GOBIERNO DE PUERTO RICO
JUNTA REGLAMENTADORA DE SERVICIO PÚBLICO
NEGOCIADO DE ENERGÍA DE PUERTO RICO

IN RE: SOLICITUD DE APROBACIÓN DE ENMIENDA A CONTRATO DE COMPRAVENTA DE ENERGÍA RENOVABLE ENTRE LA AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO Y XZERTA TEC SOLAR I, LLC	**CASO NÚM**.: NEPR-____-2021-____ **ASUNTO**: Solicitud de Aprobación de Enmienda a Contrato de Compraventa de Energía Renovable

PETICIÓN DE APROBACIÓN DE ENMIENDA A CONTRATO DE COMPRAVENTA DE ENERGÍA RENOVABLE CON XZERTA TEC SOLAR I, LLC

AL HONORABLE NEGOCIADO DE ENERGÍA:

COMPARECE la Autoridad de Energía Eléctrica de Puerto Rico a través de la representación legal que suscribe y muy respetuosamente expone y solicita:

I. INTRODUCCIÓN

La Autoridad de Energía Eléctrica de Puerto Rico (la "Autoridad") tiene la responsabilidad de suministrar y asegurar un servicio de energía eléctrica confiable al menor costo posible, tanto a corto como a largo plazo, a todos los puertorriqueños. De igual manera, la Autoridad tiene la responsabilidad de contribuir al bienestar general y futuro sostenible del pueblo de Puerto Rico, maximizando los beneficios y minimizando los impactos sociales, ambientales y económicos de sus servicios. Parte de los compromisos de la Autoridad es adelantar la política pública energética de Puerto Rico mediante el cumplimiento con los requisitos de aumentar la producción de energía renovable.

Previo a la radicación de la petición voluntaria de reorganización de la Autoridad bajo el

Título III de PROMESA[1], la Autoridad suscribió contratos de compraventa de energía renovable ("PPOA," por sus siglas en inglés) para el desarrollo, construcción, operación y compraventa de energía renovable con distintos productores de energía renovable. Como parte de los procesos del Caso de Título III, la Autoridad comenzó la renegociación y llegó a acuerdos con dieciséis (16) productores para enmendar ciertos PPOAs que se otorgaron hace varios años atrás pero no habían llegado a su operación comercial. Entre estos se encontraba el PPOA entre la Autoridad y Xzerta Tec Solar I, LLC ("Xzerta"). El PPOA original suscrito entre la Autoridad y Xzerta el 19 de septiembre de 2012, dispone el desarrollo de un proyecto de 15 MW de capacidad de energía renovable (luego aumentó a 20 MW, y luego de una segunda enmienda, aumentó a 60 MW) que sería vendida a la Autoridad por $15.0 c/kWh junto con un cargo de $0.015 c/kWh por los créditos de energía renovable ("RECs", por sus siglas en inglés). La Autoridad logró renegociar el PPOA y logró una reducción del precio del c/kWh. El nuevo acuerdo comprende la venta de ambos, la energía renovable y los RECs a $0.099 c/kWh y, de ser aprobado, el proyecto entraría en operación comercial dos años después del comienzo de su construcción[2], contribuyendo así a los requisitos de la Cartera de Energía Renovable (RPS, por sus siglas en inglés) mandatorios por virtud de la Ley 17-2019[3].

En junio de 2020, la Autoridad procedió a presentar simultáneamente todos los PPOA enmendados ante el Negociado de Energía de la Junta Reglamentadora del Servicio Público de Puerto Rico (el "Negociado de Energía" o Negociado") y ante la Junta de Supervisión y

[1] *The Puerto Rico Oversight, Management, and Economic Stability Act*, conocido como PROMESA, esta codificado en 48 U.S.C. § 2101 *et seq*.; *In re P.R. Elec. Power Auth., Bankruptcy Case No. 17 -BK-4780 (LTS) (D.P.R. July 7, 2017)* (el "Caso de Título III"). El Caso de Título III se encuentra para consideración ante el Tribunal de Distrito de los Estados Unidos para el Distrito de Puerto Rico (el "Tribunal de Distrito").

[2] En el PPOA, el término "*FNTP Date*" incluye el concepto de "inicio de construcción," y ésta fecha debe ocurrir a más tardar ocho (8) meses después del "*Assumption Order Date*."

[3] *Ley de Política Pública Energética de Puerto Rico*, Ley Núm.17 del 11 de abril del 2019, según enmendada ("Ley 17-2019").

Administración Financiera para Puerto Rico (la "Junta de Supervisión") para su correspondiente aprobación bajo su política de revisión de contratos.[4] La Autoridad informó al Negociado que el PPOA con Xzerta, junto a otros quince (15) PPOAs que se lograron renegociar, añadirían más de 590 MW de generación de energía renovable para la Autoridad durante el plazo del contrato, sujeto a que los mismos procedan a operación comercial. Mientras el Negociado de Energía aprobó todos los PPOA enmendados, la Junta de Supervisión determinó que el total de energía renovable que se debía desarrollar a través de los PPOA renegociados no debía exceder 150 MW y, además, estableció otras consideraciones que la Autoridad debía observar al momento de evaluar qué productores serían los seleccionados para ejecutar los contratos cuya capacidad total no debía exceder 150 MW. Por lo cual, la Autoridad procedió a retirar la petición de aprobación de los PPOA enmendados, incluyendo el acordado entre la Autoridad y Xzerta, con la anuencia del Negociado.

La suscripción de los PPOAs representa un paso importante para que la Autoridad pueda cumplir con los requisitos de la Cartera de Energía Renovable que le impone la Ley 17-2019 y el Plan Integrado de Recursos (PIR), según aprobado por el Negociado de Energía en *In Re: Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, caso núm. CEPR-AP-2018-0001.[5] En virtud de lo cual, la Autoridad se dio nuevamente a la encomienda de evaluar los PPOAs en cumplimiento con los criterios impuestos por la Junta de Supervisión y procedió también a modificarlos para que fueran cónsonos a las guías establecidas por el Negociado de Energía cuando aprobó los dieciséis (16) PPOAs en el mes de septiembre de 2020.

[4] *FOMB Policy: Review of Contracts*, aprobado el pasado 6 de noviembre de 2017 y modificado el 3 de julio de 2018, https://drive.google.com/file/d/1HpG4mTrniBeguHp5iutGP3CnQcDPj8zL/view.

[5] *Final Resolution and Order* del 24 de Agosto de 2020, *In Re: Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*, caso núm. CEPR-AP-2018-0001, https://energia.pr.gov/wpcontent/uploads/sites/7/2020/08/AP20180001-IRP-Final-Resolution-and-Order.pdf.

Luego de la evaluación, la Autoridad recomendó a la Junta de Supervisión que aprobara los acuerdos enmendados con CIRO One Salinas LLC y Xzerta. El 1 de marzo de 2021, la Junta de Supervisión aprobó el PPOA enmendado entre la Autoridad y Xzerta (el "PPOA Enmendado").

En cumplimiento con las leyes, regulaciones y política pública energética aplicable, la Autoridad presenta el PPOA Enmendado para la consideración y aprobación de este Honorable Negociado de Energía.

II. TRASFONDO

A principios del 2019, la Autoridad determinó que para alcanzar los objetivos provistos por la Ley 17-2019 y cumplir con los requisitos financieros establecidos en el Plan Fiscal, la renegociación de algunos de aproximadamente cincuenta (50) PPOAs era necesaria. Entre el 2009 y 2014, la Autoridad suscribió y renegoció varios PPOAs para el desarrollo de proyectos de energía renovable. Un grupo de estos proyectos aún no había alcanzado operación comercial en el año 2019. Además, los precios acordados originalmente con los desarrolladores resultaban muy por encima del precio del mercado, según determinado por la Junta de Gobierno de la Autoridad (la "Junta de Gobierno"). Los PPOAs originales contemplaban un aumento sin tope del precio de la energía renovable y cargos adicionales por RECs. Si esos PPOAs se desarrollaban bajo los términos originales, se hubiese creado una carga económica insostenible para la Autoridad y, en consecuencia, para los clientes de la Autoridad.

Con esto en mente, la Autoridad comenzó negociaciones con diecinueve (19) de estos desarrolladores. Estos desarrolladores (i) estaban cerca de completar las actividades de desarrollo que habían comenzado durante rondas anteriores; (ii) demostraron la voluntad de negociar precios que reflejaran los cambios en la industria y el mercado; y (iii) tenían el potencial de comenzar la construcción a corto plazo con el fin de maximizar los beneficios asociados con los *Federal*

Investment Tax Credits. La Autoridad estimó que, debido a su experiencia e inversión significativa en Puerto Rico hasta la fecha, los desarrolladores de estos proyectos tendrían más posibilidad de llevar los mismos de la etapa de desarrollo a la de operación comercial de forma más rápida que los desarrolladores que no habían pasado por el proceso antes.

Durante el año 2019, la Autoridad y los desarrolladores sostuvieron múltiples reuniones para discutir los detalles de cada PPOA, incluyendo el estatus del proyecto, antecedentes de la empresa, fuentes de financiamiento previstas, equipo de proyecto, factores de costos, y posibles reducciones de precios a sus propuestas comerciales. La renegociación de estos PPOAs era necesaria toda vez que los precios originales estaban muy por encima de los precios contemplados en el entonces propuesto PIR y lo sugerido por la Junta de Supervisión en el Plan Fiscal.

Como parte de las negociaciones para reducir los precios a un nivel que fuese aceptable, la Autoridad recibió el insumo de la Junta de Supervisión que le indicó cuales eran los rangos de precios aceptables para que las transacciones y eventuales enmiendas a los PPOAs fueran aprobados.

En septiembre de 2019, la Junta de Gobierno de la Autoridad comisionó un estudio para determinar, entre otros, si los términos de las negociaciones proporcionarían rendimientos excesivos a los desarrolladores, y si realmente ahorrarían dinero a los contribuyentes (el "Estudio de NEP").[6] El Estudio de NEP concluyó varias cosas, incluyendo que con los términos propuestos por la Junta de Supervisión ningún desarrollador estaría obteniendo rendimientos excesivos, pero para ahorrar dinero a los contribuyentes se necesitaría un descuento adicional. Además, se recomendó a la Junta de Gobierno diferentes opciones y alternativas para subsanar este asunto y

[6] *Review of Legacy Solar PV PPOAs and Recommendations for Disposition Final Report* preparado por New Energy Partners, Inc. con fecha del 23 de diciembre de 2019 (el "Estudio de NEP"). Exhibit A.

unos asuntos técnicos referente a los requisitos mínimos técnicos (MTR, por sus siglas en inglés) y riesgo contractual. En noviembre de 2019, la Junta de Gobierno, luego de evaluar la recomendación y, además, la opinión de la Oficina de Gerencia de Proyectos[7], aprobó las recomendaciones incluidas en el Estudio de NEP en la Resolución 4749[8].

Continuando con las evaluaciones de los PPOAs y su potencial enmienda, la Autoridad comisionó también un estudio de viabilidad de interconexión de red (incluido el análisis de flujo de energía estático utilizando el software PSS®E) en paralelo, para garantizar que el sistema de red pudiera integrar los proyectos sin problemas (el "Estudio de Viabilidad").[9] El Estudio de Viabilidad identificó algunas preocupaciones técnicas que fueron resueltas. Para mayo del 2020 la Autoridad completó todo el análisis de viabilidad de interconexión de la red y ya había llegado a un acuerdo comercial con dieciséis (16) de los diecinueve (19) desarrolladores, entre los que se encontraba Xzerta.

Es importante destacar que los PPOAs enmendados requerían que los desarrolladores cumplieran con los MTR de la Autoridad según habían sido actualizados en febrero de 2020. Los MTR requieren, entre otras cosas, la capacidad de controlar *ramp rate* y proporcionar respuesta/regulación de frecuencia, algo que no siempre se encuentra en proyectos solares fuera de Puerto Rico. El cumplimiento con estos requisitos hacía que tales proyectos fuesen más "amigables con la red" que los proyectos solares fotovoltaicos típicos y esto, a su vez, complicaba la comparación de los precios de los contratos con otros desarrollos de referencia.

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[7] *Memorandum re: Non-Operating Renewable Energy PPOA Transactions to PREPA's Chief Executive Officer from PREPA's Project Management Office* con fecha del 26 de mayo de 2020. Exhibit B.

[8] *Renewable Energy Projects Puerto Rico Power Authority Governing Board Resolution 4749* con fecha del 20 de noviembre de 2019. ("Resolución 4749") Exhibit C.

[9] *Renewable Energy PPOA Interconnection Summary Report* preparado por Sargent and Lundy con fecha del 19 de junio de 2020 (el "Estudio de Viabilidad") Exhibit D.

Así las cosas, el 28 de mayo de 2020, la Junta de Gobierno aprobó los PPOAS enmendados y autorizó a la Autoridad a continuar los esfuerzos pertinentes, incluyendo la presentación de estos ante el Negociado de Energía para su aprobación.

El 19 de junio de 2020, la Autoridad presentó ante el Negociado de Energía su *Petición de Aprobación de Enmiendas a Contratos de Compraventa de Energía Renovable: Proyecto[s] No-Operacionales* (la "Petición"), en la cual solicitó al ente regulador la aprobación de enmiendas a dieciséis (16) PPOAs cuyos proyectos de energía renovable no habían alcanzado aún operación comercial.[10] Entre los dieciséis (16) PPOAs se encontraba el suscrito entre Xzerta y la Autoridad. Xzerta y la Autoridad habían suscrito un PPOA para el desarrollo de un proyecto para producción de energía renovable fotovoltaica de 60 MW[11]. Según los términos del contrato, Xzerta vendería a la Autoridad 60 MW de capacidad de energía renovable por $0.15 c/kWh junto con un cargo de $0.015 c/kWh por RECs. A la fecha de la renegociación, Xzerta no había logrado que su proyecto llegara a operación comercial.

Al cabo de algunos trámites procesales, el 4 de septiembre de 2020 el Negociado de Energía emitió una *Resolución y Orden*[12] impartiendo su aprobación condicionada al PPOA Enmendado entre Xzerta y la Autoridad.

Luego del Negociado de Energía haber impartido su aprobación al PPOA enmendado, la Autoridad lo presentó a la Junta de Supervisión para su evaluación en acorde con su política de revisión de contratos. El 17 de agosto de 2020, la Junta de Supervisión informó a la Autoridad que

[10] *Petición de Aprobación de Enmiendas a Contratos de Compraventa de Energía Renovable: Proyecto[s] No-Operacionales* radicada el 19 de junio de 2020 (la "Petición").
[11] *Renewable Power Purchase and Operating Agreement between Grupotec USA, Inc. and the Puerto Rico Electric Authority* PPOA Núm. 2013-P 00042 con fecha del 19 de septiembre de 2012, (el "PPOA Original"). Exhibit E.
[12] *Resolución y Orden* del 4 de septiembre de 2020, *In re: Enmiendas a Contratos de Compraventa de Energía Renovables: Proyectos No-Operacionales* caso núm. NEPR-AP-2020-0003.

el total de energía renovable que debía desarrollar utilizando como base los precios que la Autoridad logró renegociar en los acuerdos no debía exceder de 150 MW.[13]

El 22 de septiembre de 2020, la Autoridad presentó una *Moción para Informar Retiro de Enmienda a Contrato de Compra de Energía sin Perjuicio de Presentación Posterior* ("Moción de Retiro").[14] Mediante la Moción de Retiro, la Autoridad informó al Negociado lo expresado por la Junta de Supervisión en su misiva y que, en cumplimiento con la directriz impartida, procedería a reevaluar los PPOAs enmendados para poder hacer el ranking solicitado y recomendar los PPOAs que debían ser seleccionados para cumplir con los 150 MW de producción aprobados. La Autoridad informó también que, por las razones ahí explicadas, retiraba la solicitud de aprobación de los PPOAs enmendados, incluyendo el PPOA enmendado entre Xzerta y la Autoridad.

Mediante *Resolución y Orden* emitida el 8 de diciembre de 2020, el Negociado de Energía acogió la Moción de Retiro como una solicitud de desistimiento y decretó el archivo y cierre del caso núm. NEPR-AP-2020-0003. El Negociado indicó, además, que cualquier petición futura sobre los PPOAs sería evaluada como un caso nuevo y sería considerada con las circunstancias prevalecientes al momento de su presentación.[15]

En aras de dar fiel cumplimiento a las instrucciones de la Junta de Supervisión, la Autoridad comisionó un estudio para que un ente independiente evaluara los PPOAs a la luz de las solicitudes y guías establecidas por la Junta de Supervisión en su carta. El estudio fue realizado por New Energy Partners. New Energy Partners rindió dos reportes a estos efectos, uno con fecha del 30 de diciembre de 2020 y el final con fecha de 26 de enero 2021 (en conjunto, el "Segundo Estudio de

[13] Carta de la Junta de Supervisión a la Autoridad con fecha del 17 de Agosto del 2020. Exhibit F.
[14] *Moción para Informar Retiro de Enmienda a Contrato de Compra de Energía sin Perjuicio de Presentación Posterior* radicada el 22 de septiembre de 2020 Caso Núm. NEPR-AP-2020-0003 ("Moción de Retiro").
[15] *Resolución y Orden* del 8 de diciembre de 2020 Caso Núm. NEPR-AP-2020-0003, pág. 7.

NEP").[16] En éste reporte, NEP informa que, luego de una evaluación a la luz de los nuevos requisitos, recomendaba que la Autoridad continuara con los acuerdos revisados con CIRO One Salinas LLC y Xzerta.[17]

Así las cosas, el 23 de febrero de 2021 la Autoridad remitió una misiva a la Junta de Supervisión informando el resultado del Segundo Estudio de NEP y cuales debían ser los PPOAs seleccionados para alcanzar la nueva meta impuesta de 150MW.[18] El 1 de marzo de 2021 la Junta de Supervisión respondió a la Autoridad aprobando que se continuara con el contrato enmendado entre CIRO One Salinas LLC y Xzerta.[19] Por lo tanto, PPOA Enmendado entre Xzerta y la Autoridad ya cuenta con la aprobación de la Junta de Supervisión y está preparado para la evaluación de este Honorable Negociado de Energía[20].

En cumplimiento con las leyes y regulaciones aplicables, la Autoridad presenta el PPOA Enmendado y solicita respetuosamente al Negociado de Energía que le imparta su aprobación.

III. DERECHO APLICABLE

El artículo 6.3 de la Ley 57-2014[21] dispone que el Negociado de Energía tiene la facultad de implementar los reglamentos y las acciones regulatorias necesarias para garantizar la capacidad, confiabilidad, seguridad, eficiencia y razonabilidad en tarifas del sistema eléctrico de Puerto Rico. De igual forma, el Negociado tiene la facultad para establecer las guías, estándares, prácticas y

[16] *Review of Legacy Solar PV PPOAs and Recommendations for Disposition Final Report* preparado por New Energy Partners, Inc. con fecha del 30 de diciembre de 2020; *Review of Legacy Solar PV PPOAs and Recommendations for Disposition Final Report Final Report Amended Per FOMB* preparado por New Energy Partners, Inc. con fecha del 26 de enero 2021 (el "Segundo Estudio de NEP") Exhibit G.
[17] *Id* en pág. 6. Ver Exhibit G y H, respectivamente.
[18] Carta de la Autoridad a la Junta de Supervisión con fecha del 23 de febrero de 2021 Exhibit H.
[19] Carta de la Junta de Supervisión a la Autoridad con fecha del 1 de marzo de 2021. Exhibit I.
[20] *Amended and Restated Renewable Power Purchase and Operating Agreement Between Puerto Rico Electric Power Authority and Xzerta Tec Solar I, LLC.* (el "PPOA Enmendado") Exhibit J.
[21] *Ley de Transformación y ALIVIO Energético* Ley Núm. 57 de 27 de mayo de 2014, según enmendada ("Ley 57-2014").

procesos a seguir para los procesos que la Autoridad lleve a cabo en relación a la compra de energía a otras compañías de servicio eléctrico y/o para modernizar sus plantas o instalaciones generadoras de energía.[22] Además, el Negociado de Energía tiene el poder de establecer mediante reglamento las normas de política pública en relación con las compañías de servicio eléctrico, así como toda transacción, acción u omisión que incida sobre la red eléctrica y la infraestructura eléctrica en Puerto Rico, e implementar dichas normas de política pública.[23] Este ente regulador aplicará normas de política pública que sean coherentes con la política pública de energía según declarada por legislación.[24]

Asimismo, el párrafo (b) del artículo 1.11 de la Ley 17-2019 dispone que todo contrato de compra de energía o toda enmienda o extensión a un contrato de compra de energía otorgado previo a la aprobación de la Ley 57-2014 se otorgará de conformidad con lo establecido en el Artículo 6.32 de la Ley 57-2014 y la reglamentación adoptada por el Negociado al amparo de dicho artículo.[25] Por lo cual, al evaluar cada propuesta de contrato entre las compañías de servicio eléctrico, el Negociado de Energía tomará en cuenta lo establecido en el PIR, especialmente en lo referente a las metas de energía renovable, generación distribuida, conservación y eficiencia que se establezcan en el PIR. [26]

La ley tambien establece que, con el propósito de garantizar que dichos acuerdos tengan un precio adecuado y razonable, los parámetros establecidos por el Negociado de Energía serán cónsonos con los que normalmente utiliza la industria para tales fines, así como con cualquier otro

[22] *Id.* Art. 6.3 (c) 9 LPRA sec. 1051 *et seq.*,1054b (c).
[23] *Id.* Art. 6.3 (b) 9 LPRA sec. 1054b (b).
[24] *Id.*
[25] *Ley de Política Pública Energética de Puerto Rico* Ley Núm.17 del 11 de abril del 2019, según enmendada ("Ley 17-2019"). Art. 1.11(b) 29 LPRA sec. 1141j (b).
[26] Art. 6.32 (d) de la Ley 57-2014, 9 LPRA sec. 1054ff (d).

parámetro o método utilizado para regular los ingresos atribuibles a los acuerdos de compra de energía.[27] Además, los contratos de compra de energía se otorgarán considerando las metas y mandatos establecidos en la Cartera de Energía Renovable, que obligan a una transición de la generación de energía anclada en combustibles fósiles, a la integración agresiva de energía renovable, según dispone la Ley 82-2010.[28] Más aún, la Ley 17-2019 modificó los estándares de RPS establecidos en la Ley 82-2010. Dicha enmienda incrementó el requisito de generación de energía a base de fuentes renovables a cuarenta por ciento (40%) para el 2025, sesenta por ciento (60%) para el 2040 y cien por ciento (100%) para el 2050. De igual forma, la Ley 33-2019[29] estableció la meta de veinte por ciento (20%) para el año 2022.

Por otra parte, el artículo 6.32 de la Ley 57-2014 establece un marco legal integral para la evaluación y aprobación de los acuerdos de compra de energía, así como otras transacciones relacionadas con empresas de servicios de energía eléctrica, como la Autoridad y los desarrolladores de los PPOAs.[30] En lo pertinente, la Ley 57-2014 reitera que el Negociado de Energía adoptará y promulgará un reglamento con los estándares y requisitos con los que cumplirán los contratos de las compañías de servicio eléctrico, incluyendo los contratos entre la Autoridad, su sucesora, o el contratante de la red de transmisión y distribución y cualquier compañía de servicio eléctrico o cualquier productor independiente de energía.[31] El Negociado de Energía también, velará que las tarifas, derechos, rentas o cargos que se paguen a productores

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[27] *Id.*

[28] *Ley de Política Pública de Diversificación Energética por Medio de la Energía Renovable Sostenible y Alterna* Ley Núm. 82 del 19 de julio de 2010, según enmendada ("Ley-82-2010"). El RPS para establecer metas de cumplimiento obligatorio a corto, mediano y largo plazo en materia de producción de energía por medio de energía renovable sostenible o alternativa. Además, la Ley 17-2019 requiere que el 40% de la producción de energía en Puerto Rico, se base en fuentes renovables para el año 2025.

[29] *Ley de Mitigación, Adaptación y Resiliencia al Cambio Climático de Puerto Rico* Ley Núm. 33 del 22 de mayo de 2019, según enmendada ("Ley 33-2019").

[30] Art 6.32 de la Ley 57-2014, 9 LPRA sec. 1054ff.

[31] Art. 6.32(c) de la Ley 57-2014, 9 LPRA sec. 1054ff (c).

independientes de energía sean justas y razonables, y protejan el interés público y el erario.[32] Así como que la tarifa de interconexión a la red de transmisión y distribución, incluyendo los cargos por construcción, la tarifa de trasbordo, así como cualquier otro requerimiento aplicable a los productores independientes de energía o a otras compañías de servicio eléctrico que deseen interconectarse al sistema de transmisión y distribución, sea justa y razonable.[33] En este proceso, el Negociado de Energía deberá asegurarse que las tarifas permitan una interconexión que no afecte la confiabilidad del servicio eléctrico y promueva la protección del ambiente, el cumplimiento con los mandatos de ley, y que no impacte adversamente a los clientes.[34]

IV. PPOA RENEGOCIADO ENTRE XZERTA Y LA AUTORIDAD

Las diferencias más significativas entre el PPOA suscrito por Xzerta y la Autoridad el 19 de septiembre de 2012 y el PPOA Enmendado que se presenta aquí para la consideración de este Honorable Negociado es que la Autoridad logró una reducción del precio del c/kWh. El nuevo acuerdo comprende la venta de ambos, la energía renovable y los RECs a $0.099 c/kWh, y el aumento escalado al uno por ciento (1%) está limitado a $0.126 c/kWh.

Además, el PPOA Enmendado incluye varias revisiones listadas por el Negociado de Energía en el caso NEPR-AP-2020-0003 e impuestas como condiciones para que pudiera ser ejecutado en versión final. Las revisiones solicitadas y donde se atienden se listan a continuación.

a. Completar el Apéndice I del PPOA Enmendado, de manera que contenga los MTRs finales aplicables al Proyecto.

La Autoridad completó el Apéndice I e incluye los MTRs finales aplicables al proyecto. *Véase* Apéndice I del PPOA Enmendado.

[32] Art. 6.32(g) de la Ley 57-2014, 9 LPRA sec. 1054ff (g).
[33] *Id.*
[34] *Id.*

b. Anadir una disposición al PPOA Enmendado que reconozca expresamente que ninguna disposición de éste pueda ser interpretada de manera que atente de forma alguna, con la jurisdicción y autoridad del Negociado de Energía.

La Autoridad incluyó la disposición: "Nothing contained in this Agreement shall be construed or interpreted to limit in any way the PREB's power and authority under the laws of the Commonwealth of Puerto Rico" *Veáse* PPOA Enmendado, Sección 1.2 inciso (m) pag. 14.

c. Atemperar la cláusula de Resolución de Disputas (Artículo 22.12 del PPOA Enmendado), a las disposiciones aplicables establecidas en la Ley 57-2014.

La cláusula de Resolución de Disputas fue atemperada a las disposiciones de la Ley 57-2014. *Véase* PPOA Enmendado, Sección 22.12, pág. 55.

d. Atemperar las definiciones y cláusulas del PPOA Enmendado de manera que, el termino para que comience la construcción del Proyecto, el cual es considerado por la Autoridad como uno "shovel ready", en ningún caso exceda ocho (8) meses contados a partir de la fecha de otorgamiento del Acuerdo.

La Autoridad solicita al Negociado que reconsidere esta última condición y que el término para el comienzo de la construcción del proyecto se calcule a partir desde que se asuma el PPOA Enmendado en el Caso de Título III y no desde la fecha de la firma del PPOA Enmendado. Esta solicitud responde a la preocupación manifestada por los desarrolladores durante las negociaciones sobre los riesgos de inversión previo a una decisión final del Tribunal de Distrito, ya que mientras la Autoridad permanezca dentro del Caso de Título III, como deudor protegido, conserva el derecho de asumir o rechazar cualquier contrato otorgado previo a la petición de reorganización, con la aprobación del Tribunal de Distrito. Además, la Junta de Supervisión controla el proceso de "asumir o rechazar" y requiere que los

contratos se ejecuten antes de que se presenten en el Tribunal de Distrito para su aprobación. Siguiendo ese razonamiento y por la Autoridad entender razonable la preocupación de los desarrolladores, incluyendo la de Xzerta, el PPOA Enmendado ha sido redactado para que las fechas de inicio de condiciones incluidas en el Acuerdo no comiencen a transcurrir o contarse hasta que la Autoridad tenga la autorización del Tribunal de Distrito para asumir el PPOA. *Véase* PPOA Enmendado, Sección 1.1 Definición del *Guaranteed FNTP Date*, pag. 8.

e. Atemperar las definiciones y cláusulas del PPOA Enmendado de manera que, el termino para que se complete la construcción del Proyecto, el cual es considerado por la Autoridad como uno "shovel ready", en ningún caso exceda el 10% del término propuesto para su terminación a menos que se solicite una extensión y el Negociado de Energía la apruebe.

La Autoridad atemperó las definiciones y cláusulas según requerido. *Véase*, PPOA Enmendado, Sección 4.5 págs. 17-18.

IV. DOCUMENTOS DE RESPALDO A LA PETICIÓN

El PPOA Enmendado que la Autoridad solicita respetuosamente al Honorable Negociado de Energía que apruebe cumple con los requisitos legales vigentes. A continuación, un listado de cada requisito y como el PPOA Enmendado cumple con dicho requisito.

Requisito	**Dónde y cómo se atienden en el PPOA Enmendado y/o documentos complementarios**
Cumplimiento con la Ley 57-2014. Sección 1.11 de la Ley 17-2019[35]	Véase el presente listado y la Sec. 6.2 del PPOA[36] (*Compliance with Law*).

[35] Ley 17-2019, 29 LPRA sec. 1141(j).

[36] Véase Exhibit J.

Requisito	**Dónde y cómo se atienden en el PPOA Enmendado y/o documentos complementarios**
El acuerdo debe ser consistente con el PIR de la Autoridad. Narrativa detallada, con ejemplos específicos, relacionados a cómo el PPOA cumple con el PIR. Sección 6.32(d) de la Ley 57-2014.[37]	Todos los escenarios en PIR contemplan un alza significativa en recursos renovables. El proyecto existente, el incremento en capacidad y extensión de término bajo estas enmiendas contribuyen a alcanzar este objetivo.
La interconexión del proyecto propuesto no comprometerá la confiabilidad y seguridad de la red de energía eléctrica de Puerto Rico. Sección 6.32(f) de la Ley 57-2014.[38]	Véase el *Renewable Energy PPOA Interconnection Summary Report* preparado por Sargent & Lundy, con fecha de 16 de junio de 2020 ("Estudio de Viabilidad").
Las tarifas que pagará PREPA bajo el PPOA Enmendado son justas y razonables, y protegen el interés público y del fisco. Los parámetros relacionados a los márgenes de ganancias y los aumentos en precios[39] están basadas en los costos de la industria y los puntos de referencia (*benchmarks*) de ganancias dada la naturaleza del Proyecto propuesto. Sección 6.32(g) de la Ley 57-2014.[40]	Para un análisis relacionado a la razonabilidad, análisis del interés público y los puntos de referencia de mercado, véase el *Review of Legacy Solar PV PPOAs and Recommendations for Ranking and Negotiations. Final Report Amended per FOMB 1/26/21* preparado por New Energy Partners Inc. con fecha del 26 de enero de 2021 ("Segundo Estudio de NEP"). La enmienda al PPOA redujó los precios previamente pactados. Para un análisis de la reducción de precios, véase el *Operating and Non-Operating Renewable Status Update*, con

[37] Ley 57-2014, 22 LPRA sec. 1054ff(d).
[38] Ley 57-2014, 22 LPRA sec. 1054ff(f).
[39] Conocido como *price escalators*.
[40] Ley 57-2014, 22 LPRA sec. 1054ff(g).

Requisito	Dónde y cómo se atienden en el PPOA Enmendado y/o documentos complementarios
	fecha el 20 de mayo de 2020, anejo del Exhibit B.
Los cargos a pagarse por la interconexión del PPOA al sistema de la PREPA son justos y razonables, y permiten una interconexión que no afecte adversamente la capacidad de PREPA de proveer un servicio de energía eléctrica consistente con la protección del ambiente, la Ley de la Autoridad de Energía Eléctrica de Puerto Rico[41], ni afecta adversamente a los clientes de la PREPA. Sección 6.32(g) de la Ley 57-2014.[42]	Véase el Estudio de Viabilidad para un análisis de los costos de interconexión y del impacto de los proyectos en el sistema de la red. Véase el Segundo Estudio de NEP para un análisis adicional relacionado a la razonabilidad de los costos de interconexión.
Estudio de interconexión u otro análisis técnico evaluando la interconexión. Sección 6.32(h) de la Ley 57-2014.[43]	Véase el Estudio de Viabilidad para un análisis inicial de interconexión. Véase, además, la Sec. 4.2 del PPOA (*Interconnection Study and Facility Study*), y la Parte III del Apéndice B (*Interconection*) Parte III del Apéndice B del PPOA (*Interconnection*), págs. 73-77.

V. SOLICITUD DE TRATAMIENTO CONFIDENCIAL A DOCUMENTACIÓN PRESENTADA

La Autoridad adjuntó a la presente Petición una serie de documentos que sustentan la misma. Algunos de estos documentos fueron sellados porque contienen información sobre

[41] *Ley de la Autoridad de Energía Eléctrica de Puerto Rico* Ley Núm. 83 de 2 de mayo de 1941, 22 LPRA sec. 192 *et seq*. ("Ley 83-1941")
[42] Ley 57-2014, 22 LPRA sec. 1054ff (g).
[43] Ley 57-2014, 22 LPRA sec. 1054ff (h).

los términos de la contratación con Xzerta cuales podrían variar, tanto con el presente como futuros proveedores. Revelar esta información cuando el proceso de aprobación aun no es final colocaría a la Autoridad en una desventaja competitiva con la consecuencia de afectar a sus clientes. Por lo tanto, según las leyes y regulaciones aplicables, esta información debe permanecer editada y sellada, respectivamente, por ser confidencial.

La norma constitucional es que los documentos preparados por una entidad gubernamental, como la Autoridad, son públicos. Sin embargo, según ya decidido por nuestro Tribunal Supremo, esta norma, como muchas otras, tiene sus excepciones. Por ejemplo, en el caso *Pueblo v. Tribunal Superior*, 96 DPR 746 (1968), el Tribunal Supremo de Puerto Rico tuvo ante si una controversia sobre la naturaleza especial de aquellos documentos que son preparados y circulados en el curso del cargo de un funcionario para fines internos de la entidad gubernamental. Allí resolvió el Tribunal Supremo, a la luz del antiguo Art. 1170 del Código Civil, 32 LPRA sec. 3271 (derogado), que

> un informe, memorando o escrito preparado por un empleado o funcionario en el ejercicio de su cargo o empleo para su superior o para fines internos de las decisiones y actuaciones departamentales no son documentos públicos (énfasis nuestro) que, conforme al Art. 47 de la Ley de Evidencia, todo ciudadano tiene derecho a inspeccionar.

Pueblo v. Tribunal Superior, *supra*, págs. 755-756.

La determinación en ese caso se basó en motivos de orden público y en las implicaciones que resolver lo contrario podría tener en el funcionamiento efectivo del Gobierno. Específicamente, se indicó que

> [p]or razones de orden público; porque ello afectaría el efectivo funcionamiento del gobierno e impediría que los funcionarios actuaran con entera libertad y entereza, sin temor o inhibición alguna en la preparación de informes, memorandos u otras expresiones o comunicaciones en el curso de sus cargos, para fines departamentales, debemos concluir que el Informe

> que aquí se interesa, como tal, no está sujeto a inspección bajo la Regla 95 como un "documento" o "papel" obtenido por El Pueblo, de otra persona".

Id., pág. 757.

Por otra parte, el artículo 6.15 de la Ley 57-2014, 9 LPRA sec. 1054n, provee que

> Si alguna persona que tenga la obligación de someter información a la [Negociado] de Energía entiende que la información a someterse goza de algún privilegio de confidencialidad, podrá pedirle a dicha [Negociado] que le dé dicho tratamiento sujeto a lo siguiente: (a) Si la [Negociado] de Energía, luego de la evaluación de rigor, entiende que la información debe ser protegida, buscará la manera de conceder esta protección en la forma que menos impacte al público, a la transparencia y el derecho de las partes envueltas en el procedimiento administrativo en el cual se somete el documento alegadamente confidencial.

En el ejercicio de sus facultades y poderes otorgados por la Ley 57-2014, el Negociado de Energía aprobó el *Reglamento De Procedimientos Adjudicativos, Avisos de Incumplimiento, Revisión De Tarifas e Investigaciones*, Reglamento Núm. 8543, Negociado de Energía de Puerto Rico, 18 de diciembre de 2014 (el "Reglamento 8543"). Este reglamento incluye también una disposición en relación con las salvaguardas que el Negociado de Energía da a la información confidencial. El reglamento provee que

> [s]i en cumplimiento con lo dispuesto en [el Reglamento 8543] o en alguna orden [del Negociado de Energía], una persona tuviese el deber de presentar [al Negociado de Energía] información que, a su juicio es privilegiada a tenor con lo dispuesto en las Reglas de Evidencia, dicha compañía identificará la información alegadamente privilegiada, solicitará [al Negociado de Energía] la protección de dicha información, y expondrá por escrito los argumentos en apoyo a su planteamiento sobre la naturaleza privilegiada de la información. [El Negociado] evaluará la petición y, de entender que la información amerita protección, procederá de conformidad con lo dispuesto en el Artículo 6.15 de la Ley 57-2014, según enmendada.

Id., Sección 1.15.

De igual forma *el Reglamento Para el Programa de Administración de Documentos de la Autoridad de Energía Eléctrica*, Reglamento Núm. 6285 del 9 de febrero de 2001 ("Reglamento

6285"), que tiene fuerza de ley, regula la administración de documentos de la Autoridad e indica en su sección V las categorías de documentos que se pueden designar como confidenciales. Según el Reglamento, y en relación con este caso, es confidencial:

> [La] [i]nformación revelada o generada por la Autoridad, como parte de una transacción comercial, cuya divulgación podría ser utilizada por terceras personas para proveer bienes o servicios a la Autoridad, a un precio más alto del que regularmente se ofrecerán tales bienes o servicios, en detrimento de los propósitos contenidos con la ley habilitadora de la Autoridad, de hacer asequible el servicio de energía eléctrica en la forma económica más amplia.

Por disposición de ley, entonces, la Autoridad puede reclamar como privilegiados y confidenciales aquellos documentos e información transacciones comerciales que están en curso. En estas categorías de documentos se encuentra el Exhibit J (el "Documento Confidencial").

Durante el proceso de negociación del acuerdo hoy presentado, la Autoridad se coloca en el lugar de un comprador ordinario.[8] El Documento Confidencial presentado sellado contiene información deliberativa y comercial de la Autoridad que se preparó con el propósito de negociar el mencionado acuerdo. Entre dicha información hay estrategias y deliberaciones comerciales de la Autoridad y análisis de precios y economía de cada acuerdo por separado. La información contenida en el Documento Confidencial no puede ser revelada hasta que las transacciones sean finales. La divulgación prematura de esta información colocaría a la Autoridad en una posición de desventaja en la competencia para las negociaciones y, además, se pondría en juego la ejecución final de los contratos.

A tono con lo anteriormente expresado, la divulgación del Documento Confidencial está exenta por la jurisprudencia, leyes y reglamentos aplicables. Mantener este confidencial es una consideración que sobre pesa la divulgación de los mismos por estos tener información que

pondría en desventaja competitiva a la Autoridad y en consecuencia afectaría al pueblo de Puerto Rico, sus clientes.

VI. CONCLUSIÓN

Los términos del PPOA Enmendado que aquí se presenta cumplen con todos los requisitos legales y regulatorios aplicables. Además, sus términos están en acuerdo con la política pública energética y adelantan el mandado de este Honorable Negociado de Energía según esbozado en el PIR operativo.

POR TODO LO CUAL, se solicita al Negociado de Energía que evalúe lo aquí solicitado, APRUEBE el PPOA Emendado, determine que el Exhibit J es confidencial y debe permanecer sellado.

RESPETUOSAMENTE SOMETIDO.

En San Juan, Puerto Rico, este 17 de marzo de 2021.

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Exhibit A

REVIEW OF LEGACY SOLAR PV PPOAS AND RECOMMENDATIONS FOR DISPOSITION

FINAL REPORT

DECEMBER 23, 2019

FOR PUERTO RICO ELECTRIC POWER AUTHORITY
WORKED PERFORMED UNDER CONTRACT 2020-POO36

SUBMITTED BY:
NEW ENERGY PARTNERS, INC.

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PREPA SOLAR REVIEW REPORT

Executive Summary

The PREPA Board must make a decision as to whether to approve 16 legacy solar PPOAs. Our recommendations of which solar PPOAs to approve, disapprove or modify are based on the objective and independent analysis using a series of tests and criteria discussed in the report. We caveat that we relied on existing PREPA reports, studies, and submitted developer data in performing these analyses, and only 10 of developers provided full data. We have specific nuanced recommendations regarding the proposed modifications to the projects and changes in the master PPOA contract to better protect PREPA's interests. Three tests determine which Solar PPOAs should be approved: 1) *Will ratepayers save money over the life of the project?* , 2) *Are developers earning unreasonably high rates of equity return beyond what is needed to compensate for PREPA below investment grade counterparty risk?* , and 3) *Do the projects create intractable grid integration conditions that can't be resolved at reasonable cost*? These are the same tests that Hawaii regulators used to determine prudence when faced with an analogous situation in 2017 described in Section VII. PREPA compliance with all applicable laws including Act 17 is an integral aspect of these standards.

Key Findings

What PPOA Pricing Reflects PREPA's Current Counterparty Risk?

PREPA was rated Ca by Moodys in March 2019. This downgrade increases PREPA's counterparty risk cost of capital to both debt and equity by ~+6% vs. investment grade. [1] The Siemens PV benchmark, with 150 hours of curtailment and adjusted for PREPA's counterparty risk would require a price of $124/Mwh escalated at 2% to recover its WACC. **This means that an efficient capital market that priced in the full counterparty risk of PREPA would require ~$124/Mwh at Ca and $108/MWh at Caa to get adequate returns to capital.** Since the majority of the PPOA sponsors accepted the reduction from ~$145/Mwh range negotiated in the beginning of 2019 to $105/Mwh in July of 2019, is evidence **that the capital markets are efficiently pricing in risk and return on an incremental cost basis and/or there is an expectation that PREPA will return to a higher credit rating (Caa or better) shortly after the agreement with bond holders.**

Is PREPA Better off issuing a new RFP for solar energy in 2020?

Unless PREPA's credit level improves, PREPA should not expect to receive better pricing for the next two years, because the improvement in technology is offset by the loss of the Investment Tax Credit. Once investment grade, the 2021 benchmark for

[1] The weighted average cost of capital (WACC) increases from base of 9.8% to 11%(Caa) or 13.5%(Ca). Third party solar developers will require 16-18.9% return on equity instead of the 12.9%.

LCOE is $75/Mwh. Next RFP, PREPA should seek hybrid projects combining BESS with either PV or wind.

Are developers earning unreasonably high rates of return beyond what is needed to compensate for PREPA below investment grade counterparty risk?

None of the developers earned the required rates of return on an unlevered basis, using 150 hours (7%) curtailment. On a levered basis, one developer earned above the required ROE.[2] **High curtailment (400 hours or ~15%) will result in very few plants being financed due to low returns.** The unlevered returns are the most unbiased measure of excessive economic rents.

Will ratepayers save money over the life of the project?

We used conservative assumptions in the public policy analysis.

The five projects (150.9 MW) with Solar PPOAs at 10 ¢/kwh ($100/Mwh) or less create total system energy benefits which can be used to offset the costs PREPA must incur (interconnect costs) irrespective of any future EPA enforcement of MATS, higher REC costs and at all discount rates.

All the developers that bid at the full ceiling rate have the same fundamental problem. With RECs at the bid rate of 1.5¢/kwh and inclusive of the value of fixed contracts in hedging natural gas**, if there is no MATS enforcement, the FOMB ceiling rate does NOT create total system energy benefits at the blended discount rate based on PREPA returning to investment grade by 2023..** There are valid public policy arguments that these projects are insurance against more expensive outcomes (MATs, higher RECs, and lost load/VOLL). **Six projects (191-219 MW) that bid at the FOMB ceiling rate should renegotiated to 10¢/Kwh to ensure they provide benefits to ratepayers.**

All facilities produce substantial savings to PREPA ratepayers if MATS is enforced in 2020-2025 or in 2025-2026 if CCGT is delayed or if the value of RECs is 2¢/kwh (real) or greater. This is true at all discount rates.

Do the projects create intractable grid integration conditions that can't be resolved at reasonable cost?

One project Montalva (100 MW) is rated as a major interconnection concern and should not be approved. Three projects GIRO Guayama, GIRO Salinas and Fonroche Vega Baja failed grid interconnection thermal overload contingency tests based on Sargent and Lundy findings. Operations had additional concerns on GIRO Guayama.

[2] At 7% curtailment, M Solar earned 25% ROE at 60% leverage.

Th GIRO Guayama project should be temporarily denied subject to resolution between S&L and PREPA Operations.

Three facilities (50 MW), REA Vega Serena, Fonroche Vega Baja, and Fonroche San Juan have high interconnection costs and bid at or near the full FOMB ceiling rate. The interconnection costs should undergo more refined review and ceiling price set under negotiation with developer and bid rate should be renegotiated to 10¢/kwh at 2% escalation.

There will be timing gap for certain mini-grid zones if the solar projects come on-line before the 180 MWh of BESS currently awaiting P3 funding, which will create frequency and other grid issues. Advanced weather forecasting capabilities are lacking and critically important to manage intermittent renewables and need to be deployed urgently. **Requiring developers to meet ramping MTR 7 and frequency response MTR 6 would address the grid problems. Lowering curtailment to 40 hours and allowing solar projects to bid in subsequent storage or grid services RFPs would mitigate developer MTR 6 and 7 compliance cost, lowering returns by ~0.3-0.5%[3].**

The alternative, modifying the PPOA to front load the curtailment bank (using the headroom as operating reserves) would partially address the issue. This would also lower developer returns by ~0.3-0.4%. Even with curtailment, PREPA would still need to increase generation reserves to address the frequency and ramping issues, which will impose higher marginal fuel costs. It is highly likely that there would be greater load shedding under the non-MTR compliant approach.

We recommend that PREPA modify the contracts to require MTR 6 and 7 compliance and lower the curtailment bank to 40 h/yr. This will allow efficient PV plants to be financed, while maintaining grid system stability and minimizing ratepayer costs.

In 2020, after privatization concessionaire has been selected, PREPA should convene a task force of PREPA operators, the new grid concessionaire, developers, customers, and NREL in 2020 to address operational integration protocols.

Are Modifications need to the Draft Master PPOA?

We recommend the following modifications:

- Restore MTR 6 and 7 requirement, and lower maximum curtailment to 40 hours for grid related events before deemed energy payments are required. Provide quantitative clarifications in AOPs on PREPA's interpretation and allow developers to design for compliance based on their risk preferences.

[3] PREPA strict interpretation could raise this to 1.3%

- Weather risk and recovery period from hurricanes should be contractually addressed by moving the 300 hours curtailment bank from Article 8.4 into the Article 15 force majeure contract terms addressing weather risk, which are symmetrical.

- As currently written, the PREPA decision to have the developer or PREPA build the interconnection exposes PREPA to multiple default risks. Modify Article 4 so the PREPA decision is made after the interconnect design is complete and well in advance of FNTP.

- To avoid liability of default due to lack of funds, PREPA should have the developer finance and build the interconnect whenever possible, and charge a fee to PREPA at annual amortized cost of 8.5% over a period of 20 years. Interconnection cost should be capped at actual costs subject to the maximum costs specified by Sargent and Lundy.

We have no basis for recommend negotiating "bundled" agreement with developers, as requested by YFN, Windmar, and REA. The additional projects were outside the scope of this review. In general, we would not recommend bundling projects unless each has been evaluated based on the criteria.

Urgency: The final, and most important recommendation is for the Board to act now with no further delay or study. Not everything can be known in advance of the decision, but enough is known now to make a sound and robust decision.

Recommended Disposition of PPOAs:

We recommend approving five projects, totaling ~150.9 MW[4], renegotiating six projects (191-219 MW), refining interconnection and renegotiating three projects (50 MW) and denying two projects (118 MW).

Recommendations on PPOA Approval

Recommended Project Approval?	PPOA Rate $/Kwh	Are Projects Earning Reasonable rate of return given PREPA Counterparty Risk?	Do PREPA Ratepayers Save Money at Blended discount rate?	Are there Grid integration Issues that can not be resolved?	Would ratepayer save money at 2¢ REC or PPOA at 10¢/kwh?
Morovis 33.3 MW	9¢	Yes	Yes	No	Yes
Solar Blue 30-40MW	9.5¢	N/A	Yes	No	Yes
Blue Beetle 30 MW	9.9¢	Yes	Yes	No	Yes
Aetnas 22.4 MW	9.9¢	Yes	Yes	No	Yes
Solaner 25 MW	9.9¢	Yes	Yes	No	Yes
M Solar 50 MW	10.5¢	Yes	No	No	Yes
ReSun 20 MW	10.5¢	Yes	No	No	Yes
Yacuba 20 MW	10.5¢	Yes	No	No	Yes
Xyerta 20-40 MW	10.5¢	N/A	No	No	Yes
Windmar 20 MW	10.5¢	N/A	No	No	Yes
GIRO Salinas 61-69MW	10.5¢	N/A	No	Minor	Yes
Fonroche 15 MW San Juan	11¢	Yes	No*	No	Yes
REA Vega Serena 20 MW	10.5¢	Yes	No*	No	Yes
Fonroche 15 MW Vega Baja	11¢	Yes	No*	Minor	Yes
GIRO Guayama 18 MW	10.5¢	N/A	No	Yes: TBC	Yes
Montalva 100 MW	10.5¢	Yes	No	Yes: Major	Yes

Green indicates approve, **Red** Indicates Do not Approve, Yellow indicates renegotiate to lower rate and Orange indicates refine interconnection and renegotiate to lower rate. TBC indicates resolve interconnection.

[4] Based on upper bound of proposed range

I. Methodology

Four Critical Questions

Our methodology is designed to provide the PREPA Board transparent information to make the decision on which PPOAs to accept that meet their fiduciary responsibilities to comply with the governing laws, provide reliable power at risk adjusted least cost, and ensure PREPA ratepayers benefit.

The first question is whether the legacy PPOA projects at the FOMB required ceiling rate, or at their bid price, are earning excessive financial returns relative to the risk of PREPA as a counterparty in its current situation. This requires two inquiries: 1) what is the unlevered (e.g WACC) and levered (e.g., ROE) rate of return needed to compensate for the risk of PREPA at the level of risk represented by the Moodys rating of Ca or Caa, and 2) given the costs provided by the project sponsors to PREPA, what are the unlevered returns of the project at the FOMB rate. For the second analysis, where developers omitted costs, standardized benchmarks were applied.

The second question is whether PREPA would gain benefits from acquiring new projects in 2020 rather than accepting the current projects now. This can be estimated using the Siemens IRP projections, after they are adjusted for risk and any missing Puerto Rico specific costs not included in the Siemens analysis, as well as deductions for interconnection costs which are borne by PREPA under the modified PPOAs. Since by definition future projects are not burdened by the sunk development costs, they would be expected to have lower costs that the current projects, which is partially offset by declining ITC.

The third major question is whether accepting the legacy projects at the proposed rate (either the FOMB ceiling rate for PV or bid below that) will provide a benefit to PREPA ratepayers. The full test of whether this presumption is valid would be to run the portfolio of PV projects under consideration through the Siemens IRP model. Since this is not possible, we can do a high level analysis of the avoided trajectory of avoided fuel costs of the dominant baseload plants the solar energy displaces: before 2025, the Palo Seco 3 and 4 plants burning No. 6 fuel oil, and after 2025, based on the ESM plan, the new proposed LNG combined cycle plants. In addition to these costs, there is uncertainty as to whether EPA will enforce the MATS requirements, which will not be known until after the PREB accepts the IRP. If EPA does enforce MATS, PREPA would need to switch to very low sulfur fuel oil at the 90% substitution rate, which would significantly increase avoided costs or face severe fines[5]. Therefore, we construct three scenarios for this: no EPA action, immediate EPA action, and EPA action only if the LNG plant is delayed. The PV plants also benefit resilience by providing local power to the minigrids, as noted in the IRP, and avoid the volatility of fossil fuels. These benefits

[5] EPA can fine. Maximum of $99,681 per day per MATs unit.

have to be compared to additional costs that PREPA must bear from the PPOA, namely the interconnection costs and whatever additional system actions are required to address increased variable generation on the grid that is caused by the modified MTRs that are allowed by the PPOAs. The interconnection costs are being directly estimated by Sargent and Lundy. PREPA Operations and Planning identified San Juan 5 and 6 as ramping units, but did not define the integration costs.

The fourth major question was whether there are location specific grid integration issues that are intractable in the near term and preclude construction of a new solar project, because it could not be safely interconnected.

Methodology for Determining Developer Returns and Benchmark PV Prices

The methodology requires adequate data from the sponsors. Of the 16 projects assigned, 11 had adequate data and five (Windmar, Solar Blue, GLC, and Xzerta) did not provide any meaningful data besides the bid prices and interconnection costs, so only the public benefits test could be used.

The equity rate of return required started with the Siemens IRP, which has the expectation that PREPA would be credit worthy (Moodys rating of Baa or better), but added a company specific adder of 4% for PREPA company specific risk was included to the return on equity to address both the difficulty of doing business as a solar developer in Puerto Rico and with PREPA. Therefore, the differential between investment grade and PREPAs current credit rating (Moodys Ca) and potential near term credit rating (Caa) would represent the additional risk that the equity and debt financiers of solar developers would have to bear if the contract were signed and financed in 2019. This was estimated both on Moody's current market spreads and the academic reviews of long term credit risk premium between the Moodys ratings level.

The quantitative model used to calculate developer returns is a proprietary financial model that is used by solar project developers to bid and finance projects, so has comprehensive treatment of cost, tax effects, and financial returns. To provide clear comparability across proposed PV projects, it is run as an unlevered model first. This provides an unbiased assessment of the relative returns of each project at the stated developer costs vs. price bid to PREPA, either the FOMB mandated ceiling rate or a lower price. The benchmark Siemens PV plant for 2019 was also evaluated in the model to provide ease of comparison between the projects.

The rate of return for an unlevered project, is by definition, the return on weighted average cost of capital (WACC) necessary to address the counter party and project risk.[6] The unlevered cash flows are used to pay both debt and equity, therefore we use the

[6] See corporate financial institute description of levered and unlevered return and discount rate. https://corporatefinanceinstitute.com/resources/knowledge/valuation/fcff-vs-fcfe/

WACC to discount them. Thus, comparison of whether any particular project would exceed this return on capital would identify whether the project is earning excessive returns (e.g. high net present value when discounted by the WACC, and also a direct comparison of the unlevered IRR vs the required WACC). *An important caveat is that this assumes the developers are able to find tax equity investors to capture the value of the ITC and full use of tax depreciation*, ***which expect will be very difficult in the current situation of PREPA as an under investment grade counterparty***. The pre-tax returns would be proxy of the extreme outer boundary.

As an additional analysis, the leveraged returns were calculated. The levered returns are the returns to equity shareholders after payment of debt service (interest and principal), therefore the discount rate is the required equity return on capital. Since this analysis used annual rather than quarterly data, it is a coarser measure than the quarterly XIRR used to calculate the unlevered return, but provides some useful insights. This analysis first requires adjusting the cost of debt for the additional counterparty risk described above. Then the question of what leverage ratio is justified for the projects. Where available, the leverage ratio proposed by the developers for their specific project was used. Where that was not available, we applied the DSCR ratio as a limit to the amount of debt subject to the maximum benchmark Siemens leverage ratio of 50/50. A Debt Service Coverage Ratio of 1.4x was used, which may be low considering the counterparty risk. For projects with low unlevered IRRs they typically can not pass the DSCR test, nor would leverage boost returns, so these are show as N/A. Three caveats to this approach. First, the availability of debt given PREPA's high counterparty risk may limit the ability of weaker developers without strong balance sheets to acquire financing at all. Second, the CDS costs to fully insure the debt at PREPAs current credit rating is exorbitant. Therefore, the cost of debt could be higher than the risk premium applied. Third, the debt service coverage ratios may be higher than the standard 1.4x applied.

The methodology relies on the developer costs. These can not be validated directly by the consultant. There could be many reasons for the developers to overstate or understate particular costs. To address this, where developers entirely omitted certain costs that are necessary for the project to function (for example, replacement of inverters), these costs were added to the project costs at standardized benchmark rates and noted. Where developers had very high or very low costs compared to either the Siemens PV benchmark data (which derives from NREL) or from other developers, these are highlighted for transparency. Prior development costs are impossible to validate or benchmark.

Methodology For Determining Net Rate Payer Savings

The benefits of each PPOA must be weighed against the cost for each project individually because PREPA is responsible for the costs of interconnection which vary by project. The table below summarizes the costs and benefits that were taken into account.

Table 2: Total System Costs and Benefits to PREPA Ratepayers

Benefits of PV Projects	PREPA Costs from Legacy PPOAs
NPV of avoided energy costs, including valuation of PV hedge benefit of avoiding fossil fuel volatility NPV of REC credits Avoidance of MATs penalties or fuel switching compliance costs Increased resilience (lower unserved load) when combined with minigrid ESM IRP plan Additional power for battery storage benefits Compliance with RPS Act 17 Mandate	Cost of PPOA Cost of Interconnection Intermittent renewable Integration System Costs

Since PREPA is in financial distress, the blended discount rate of 13.5% until 2022, then 8.5% thereafter is used, though the results are shown for the entire WACC range, from investment grade to bankruptcy to demonstrate the robust nature of the results.

If the PREPA was forced to fuel switch to 90% ultralow sulfur fuel oil, then the NPV of avoided energy costs increases significantly if this is enforced in 2020-2025. Since EPA action will not be known until after the PREB approves the IRP , we provide three scenarios that represent the boundary conditions (best and worst case): the EPA takes no action; EPA requires compliance starting in 2020 and the CCGT is delayed 2 years and EPA enforces in 2025 and 2026.

The value of Puerto Rico specific RECs is real since under Act 17, PREPA must purchase RECs if it is unable to procure enough renewables to meet its mandated RPS targets. The earlier executed PPAs charged PREPA between 2.5 and 3 ¢/kwh for the REC attributes. In the latest PPOA negotiations, the developer proposed between 1.3-1.5¢/kwh for RECs. The FOMB price is an "all in price", so PREPA receives the REC at no additional charge. However, if PREPA did not purchase these facilities, it is likely it would not make the 2020 target, and this have to purchase RECs. To be conservative, we used the 1.5¢/Kwh price.

The quantification of the value of fixed price renewable contracts in avoiding the volatility of oil and natural gas (henry hub prices) has been the subject of much academic debate. If financial theory is applied to historical volatility of oil, the fixed price equivalent cost of a 25 year fixed price contract would be ~200-250% more than the spot prices.[7] For this reason, forward contracts with liquid markets do not exceed 5 years, and are normally liquid only for 1-3 years out. Longer term contracts are negotiated bilaterally.

The near term hedge prices are known from observation in the CME, and have been used here. The State of Hawaii was able to receive market prices for 10 year hedges (starting 3 years out from the then current date) from the regulated Hawaii gas utility which translated into an ~8% premium.[8] While financial theory clearly predicts that the value of a hedge price would be substantially higher in years 15-25, to be conservative we used the 8% premium in those years.

The increased resilience benefit of earlier solar PV applies if PREPA is able to implement the mini-grid IRP plan. Since there is no funding as of yet for the minigrids, the plan is effectively delayed by at least one year. It is not possible to estimate the difference in resilience benefits that failure to execute these solar projects in 2020 would cause without rerunning the Siemens analysis. It is possible to observe that these projects contribute to improving resilience when linked with the minigrids.

Similarly, once the PREPA system has utility scale batteries, the extra output of the PV projects will be stored and discharged by the batteries in the shoulder and evening periods, effectively displacing higher cost fossil fuel units. The net benefit of these solar projects to that system operations can not be readily quantified without rerunning the Siemens analysis.

Grid Costs and Near Term Limits on Intermittent PV systems with Modified MTRs

PREPA system planning has identified that all new PV plants with modified MTRs could cause frequency regulation problems during 2020 and 2021 due to the delay of PREPA utility scale batteries. Based on the most recent meeting, this cost is likely to be the additional heat rate penalty of running San Juan 5 and 6 gas combined cycle plants at less than full capacity to allow for ramp up needed to manage frequency grid violations as well as the additional costs of running higher priced fossil fuel units the San Juan 5 and 6 reserved capacity would have otherwise displaced. Further, PREPA could have to increase under frequency load shedding. At the time of this report, any incremental integration costs were not provided to the consultant, and has been omitted from the public benefits analysis.

[7] Constantides, Fixed Price Equivalent for Long Term Fossil Fuel Prices, Report to Ulupono Initiative 2016.
[8] Hawaii Public Utility Commission docket No.2014-0183.

The maximum intermittent renewable limits can not be truly known without a detailed grid stability analysis study. The last two studies by Siemens, the 2019 IRP and the 2014 Renewable Generation Integration Study, and the ongoing Sargent and Lundy workstream reports provide some guidance. Location will matter as certain projects have specific additional grid constraints.

Additional Considerations

The entire decision is encapsulated in regulatory context. For PREPA, we also consider the balance between the two requirements within Act 17—the first is the mandate to keep total retail rates below 20¢/Kwh, and the second the RPS target mandates.

We believe the experience of Hawaii in dealing with a similar conundrum of whether to honor legacy PPOAs given declining solar costs. This examination of the factors used by regulators to determine the path forward is instructive to the PREPA's current situation.

Finally, we examine reputational risk factors from if PREPA was to abrogate all the PPOAs unilaterally, and conversely, the reputational signals that accepting the PPOAs even if they do not meet the proposed criteria.

II. MODIFYING THE SIEMENS 30 MW PV BENCHMARK

The Siemens' PV cost estimates used for the Integrated Resource planning purposes[9] are fully adequate for planning purposes but require some adjustments to be made to allow them to be compared on an apples-to-apples basis with the current PPOAs. Siemens performed detailed analysis on making adjustments to the NREL cost of solar report[10] national benchmarks to align to the Puerto Rico cost structure, particularly on the major aspects for capital costs. The adjustments required are 1) the cost of capital if PREPA is not credit worthy, 2) Omissions in the O&M costs that are Puerto Rico specific, such as Hurricane Insurance.

Siemens PV Benchmark

The Siemen PV benchmark used in the IRP is based on the NREL Cost of PV 2018 study[11]. Siemens takes the NREL benchmark of $1.05/Kw-dc, coverts it to AC using the national 1.3 AC/DC conversion ratio, gross it up by 16% to account for Puerto Rico cost and adds a factor 1.5% for Interest Used during Construction. Thus, Siemens arrives at a figure of $1.6/kW ac (or $1.23/kW dc). The NREL figure itself contains not only the direct equipment and balance of plant, EPC construction, overheads, and margin, 3% contingency, sales tax on equipment, but also developer costs such as land acquisition, permit fees, interconnect fees and developer overhead and profits. Siemens then adds a specific estimate of typical additional interconnection costs and land values related to site conditions in Puerto Rico. As the land is purchased, there are no site lease or royalty payments, and land acquisition is notes as a consistent adder to all plants. Since Siemens recognized that the cost of hardening local solar systems for hurricane force winds would be higher than the mainland national average they use costs from the tracking systems with capacity factor of the fixed tilt as a reasonable proxy for the cost of performance of the system. Thus, this benchmark as associated with Puerto Rico should be viewed as comprehensive, though there are some modifications required and some relevant omissions.

Modification Cost of Capital to Reflect PREPA's Current Credit Rating

In calculating the cost of capital, Siemens considers "future builds to be financed by third parties and consider that PREPA has obtain financial backing for the contract as a

[9] Puerto Rico Integrated Resource plan 2018-2019. Draft for the Review of the Puerto Rico Energy Bureau, Siemens PTI Report: RPT-015-19, Rev 2.1, submitted 6/18/19. Solar Costs are found in Section 6. New Resource Options Section 6.41-6.4.8 have Solar Photovoltaic PV Project Data.

[10] US Photovoltaic System Costs, Q1 2018, Fu, Feldman and Margolis, NREL Technical Report NREL/TP-6A20-72399, November 2018 see https://www.nrel.gov/docs/fy19osti/72399.pdf

[11] *Op Cit*.

credit worthy counterparty".[12] Siemens then assigns an asset beta to solar of 0.7, and equity beta of 1.08, calculates the following rates to get to third party cost of equity.

Siemens Cost of Capital in IRP for Third Party Projects

	Siemen IRP
Equity Beta	1.08
Risk Free Rate	2.95%
Equity Risk Premium	5.50%
PREPA Company Specific Risk Premium	4.00%
Cost of Equity	12.91%[13]

The Siemens return on equity before the PREPA premium (8.9%) closely resembles the reported NREL average return on equity for project for "high cost" projects of 8.5% for sponsor equity and 9% for tax equity.[14] We conclude that the asset beta, equity beta, risk free rates and market premium are all in line with nationally expected averages.

The Siemens PREPA company specific risk premium of 4% incorporates two major risk factors: one is the difficulty of doing business in Puerto Rico, and specifically with PREPA itself,– assuming PREPA is at the minimum investment grade at threshold at Moodys Baa3 rating or better.

As of March 31 2019, the Moodys updated credit risk for PREPA is under investment grade as Ca.[15] This corresponds to a highly uncertain and speculative investment risk with significant default risk. Therefore, the PREPA company specific risk premium must be higher than the stated risk premium calculated by Siemens in the IRP. This is

[12] Puerto Rico Integrated Resource plan 2018-2019, Op Cit. p 6-2.

[13] Calculated as (Equity Beta x Equity Risk Premium) + Risk Free Rate + PREPA Specific Risk Premium

[14] Feldman, David, and Paul Schwabe. 2018. *Terms, Trends, and Insights on PV Project Finance in the United States, 2018*. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-72037. https://www.nrel.gov/docs/fy19osti/72037.pdf.

[15] https://www.moodys.com/research/Moodys-announces-completion-of-a-periodic-review-of-ratings-of--PR_905756574. Puerto Rico Electric Power Authority's (PREPA) Ca rating on its power revenue bonds primarily reflects our view on the recovery prospects for creditors following its decision in July 2017 to commence bankruptcy proceedings under Title III of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA). The Ca rating also acknowledges the recent developments toward reaching a new, preliminary Restructuring Support Agreement (RSA) with bondholders in July 2018. However, there remains a significant amount of uncertainty around the final terms, and timing of a future debt restructuring plan for PREPA, and the form PREPA will eventually take after it emerges from bankruptcy.

the risk the third party financer must bear for PREPA being the counter party of the PPOAs.

The analytic question is how much higher is the PREPA specific risk compared to what Siemens already assumed. While Siemens gathered anecodatal data from developers to arrive at the current risk premium level, and some developers provided their quantitative estimate of the PREPA company specific risk, we make the following observations. The risk premium differential for a specific company can not be readily derived from a published number. Indeed, the relative amount of the risk premium changes based on larger marco economic conditions, and is higher during periods of broad economy financial crisis and lower in periods of economic stability. Further, there are some industry specific differentials. Finally, the market is the ultimate arbiter of what credit premium is required for equity and debt finance. Therefore, for reasons of objectivity, we turn to academia in a published study of credit risk premium of US companies over time (2002-2015).[16] The findings are sobering and presented in the table below:

Credit Risk Premium For Different Moody Credit Ratings[17]

	Baa	Caa	Ca-C
Credit Risk Premium (in basis points)	143	459	738
Implied Increase in Risk from below Investment grade counterparty credit		316	595
5 year median CDS Rates (in Basis points)[18]	185	692[19]	1,430

Since the Solar PV sponsors would be signing their PPAs before the RSA is approved, and before any corresponding credit rating increases or any Title III rulings as to the priority of these solar PPOA contracts relative to fuel contracts, we are applying the below investment premium at the level PREPA is currently rated (as per Moody review on 3/19) at Ca level. Since the data combines Ca and C ratings, this could over-estimate the risk premia. We do a sensitivity to if PREPA was upgraded to the Caa. We are using the counterparty credit risk, rather than the CDS rate, which would be far higher.

[16] Corporate Risk Premia, Bernt, Douglas, Duffie and Ferguson, Review of Finance 2018, p 419-454.
[17] Op Sit, Table III p. 431
[18] The Markit CDS is a derivative contract designed to transfer credit risk, and is the economic equivalent of a bond insurance contract. The buyer of protection makes periodic payments over the life of the bond. The annualized payment per unit of covered bond principal is called the CDS rate, and expressed in basis points. Normatively, investment grade CDS is 100 basis points, while high yield is 500 basis when launched in 2009. The data in the article uses Markit data service for the market rates during the period.
[19] Moody Credit Risk report as of 10/17/19 lists CDS spread for North American Corporates as 959.

Therefore, in terms of allowable return, we are being conservative (e.g. third party investors could seek more).

Developer Cost of Equity for PREPA Caa and Ca Credit Ratings

	Siemen IRP	Adjustment for PREPA Credit Risk below Investment Grade Caa rating	Adjustment for PREPA Credit Risk below Investment Grade Ca rating
Equity Beta	1.08	1.08	1.08
Risk Free Rate	2.95%	2.95%	2.95%
Equity Risk Premium	5.50%	5.5%	5.5%
PREPA Company Specific Risk Premium	4.00%	7.16%	9.95%
Cost of Equity	12.91%[20]	16.05%	18.86%

These risks factors discussed above were designed for long term bonds. Therefore, we must also apply the credit risk premium to the expected cost of debt from the Siemens estimate of cost of capital.

Developer Cost of Debt for PREPA Caa and Ca Credit Ratings

	Siemen IRP	Adjustment for PREPA Credit Risk below Investment Grade Caa rating	Adjustment for PREPA Credit Risk below Investment Grade Ca rating
Pretax Cost of Debt	5.00%	8.16%	10.95%
Tax Rate	32%	32%	32%
After Tax Cost of Debt	3.4%	5.5%	7.45%

When combined, the weight average cost of capital (WACC) is will be higher than used in the IRP due to these risk premia for failure of PREPA to reach investment grade counterparty status. The revised WACC is shown below, along with the revised capital charge rate over a 25 year lifetime.

[20] Calculated as (Equity Beta x Equity Risk Premium) + Risk Free Rate + PREPA Specific Risk Premium

Developer WACC for PREPA Caa and Ca Credit Ratings

	Siemen IRP	PREPA Credit Risk below Investment Grade Caa	PREPA Credit Risk below Investment Grade Ca
After Tax Cost of Debt	3.4%	5.5%	7.45%
Percent Debt	47%	47%	47%
Cost of Equity	12.91%	16.05%	18.86%
Percent Equity	53%	53%	53%
Weighted Average Cost of Capital	8.5%[21]	11%	13.5%
Capital Charge rate	9.8%	11.97%	14.1%

The implication of the higher capital charge rate, *cetus paribus*, is to raise the benchmark 2019 LCOE for a 30 MW solar plant: **~$17/Mwh** for Caa rating (PREPAs Moody rating in 2018) to a whopping. **~$36/Mwh** at the Ca rating (PREPA current Moody Rating as of March 2019), from $70/Mwh in 2019 to $87/Mwh or even $106/Mwh.[22] The impact of under investment grade credit risk is by far the largest factor.

Impacts to Siemens PV LCOE from PREPA Caa and Ca Credit Ratings

Solar Mid LCOE	Base Case Siemens PREPA at Investment Grade. Moodys Rating Baa	PREPA below Investment Grade Moodys Rating Caa	PREPA below Investment Grade. 3/19 Moody Rating Ca
2019 On Line	$70	$87	$106
2020 On Line	$66	$82	$100
2021 On Line	$67	$83	$101
2022 On Line	$70	$88	$107
2023 On Line	$82	$102	$124
2024 On Line	$81	$101	$123

The table above incorporates both the change in capital cost, the change in ITC tax credit, and the continued reduction of solar equipment prices, as per Siemens IRP. Thus, the LCOE drops and then rises as the ITC phases down to 10%, then slowly and steadily declines thereafter.

[21] Calculated as (Equity Beta x Equity Risk Premium) + Risk Free Rate + PREPA Specific Risk Premium

[22] The PPOA appear to have prices based on coming on line in 2019. Given the costs of solar decline, the mid solar case LCOE is $66/Mwh baseline, and would rise to $82/MWh LCOE from increased cost of capital.

The FOMB mandated rate of $10.5/Mwh with increase of 2% per year capped at $14.1/Mwh would be justified based solely on PREPA's current abysmal credit rating. The impact would be even more severe if the third party entered into a credit insurance (CDS spread) policy.

We recognize that one of the major values of the proposed privatization is that the credit rating of the new asset owners is far better than PREPA. What matters is who is the counter party to the PPOA: PREPA or the operator of the asset after privatization. It is our understanding that PREPA or its successor entity, backed by the Government of Puerto Rico, will be the counterparty, which should have better credit in the future.[23]

Capital Cost Adjustments

The capital costs in the Siemens Solar PV must be adjusted in two ways. The interconnection cost is borne by PREPA, so this is a reduction of $4.27 MM from the base case capital cost in the LCOE. To be clear, average interconnection cost calculated for the benchmark plant is $4.27 MM, of which $1.43 MM was already included in the NREL base costs, resulting in the elimination of the additional adder of $2.84 MM in the Siemens calculations. This lowers the LCOE by -$4/Mwh.

The Operations and Maintenance Adjustments

Siemens based their fixed O&M costs of $11.85/kW-yr on the NREL Cost of PV report 2018. NREL included the following categories of costs in their fixed O&M: module cleaning and vegetation management, system inspection and monitoring, replacement of inverters, modules and components, and operations management. These are the same categories as General O&M, Other O&M, Asset management, and inverter and component replacement on the PREPA LCOE data sheets requested of the sponsors. Therefore, even though most sponsors had higher total fixed O&M costs than this benchmark, we are not changing the NREL-Siemens benchmark for O&M for these categories.

The NREL-Siemens O&M benchmark did not include the following costs that are evident in all the sponsor submissions: Insurance (including Hurricane insurance

[23] Jorge Miguel of Ankura email 11/1/19: The privatization is currently being structured as a Qualified Management Agreement for the T&D system, including customer service, generation dispatch, and other non-generation-plant level assets and functions. The counter party to PPA's will continue to be the Government of Puerto Rico as Owner of the System, wherein the T&D Operator will act as an agent on behalf of the Owner. The successor entity to PREPA will likely have an improved credit profile to PREPA today, as a result of restructuring / securitization of legacy liabilities, and the continued use of a dedicated reconciling rate component for purchased power.

premiums). and site lease royalties (if any).

Impacts to Siemens PV LCOE of Hurricane Insurance

O&M Cost Category	Range of Costs $/Kw-yr (dc basis)	Median Costs Used $/Kw-yr (dc basis)	Impact in $/Mwh
Hurricane Insurance	$12.5--$32	$21	$8/Mwh

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In summary, placing the Siemens 2019 benchmark estimate for a 30 MW PV plant built in Puerto Rico should be increase from by $21-$40/Mwh to take into account the higher cost of capital associated with the PREPA counterparty risk of being under investment grade and the capital cost adjustments and site specific O&M adjustments.

Impacts to Siemens PV LCOE of All Factors

	Incremental $/Mwh Caa	Incremental $/Mwh Ca
Increased Weighted average Cost of Capital due to PREPA counter risk as under investment grade	+17	+36
Removed Interconnection Cost	-4	-4
Increased Fixed O&M from $11.85/Kw-yr for Hurricane Insurance to $33/Kw-yr	+8	+8
Total Adjustment	$21/Mwh	$40/ Mwh

The modified expected PV LCOE benchmark for Puerto Rico represents what PREPA might expect from future bids that come on line in the following years, as well as serves as benchmark for the current bids. The table below shows the range of benchmark costs at different credit ratings.

Benchmark LCOE PV Mid Costs for Puerto Rico Adjusted for Projected PREPA Risks and PPOA Apples-to-Apples Comparisons Real 2018 $/Mwh

	2019	2020	2021	2022	2023
Original LCOE Investment Grade	$70	$66	$67	$70	$82
Investment Grade adjusted for Hurricane Insurance	$79	$75	$75	$79	$89
Adjusted LCOE: Caa Rating & Hurricane Insurance	$95	$90	$91	$94	$107
Adjusted LCOE: Ca Rating & Hurricane Insurance	$112	$106	$107	$112	$127

Implications of Credit Adjusted PV Benchmark

The PV benchmark, adjusted for PREPA's current credit risk at Moodys Ca, is nearly identical to the FOMB rate. This means that an efficient capital market that priced in the full counterparty risk of PREPA would require ~$106/Mwh to get adequate returns to capital, *excluding any curtailment*.[24]

Until PREPA's credit level improves, PREPA should not expect to receive better pricing for the next two years, because the improvement in technology is offset by the loss of the Investment Tax Credit. There is absolutely no benefit to be gained by issuing a new RFP until PREPA's credit rating improves.

Once PREPA's credit rating improves, there are clearly significant reductions in PPOA price that PREPA should require from developers. This underscores the importance of getting the credit rating back to investment grade before the next solar RFP.

[24] Curtailment will have a major impact on the required price to reach the capital returns as discussed later in this report.

These adjusted benchmarks are expressed in real 2018 dollars and should be valid for the next several years, in the absence of additional technology breakthroughs reported by NREL.

Comment on Additional Development Costs Incurred by PPOA Sponsors

All the PPOA sponsors under review have incurred sunk development costs during this 5 to 7 year odyssey. The range of stated sunk development costs to date can be between ~$3 - 7 MM. Although economic theory states that sunk costs should not be considered in making the decision to move forward, developers will nonetheless be eager to recover these costs. These costs would add roughly $4-10/Mwh to the total cost. Thus, we would expect that if developers are able to keeps costs close to the Siemens benchmark levels, they will recover some, but not all of their sunk development costs.

III. ARE DEVELOPER EARNING EXCESSIVE RETURNS: KEY FINDINGS

If PREPA were to sign contracts today, the unlevered required return on equity to compensate developers for risk would be 11%-13.5% at the Moodys rating of Caa and Ca respectively. If the developers were able to obtain debt financing, then the required levered returns based free cash flow to equity would be a return on equity (ROE) of 16%-18.9% at the Moody Rating of Caa and Ca respectively.

The impact of the PPOA contractual curtailment bank weighs heavily on returns because financial investors will apply the full annual curtailed hours to the profitability analysis. The IRP ESM plan projects renewable curtailment at 2.5-5% for most years, and below 7% for all but 4 years. A 400 hour curtailment bank would preclude nearly all the proposed projects from obtaining debt financing and is unjustified based on the planning assumptions. Therefore, we used a maximum of 150 hours (7%) in our evaluation.

No project exceeded the required unlevered return, see Exhibit 1. If the Siemens benchmark PV project, modified as described in the previous section, received the FOMB rates and 150 hours of curtailment, it would earn an unlevered return of ~11.1%, and a levered return of 16.3%. M Solar earns 12.5%--slightly more than the benchmark Siemens PV project. On a levered basis, only M Solar earns ~ 25% return on equity, which is significantly higher than the risk adjusted returns. M Solar earns higher returns for four reasons: a) their capital costs are lower than the Siemens benchmark, b) M Solar has operating costs are lower than the modified Siemens benchmark, c) they have significantly higher capacity factor than the Siemens benchmark, and most importantly, a higher leverage ratio of 60%.

A comparison of all projects against key parameters is provided in Exhibit 1 as an attached spreadsheet. Several observations can be made from this analysis.

- The FOMB mandated ceiling rate (10.5¢/Kwh, escalated at 2%) is justified given PREPA's financial condition, since the Siemens benchmark PV plant using this rate, as modified above, earns 11.1% unlevered rate of return vs. the risk adjusted WACC of 11.9%-13.5%. However, if PREPA was investment grade, then the Siemens benchmark plant and many of the PPOA projects would earn large premiums over the investment grade weighted average cost of capital (8.5%).

- In general, the FOMB rate of 10.5¢/Kwh, escalated at 2% will force most of the projects to be more efficient than stated in order to obtain financing. Since many of the costs projects were in the context of justifying much higher rates (12-14¢/Kwh), they may have been inflated for purposes of negotiation.

- All projects except Morovis and Montalva are significantly burdened by post Maria Hurricane insurance. In essence, this item alone at least doubles the O&M

cost, which is a very strong drag on earnings. It is likely that both Morovis and Montalva are underreporting this cost. We adjusted both in a similar manner to the Siemens benchmark for a more apples to apples comparison.

- Even though M Solar earns high levered returns (25% ROE) based on 60% leverage, we caution that debt may not be so easy to obtain, even at a premium when PREPA is under investment grade, and we did not use the CDS rates to define returns.

- The majority of projects (Montlava, Blue Beetle, Yabuca, Aetnas) earn between ~8-10% unlevered return, which *may* be sufficient to attract investment capital, though may not pay off *all* preexisting development costs. However, these latter costs are sunk.

- All but two projects are significantly burdened with preexisting development expenses that weigh down capital costs. The lack of preexisting development costs (either because not incurred or not reported for recovery) makes Fonroche have viable unlevered financial returns (10.5%). Aetnas is burdened by excessive capital and operating costs regardless.

- Montlava, REA and Aetnas have total EPC capital cost in excess of 25% of the Siemens benchmark. This is especially surprising for Montlava which is 100MW project and should have shown economies of scale.

- The laggards (Resun, REA and Solaner) will have to significantly improve both capital and operating efficiency in order to attract finance. In other words, even if PREPA approves these contract, they would have to lower both capital and operating cost to be financeable at *even if PREPA's financial condition improved to investment grade.*

A very important caveat is that under current U.S. national conditions, we are concerned that the companies will be able to tax equity or at anywhere near the 100% tax equity assumed in the base case of the models. The returns are bounded by the pre-tax unlevered equity shown in the summary table. Our view is that unless the sponsor has intrinsic U.S. tax equity or have very strong relationship with tax equity providers, the tax equity may prove to be limiting factor. In our experience, U.S. tax equity will avoid both smaller projects, and those with large counter party risk, both of which are evident in these legacy projects.

Levered Returns

Our expectation is that all projects that earned adequate returns to cover the debt service coverage ratios required by banks will seek leverage. While we recognize the financing institutions will required a higher DSCR than 1.4x, there is inadequate

objective data to determine what this required ratio will be. With this important caveat, we applied the developer proposed leverage ratio to the projects using the risk adjusted interest rate of 8.16% to determine the leverage returns.

Financial theory dictates that if the debt cost of capital is lower than the equity cost of capital, the financial returns to equity will increase with leverage. Thus, the levered returns of the projects are indeed higher for all projects that can manage the debt covenants, which are the ones with unlevered returns at ~8% or above.

A 10% unlevered project increases returns to equity to ~14% at a leverage ratio of 50%. This implies that these projects can meet the risk/return requirements are leveraged projects, *if PREPA or its successor entity has improved credit ratings*. (e.g. on a weighted average cost of capital basis, they would have a slightly positive NPV). Thus, PREPA can have some degree of confidence that if they approve these projects, and Moody upgrades PREPA's credit rating after the RSA agreement approval, the projects could potentially be financed and built. We do not believe the levered returns of 14% are excessive because they do not even meet the risk return requirement of 16% after tax returns on equity needed to compensate for PREPA below investment grade counter-party status at the Caa rating (18% at Ca rating), and the project after tax free cash flow, discounted at levered do not show significant positive NPVs. All financial information has been calculated using the nominal cash flows and nominal discount rates.

Summary of Return Findings

No project exceeded the unlevered return. 13.5% at the FOMB mandated ceiling rates, and only one project, M solar (12.6%) exceeded the 11% unlevered return. We observe the 2019 Siemens PV benchmark plant earns returns of the same magnitude (11.1%) at the FOMB rate, with 7% curtailment (150 hours). This would imply that if a new RFP resulted in the cost efficiencies of the projected IRP, there would be little if any savings. Thus, from this perspective, these projects are not earning excessive returns.

We can clearly observe that the early 2019 rates of 14¢/Kwh, with escalators, would have produced excessive returns on many of the projects. Thus, when the cost structures that were developed during that negotiation period are applied, several projects appear to have very low returns (<~6% unlevered) in the case of Resun, REA, and Solaner.

The remainder have costs and returns that are largely in line with both the benchmark Siemens IRP costs and the expected returns, which are below the risk premium required due to high development costs. This implies that when they get financed, the sponsors will either not get their full pre-development costs back, or certainly will not earn adequate returns on them.

IV. SAVINGS TO PREPA RATEPAYERS

Do PREPA ratepayers save money from the renewable contracts? The answer is often yes, but not always. As discussed in the methodology section, the benefits must be weighed against the cost for each project individually because PREPA is responsible for the costs of interconnection which vary by project. The table below summarizes the costs and benefits that were taken into account.

Benefits of PV Projects	PREPA Costs from Legacy PPOAs
NPV of avoided energy costs, including valuation of PV hedge benefit NPV of REC credits Avoidance of MATs penalties or fuel switching compliance costs Increased resilience (lower unserved load) when combined with minigrid ESM IRP plan Compliance with RPS Act 17 Mandate	Cost of PPOA Cost of Interconnection Intermittent renewable Integration System Costs

Since PREPA is in financial distress the results are shown for the entire WACC range, from investment grade to bankruptcy to demonstrate the robust nature of the results. To be consistent, we run a blended case wherein PREPA is investment grade starting in 2023, but not investment grade until then. Since the IGCC can not be built or financed until PREPA is investment grade, this blended discount rate is internally consistent.

The analysis shows that ratepayers will have net energy benefits for PPOAs under at 10¢/Kwh or less. **This is true irrespective of any future EPA decision to impose MATS compliance on PREPA , higher REC values, and at all discount rates.** Quantitively, the NPV of avoided energy costs and 1.5¢/kwh REC credits exceeds the cost of PPOAs that are equal to or lower than 10.0¢/kwh, with the associated escalators <2% per year capped at 14.1¢/kwh. If the EPA was forced PREPA to fuel switch to 90% ultralow sulfur fuel oil or pay fines, then the NPV of avoided energy costs increases significantly if this is enforced in 2020-2025. These net energy benefits are then compared to the interconnection cost to determine the total system benefit, subtracting any additional operations integration costs in 2021.

The value of Puerto Rico-specific RECs is real since under Act 17, PREPA must purchase RECs if it is unable to procure enough renewables to meet its mandated RPS targets. The earlier executed PPAs charged PREPA between 2.5 - 3 ¢/kwh for the REC attributes. In the latest PPOA negotiations, most developers proposed between 1.3-1.5¢/kwh for RECs[25]. The FOMB price is an "all in price", so PREPA receives the REC at no additional charge. However, if PREPA did not purchase these facilities, it is likely

[25] GIRO proposed the highest REC value of 3¢/kwh

it would not make the 2020 target, and this have to purchase RECs. To be conservative, we used the 1.5¢/Kwh price.

As discussed in methodology section, the quantification of the value of fixed price renewable contracts in avoiding the volatility of oil and natural gas (henry hub prices) has been the subject of much academic debate.[26] The near term hedge prices are known from observation in the CME, and have been used here. The State of Hawaii was able to receive market prices for 10 year hedges (starting 3 years out from the current date at the time) from the regulated Hawaii gas utility which translated into an ~8% premium.[27] Financial theory clearly predicts that the value of a hedge price for oil would ~72% for a 15 year contract starting at the end of the CME hedge period. For natural gas at the Henry Hub, the historical average price growth is lower, so the same contract fixed price equivalent would be ~7%. Since the academic analysis and market analysis are very close, we used the observed the 8% premium for years 6-25 to be conservative.

The increased resilience benefit of earlier solar PV applies if PREPA is able to implement the mini-grid IRP plan. Since there is no funding as of yet for the minigrids, the plan is effectively delayed by at least one year. Thus, we can not accurately quantify the benefits of solar builds in 2020 in terms of reducing lost load, though we can observe that to the extent both the solar and BESS systems are on line by 2021, the benefits as stated in the IRP per region are valid benefits.

We were unable to obtain an estimate from PREPA systems operations regarding the 2020/2021 intermittent renewable integration cost. However, we since the magnitude of the cost is bounded by the marginal fuel cost differential on the gas CC heat rate for capacity reserved as ramping and higher fuel costs from replacement units if any, we do not believe it will change the conclusions.

[26] See Constandides study "Report to Ulupono" provided as testimony in Hawaii Public Utility Commission docket No.2014-0183of volatility premiums associated with historical oil and gas volatility. The electricity price of a fixed-price long-term renewable-energy contract that equates the discounted total cost of such contract with the discounted total cost of oil-based electricity production (the "avoided cost") is at least 30% (5-year contract), 96% (15-year contract), or 237% (30-year contract) higher than the current cost of oil-based electricity production, based on the volatility of Hawaii oil/diesel prices (75%-25% oil-diesel generation target with a discount rate of 8%). Results of Hawaii prices and BP forecast of oil prices are nearly identical. At a 2% contract inflator, the 15 year contract premium drops to 72%.

[27] Hawaii Gas presentation to DBEDT May 2016 , Hawaii Public Utility Commission docket No.2014-0183

The resulting net present value discount rate net savings benefit per Mwh of solar produced is shown in the following two tables (with and without MATS compliance cost). *We believe the blended rate is the most accurate for public policy considerations*. The results are very sensitive to REC prices and discount rates.

NPV Net Savings per MWh With No MATS Compliance Costs

PPOA Price	WACC 8.5%	Blended WACC	Blended with 2¢/Kwh REC	WACC 13.5%
$90/Mwh	$53	$97	$152	$131
$100/Mwh	$(67)	$13	$69	$61
$105/MWh	$(127)	$(29)	$27	$25

Savings per MWh With MATS Compliance Costs
Ultra Low Sulfur fuel oil 90% from 2020-2025

PPOA Price	WACC 8.5%	Blended WACC	WACC 13.5%
$90/Mwh	$328	$299	$328
$100/Mwh	$237	$215	$257
$105/MWh	$185	$173	$222

Savings per MWh With MATS Compliance Costs
Ultra Low Sulfur fuel oil 90% from 2025-2026
Due to delay of CCGT

PPOA Price	WACC 8.5%	Blended WACC	WACC 13.5%
$90/Mwh	$254	$228	$244
$100/Mwh	$167	$140	$173
$105/MWh	$112	$103	$138

Given the current federal funding, privatization, and resolution of financial distress, we believe the third scenario (delayed IGCC with penalties) to be reasonably possible. Collectively, the planned solar facilities would reduce the residual exposure to the final Palo Seco output significantly. In IRP, Palo Seco output dropped from 5,078,775 Mwh in 2019 to 1,387,363 MWh in 2024. The combined output of the solar plants is 1,159,042 Mwh. Thus, in the absence of these plants, unless compensated by additional solar facilities before 2024, Palo Seco output would be considerably higher.

These NPV net savings benefits, multiplied by the cumulative PV output, is the total value created of each solar project. We can then compare against the interconnection cost, grossed up by Interest during construction, to determine which projects produce net savings to ratepayer. We ran two sensitivities: discount rate and REC price.

Projects savings to Ratepayers vs interconnection cost and discount rate

Project	PPOA Rate $/Kwh	Maximum Interconnection Cost $MM	Blended Rate	Sensitivity >11.6%	Sensitivity Blended 2¢ REC
Morovis 33.3 MW	9¢	$12.6	Yes	Yes	Yes
Solar Blue 30-40MW	9.5¢	$5.9	Yes	Yes	Yes
Blue Beetle 30 MW	9.9¢	$3.6	Yes	Yes	Yes
Aetnas 22.4 MW	9.9¢	$10.9	Yes	Yes	Yes
Solaner 25 MW	9.9¢	$3.5	Yes	Yes	Yes
M Solar 50 MW	10.5¢	$8.1	No	Yes	Yes
Montava 100 MW	10.5¢	$6.1	No	Yes	Yes
GIRO Salinas 61-69MW	10.5¢	$10	No	Yes	Yes
GIRO Guayama 18MW	10.5¢	$5.6	No	Yes	Yes
ReSun 20 MW	10.5¢	$3.1	No	Yes	Yes
Yacuba 20 MW	10.5¢	$3.1	No	Yes	Yes
Xyerta 20-40	10.5¢	$5.5	No	Yes	Yes
Windmar 20MW	10.5¢	$5.8	No	Yes	Yes
Fonroche 15 MW San Juan	11¢	$7.9	No	No	Yes
Fonroche 15 MW Vega Baja	11¢	$5.6	No	No	Yes
REA Vega Serena 20 MW	10.5¢	$6.9	No	No	Yes

Key Findings: Do Ratepayer Save Money?

Five plants, Morovis, Blue Beetle, Aetnas, Solar Blue and Solaner bid under the FOMB ceiling price and created energy NPV of energy savings to pay for their interconnect costs, so always created savings to ratepayers under any interest rates or MATS compliance scenario. These equate to 150.9 MW. Three are clustered in the North near San Juan.

Three plants, REA Vega Serena, Fonroche San Juan and Fonroche Vega Baja have high interconnection costs given their scale due to location. Since they bid at or near the full FOMB rate, they only pass under MATS compliance scenarios, higher REC prices, or an unrealistically high discount rate.

The remaining plants that bid at the full FOMB ceiling rate have the same overall pattern: they do not create net system benefits (e.g. do not cover their interconnection costs) at the investment grade or blended discount rate, but would if either MATS compliance scenario or higher REC prices.

Implications

Morovis, Blue Beetle, Aetnas, Solar Blue and Solaner all save ratepayers money, and bid below the FOMB rate. These PPOAs should have no problem getting PREB and FOMB approval if the Board approved the PPOAs.

The public policy arguments for the remaining plants at the FOMB ceiling rate is more nuanced. These plants will pass the public policy test under the following conditions that are reasonably probable: a) there are penalties imposed due to delays in meeting MATS compliance or b) the REC value is 2¢/kwh rather than 1.5¢/kwh. Therefore, we view these plants as insurance against these more expensive outcomes. Nonetheless, *if these developers reduced their price to 10¢/Kwh, they would pass the public policy test. Therefore, we recommend renegotiation of these contracts.*

REA Vega Baja, Fonroche San Juan and Fonroche Vega Baja have interconnection costs that exceed its net value at the full FOMB rate. Even assuming higher PREPA risk, these plants do not quite break even. This is a red flag for PREB approval. *If these developers reduced their price to 10¢/Kwh, they would pass the public policy test. Therefore, we recommend renegotiation of these contracts.*

V. GRID SYSTEM OPERATIONAL CONSTRAINTS AND COSTS

The final test for approval of the PPOAs is whether operational considerations or grid constraints are significant enough, either due to grid system impact or additional costs to address the grid system violations that the specific project does not meet the public policy test as a benefit to PREPA ratepayers.

Understanding the Engineering Challenge

The fundamental problem of integrating intermittent and variable renewable resources whose output is weather dependent, is that electrically isolated island systems, such as Puerto Rico and Hawaii, with low inertia, a relative lack of spinning reserves available to system operators, and comparatively weak grids due to the circumference of the island systems make integration more difficult and expensive than continental grid systems. PREPA's challenge is compounded by the hurricane storm damage and bankruptcy which means a lack of personnel and budget for maintenance and repair of the existing system.

The structured integration of intermittent and variable renewable energy generation sources to electrically isolated systems with low inertia, such as Puerto Rico, requires specialized technical power engineering studies to determine their impact upon the reliability and stability of the grid. PREPA had performed several studies with Siemens and NREL to assess the ability of the existing system to integrate new renewables, to define the IRP ESM plan that adds both BESS and PV to the grid, and to define the Minimum Technical Requirements (MTRs) that new renewable power plants must comply with.

The MTRs[28] include frequency ride through, voltage ride through, and voltage regulation requirements, all of which can be technically addressed through currently available inverter and control technology. PREPA MTR 6 requires renewable generators to support grid frequency when it drops below 59.7 Hz with 10% of contractual capacity for 9 minutes, and PREPA MTR 7 limits project ramp rates to 10% of the project's Contractual Capacity per minute for both increases and decreases in production. The system operators' key concern is sudden drops in renewable output that are difficult to manage using PREPA's current generation reserves.[29] A common assumption is that battery energy storage systems (BESS) will need to be installed at each new renewable generation facility in order to meet the MTRs. The Siemens study concluded that each BESS system located at a solar generation plant should have an

[28] PV Minimum Technical Requirements Rev 15 agosto 2012

[29] Relevance of Minimum Technical Requirements for the Integration of Renewables, PREPA CN 078-04495 Rev 11/17

energy storage capacity equal to 1 minutes x 45%, and 9 minutes at 30% of the project capacity to meet the requirements of the MTR.[30]

The current draft master PPOA contract modifies the MTRs to exclude MTR 6 and 7, the key provisions regarding the requirement to control ramp down rate, and provide frequency support, effectively amending the MTRs to eliminate the need for the PV projects to have their own co-located BESS systems. The reasoning for this change was four fold: 1) it is currently economically more efficient and operationally more secure for PREPA to build, own, and operate the batteries at utility scale at strategic points in the grid,[31] 2) linking the renewable additions with a BESS may result in investments beyond the actual requirements for the system,[32] 3) PREPA and P3 have selected 180 MWh of utility-controlled batteries, consistent with the IRP, and 4) PPOAs modifications were designed to lower project cost to comply with the FOMB ceiling rate. We conclude from the above that, once PREPA has installed the required amount of new utility-controlled BESS specified under the IRP the frequency response and ramping problems resultant from this tranche of PPOAs will be largely resolved and any investments in project-owned BESS per the standard MTR for these projects would be rendered superfluous.

Separately, the current PPOA contract requires PREPA to build the interconnection facilities to help comply with the FOMB mandated rate. Sargent & Lundy estimated the interconnection costs for each PPOA projects under consideration. Their study also highlighted any grid system violations that may occur given the existing system on a project-by-project basis. Overall, the requirement for PREPA to build the interconnection places additional burdens on PREPA's electrical system operations department given PREPA's financial condition and limited manpower and budget resources. In addition, PREPA's operational department has raised concerns that the S&L plan for sectionalizing grid may compromise performance and had differences regarding ease of integration on certain plants.[33]

[30] IRP 2019, Rev 2 06182019, Section 6.4.8, page 149. Specifically, the Effective Storage Capacity of 45% of the Contractual capacity for 1 minute, and a Nominal Storage Capacity equal to 30% if the Contractual Capacity for the remaining 9 minutes would address the worst case situation where the PV plant was running at 100% capacity and dropped to zero due to rapid cloud cover. The BESS power capacity requirement was not defined.

[31] In the 2019 IRP Siemens states that the cost of BESS Power Conversion Systems (PCS) are similar on a per kW basis, regardless of the quantum of energy storage required (10 minutes or 4 hours), making larger grid connected, utility owned batteries more cost competitive.

[32] *Ibid,* IRP p 149.

[33] Javiar Suarez internal email 9/18/19 "by constructing new sectionalizers, our existing infrastructure is adversely affected by increasing the probability of contingencies due to more system components, therefore compromising the stability and reliability of our existing infrastructure"

Defining the Parameters of the Solution

The key operational concern is bounded by **time**: solar generation down-ramp events will only be an issue after late 2020 (the earliest date for the new PPOAs to begin operation if they were approved today) and before the commissioning dates of the new, grid-sited BESS systems already selected, but held up by P3 funds availability. The problem is the 6-16 month window (3Q 2020-4Q2021) when the subject solar plants should come on line, but when the new, grid-sited BESS may not yet be operating, but the timing gap could be longer. The IRP and all prior studies have been clear that new solar facilities should not be added to the grid unless they comply with the MTRs or PREPA has installed the necessary BESS.

The 180 MWh of planned BESS are distributed in three sites of 60 MWh each in San Juan, Carolina, and Caguas. The operational challenge varies by geography within the minigrid architecture. While the transmission and distribution improvements have not yet been made to create the isolated minigrids, the IRP nonetheless provides guidance on the spatial differentiation of the grids ability to integrate new solar. The 2019 IRP found that the Bayamon minigrid can accommodate 120 MW of new solar without BESS systems in 2020[34] in conjunction with the neighboring San Juan minigrid plans for 120 MW of BESS along with the San Juan 5 and 6 gas 200 MW CC units. The other mini-grids relevant to the subject PPOAs planned for BESS either concurrently or a year before the new solar was placed on the system.[35] The central BESS are used for both grid management and energy shifting to the shoulder periods.

During 2020, the PREPA's generation reserves are already stretched beyond baseload capacity, and therefore require peaking units to operate in certain months.[36] If PREPA adds intermittent solar facilities before the BESS are installed, the requirement for reserves will increase. Discussions with PREPA's grid operators suggest that the San Juan 5 and 6, 200 MW gas fired combined cycle plants, totaling of 400 MW, could be used to address the ramping and frequency requirements by lowering the capacity factor that would otherwise be running at, essentially using part of their capacity as a regulating reserves.[37] It is worth noting that once batteries are in place, in the IRP ESM plan hourly simulations, these units do not run during the day, but in the shoulder and evening periods. Any baseload capacity used as reserves to address intermittent solar, would come at the incremental cost of fuel for higher heat rate and more expensive

[34] See Area_Cap_Detail tab of ESM Metrics Base SII, submitted as IRP testimony. Bauyaman in specific adds to 480 MW of new solar without new BESS on generation units.
[35] IRP Op Cit.,p 257-258
[36] See Electrical Systems Operating Reserves report forecast for Nov 2019-Dec 2020 presented on November 20, 2019, which shows that baseload only reserves are inadequate for spinning reserve (450 MW) and total reserves (650 MW) in several months in 2020, which means peakers must be deployed. The situation would worsen and could result in load shedding if too much solar was added without MTRs and weather-related disruptions occurred during the planned maintenance cycles.
[37] Meeting with Gary Fernandez, October 2019

alternative units being utilized. This could be significant when peaker units are required especially if run on diesel fuel.

The Board has four sources of information available now to make its decision: 1) the 2015 Siemens report on renewable integration before BESS systems were commercially viable, 2) the Siemens 2019 IRP ESM plan with concurrent utility BESS and intermittent PV systems, 3) the latest Sargent & Lundy interconnect cost and system integration study (Sept 2019) and 4) the prior NREL studies justifying the need for MTRs.

The 2019 IRP ESM plan concludes that BESS and intermittent PV can be placed on the grid concurrently and that the BESS would mitigate PV's negative operational effects. Under the ESM plan, Siemens suggested the ratio of storage to solar should be 64% in the base load case, with a lower ratio of 53% and 42% for the high and low load cases respectively.[38] The ESM IRP plans adds 240 MWh of BESS and 300 MW of new solar by 2020. The ESM plan front-loads the grid-side resources for the 5 year 2020-2025 period. To accommodate the ~400 MW of new PV, 248 MWh of BESS will be needed in base load case, but only 168 MWh of BESS in low load case.

The Siemens 2014 study, PREPA Renewable Integration report[39] found that the grid, without any BESS (which was not commercially viable at the time), could handle 579.4 MW of renewable power without exceeding system limits, *if the new renewables complied with the MTRs.* This 579.4 MW number included 121 MW of renewable generation existing at the time, and 64 MW of net metering DERs.[40] By 2018, an additional 103 MW of wind and solar were added along with 141 MW of DERs. This would leave ~135 MW of grid integration capacity without any new BESS or new combined cycle.

The 8/27/19 Sargent & Lundy study[41] is an ongoing work in progress, but provides some useful emerging insights. Against PREPA's grid integration criteria, certain proposed PPOA projects present consistent grid problems. In specific, Montalva due to its size and location, violates Thermal Overloading, System Strength, and cause severe frequency deviations in the absence of batteries. In addition, REI Ceiba, GIRO Guayama and Fonroche Vega Baja trigger thermal overloading under contingent events[42]. Operations raised additional issues on grid condition related to Guayama. S&L's emerging conclusion was that the PREPA system had enough system inertia

[38]IRP 2019, Op cit, p 257-258

[39] Siemens PTI R017-14

[40] PREPA's system in its planned 2015 configuration and generating fleet can accept up to 579.4 MW of renewable generation, split in 160 MW of wind turbine generation and 419.4 MW of Photovoltaic generation, with generally acceptable levels of curtailment (2.26%) and a total penetration of 6.6% of sales. If net metering projects are allowed to exceed 64 MW, the actual system's limit to manage renewable projects would be reduced to penetration levels below 579.4 MW. The total PPOA renewable generation limit (579.4 MW) already includes the existing plants, AES Ilumina, Pattern, and Punta Lima (121 MW).

[41] Photovoltaic Feasibility Studies, Grid Studies and Analysis, Workstream 8 Sargent and Lundy 8/27/19

[42] YFN Yabuca also triggered a thermal violation, though S&L listed as minimal. The combination of M Solar, Vega. Serena and Aetnas alternate was given the same rating.

could handle up to 30 % renewable penetration (835 total MW, i.e. ~579 additional MW).
The capabilities of smart inverters of the solar plants themselves can provide frequency response and frequency regulation to the extent they are operating in curtailed mode and have adequate headroom. NREL ran a series of tests of PV APC systems in Puerto Rico in 2016 specifically designed to see whether the PREPA MTRs could be met without on-site batteries.[43] NREL found that solar facilities are operated in a partially curtailed mode with headroom to ramp up their generation, the facilities can provide support for frequency droop, and regulation up or down.[44] Though not perfect substitutes for inertial generation[45], inverters can supplement the system. Given the inherent locational diversity of the renewables, it is highly unlikely that all renewables would suffer a simultaneous drop in output.

Weather forecasting plays an important role in preparing for the operational response to intermittent renewables. When PV facilities are required to comply with MTR 7, the developers will determine the power capacity of the BESS system on a site specific basis based on the probability and magnitude of weather related events, and their own risk management preferences. During cloud cover events, the PV system output will experience sudden drops, but not fully to zero, the amount and likelihood of residual output is a key factor in determining the power capacity necessary for compliance.

The Solution Space

Siemens 2014 study indicates that a modest amount of new renewables ~135 MW could be accommodated without additional costs to the system. The P3 energy storage RFP would bring 180 MWh of batteries on line, supporting 284-428 MW PV depending on load conditions. Thus, once these batteries are on line, the operational issues are largely solved. The question is what to do until then.

Restoring the MTR 6 and 7 will increase costs to developers, and which will vary significantly by site. We have estimated this using a range of 0-30% residual power output using the NREL 2018 cost estimates[46] and the IRP estimates for stand alone BESS. Lowering the curtailment to 40 hours addresses the operational concerns and helps developers financially by increasing power revenues, as well as increasing leverage. Since developers will have to install the power capacity of the BESS system

[43] Advanced Grid Friendly Controls, NREL 2016 https://www.nrel.gov/docs/fy16osti/65368.pdf

[44] To demonstrate this control feature, the AES Illumina plant had to operate in curtailed mode with at least 10% headroom to be able to provide frequency regulation in both directions in accordance with PREPA's MTRs.

[45] The FFR by PV power plants cannot completely replace inertia. Inertia is provided by rotating mass that is synchronized to the frequency of the power system, and thus is instantaneous in response. Any equipment that detects frequency of the system before responding through a closed loop control is not instantaneous, so is not exactly inertia.

[46] 2018 US Utility Scale Photovoltaics-Plus Energy Storage Systems Cost Benchmark, by Fu, Remo, and Margolis, NREL/TP-6A20-71714 November 2018 and Siemens IRP Solar, Wind, and Storage Costs-final.xls

necessary for compliance with very little energy storage capacity, the incremental cost of expansion will be low. Thus, if MTR compliant PV plants are allowed to bid into future RFPs for energy storage or grid services, they will underbid new stand alone facilities, and thereby earn future revenues to offset the upfront costs of MTR compliance. Even without no future expansion or revenues, the impact is 0.3-0.5% unlevered IRR and 0.4-0.8% levered IRR. [47]

This could be lowered further if PREPA agrees that developers can use remote sited BESS systems with the applicable range defined by PREPA, subject to the following limitations : a) the ratio of BESS power capacity to PV Contractual Capacity shall be no less than 64% in aggregate, and b) the BESS system shall have the same degree of transparency to the control room as a collocated system. There are developers with multiple projects that would avail themselves of such a rule, as well as consortium that may develop to capture economies of scale (~30+%).

There are important clarifications to the MTRs based on system operations[48]:

1) MTR 7 "The ramp rate control tolerance shall be +10%"..
    a. The 10% per minute rate change limitation (based on contracted capacity), shall be complied in a continuous manner. This is 16.67 kW/sec. Average 10% per minute with peaks in the middle is not acceptable.
    b. Tolerance shall be +/-10%. Example: 10 MW PV facility, ramp rate limit is 1MW/min. Therefore, after the first minute, 8.9MW to 9.1MW is acceptable. Similar situations are acceptable as long as the control system is programmed for 10% per minute.
2) The same BESS systems can be used to comply with MTR 6 and 7, as long as the facility has a control system that allows to manage both requirements independently, giving priority to ramp rate control when necessary. Although 10% of the contracted capacity in the BESS is always reserved for frequency regulation/response, if in a specific operation condition this 10% is needed for ramp rate control (because the allocated capacity used for ramp rate control has been depleted), then it can be used. These details have been specified in the Agreed Operational Procedure (AOP) of these facilities, and therefore are in compliance with the MTR.

Finally, it is important the PREPA define the criteria clearly and provide quantitative examples of performance requirements to avoid confusion. However, developers, not PREPA must determine technically how to meet these criteria, and we believe it is inappropriate for PREPA to approve the technical designs prior to operations, unless the developers fail to meet the criteria during operations and must demonstrate they have cured the problem. Our observation was the PREPA has taken a more risk adverse stance in determining the amount of power capacity and energy storage needed to meet the criteria given the site weather data than a developer might otherwise do commercially.

[47] As discussed below this could rise to 1.3% under PREPA strict interpretation of BESS system to meet criteria
[48] Written and telephone conversations between S&L and PREPA Operation Luis Rosario in December2019

In the alternative, a combination of contractual changes, operational changes, and additional load shedding could address the issue. The partial use of San Juan 5 and 6 capacity as reserves for AGC (frequency) and ramping could potentially accommodate the recommended projects within electrical proximity, depending on how much capacity was reserved. Requiring the PV plants to run in partially curtailed mode by raising curtailment to 600 hours/yr. for 2020 and 2021 would both provide additional resources for frequency response and also lower the magnitude of the sudden drop in output by any one plant. There may be additional demand response capabilities that could be called upon by 2021, or PREPA would have to resort to greater load shedding.

Additional to all the system level solutions discussed above, there are contractual modifications to the PPOAs that could address the integration and manpower constraint issues raised by systems operations without making the solar projects themselves unfinanceable. These include:

a) **Restore ramping MTR 7 and frequency response MTR 6 requirement, and lower curtailment to 40 hours.** There are too many operational uncertainties until the utility scale BESS are in place. The net impact to developers is ~<0.3-0.5% unlevered IRR loss, due to lowering curtailment to compensate for the increased BESS cost. If MTR 7 compliant plants are allowed to bid into future storage or grid services RFP, there is upside optionality that would lower the net impact to developers further. This approach would have the least load shedding and additional fuels costs to PREPA.

b) **The alternative to restoring the MTR 6 and 7 is to increase the allowed curtailment in 2H 2020 and 2021 to 600 hours:** The IRP 2019 expectations of curtailment range oscillate, but stay under 7% most years[49]. Since most PV plants are operating only 2300-2500 hrs/per year (Capacity factor ~22-27%), and a 150 hour annual curtailment bank (7%) addresses nearly all forecast system needs and still allows a reasonable degree of leverage. One approach is to increase the allowable curtailment during the operationally challenged time period (2020/2021) and decrease it later, when Siemens predicts very low curtailment due to the large number of batteries. Our analysis suggests that modifying 2020 and 2021 to no more than 600/hr per year, then reducing the curtailment to 150/hr afterwards, would meet all parties' needs. [50] The contract requires the solar plants to provide inverter based frequency response and regulation services when PREPA requires

[49] See ESM Metrics Base SII spreadsheet submitted as part of IRP testimony, Curtailment ranges for 0-3% from 2020-2024, rises temporarily to 6-9% for three years, 2025-2027, then drops to 2.5%-4% until 2034, when it rises from 7-9% for two years, then reaches 11-15% in 2036-2038.

[50] This approach minimizes Deemed Energy payments and maximizes ability of solar plants to be financed. The construct of a customizing the curtailment bank to match the planning cycle is to optimize the whole system.

them to operate in curtailed mode under Article 7.1. The solar projects can absorb the higher maximum curtailment in the first year due to cash flows from tax effects. We caution that going beyond 600 hours will lower free cash flow to much, and not all projects can absorb this level. In essence, we are derating the plants and using their inverter capabilities to assist the frequency challenged period while maintaining adequate cash flow for debt service coverage ratio and partnership flip cash coverage. This allows more nameplate capacity to be added now, while meeting the RPS in 2020/21. We believe that the projects recommended for approval can be financed under this approach at ~45-50% leverage for projects that are near the modified IRP benchmark capital and operating efficiency. PV plants that do not comply with MTR 7 create costs to the system. PREPA will incur costs for additional generation reserves and customers are likely to have more load shedding events than our recommendation to restore the MTRs. Given the cost causation, keeping the curtailment at 150 hours/yr from 2022 onward is appropriate. The developer unlevered IRR drops by ~0.3-0.4%, and levered IRR drops by 0.7-0.8%at this level of curtailment. This is in the same range as the MTR compliance, but without the upside optionality of future revenue potential. Further, this approach clearly increases costs to PREPA ratepayers vs. the MTR compliant approach.

c) **For disruptions from major weather events, such as hurricanes and the recovery period, should be addressed by modify Article 15 to include the 300 hour cap for weather related events in the symmetrical force majeure provisions**. The existing PPOs typically include annual curtailment periods in Article 8.4 for weather risk and planning expectations ~ 420 hours in the aggregate, usually comprising ~280-300 hours for weather risk and ~120 hours for planning expectations. Since financiers must assume the worst case, 420 hours a year in Article 8.4, could foreclose efficient debt financing for most developers. Separating the issues contractually will lower risk.

d) **Provide PREPA the unilateral option to have the developer build and finance the interconnection based on S&L design and maximum cost, and then charge PREPA a fee that amortizes the actual interconnection cost up to the maximum cost at the PREPA investment grade 8.5% WACC over the contract period.** This alleviates not only PREPA manpower and budget constraints, but also reduces PREPA liability for contractual default (due to lack of funds) during the development period. The developer costs are repaid with fees from PREPA. Aetnas and Xzerta have expressed interest in building the interconnection themselves and charging PREPA. Giving PREPA the unilateral option (before FNTP so the developer can obtain financing) provides PREPA with the management choice based on available funds, manpower, and priorities.

Privatization may have been completed in 2020 before the new solar plants come on line. This may change the availability of manpower, expertise, and system operations capabilities, such as advanced weather forecasting, that could ameliorate the operational concerns expressed due to the current situation.

Integration of intermittent renewable energy often requires a partnership between the utility and the renewable providers. We believe a task force of NREL advisors, PREPA systems operations, the new concessionaire, the selected renewable projects, and customers should be convened in 2020 to define the operational protocols before the solar plants come on line.

VI. COMPLIANCE WITH FEDERAL AND TERRITORY LAWS

Approval of the recommended PPOAs will bring PREPA into compliance with the RPS by 2020.

Any decisions regarding acceptance or denial of the proposed solar PPOAs should be in the contact of two laws: Act 17-2019, which sets both the RPS standard and the maximum retail price, and the Federal Clean Air MATS compliance requirements for non-attainment areas. Puerto Rico's first RPS was established by Act 82-2010 in July of 2010 and recently amended by Act 17-2019 which set minimum targets of renewable and alternative energy and puts the island on a path to 100% renewable generation by 2050. The targets set by the Act are a minimum of 12% by 2020, 15% by 2021, 20% by 2022, 40% by 2025, 60% by 2040 and 100% by 2050.

RPS mandates in general require that load serving entities to supply increasing shares of retail sales with qualified renewable and alternative source. This can be procured by direct purchase of the energy including renewable attributes or by the purchase of renewable energy certificates (RECs), which are tradable instruments representing the renewable attributes qualified generation, unbundled from the energy itself. RECs allow for compliance flexibility and in general can be banked for use up to two years forward.

The solar developers sold RECs to PREPA in the existing PPOAs at between 2.5-3.5¢/Kwh in the earlier projects between 2015-2018. The most of the recent 2019 PPOA bid the RECs at 1.5¢/Kwh, and the subsequent bids at or below the FOMB ceiling price of 10.5¢/kwh are "all-in", and include the RECs and any future environmental or carbon credit. Therefore, the value to ratepayers of purchasing renewable power now is compliance with the RPS, which we can estimate at the bid REC price. This is conservative, since if PREPA fell short of the RPS target, it would have to purchase RECs at the market price or seek PREB permission to miss the target if the market price is too high.

Achievement of RPS Based on Approving Recommended PPOAs

	2020	2021
Total Sales to Consumers	14,091,000	13,320,000
Existing Renewables	566,294	566,294
Recommended PPOAs	812,145	812,145
Addition hydro generation	70,791	128,628
Total Renewable Generation	1,449,297	1,507,104
RPS %	10.3%	13.4%
RPS Target	12%	15%

If PREPA's board approves the recommended PPAs, and sales are as forecast in the 2019 IRP (along with identified new hydropower generation), the PREPA will make significant progress the 2012 RPS target, and come very close to meeting the 2021 RPS target. Approval of all PPOAs would meet the 2020 RPS target.

PREPA units subject to Federal Clean Air Act MATS are presented in the Exhibit 4-25 of the 2019 IRP along with the approach taken by each unit to comply with MATS. For Palo Seco Unit 3 and San Juan unit 9 have had PM emissions above the MATS limit and are run for reliability needs. The IRP assumes that the units could run until 2025, when new large combined cycle plants could be in service. This means that PREPA will not be in MATS compliance until the end of 2024.

The EPA has yet to approve PREPA's MATS compliance approach until after the PREB has approved the IRP. The EPA has the right to fine PREPA under its Civil Penalty Authority under Section 113(b) at a maximum rate of $99,681 per day of violations subject to a maximum cap.[51] The other alternative to meet compliance is fuel blending with ultralow sulfur diesel at a 90% ratio. This in essence adds ~$5.44/MMbtu to the cost of Palo Seco 3. While we acknowledge recent studies that fuel blending may not work as well for Palo Seco 3[52], we nonetheless also recognize that actively planning not to comply with the Clean Air Act could expose PREPA management to other legal actions by the agency. Therefore, for purposes of determining the potential impact of solar PV savings in helping to support MATS compliance, we are using the fuel blended estimate on a per kwh basis. We have three scenarios: 1) EPA accepts the IRP waives all fines, 2) EPA fines PREPA immediately, 3). EPA accepts the IRP, waives all fines until 2024, but imposes them after if PREPA does not meet compliance, and the CCGT is delayed two years.

[51] https://www.federalregister.gov/documents/2016/07/01/2016-15411/civil-monetary-penalty-inflation-adjustment-rule

[52] Memorandum, "Staff Opinion – Assessment of Fuel Blending for MATS Compliance", Puerto Rico Electric Authority, July 25, 2018

VIII. ADDITIONAL CONSIDERATIONS

Legal Liabilities Under Bankruptcy

Since PREPA still in bankruptcy, there is a possibility that if PREPA abrogated one of the PPOA contracts, the developer could attempt to claim losses or damages in bankruptcy court.[53] While we can not speculate on the outcome of such a claim, we believe that there will be precedent for bankruptcy courts showing that if the utility regulator approved the transaction, then a) the utility can not sue the regulator in federal court, and b) while a debtor can attempt such an action, there is likely that the court will show deference to decisions regarding protection of the public interest, reliable provision or power, and issues of a similar nature.[54]

Market Reputation with IPP if contracts halted unilaterally after good faith negotiations: There is a real concern that if PREPA unilaterally terminates the contracts for economic reasons only, after the years of good faith negotiations and the recent renegotiations of 2019 (March 2019 and post FOMB ceiling price ruling in June 2019), that IPP developers will increase the company specific risk associated with doing business with PREPA.

We observe that Siemens already concluded that there is a 4% additional returns required by equity to offset the combination of company specific risk of doing business with PREPA and the difficulty in doing business in Puerto Rico. Our direct experience in Hawaii and other jurisdictions is that three effects will occur: 1) the risk premium will increase, 2) tax equity may become more scarce, and 3) more qualified IPPs may decide to bid elsewhere, leaving PREPA with weaker companies that typically lack the economies of scale. Thus, even under competitive bidding, PREPA may experience higher bid prices. An anecdotal observation is that in 2016, when HECO terminated several renewable contracts for questionable reasons during the Next Era merger, not only to the PUC require them to ultimately be reinstated, but also, new developers increased the required return on equity by 100-160 bp.[55]

Regulatory reputation with PREB if contracts approved despite failure to provide ratepayer benefits

PREPA must consider its regulatory reputation with the PREB regarding both its demonstrated intention to comply with Act 17, and its determination to ensure that all contracts for new assets are in the public interest and will save ratepayers money. Given the multiple principles and requirements of PREPA under Act 17, particularly the requirement to keep retail rates below 20¢/Kwh and meeting the RPS, PREPA

[53] Concern raised by Board member Charles Bayless in Board Committee meeting of Oct 28, 2019

[54] https://www.abi.org/abi-journal/power-plays-when-bankruptcy-and-utility-law-collide and https://www.jonesday.com/en/insights/2004/12/bankruptcy-courts-may-authorize-rejection-of-ferc-regulated-contracts

[55] Personal communications with developers in Hawaii by Kyle Datta, General Partner of Ulupono. Uupono filed testimony to the PUC regarding this effect.

should not approve contracts that were either a) out-of-the-money, b) represented net losses to ratepayers due to inability to pay for transmission or interconnection upgrades, or c) imposed significant reliability penalties that could either disrupt service or impose very high grid management.

The entire analysis of whether the proposed PPOA projects earn excessive rates of return was designed to address the issue of whether the projects are out-of-the-money. The findings are the projects earn returns justified by PREPA's financial situation, and there should be no expectation of savings from future RFPs unless the PREPA returns to investment grade. In the early years, the solar projects save money, and therefore would not violate the requirement to keep retail rates below 20¢/kwh, instead they contribute to this goal.

There is little question that approval of a project that clearly would disrupt reliability of service would be questionable and harmful to PREPA's regulatory reputation. As noted above, one projects Montalva, clearly raises this concern, another Guayama, may.

On the final issue of whether approving the projects that bid at the FOMB ceiling rate and do not pay back the interconnection costs at the blended discount rate, PREPA should renegotiate these projects to 10¢/Kwh, escalated at 2% with a cap of 14.1 ¢/kwh to be compliant with the criteria of saving ratepayers money. Although, we believe that PREPA could make the decision to approve as is based on a reasonable expectation of higher REC prices, non-zero MATS compliance costs and compliance with the RPS. PREPA would then need to seek the PREB's concurrence of its decision in writing, along with the FOMB. This would preserve PREPA's reputation as meeting the intent of Act 17, considered in its entirety.

Experience of Developers

Morovis, Fonroche, Windmar and YFN has completed solar PV in Puerto Rico before. ESA, Reden, and GCL are all large international developers.

IX. Hawaii Solar PPA Comparable Pricing and Regulatory Process

Overview of Comparable Factors between Hawaii and Puerto Rico

The electrical systems in the State of Hawaii are highly comparable to the situation PREPA faces in the territory of Puerto Rico in terms of procurement of renewable energy from photovoltaic systems and energy storage. Both electrical systems are predominantly oil fired with a high percentage of baseload power and comparatively inflexible in terms of integration of variable resources due to a relative lack of spinning reserves and fast ramping units when compared to larger utilities in the U.S. Therefore, for valid and justified system engineering reasons, both HECO and PREPA require developers to meet minimum technical standards that often exceed those in the

continental U.S. and increase the photovoltaic projects costs due to additional equipment required to meet the specifications. Further, Hawaii and Puerto Rico share similar conditions that increase the cost of solar projects built within their geographies. Both have a mountainous island geography, with dense tropical vegetation and scarce availability of suitable land for solar that simultaneously increases land costs (either direct ownership or leases), site clearance and preparation, and installation of components such as the racking cost. Both economies are distant from the primary commerce centers in the U.S., and therefore have additional labor costs and higher labor, machinery, and construction costs. Thus, the overnight costs factor increases assigned by reputable engineering firms to the costs of building photovoltaic and storage are within similar ranges. For PREPA, the overnight construction cost adder is 16% and construction finance factor of 1.02[56], which was used in the PREPA IRP. The Hawaii PSIP relied on EIA adjustment factors, which for utility solar was zero, and for wind was 30.1 %.[57]

The trajectory for project bids for PV only and PV + battery storage is quite similar over time. Like Puerto Rico, Hawaii had a handful of legacy only PV projects that were caught up in financial and regulatory issues that were beyond the developer's control and were subsequently renegotiated, finally approved by the Hawaii PUC and were commissioned this year. Thus, the price trajectory is instructive for Puerto Rico in benchmarking the 16 existing legacy PV only PPOAs under consideration.

Historical Timeline of Comparable PV Only Projects

In 2006, Hawaii enacted the Competitive Bidding process in which an independent observer reviews and score the bids to ensure impartiality.[58] The utilities can seek Commission approval for a Waiver of this process, when there is a need for accelerated deployment of power or other factors. In 2013, the Hawaiian Electric Companies requested a waiver which was granted by the Commission for six solar projects.[59] On July 31 2015, the Commission approved the Hawaiian Electric Companies power purchase agreements. Three of the solar projects were developed by First Wind Solar

[56] See Siemens PTI RPT -015-19, Puerto Rico Integrated Resource Plan 2018-2019, Exhibit 6-32, Levelized LOCE assumptions. The 16% overnight capital cost factor vs typical US mainland costs corresponds to the US Department of Defence Area Cost factor for Puerto Rico.
[57] Department of Defence Area Cost Factor ufc_3-701-01-2019-c3, updated factor for Puerto Rico is 120% for 2019. While Hawaii military facilities listed were 220-240%. Hawaii Power Supply Improvement Plan Docket 2011-0206 2014 08 26 HECO PSIP Report, Appendix F provides planning cost adjustment factors for all technologies.
[58] The Competitive Bidding Framework was approved by the Commission in Decision and Order No, 23121, filed on December 8, 2006 in Docket No. 03-0372
[59] See Docket No 2013-0381

Portfolio LLC, which was subsequently acquired in 2015 by SunEdison. SunEdison subsequently ran into financial distress due to overexpansion.

On February 12, 2016, Hawaiian Electric terminated the original PPAs asserting that SunEdison had not cured important milestones and concerns of SunEdison's financial condition. On April 21, 2016, SunEdison filed for Chapter 11 Bankruptcy. On September 16, 2016 the Bankruptcy court approved the sale of the projects to NRG Renew LLC. NRG and Hawaiian Electric renegotiated and Amended the Original PPAs. On May 10 2017, the Commission filed Order No. 34545 consolidating the requests to approve the PPAs, which were ultimately approved in July 2017.[60] NRG subsequently restructured and sold its interests to Clearway.

The following table summarizes the price trajectory of the three projects:

Project	Size MWac	Original PPA[61] ($/MWh) 2015	Amended PPA ($/MWh) 2018	Equivalent Price with Full Use of Hawaii State Tax Credit ($/Mwh)[62]
Kawailoa Solar	49 MW	$134.75	$127.3	$109.9
Waipio Solar	45 MW	$134.75	$121.8	$104.4
Lanikuhana Solar	14.7MW	$135.75	$130.5	$114.1

The "apples to apples" comparison between the Original 2015 approved contracts and the approved 2018 contract shows only a modest 4-10% reduction in costs from the renegotiation process despite the much larger drop in solar component prices between 2015 and 2018. The additional benefit to ratepayers was inclusion of 100% of the value of the Hawaii Renewable Energy Tax Credit rather than 90%. That incremental value adds another ~$1.74/Mwh or 1.2% savings to ratepayers from the renegotiation bringing the total to 5.2-11.2%.

For these three projects, at the time of approval, the project developers has already purchased a significant portion of the solar property, plant and equipment, had been incurring lease payments, and developing and permitting expenses.

For additional context, the trajectory of solar as available (PV) only power is instructive.

[60] See Commission. Decision and Order in Docket No. 2017-0108.

[61] The Original PPA provided the Hawaii Electric Companies with 90% of the applicable value of the Hawaii Renewable Energy Tax Credit. The Original PPA price shown does not reflect this as it was not estimated in the PPA documents.

[62] This reflects 100% utilization of the full Hawaii Renewable Energy tax credit of 35%

In February 2014, the Hawaiian Electric system avoided costs were 19.48 cents/Kwh, reflecting the high price of oil run through inefficient baseload steam plants, which is similar to PREPA's generation fleet. At that time, the price of approved renewable PPAs was $218/Mwh for Kalaeloa Solar 2 (5 MW)[63], $236/Mwh for Feed In Tariff Tier 3 Projects (<5 MW)[64]. Thus, when the Waiver projects were approved in 2015, the PPAs represented a significant cost decrease from the prior commercial solar projects approved by the Commission.

By July 2017, the price of oil had dropped so that the Hawaiian Electric avoided costs was 10.38 cents/kwh. For the subsequent renegotiation, the PPA prices, inclusive of Hawaii Renewable Tax Credits, were more closely in line with the prevail fossil fuel avoided costs and also with contemporary as available solar projects. In 2018 as available solar PPA approved by the commission were $110.6/Mwh for Kuia Solar (2.87 MW)[65] and South Maui Renewable Resource (2.87 MW)[66], both on the island of Maui.

It is notable that the trajectory of Hawaii as available solar projects not only tracks the PREPA PPOAs in terms of similar cost and scale, the relatively modest gains of project renegotiation, and significantly higher than benchmark prices within the Continental U.S. We discuss some of the underlying factors that drive higher prices in Hawaii in the following section.

Current Status of PV-Battery Energy Storage Projects (PV-BESS)

Hawaii began its commercial journey into utility scale PV-battery storage project with the Solar City project for the Kauai Island Utility Cooperative in 2017. At the time, this was a new-to-industry flagship project for Solar City which public acknowledged that it bid the project at minimal profit (some reports say at a loss) to demonstrate the approach. The PV-BESS configuration was 13 MW and 52 MWh of storage which the PUC approved in 2017 at $145/Mwh ($139 MWh if Federal ITC and non-refundable Hawaii State Tax Credit is achieved).[67] The prices of PV-BESS projects have subsequently declined as the price and cost of battery storage and PV modules has declined. The most recent prices for bid PV-BESS projects that the PUC has approved include: AES Lawai Solar LLC on Kauai at $110.9/Mwh[68] , AES Kekaha Solar (14 MW, 70 MWh BESS) at $108.5/MWh[69] both of which operate as "firm like" capacity on the KIUC electrical system dispatched to ramp towards afternoon peak, shave the evening peak, offset night time oil fired generation, and provide grid stability services. In other

[63] Docket No 2011-0051
[64] Docket No 2008-0273
[65] Docket No. 2015-0224
[66] Docket No, 2015-0225
[67] Docket No. 20125-0331
[68] Dockey No 2017-0018
[69] Decision and Order No 35538 in Docket No 2017-0443

words, the PV-BESS function similar to fossil fuel units they are displacing as firm dispatchable capacity, hence the relatively large proportion of BESS to PV ratios.

Recent prices from Hawaiian Electric Company show similar price declines, albeit with different PV-BESS ratios. The most recent competitive bidding solicitation in January 2019 provides a clear demonstration of how far prices have fallen and reaffirms the projections made by Siemens in the PREPA RFP.

Project	Developer	PV MWac	BESS Mwh	PPA Price $/kwh
Waikaloa Solar	AES	30	120	$0.08
Hale Kuawehi	Innergex	30	120	$0.09
Kuihelani Solar	AES	60	240	$0.08
Paeahu Solar	Innergex	15	60	$0.12
Hoohana	174 Power	52	208	$0.10
Mililani 1 Solar	Clearway	39	156	$0.09
Waiawa Solar	Clearway	36	144	$0.10

Regulatory Approach and Considerations for Prudent Approval of Solar Projects

The Hawaii PUC faced a similar regulatory situation as PREPA will now be faces with regarding approval the 16 legacy PV-only PPOA. Hawaii's legacy PV-only PPAs were negotiated in good faith and represented costs that were lower than the prevailing avoided system costs at the time the PUC approved them. During the intervening period, not only did solar PV costs dropped significantly, but also the necessity and desirability of storage (BESS) became apparent as higher penetrations of intermittent renewable energy constrained the ability of absorb more intermittent energy leading to high levels of undesirable curtailment. The subsequent current decline in BESS has made variable PV only utility scale systems obsolete, so now current and future bids are for PV-BESS or firmed renewable systems. While NRG improved the technology of the three projects switch from fixed tilt to tracking systems and added new inverter technology, HECO did not require NRG to install BESS systems. Yet despite these clear trends that a future solicitation would be both lower cost and have more desirable characteristics, the Hawaii Public Utility Commission approved the three legacy PV-only projects in July 2017.[70] The projects were completed and commissioned in July 2019.

The Hawaii Commission approved the three solar legacy projects based on the following key principles and findings:

[70] Decision and Order No. 34714 in Docket 2017-0108

1. **PPA rate is "just and reasonable",** which is typically determined by lower rates/cost and customer bills and the need to stabilize and delink energy purchases from volatile fossil fuels.[71]
2. **The respective price** in the Amended and Restated PPAs of each of the three projects **was lower than the original PPA price**
3. The prices reflected pro-forma cash flow documents provided by the developer to the utility with the **twin goals of "reducing the PPA prices as much as possible" while "maintaining minimum reasonable economic returns** for NRG", calculated as both an Internal Rate of Return and a Net Present Value. The costs considered not only included the capital and operating costs, but also costs for delays that the projects had undergone.[72]
4. Despite the fact that consumer bills would be lowered in the long term, but not necessarily in the short term, depending on the projected IRP planning scenario, the Commission nonetheless found **the bill savings to be in the public interest**. The planning scenarios called for different levels of accelerated PV and PV-BESS which collectively lowered the system avoided costs in the near term, creating an increase in customer bills from these higher priced legacy projects.[73]
5. Even though these projects were granted waivers from the Competitive Bidding Process, the negotiation process was transparent enough to be considered due process for both the developers and the utility. Further, that subjecting the already approved PPAs to competitive bidding would delay the projects and likely result in a step down for the Federal ITC.
6. The projects made a **meaningful immediate progress towards the near term (2020) Renewable Portfolio Standard Goals**, in the critical geography of the main island of Oahu, and would advance state policy in both Greenhouse Gas Reduction and energy security benefits
7. Hawaii state energy policy with regarding to the Hawaii Renewable Tax credit was in flux and whether NRG could get local investors to utilize the full tax credit vs the refundable portion was uncertain[74]. Similarly, the final timing of construction was uncertain, and the Federal Investment tax credit total value was not locked into the PPAs due to this uncertainty. Therefore, the Commission did not require that the tax benefits be locked in, but agreed with the PPA terms that whatever tax benefits did accrue would be allocated 100% to the ratepayers.[75]
8. At the time of approval, the Kauai Island Utility Cooperative had successfully negotiated for PV-BESS systems at 13.9 and 11.8 cents/kwh. While the Commission accepted that HECO did not renegotiate these contracts to "expedite the completion of these projects and take advantage of the federal Investment

[71] This overarching policy issued in Docket No. 2012-0035 as an attachment entitled "Commissions Inclinations on the Future of Hawaii's Electric Utilities", generally referred to "Inclinations"
[72] HECO response to IR 202 and 2004 in Docket 2017-0108, cited in Decision and Order No. 34714 at p 52-54.
[73] Decision and Order 34714 at p 54-58
[74] The Hawaii Renewable Tax credit is set at 35% if utilized to reduce Hawaii income tax liability or 24.5% as a refundable cash credit. The availability of investors with Hawaii income tax liability is generally constrained.
[75] Decision and Order 34714 at 66-67

> Tax Credit before it steps down in 2020", the Commission clearly stated that **" in future applications, the Commission expects that HECO will fully consider energy storage systems in proposing new utility-scale renewable energy projects**".[76]

The situation faced by the Hawaii Commission in 2017 is directly analogous to the situation facing PREPA in 2019 with regards to legacy PV-only projects wherein the PPA prices represented significant cost reductions when originally approved, but now are higher cost and with lower technological capabilities than could reasonably be expected from a future RFP in 2020 or 2021. Like PREPA today, HECO had an urgent need to make meaningful progress towards the RPS, and like PREPA, had renegotiated the contracts to a lower rate than the original contract. The notable considerations that gave the Commission and the Consumer Advocate comfort was the contract prices reflected the balancing of lower PPA prices while maintaining reasonable developer returns. While PREPA does not have the same open book pro forma negotiation data, the intent of the quantitative aspects of this study is to provide some assurance to PREPA, and ultimately its regulators, that the developer project returns are reasonable, given the territory regulatory risk and company credit counterparty risk.

[76] Decision and Order 34714 and 68-70.

X. RECOMMENDATIONS

Our recommendations of which solar PPOAs to approve, disapprove or modified are based on the objective and independent analysis of the series of tests and criteria discussed in the report. We have specific nuanced recommendations regarding the proposed modifications as well as changes in the master PPOA contract to better protect PREPA's interests. Three tests determine which Solar PPOAs should be approved: 1) *Will ratepayers save money over the life of the project?*, 2) *Are developers earning unreasonably high rates of equity return beyond what is needed to compensate for PREPA below investment grade counterparty risk?* , and 3) *Do the projects create intractable grid integration conditions that can not be resolved at reasonable cost*?

Recommendations on PPOA Approval

Recommended Project Approval?	PPOA Rate $/Kwh	Are Projects Earning Reasonable rate of return given PREPA Counterparty Risk?	Do PREPA Ratepayers Save Money at Blended discount rate?	Are there Grid integration Issues that can not be resolved?	Would ratepayer save money at 2¢ REC or PPOA at 10¢/kwh?
Morovis 33.3 MW	9¢	Yes	Yes	No	Yes
Solar Blue 30-40MW	9.5¢	N/A	Yes	No	Yes
Blue Beetle 30 MW	9.9¢	Yes	Yes	No	Yes
Aetnas 22.4 MW	9.9¢	Yes	Yes	No	Yes
Solaner 25 MW	9.9¢	Yes	Yes	No	Yes
M Solar 50 MW	10.5¢	Yes	No	No	Yes
ReSun 20 MW	10.5¢	Yes	No	No	Yes
Yacuba 20 MW	10.5¢	Yes	No	No	Yes
Xyerta 20-40 MW	10.5¢	N/A	No	No	Yes
Windmar 20 MW	10.5¢	N/A	No	No	Yes
GIRO Salinas 61-69MW	10.5¢	N/A	No	Minor	Yes
Fonroche 15 MW San Juan	11¢	Yes	No*	No	Yes
REA Vega Serena 20 MW	10.5¢	Yes	No*	No	Yes
Fonroche 15 MW Vega Baja	11¢	Yes	No*	Minor	Yes
GIRO Guayama 18 MW	10.5¢	N/A	No	Yes: TBC	Yes
Montalva 100 MW	10.5¢	Yes	No	Yes: Major	Yes

Green indicates approve, Red Indicates Do not Approve, Yellow indicates renegotiate to lower rate and Orange indicates refine interconnection and renegotiate to lower rate.

Recommendations

Recommended Disposition of PPOAs:

We recommend approving five projects, totaling ~150.9 MW[77], renegotiating six projects (191-219 MW), refining interconnection and renegotiating three projects (50 MW) and denying two projects (118 MW).

F**our projects pass all tests, have no interconnection issues and should be approved immediately, with no further hinderances, and placed on high priority for all internal PREPA approvals, so that can both obtain their ITC safe harbor provisions and achieve commercial operations by 12/31/2020.** None of these plants were found to have any interconnection violations by S&L. **These are Morovis, Blue Beetle, Aetnas, and Solaner**. These equate to 110.9 MW, and three are clustered near San Juan.

One project did not submit cost data, but nonetheless bid at a rate low enough that when compared to the Siemen's benchmark, is unlikely to make excessive returns that are not commensurate with PREPA counterparty risk. This project, **Solar Blue, should also be approved with the same intentional acceleration the projects above**. That would bring to total to **150.9 MW**.

One project (100 MW) failed both the basic public policy test of savings ratepayers money and was found to have interconnection constraints and should not be approved at this time. S&L found Montalva fails all the standard grid integration tests (thermal violation, system strength) and due to its size, has significant frequency regulation and response concerns.[78] This indicates the problem is broader and that the surrounding transmission systems needs to be strengthened first. CIRO Guyama (18 MW) failed the thermal violation contingency test and operations raised concerns regarding grid condition. This plant should not approved by the Board until S&L and Operations come to resolution. If resolved, then it can be added to the renegotiation tranche.

Three projects (50 MW) should be have interconnection costs refined and renegotiated to lower rate. REA Vega Serana, Fonroche San Juan, and Fonroche Vega Baja had interconnection costs so high that the project failed to save ratepayers money even if PREPA's counterparty risk was remained at below investment grade level of Ca. The recommendation is to refine the interconnection costs, have developer build to mid point of S&L range and charge cost back as fee and seek renegotiation of the contract to 10.0¢/Kwh.

[77] Based on upper bound of proposed range

[78] S&L evaluated both the proposed interconnect to 115kV at Guanica and an alternate at a sectionalizer, at ranges from 83 -165MW.

The remaining **six projects** all bid the full FOMB Ceiling rate and **total ~191- 219 MW**. The recommendation is to renegotiate these projects to 10¢/Kwh, escalated at 2% capped at 14.1¢/kwh so they are in compliance with criteria of benefiting ratepayers**.**

Public Policy rational for approval of recommended projects:

1. **Necessary for Compliance with RPS:** Act 17 requires PREPA to meet the RPS standard of 12% by 2020, 15% by 2021 and 20% by 2022. The approval of these projects will bring PREPA to 10.3% by the end of 2020 and 11.3% by 2021.

2. **Insurance Against Higher REC costs:** Act 17 requires PREPA to buy RECs for third parties if PREPA can't meet the target with their own plants or PPOAs. These RECs would have to be purchased from either new PV facilities or from facilities that obtained RECs through selling to non-energy retailers in Puerto Rico. In either event, there is a high probability that these RECs would be sold at a premium to the 1.5¢ valuation conservatively assigned in the public policy analysis. A 0.5¢/Kwh premium would be adequate for all the conditional projects to pass the public policy test.

3. **Insurance against MATs compliance costs.** If EPA imposes MATS compliance costs either as penalties or requiring fuel switching, even if only for 2 years due to delay of the CCGT, then these plants are clearly in the public interest

4. **Supports Compliance with Act 17 mandate to keep retail rates down below 20¢/Kwh**. From 2020-2025, the solar plants produce net savings in energy vs oil fired fossil fuel plants that are still operating, which helps keep the costs lower. While it is equally true that after the new IGCC LNG plant is on line, the solar PPOAs are more expensive, PREPA is still able to meet the mandate due to the very large drop in fuel costs that dwarfs the impact of these PPOAs.

5. **Supports acceleration of achieving resilience in the microgrids**: The 2019 IRP recognized the Value of Lost Load[79] as between $32-58,000/Mwh, but used $2,000/Mwh in the IRP estimation of cost of unserved load[80]. The minigrid approach relies heavily on solar PV, in concert with BESS and thermal, to achieve coverage of critical and priority loads as quickly as feasibly, typically by 2022. These PPOA solar plants tend to cluster in the Bayamon-San Juan, Arecibo, Carolina, and Caguas minigrids, which are the

[79] IRP 2019 Section 7.3

[80] IRP p 253, this is the residential cost of unserved load

same minigrids with high values of unserved load under the ESM minigrid plan.[81] In the time provided, it was not possible to calculate the increased VOLL should these plants not come on line in concert with the BESS. It is clear that it would make a material difference in achieving the resilience targets, which, if an event occurred, would very likely exceed the public benefits test deficit.

6. **Delay destroys, rather than creates value**: Until PREPA is fully restored to investment grade, there is no expectation that future solar PPOAs will be less expensive because the improvement in technology costs is offset by the reduction in ITC.

7. **Reputational Risk and Future Cost:** PREPA and the developers have negotiated in good faith to meet the FOMB ceiling rate, which is a substantial discount to the 12-15¢/Kwh ranges of PPOAs PREPA has been offered in March 2019. Unilaterally cancelling the contracts solely for economic public policy test reasons, that as mentioned above, may well be justified as insurance against more expensive compliance outcomes, would harm PREPA's reputation and make it a risker counterparty, which increase required developer returns even after PREPA is restored to investment grade.

Recommendations on Modifying the PPOA Contact

Since there are likely to be operational constraints related to frequency regulation and response that occur after the solar plants are built and before the full 180 Mwh complement of PREPA owned and operated BESS is installed and because PREPA is still undergoing a privatization transition, we recommend a few critical changes in the Master PPOA contact.

a) **Restore ramping MTR requirement (MTR 7) and MTR 6, and lower curtailment to 40 hours.** Specifically, in the current draft Master PPOA (October 9, 2019), remove MTR 7 from the excluded MTRs in Appendix E, and set the equivalent derated hours limit to 40 hours in Section 8.4. There are too many operational uncertainties until the utility scale BESS are in place to exempt projects from the MTRs. The net impact to developers could range from ~0.3-0.5%[82] IRR loss depending on the site weather conditions and developer risk preferences, due to lowering curtailment to compensate for the increased BESS cost, and whether they are allowed to participate in future RFPs for storage or otherwise sell grid services to PREPA in the future. This is would also have the least load shedding and additional cost to PREPA, and the combination of project BESS/inverters and PREPA BESS will greatly

[81] IRP 2019 p 265, ESM Plan Cost of Unserved load in these minigrids ranges from $50-70MM, Table 8-52
[82] PREPA strict interpretation, which we recommend against, could raise this to 1.3%

augment system regulation. Quantitative clarification is needed so developers can correctly understand the MTR 6 and 7 criteria and how they interact. Developers, not PREPA should define the technical solution to meeting the MTRs, based on their risk preferences.

b) To improve efficiency, PV facilities can share remote located BESS systems for compliance with no less the .64 MW of BESS power capacity per MW of PV solar capacity and

a. the BESS system has the same level of transparency to the PREPA control room as a collocated system
b. The interconnection of the BESS system has been approved by PREPA
c. PREPA will define the geographic range of remotely located BESS systems on a per facility basis.

c) For disruptions from major weather events, such as hurricanes and the recovery period, should be addressed by modify Article 15 to include the 300 hour cap related to major weather events, in the symmetrical force majeure provisions. Separating the weather and grid system risks and placing them in the appropriate contractual sections will lower developer risks vs. placing them all in Section 8.4, and allow more plants to be financed.

d) Provide PREPA the unilateral option to have the developer build and fund the interconnection based on S&L design and maximum cost, and then charge PREPA a fee that amortizes the actual interconnection cost up to the maximum cost at the PREPA investment grade 8.5% WACC over the contract period. This alleviates not only manpower and budget constraints, but also reduces PREPA liability for contractual default (due to lack of funds) during the development period. Since privatization may have been fully implemented sometime in 2020, it is possible that the manpower constraints may no longer be applicable.

a. Since PREPA remains financially responsible for the PPOAs, the available capital constraints may still occur. The right for PREPA to have the developer pay already exists *after* the Final Notice to Proceed (FNTP) under the master PPOA under Article 4.1.(c). However, the developer is supposed to have all financing done at FNTP. The additional of interconnect cost responsibility could derail the financing package. Therefore, we are recommending that the timing of the decision occur earlier, immediately after the interconnection designs are completed. This allows either party to get the financing done in a timely manner.

b. We recommend that the expectation is that PREPA will design and developer will build and finance, then charge PREPA a fee over the life of the contract. This removes several "friction" points and any risk of default by PREPA. It further lowers the manpower constraints problem raised by operations.

c. The approach would not violate the intent of the FOMB 10.5¢/kwh payment cap, since we have ensured that the NPV of the energy savings is less than the interconnection cost incurred.

Addressing Operational Concerns

The recommendation is for ~332-370 MW of solar PV PPOAs be approved now or after renegotiation to lower rate, and 118 MW denied approval, and 50 MW be negotiated to refine interconnection costs and be renegotiated to a lower rate. The restoration of the MTR 6 and 7 will likely to addressed by developers deploying BESS systems. MTR 7 lowers the negative impact of PV systems to the grid by controlling the ramp rate. The restoration of MTR 6 (as clarified above) means the PV systems will contribute to grid services to alleviate the operational concerns on frequency regulation and response cause by the influx of new solar. From the Siemens 2014 report, the use of PV sited BESS should also lower load shedding that would otherwise occur.

We recommend that an advanced weather forecasting system capable of allowing the control room operators to anticipate weather related disruptions and predict day ahead output be in place before the solar plants come on line. We expect that any of the new concessionaires will put these systems in place, and do not wish to duplicate capabilities. Thus, **we are recommending a task force of PREPA systems operation, the new concessionaire, renewable developers and customers be put in place to address operational protocols shortly after selection**.

To the extent that Sargent and Lundy and PREPA operations concur that the grid interconnection issues related to Montalva, and CIRO Guyama can be addressed in time for 12/31/20 COD, then we would recommend approval and renegotiation.

The frequency regulation and ramping issues are temporary, for when the 180 MWh of strategically located batteries from the P3 RFP are in place by 2021, the operational frequency response issue should be fully addressed. We recognize the MTRs and the PREPA BESS created redundant systems, though collectively, we believe it will improve overall system reliability and reduce load shedding. [83]

[83] The Siemens 2014 report on utility scale BESS observed lower load shedding and better recovery, but at the time BESS was prohibitive.

The "approve now" tranche of 150.9 MW compares well to the Siemens 2014 study that another 135 MW could be added to the system. These PV plants are not all in the same location, and there will be considerable diversity as to when and where sudden frequency events occur. The ability to call on the solar plants as reserves in curtailed mode will contribute to frequency management. We do recognize that the two larger plants M Solar in the north and GIRO Salinas in the South have higher system impacts, and in particular, M Solar is clustered with several other plants. Given the load shedding programs in these areas, it will be especially important to communicate with customers.

Partnering with the Customer

Programs to partner with customers to provide grid services from their BESS or generating assets should be launched now, starting with bilateral arrangements with C&I, and ultimately tariff arrangements with residential customers. Over 170 MW of distributed solar are already connected to PREPA's grid, up from only 88 MW in June 2017.[84] We have seen no firm estimates of distributed storage capacity installed in Puerto Rico but anecdotally hear from solar companies that the large majority (i.e., roughly 90 percent) of installations since Hurricane Maria have included battery storage.[85] This could equate to 100 Mwh of installed storage that PREPA could contract for to support solar integration requirements.

Future Solar RFPs

We must firmly recommend that PREPA not negotiate agreements that allow solar facilities to be exempted from the MTRs when there is not adequate grid side battery storage already in place to address the operational impacts the new solar facilities would create. This issue has greatly complicated the already challenging task of completing the agreements, and has no justification going forward. We have recommended restoring the MTR 6 and 7 now because the planned BESS systems are not in place. However, this imposes higher costs to developers and is inefficient.

To help recover those costs, it is imperative that the approved plants be afforded the opportunity to bid for grid storage and/or grid services in the future. Since they will have already incurred fixed costs for power capacity, the incremental costs of increasing energy storage will be lower than the full costs of new standalone energy storage facilities, which will enable developers to recover some of the MTR 6 and 7 compliance costs.

[84] http://energia.pr.gov/wp-content/uploads/2019/07/MI-2019-00010.pdf
[85] RMI testimony on IRP docket

PV developers are increasingly offering hybrid PV or Wind plus storage projects at low costs compared with operations of fossil fuel units and utility grid side BESS. Due to advances in analytics, some developers are willing to absorb the output risk and bid firm power into the wholesale energy system. For the next RFP, we recommend allowing all solar facilities, both existing and new, to bid PV+BESS to not only meet the MTRs but also bid for grid services, as it may be more economically and financially efficient for developers to deploy their own batteries rather than grid side. Customer aggregators could also be allowed to bid for grid services from BESS.

No RFP should be put to the market until PREPA or its successor entity is rated as investment grade, since there is no expectation of savings compared to the current PPOAs. At investment grade, PREPA will able to access PV and hybrid PV-BESS systems at far lower cost than the legacy PPOAs.

***Urgency*.** The final, and most important recommendation is for the Board to act now with no further delay or study. Not everything can be known in advance of the decision, but enough is known now to make a sound and robust decision

COMPARISON TABLE OF RETURNS OF PPOA PROJECTS **CONFIDENTIAL DEVELOPER INFORMATION NOT FOR CIRCULATION BEYOND PREPA BOARD**

Curtailment Bank Hours/yr 150

INVESTOR REQUIRED RETURN	Siemens IRP Investment Grade	Risk Adjusted PREPA Caa	Risk Adjusted PREPA Ca
UNLEVERED RETURNS COMPARE TO WACC	**8.50%**	**11.00%**	**13.50%**
LEVERED RETURNS COMPARE TO ROE	12.91%	16.05%	18.86%
Cost of debt used for levered calculations		8.16%	
Leverage Ratio unless DSCR Cap or Developer Provided		50%	50%
Nominal, risk free rate on 20 yr treasury is 2%			

LEGEND	
Better than Siemens Benchmark	GREEN
Worse than Siemens Benchmark	RED
Missing Costs Added at Standard Rates	BLUE

ADJUSTED LCOE DATA

	Siemens Adj Benchmark	M Solar	Fonroche	Fonroche	Morovis	Blue Beetle	Montalva	Aetnas	Yabuca	ReSun	REA	Solaner
Capacity (MW AC)	30	50	15	15	33.5	30	99.6	22.4	20	20	20	25
Energy Price Bid into PPOA	105	105	110	110	90	99	105	100	105	105	105	99
Energy Price Escalator	2%	2%	1%	1%	2%	1.75%	2%	2%	2%	2%	2%	1.5%
Unlevered IRR: After Tax	**11.1%**	**12.49%**	**10.20%**	**10.25%**	**9.60%**	**8.21%**	**8.51%**	**8.06%**	**8.70%**	**6.3%**	**6.13%**	**0.14%**
Unlevered IRR: Pre Tax	10.1%	9.87%	6.95%	6.98%	6.87%	5.50%	5.63%	5.13%	5.55%	3.9%	3.21%	N/A
Leverage Ratio	50%	60.00%	45%	45%	45%	35%	40%	40%	40%	N/A	N/A	N/A
Levered IRR	**16.3%**	**25.6%**	**13.90%**	**14.00%**	**12%**	**8.8%**	**9.6%**	**8.6%**	**10.0%**	**N/A**	**N/A**	**N/A**
Capacity Factor ac basis	**22%**	**24%**	**22.5%**	**22.5%**	**29.6%**	**23.7%**	**26.2%**	**21.1%**	**23.5%**	**22%**	**24.1%**	**21.4%**
Curtailed Energy %	7.8%	7%	7.6%	7.6%	7.6%	7.2%	6.6%	8.1%	7.3%	8%	7.1%	8.0%
Net Energy Output MWh/y	53,318	105,000	29,618	29,618	86,864	62,200	228,402	41,400	41,156	38,544	42,226	46,920
$/Kwdc Capital Cost (Total)	**1.26**	**1.18**	**1.34**	**1.34**	**1.11**	**1.5**	**1.62**	**1.67**	**1.69**	**1.78**	**1.64**	**1.56**
$/Kw dcCapital Cost: EPC Only	1.06	0.76	1.26	1.26	0.87	1.29	1.33	1.58	1.16	1.40	1.27	1.06
$/Kwdc Capital Cost: Dev Cost	0.19	0.39	0.11	0.11	0.24	0.21	0.29	0.09	0.53	0.38	0.37	0.49
$/KWp-Yr O&M Cost (Total)	**32.7**	**24.6**	**41.28**	**41.28**	**31**	**39.4**	**39.1**	**31.4**	**50.3**	**55.4**	**100**	**86.1**
$/KWdc-Yr O&M Cost Fixed O&M	9.12	5.12	13.33	13.33	10.2	11	12.9	10.71	22	14.68	19.39	18.9
$/KWdc-Yr O&M Cost: Hurricane Insurance	21	19.48	23.08	23.08	21	16	21	12.5	21.2	31.4	55.87	32.3
$/KWdc-Yr O&M Cost Taxes		0	0	0	2.6	6.4	1.7	5.49	0	0	0	1.88
$/KWdc-Yr O&M Cost Site Lease		0	4.1	4.1	4.29	6	9.59		5.9	9.27	11.17	17.68
Inverter Replacement Cost $kW-dc	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	0.165	0.086	0.035	**0.4**	0.092	0.032	**0.4**

ADJUSTMENTS

Set Hurricane Insurance to $21/Kw-dc (Montlava and Monrovis, Siemens)
IDC Added to Fonroche, Blue Beetle @ 4%, Siemens IDC raised from 1.5 to 4%
Fonroche and Aetnas has zero preexisting dev costs
Replacement Inverter set at 0.4 x vKW-dc

Set ITC at full 30¢ for safe harbor decision	Yes	Yes	Yes	Yes	Yes		Yes		Yes
85% Tax equit efficiency on all projects									

Exhibit B

CN 078-04495
Rev. 11/17

GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority

Memorandum **Privileged and Confidential**

TO: José F. Ortiz Vázquez
Chief Executive Officer

FROM: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

DATE: May 26, 2020

RE: Non-Operating Renewable Energy PPOA Transactions

Dear Mr. Ortiz:

We refer to the power purchase and operating agreements ("**PPOAs**") described in Annex A (the "**Non-Operating PPOAs**"), between PREPA and various counterparties, relating to the development, construction, operation and sale / purchase of renewable energy from planned photovoltaic solar projects located throughout Puerto Rico. PREPA recently reached agreements in principle with 16 of the 19 counterparties to the Non-Operating PPOAs[1] on full-length documentation to amend and restate these PPOAs (collectively, the "**Subject Transactions**"). The renegotiated deals comprise over 590 MW of renewable energy generation and deliver over **$1 billion of savings** to PREPA over the contract term (notional – undiscounted) versus the original agreements[2], assuming all proceed to commercial operation. The Subject Transactions represent a major step by PREPA toward meeting the renewable energy portfolio requirements placed on it by the Puerto Rico Energy Public Policy Act (Act 17-2019) ("**Act 17**") and draft Integrated Resource Plan ("**IRP**") currently before the Puerto Rico Energy Bureau ("**PREB**").

To be clear, PREPA management recognizes that some of the project sponsors with whom we have reached agreement in principle may not be able to complete the development, financing, and construction of the projects. PREPA credit risk remains a significant barrier to the bankability of these projects, and the meteorological, geologic and political risk events over the past few years underscore that Puerto Rico remains a challenging location to develop projects. Given these factors, the current economic environment, COVID-19 concerns, the financial headwinds still being faced by PREPA and Puerto Rico more generally, and PREPA's experience in the last renewable energy procurement processes, we suspect that many of these projects will not reach completion, but also remain optimistic that some of them will be built and that this will lay the groundwork for the next request for proposal ("**RFP**") and future offerings.

This letter solicits the Board's approval to (1) submit the Subject Transactions to the Financial Oversight and Management Board (the "**FOMB**"), the PREB and the Puerto Rico Public Private Partnerships Authority (the "**P3A**"), and (2) following their approval, finalize and execute the Subject Transactions and submit each such transaction to the Title III Court for assumption.

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[1] **Note**: M Solar, Windmar and YFN Yabucoa (Sonnedix) did not reach agreement with PREPA. Windmar effectively withdrew from the process on May 13, 2020, via a letter postponing any decisions until an unidentified future date.
[2] **Note:** See Annex B for explanation / analysis of all savings figures in this memo.

I. Executive Summary

- Forward cost savings of around **35%**, valued in excess of **$1 billion** over the term of the Subject Transactions (notional – undiscounted), versus the existing Non-Operating PPOAs;

- All-in pricing at or slightly below the "**market price**" defined by the Governing Board as **$0.10 / kWh, with 2% escalation and capped at $0.141 / kWh**, inclusive of renewable energy credits;

- **25-year terms** starting from the Commercial Operation Date ("**COD**"), anticipated to be no later than three years after the receipt of the Assumption Order from the Title III Court; and

- Similar contracts to existing Non-Operating PPOAs, with **modest improvements** except that PREPA is now assuming responsibility for reimbursing the project sponsors (via a monthly installment post-COD) for certain interconnection costs (estimated to be $90-100 million in the aggregate for all projects) and bearing operation, maintenance and repair responsibility for interconnection lines (which will be conveyed by the project sponsors to PREPA upon completion thereof).

II. Commercial Rationale and Process

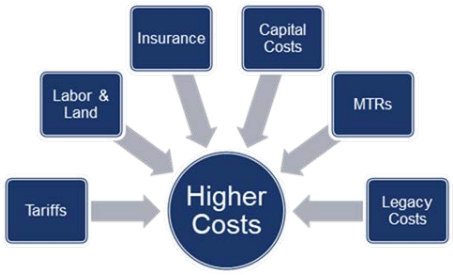
As you are aware, PREPA bears the responsibility to supply secure and reliable electric power to ratepayers in Puerto Rico at the lowest cost possible in both the short and long term, while contributing to the general welfare and sustainable future of the people of Puerto Rico, including minimizing social, environmental, and economic impacts, while carrying out the energy policy established by the Government of Puerto Rico. Act 17, one of the key pillars of Puerto Rico's energy policy, requires that 40% of the energy production in Puerto Rico come from renewable sources by 2025.

PREPA's management determined in early 2019 that the best way to achieve the targets under Act 17 as quickly as possible, and also better align PREPA's finances with the objectives of PREPA's Fiscal Plan, included renegotiating some of the approximately 50 PPOAs for non-operating renewable projects that PREPA had originally entered into between 2009 to 2012, and later renegotiated once before in and around 2014. The prices originally agreed under the Non-Operating PPOAs are now above the current market price, with uncapped escalation and additional charges for renewable energy credits. If developed under those terms, the energy prices and contractual conditions in the Non-Operating PPOAs would have imposed a large financial burden on PREPA and the ratepayers of Puerto Rico.

PREPA originally focused on 15 of these existing PPOAs, which grew to 19 by the end of the process, relating to projects that had (i) nearly completed their development activities during prior development rounds, (ii) demonstrated a willingness to negotiate pricing to reflect changes in the industry, and (iii) potential to commence construction in the near term in order to maximize benefits associated with Federal Investment Tax Credits. Management expected that (A) due to their experience and significant investment in Puerto Rico to date, the developers of these projects would stand a better chance of getting projects through the development stage to commercial operation more quickly than developers who had not been through the process before, and (B) getting some of these projects built would lay the groundwork for future RFPs and procurement offerings.

PREPA initiated extensive, arms-length negotiations with the Non-Operating PPOA developers in early 2019. PREPA conducted these negotiations via conference calls, exchange of documents and in-person meetings. Fernando Padilla and Francisco Santos of PREPA's Project Management Office led the negotiations for PREPA. PREPA engaged Filsinger Energy Partners ("**FEP**") to advise on commercial matters, Sargent & Lundy ("**S&L**") to advise on technical matters, King & Spalding LLP ("**K&S**") for negotiation support and advice on non-Puerto Rico law matters, and Mara Vázquez, now with Diaz & Vázquez ("**D&V**"), for advice on Puerto Rico law matters. Over the course of negotiations, PREPA's representatives consulted with (i) these advisors concerning the impact of developer-proposed terms, market practice and typical approaches to pricing and supply terms for photovoltaic solar projects, as well as (ii) PREPA planning, operations, legal, risk management and other departments, taking their feedback into account where possible subject to management direction, and working extensively with planning and operations to ensure the projects could be integrated into the grid system effectively.

From February to May of 2019, PREPA and the developers conducted meetings to discuss the particulars of each PPOA, including project status, company background, anticipated sources of financing, project team, cost drivers, and potential price reductions to their commercial proposals. Proposed pricing came in at levels higher than contemplated by the draft IRP and the FOMB working-level team input. PREPA held multiple calls with the FOMB team to explain factors contributing to higher pricing, which included, among others, higher insurance premiums post-Hurricane María, Puerto Rico land and labor, as well as the cost of capital due to PREPA's non-creditworthy status.



As part of negotiations to reduce pricing to a level thought acceptable to the FOMB, a decision was made to (i) relieve the developers from the minimum technical requirements ("**MTRs**") for photovoltaic solar projects (which PREPA believed it could compensate for through utility-scale battery energy storage) and (ii) take responsibility for, and bear the cost of, the interconnection facilities for the projects. Over the course of May to August 2019, PREPA engaged in multiple meetings and calls with the project stakeholders, including the FOMB, to review progress, keep these stakeholders abreast of these negotiations and solicit input on the process. As part of the this, the FOMB communicated in or around June 2019 an all-in price target (inclusive of renewable energy credits) of $0.105 / kWh, escalating at 2% and capped at $0.141 / kWh based on the key terms set forth above. PREPA distributed term sheets in June and July of 2019 to those counterparties whose pricing fell within the FOMB guidelines, and shared the term sheets and developer feedback with the FOMB in July 2019. On August 7, 2019, the PREPA team met with the FOMB team and received input on the key terms of the Subject Transactions. Around this time, PREPA also met informally with PREB commissioners and received a verbal "green light" to continue the negotiations with the pricing and terms presented in the meeting. The PREPA team prepared draft PPOAs in August 2019 incorporating stakeholder feedback and circulated the draft with the FOMB and members of PREPA planning, operations and legal for comment by September 2019.

In September 2019, PREPA's Governing Board (the "**Governing Board**") directed the engagement of a third-party consultant, New Energy Partners, Inc ("**NEP**"), to determine whether the Subject Transactions provided excessive returns to developers and would actually save ratepayers money. NEP concluded, after approximately two months' review (which included review of information on cost drivers previously provided by developers), that no developer was earning excess returns at the FOMB-suggested rate, but that PREPA needed a rate of $0.10 / kWh (with 2% annual escalation, capped at $0.141 / kWh, and inclusive of renewable energy credits) or less to create total system energy benefits / savings sufficient

to offset the costs PREPA must incur to interconnect the projects, irrespective of any future EPA enforcement of its Mercury and Air Toxics Standard (MATS). NEP further recommended (i) full compliance by the projects with PREPA's MTRs (at the expense of the project sponsors), including the ramp rate control and frequency response requirements, (ii) construction of the interconnection to be carried out by the developer and reimbursed by PREPA (up to a pre-agreed cap) at an 8.5% rate amortized over 25 years (in the form of a monthly installment payment), (iii) specific limits on curtailment of the projects (*i.e.* fewer permitted hours of curtailment in respect of grid events and equivalent hours of curtailment for Force Majeure ("**FM**") versus the original agreements), and (iv) resolution of certain interconnection cost and/or technical issues for specific projects before moving forward, among other things. The Governing Board approved NEP's recommendations in Board Resolution 4749. PREPA re-commenced negotiations with the developers on this basis and began significant technical analysis of the projects in January 2020, though a series of earthquakes diverted resources to grid repair and restoration for much of that month.

The P3A authorized the commencement of PPOA negotiations on February 13, 2020, and PREPA released full draft PPOAs along with requests for information relating to system impact studies, and confirmation of land control and financing, thereafter.[3] PREPA negotiated full-length documentation with developers over the next three months, while S&L conducted grid interconnection feasibility studies (including static power flow analysis using Siemens PSS®E software) in parallel to ensure the grid system could integrate the projects without material issues. S&L identified that some of the projects could cause grid overload at the developers' requested generating capacity. After negotiating reduced generating capacity for these projects, S&L's analysis identified no thermal overloads during normal operating conditions for any of the Non-Operating PPOAs. This resolved the technical concerns and interconnection cost issues raised by NEP in its recommendations (as mentioned in sub-paragraph (iv) of the preceding paragraph).

Importantly, the PPOAs now require that the developers meet PREPA's current MTRs (which PREPA updated in February 2020). The MTRs require, among other things, the ability to control ramp rate and provide frequency response/regulation – something not always found in solar projects outside of Puerto Rico – making these projects more "grid friendly" than typical photovoltaic solar projects and rendering comparison of the contract pricing with typical benchmarks more difficult. The 80 MW Montalva project is also now expected to have a 4-hour battery energy storage system, in addition to batteries used to comply with MTRs, which will store excess solar energy generation during the day for discharge at night.[4]

By the week of May 15, 2020, PREPA had completed all of the grid interconnection feasibility analysis and reached commercial agreement on full-length PPOA documentation with 16 of 19 developers, based on the terms detailed below. The Subject Transactions provide forward cost savings of approximately 35%, valued in excess of **$1 billion**[5] to PREPA and the ratepayers of Puerto Rico over the term of the agreements (notional – undiscounted), and represent over 590 MW of renewable generation – a major step toward meeting the requirements of Act 17. D&V reviewed all of the commercially-agreed Non-Operating PPOAs, and, as detailed in Annex E, concluded that, assuming (i) PREPA secures Governing Board, FOMB, PREB, P3A approval of the agreements, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) the agreements are duly executed by

[3] **Note**: Approximately half of the developers provided updated responses to PREPA's request for land control and evidence of funding / financing.
[4] **Note**: Montalva is entering into a new PPOA that will terminate the master agreement they have with PREPA, and will be required (as a condition to entering into any new PPOA) to release all of its claims and discharge with prejudice all of the proceedings relating to the lawsuit(s) that have been filed.
[5] **Note**: See Annex B for explanation / analysis of all savings figures in this memo.

the parties, each of the Non-Operating PPOAs constitutes a valid and binding obligation enforceable against the counterparty in accordance with its terms, and complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

III. Select Features of the Subject Transactions

The table below briefly summarizes select features of the Subject Transactions, including modest improvements in PREPA's favor. Additional project-specific information with respect to the Subject Transactions is set forth in Annex B and Annex D.

	Description in Subject Transactions
All-In Pricing	$0.975/kWh - $0.100/kWh, escalated at 2% with a $0.141/kWh cap, inclusive of energy, renewable energy credits and other environmental attributes, as well as any ancillary services. See Annex B and Annex D for pricing details for each Subject Transaction. Further discounted pricing for test energy and excess energy – an improvement over the Non-Operating PPOAs.
MTRs	Compliance with 2020 MTRs (Minimum Technical Requirements for Interconnection of Photovoltaic (PV) Facilities), including ramp rate and frequency control, making projects more "grid friendly."
PREPA Interconnection Facilities	Requirement for Seller to design, finance and construct the interconnection facilities to connect the project to the grid, and typically provide a 2-year warranty of / repair defects in such interconnection line. Transfer of such facilities to PREPA at COD, with reimbursement (including 8.5% interest) from PREPA over the term for direct costs (in the form of a monthly installment), subject to a pre-agreed cap and exclusive of land cost. Operation, maintenance and repair cost and risk allocated to PREPA post-COD, as further described in Annex C.
Take or Pay (Deemed Energy)	Payment by PREPA for energy available but not taken (up to volume estimated to be available based on solar irradiation and other conditions) as a result of: • FM in excess of 200-220 hours in a year; • other curtailments or disconnections in excess of 40 hours in a year, as recommended by NEP; and • a breach by PREPA of the PPOA.

	Description in Subject Transactions
Milestones, Delay LDs and Term	Deadlines for Seller to (i) obtain financing and permits and give full notice to proceed ("**FNTP**") to its construction contractors (6-12 months after later of contract signing or receipt of the Assumption Order, as applicable); (ii) complete the interconnection line; and (iii) achieve COD (18-24 months after FNTP). Limited obligations for PREPA in the pre-COD period, including providing interconnection and facility study, providing testing and operating procedures, approving the project design and coordinating testing and project integration by certain deadlines. Reciprocal liquidated damages for delaying COD, from $0.125-$0.333 / kW (approximately $20,000 per day on the high end), which go into effect after FNTP – an improvement over the Non-Operating PPOAs. PREPA faces full deemed energy payment if it delays beyond more than 90-180 Days after the milestone for COD. Term is 25 years from COD.
Performance Guarantees	Requirement for Seller to (i) pre-COD, install at least 85% of contracted capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 80-85% of expected annual output over a 1-2 year period, or compensate PREPA at $5 / MWh – an improvement over the existing Non-Operating PPOAs. Right for PREPA to terminate the PPOA if average production falls below 60-70% of Nominal Capacity (for any 2-3 year period during the term), an improvement over the Non-Operating PPOAs.
Seller Security	Requirement for Seller to post letter of credit or guarantee to cover liabilities during pre-COD construction phase– an improvement over the Non-Operating PPOAs – as well as either a similar security or a PREPA set-off right post-COD.
Assignment	Right for PREPA to assign the PPOA (without consent) as part of Transformation, as required by P3A.

IV. Main Risks of the Subject Transactions

Notwithstanding the above, PREPA remains exposed to risk under the Subject Transactions. The chart below describes the allocation of certain key risks between PREPA and the counterparties.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Permits and Authorizations	✔		Permit delays (with no fault of the counterparty) constitute an FM Event granting extra time capped at a max 1-year extension. Seller otherwise has the obligation to obtain all permits for the construction and operation of the facility (the "**Facility**") by specific deadlines.
Financing	✔		Seller must secure financing for the construction of the Facility and the PREPA Interconnection Facilities by FNTP. PREPA credit risk remains a major issue for counterparties, and many projects may not be financed. The PPOA can be terminated without material liability if financing is not achieved by the required date.
Land Acquisition	✔		Seller must acquire all land rights and transfer good and valid legal title to the land rights for interconnection free and clear of all liens and claims by third parties.
Facility Design / Construction	✔		The Seller is responsible for the design and construction of the interconnection and Facility. PREPA reviews the design for interconnection and Facility and can reject if not in accordance with the PPOA. Seller bears risk of deficient Facility design and construction through less Facility output and a $200 / kW credit to PREPA for capacity shortfalls at COD.
Changes to Technical Requirements	✔ (up to cost limit)	✔	PREPA has right to change certain technical requirements (*e.g.*, MTRs) and Seller bears the cost of such changes to up to a limit of around $1 million. PREPA must compensate Seller for the cost of complying with such changes above such limit.
Construction of PREPA Interconnection Facilities	✔		Seller has the responsibility to construct the PREPA Interconnection Facilities and typically provides a 2-year warranty for defects.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Maintenance and Repair of PREPA Interconnection Facilities	✔ (for warranty period)	✔	Beyond the warranty, PREPA bears the cost and responsibility for interconnection O&M post-COD, as further detailed in Annex C.
PREPA Delays		✔	If PREPA delays COD beyond the Guaranteed Commercial Operation Date, PREPA must pay delay liquidated damages to Seller (value increases to full deemed energy payment after Long-Stop Date).
Seller Delays	✔		If the COD does not occur by the Guaranteed Commercial Operation Date for any reason other than PREPA delay (see row above), Seller must pay delay liquidated damages to PREPA for 90-180 days, and PREPA will be provided with security to cover this amount.
Offtake Risk – FM affecting PREPA	✔ (up to hour limit)	✔	Seller takes risk for first 200-220 operating hours, after which PREPA makes deemed energy payments (*i.e.* pays for the volume of energy available, but not taken, as determined by irradiation and ambient conditions).
Offtake Risk – other curtailment, including dispatch instruction, emergencies, maintenance, grid constraints, new generation or lack of demand	✔ (up to hour limit)	✔	Seller takes risk for first 40 operating hours, after which PREPA makes deemed energy payments.
Offtake Risk – breach		✔	PREPA makes deemed energy payments for any unexcused failure to take available energy.
Generation Risk – FM affecting Seller	✔		Seller receives no payment if unavailable.
Generation Risk – Seller scheduled / unscheduled maintenance	✔		Seller receives no payment if unavailable; scheduled maintenance set in prior year with PREPA approval and financial credit given to PREPA for production shortfalls due to unscheduled outages. See Annex D for shortfall credit details for each Subject Transaction.
Generation Risk – lack of solar irradiation	✔		Seller receives no payment to the extent output reduced due to lack of irradiation.
Generation Risk – degradation	✔		Seller receives no payment to the extent output reduced due to higher than expected degradation.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Post-Effective Date Taxes and Environmental Costs		✔ (until recovery in final years)	PREPA must reimburse Seller for additional costs resulting from changes in the payments of Taxes and Environmental Costs by Seller that are the result of the enactment of the enactment of Post-Effective Date Taxes and Post-Effective Date Environmental Costs; but has the right to recover such amount at the end of the contract term via set-off in the final years.
Other Change in Law or Government Acts	✔	✔	Both parties bear risk of Changes in Law (other than Post-Effective date Taxes and Environmental Costs). In some PPOAs, PREPA cannot claim FM relief for acts of a Puerto Rican government agency unless connected with a wider FM event (such as COVID 19 or a natural disaster).
PREPA Default		✔	PREPA faces general damages for PPOA breach. Such damages may include Seller's lost profit.
Seller Default	✔		Seller faces general damages for PPOA breach leading to termination, and reimburses PREPA for cost of PREPA Interconnection Facility if such facility becomes a stranded asset.

V. Note on Certain Developers

SolarBlue and Xzerta-Tec may have been associated with individuals convicted of criminal conduct and/or receiving negative attention in the press for alleged mis-dealings with the Government of Puerto Rico. This information came to PREPA management's attention from other developers. PREPA asked for an explanation and received written responses confirming the offending individuals no longer had any continuing connection with the respective project sponsors. Annex D includes documentation provided by the respective counterparties that sets out an explanation of these matters.

VI. PMO Recommendation

For the reasons explained above, the PMO Office recommends (subject to the Governing Board's view regarding Section V above) that the Governing Board approve (1) submission of the Subject Transactions to the FOMB, PREB and P3A, and (2) following their approval, finalization and execution of the Subject Transactions and submission of each such transaction to the Title III Court for assumption.

Annexes:

Annex A – List of Non-Operating PPOAs

Annex B – Slide Deck: Operating and Non-Operating Renewables Status Update

Annex C – Slide Deck: Interconnection Facility Risk Allocation

Annex D – Project Information – Subject Transactions

Annex E – D&V Legal Opinions

Annex F – K&S Memorandum

Annex A

List of Non-Operating PPOAs

1. Renewable Power Purchase and Operating Agreement between Xzerta-Tec Solar I, LLC and PREPA, dated September 19, 2012.

2. Renewable Power Purchase and Operating Agreement between SolarBlue Bemoga, LLC and PREPA, dated October 10, 2012.

3. Renewable Power Purchase and Operating Agreement between Solaner Puerto Rico One, LLC and PREPA, dated June 13, 2012.

4. Renewable Power Purchase and Operating Agreement between Blue Beetle III, LLC and PREPA, dated October 31, 2011.

5. Master Renewable Power Purchase and Operating Agreement between PBJL Energy Corporation and PREPA, dated December 20, 2011.

6. Renewable Power Purchase and Operating Agreement between CIRO One Salinas, LLC and PREPA, dated October 25, 2010.

7. Renewable Power Purchase and Operating Agreement between Guayama Solar Energy, LLC and PREPA, dated October 22, 2010.

8. Renewable Power Purchase and Operating Agreement between Solar Project San Juan, LLC and PREPA, dated October 10, 2012.

9. Renewable Power Purchase and Operating Agreement between Vega Baja Solar Project, LLC and PREPA, dated October 10, 2012.

10. Renewable Power Purchase and Operating Agreement between Renewable Energy Authority, LLC and PREPA, dated November 21, 2011.

11. Renewable Power Purchase and Operating Agreement between REA Energy Hatillo Solar Plant, LLC, dated December 13, 2011.

12. Renewable Power Purchase and Operating Agreement between Caracol Solar, LLC and PREPA, dated July 20, 2012.

13. Renewable Power Purchase and Operating Agreement between Sierra Solar Farm, LLC and PREPA, dated December 18, 2012.

14. Renewable Power Purchase and Operating Agreement between Desarrollos del Norte Inc. d/b/a Atenas Solar Farm and PREPA, dated December 28, 2012.

15. Renewable Power Purchase and Operating Agreement between Morovis Solar, LLC and PREPA, dated December 8, 2011.

16. Renewable Power Purchase and Operating Agreement between ReSun (Barceloneta), LLC and PREPA, dated December 16, 2011.

17. Renewable Power Purchase and Operating Agreement between Windmar Renewable Energy, LLC and PREPA, dated February 23, 2012.

18. Renewable Power Purchase and Operating Agreement between M Solar Generating, LLC and PREPA, dated May 2, 2012.

19. Renewable Power Purchase and Operating Agreement between YFN Yabucoa Solar, LLC and PREPA, dated October 17, 2012.

Annex B

Slide Deck: Operating and Non-Operating Renewables Status Update

Autoridad de
Energía Eléctrica

PREPA

Operating and Non-Operating Renewables Status Update

May 2020

Executive Summary

Autoridad de Energía Eléctrica

- PREPA has entered into PPOA pricing renegotiations with 9 operational renewable energy (RE) projects and 19 non-operational RE projects under PROMESA

<u>7 of the 9 operational projects are commercially agreed</u>

- The commercially agreed projects result in over 10% savings, or around $200 million over the remaining life of the contract, from the current contract prices and contract terms

<u>16 of the 19 non-operational projects are commercially agreed</u>

- The commercially agreed projects result in a 35% savings, or greater than $1 billion over the life of the contract, from the current contract prices
- Interconnection costs are estimated to be $90 - $100 million and partially offset this savings

Summary of Renewable Energy Projects

Autoridad de Energía Eléctrica

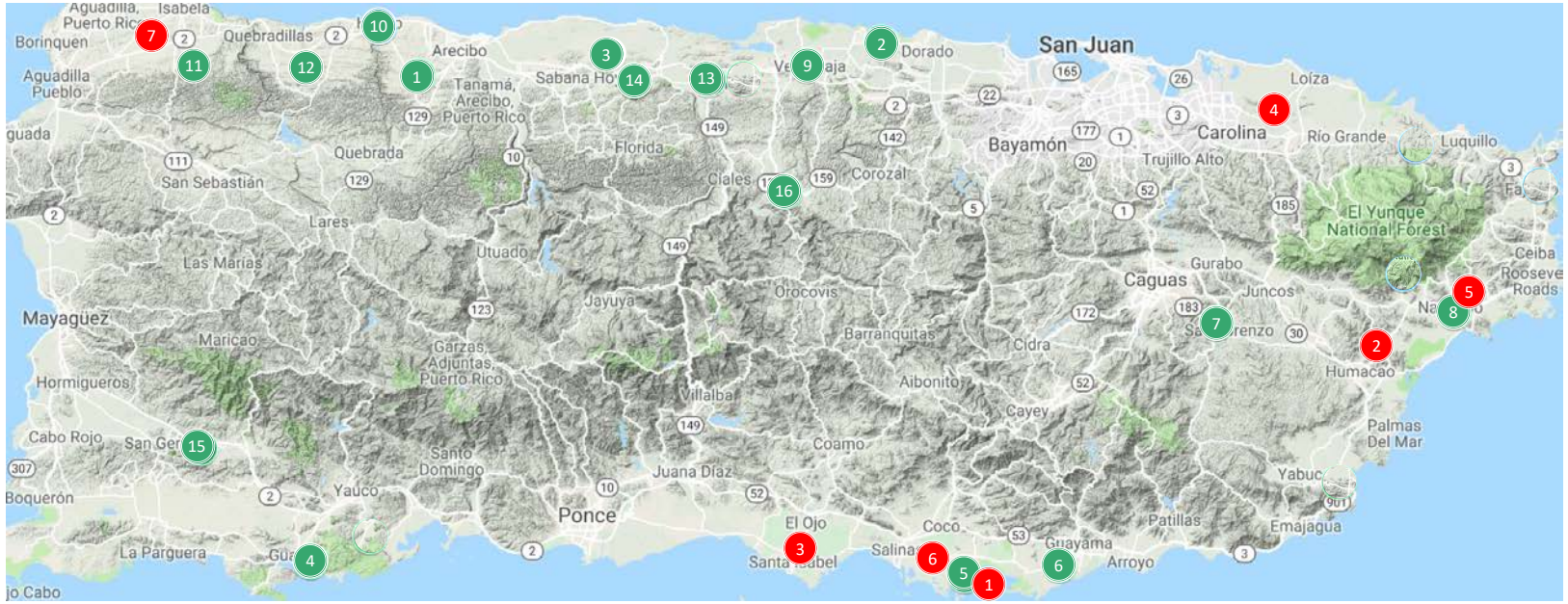
Operating PPOA Projects				
Commercially agreed* **(7 of 9)**	AES Ilumina	Pattern Santa Isabel	Punta Lima	Oriana Energy
	Humacao Solar Project	San Fermin Solar Farm	Horizon Energy	

*Commercially agreed means parties have negotiated and agreed to key amendment terms, with documentation to be finalized

Non-Operating PPOA Projects				
Commercially agreed** **(16 of 19)**	Xzerta-Tec	Ciro One	REA Vega Baja	Atenas
	SolarBlue	Guayama Solar Energy	REA Hatillo (North)	ReSun
	Blue Beetle	Solar Project San Juan	Caracol	Solaner
	Montalva Solar Farm	Vega Baja Solar Project	Sierra	Morovis

**Commercially agreed means parties have negotiated and agreed to the substantive provisions in the main body of the PPOA, with i's to dot and t's to cross, and technical appendices and interconnection issues remaining to be finalized over the coming weeks

Renewable Energy Project Locations



Operating Renewable Projects

1. AES Illumina
2. Humacao Solar Project
3. Pattern Santa Isabel
4. San Fermin Solar Farm
5. Punta Lima
6. Horizon Energy
7. Oriana Energy

Non-Operating Renewable Projects

1. Xzerta-Tec
2. SolarBlue
3. Blue Beetle
4. Montalva Solar Farm
5. Ciro One
6. Guayama Solar Energy
7. Solar Project San Juan
8. Vega Baja Solar Project
9. REA Vega Baja
10. REA Hatillo (North)
11. Caracol
12. Sierra
13. Atenas
14. ReSun
15. Solaner
16. Morovis

Autoridad de
Energía Eléctrica

PREPA
Operating Renewables
May 2020

Overview of Renegotiated Operating RE PPOAs

Autoridad de Energía Eléctrica

Operating PPOA Projects								
#	Project Name	Location	Type	MW[3]	Term (Original + Extension)[4]	Energy Price $/kWh (Energy/GC[6])	Energy Esc Rate	Green Credit Esc Rate
1.	AES Ilumina	Guayama	Solar	20+5	20+5	$0.15507 / $0.0315	2.00%	0%
2.	Humacao Solar Project	Humacao	Solar	40	25+5	$0.170	1.00%	N/A
3.	Pattern Santa Isabel	Santa Isabel	Wind	95	30+5	$0.15815	Varies	N/A
4.	San Fermin Solar Farm	Loiza	Solar	20+4.5	20+5	$0.1463 / $0.031	2.00%	0%
5.	Punta Lima[1]	Naguabo	Wind	26	20[2]	$0.12392 / $0.02335	1.50%	0%
6.	Horizon Energy	Salinas	Solar	10+10	25+5	$0.1393 / $0.0315	2.00%[5]	0%
7.	Oriana Energy	Aguadilla	Solar	50+10	20+10	$0.1439 / $0.02712	2.00%	0%
8.	Windmar Coto Laurel	Ponce	Solar	Unable to reach agreement				
9.	Windmar Cantera Martino	Ponce	Solar	Unable to reach agreement				

***Subject to Significant Revision - For Directional Use Only.**

[1] Currently Not Operational.

[2] Term to start at reconstruction date. Additional years past current contract term set at Market Prices** capped at $0.141/kWh.

[3] Additional Capacity set at Market Prices capped at $0.141/kWh.

[4] Additional Term extensions set at Market Prices capped at $0.141/kWh.

[5] Energy escalation stops at year 20 of the original agreement.

[6] GC or Green Credits represent the costs associated with the environmental attributes of the renewable energy.

**Market Prices have been determined by the governing board to be $0.100/kWh escalated at 2% and capped at $0.141/kWh.

Renegotiated Operating RE PPOA Pricing[1]

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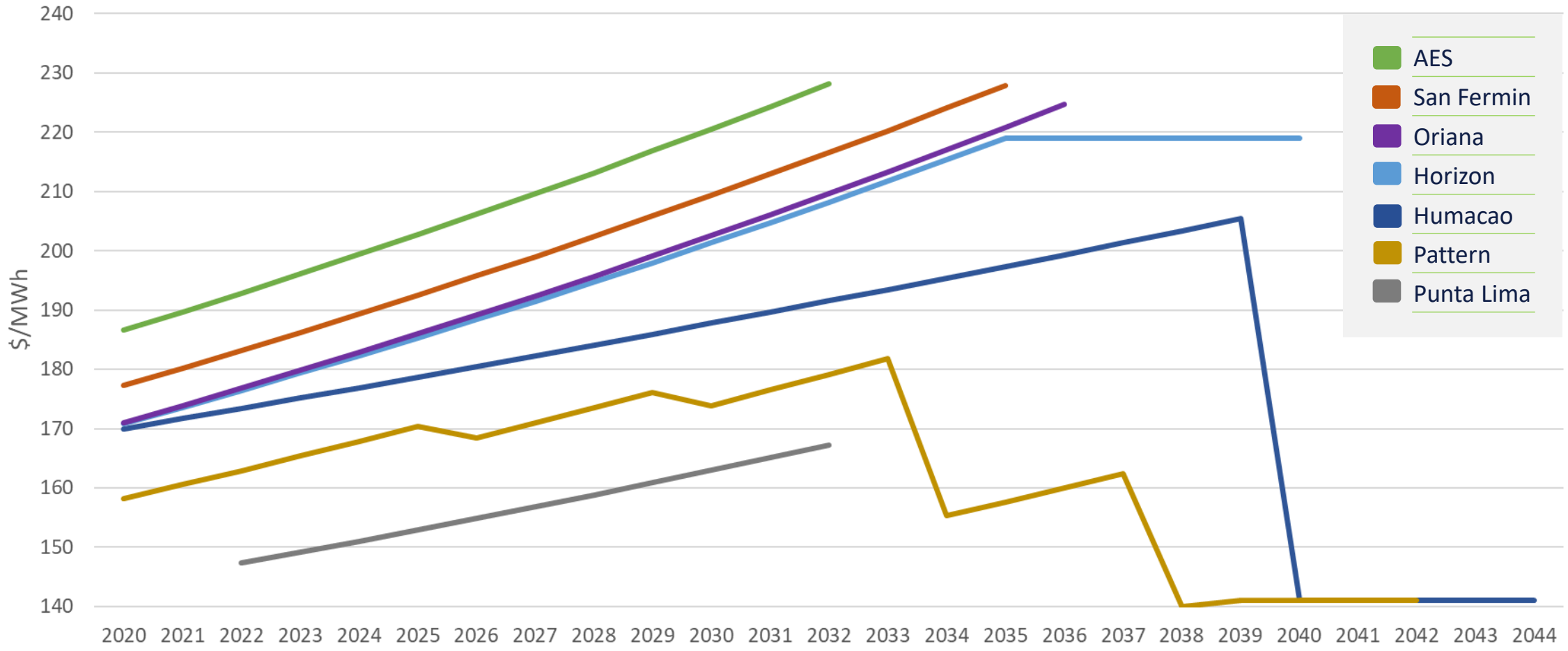


***Subject to Significant Revision - For Directional Use Only.**

[1] Pricing assumes equivalent terms of current contract values. Note that many projects have offered increased term extensions at the Governing Board's defined Market Prices.

Renegotiated Operating RE PPOA Savings[1]

Autoridad de Energía Eléctrica

Operating PPOA Projects						
#	Project Name	Current Capacity (MW)	Current Contract Total Cost ($Millions)[2]	Renegotiated Total Cost ($Millions) [2]	Total Savings ($Millions) [2]	Savings (%) [2]
1.	AES Ilumina, LLC	20	$100	$90	$10	10%
2.	Humacao Solar Project, LLC[3]	40	$340	$310	$30	9%
3.	Pattern Santa Isabel	75-95	$600	$490	$110	18%
4.	San Fermin Solar Farm	20	$130	$110	$10	10%
5.	Punta Lima[1]	26	$90	$80	$10	12%
6.	Horizon Energy	10	$80	$70	$10	10%
7.	Oriana Energy	50	$320	$290	$30	10%
Total (Commercially Agreed)		**~200**	**~$1,600**	**~$1,400**	**~$200**	**~10%**

***Subject to Significant Revision - For Directional Use Only.**

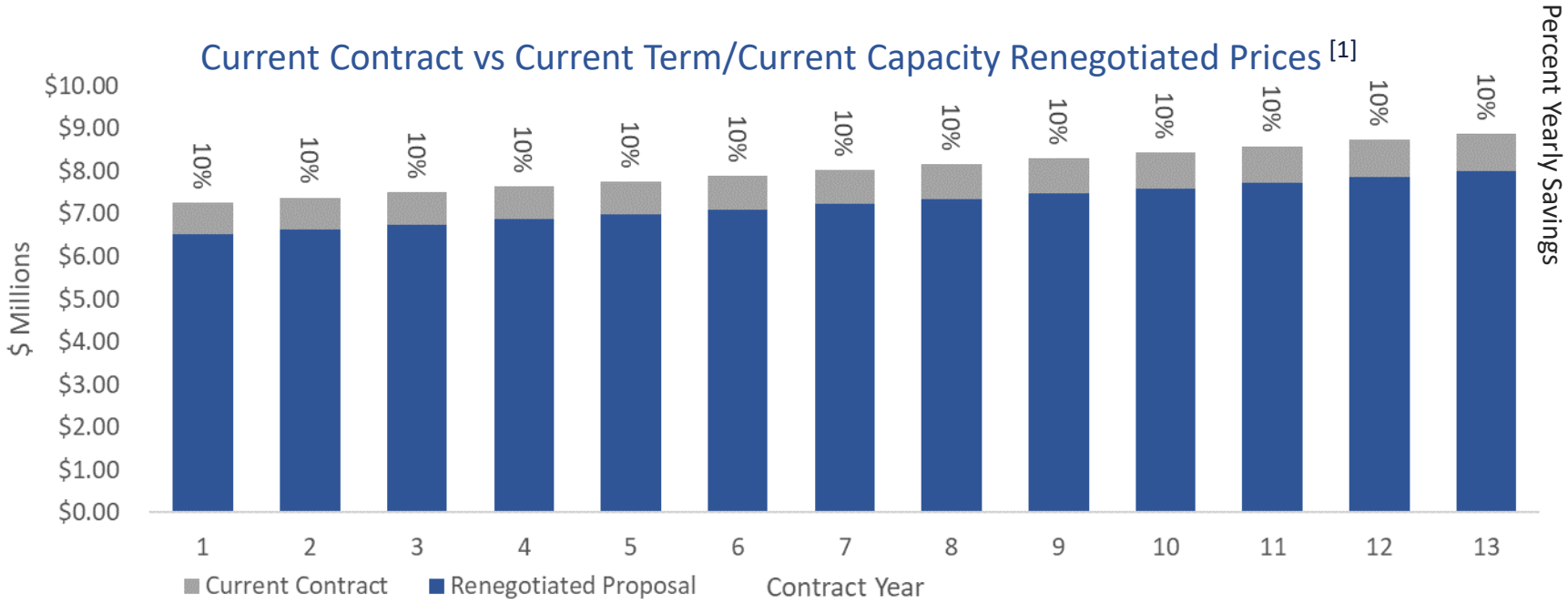
[1] Total savings assumes equivalent terms and capacity to provide a simple comparison of current contract values vs. the renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices.

[2] Total cost is on a non-discounted basis and have been rounded. Percent savings is based off non-rounded total cost savings.

[3] Humacao decreased its prices and escalation rate between the original contract and 2014 amendment. As compared to the original contract, Humacoa's total cost savings is greater than 10%.

AES Ilumina

Autoridad de Energía Eléctrica



- 20 MW solar facility
- 5 MW of additional capacity being negotiated at market prices[3]
- 5 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

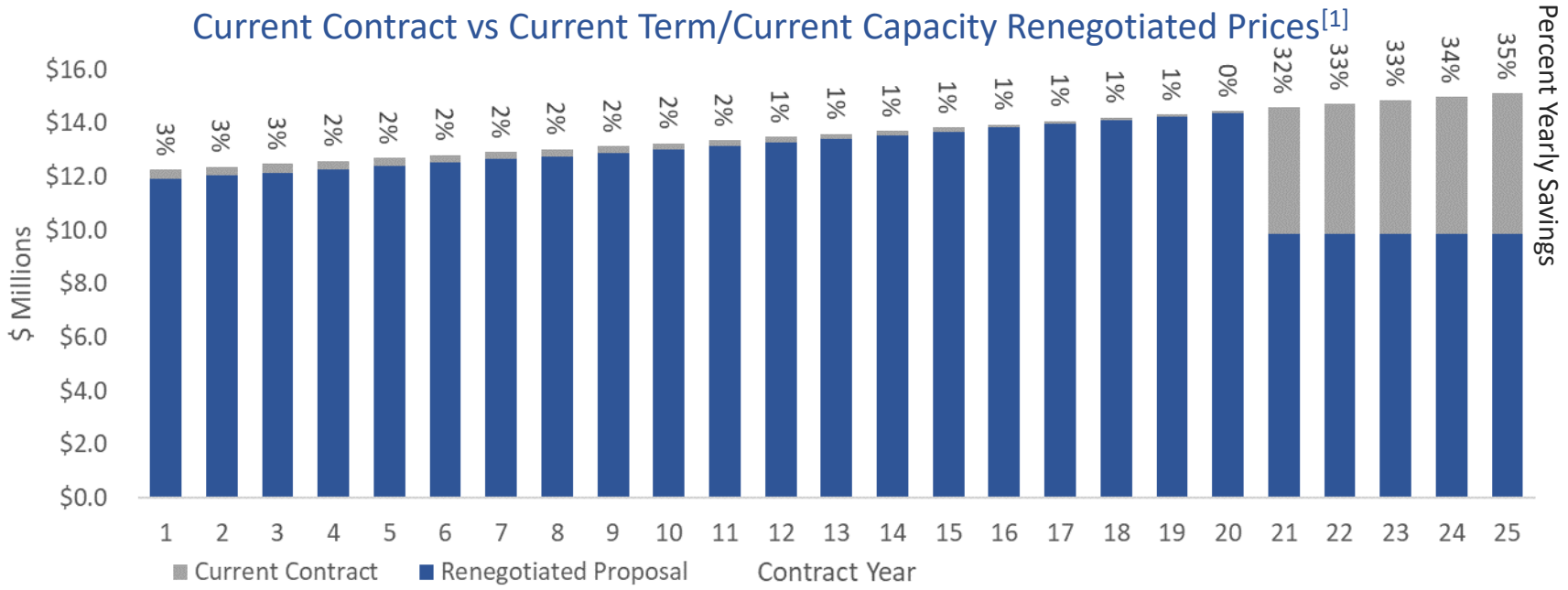
	Year 1	Final Year	Total Cost[2]
Current Contract	$7.3 Million	$8.9 Million	$100 Million
Renegotiated Proposal	$6.5 Million	$8.0 Million	$90 Million
Savings ($ Millions)	$0.7 Million	$0.9 Million	$10 Million
Savings (%)[2]	10%	10%	10%

***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Humacao Solar Project



- 40 MW solar facility
- Only Project to have reduced prices in 2014 ($0.185/kWh to $0.175/kWh and reduced escalation). Current Proposal represents additional savings from 2014 basis.
- 5 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

	Year 1	Final Year	Total Cost[2]
Current Contract	$12.3 Million	$15.1 Million	$340 Million
Renegotiated Proposal	$11.9 Million	$9.9 Million	$310 Million
Savings ($ Millions)	$0.4 Million	$5.2 Million	$30 Million
Savings (%)[2]	3%	35%	9%

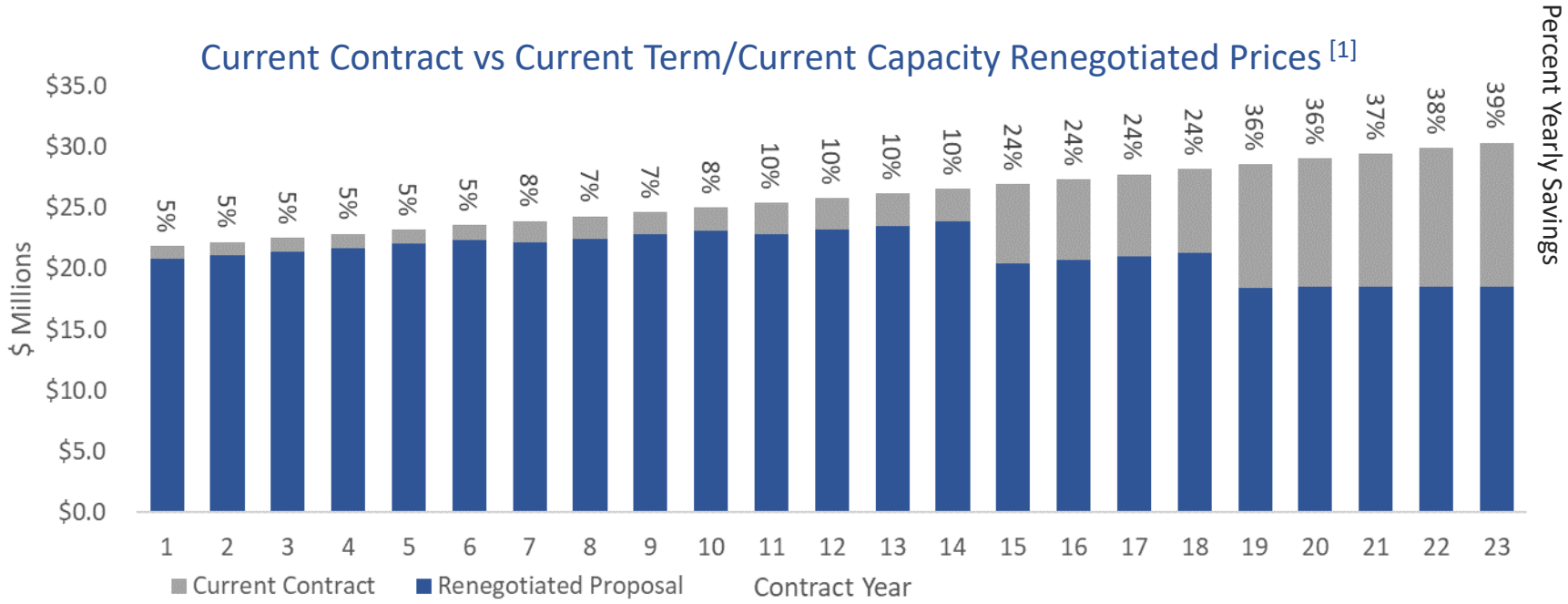
***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Pattern Santa Isabel

Autoridad de Energía Eléctrica



- 75-95 MW wind facility. Anticipate running full time at 95 MW
- 0 MW of additional capacity being negotiated at market prices[3]
- 5 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

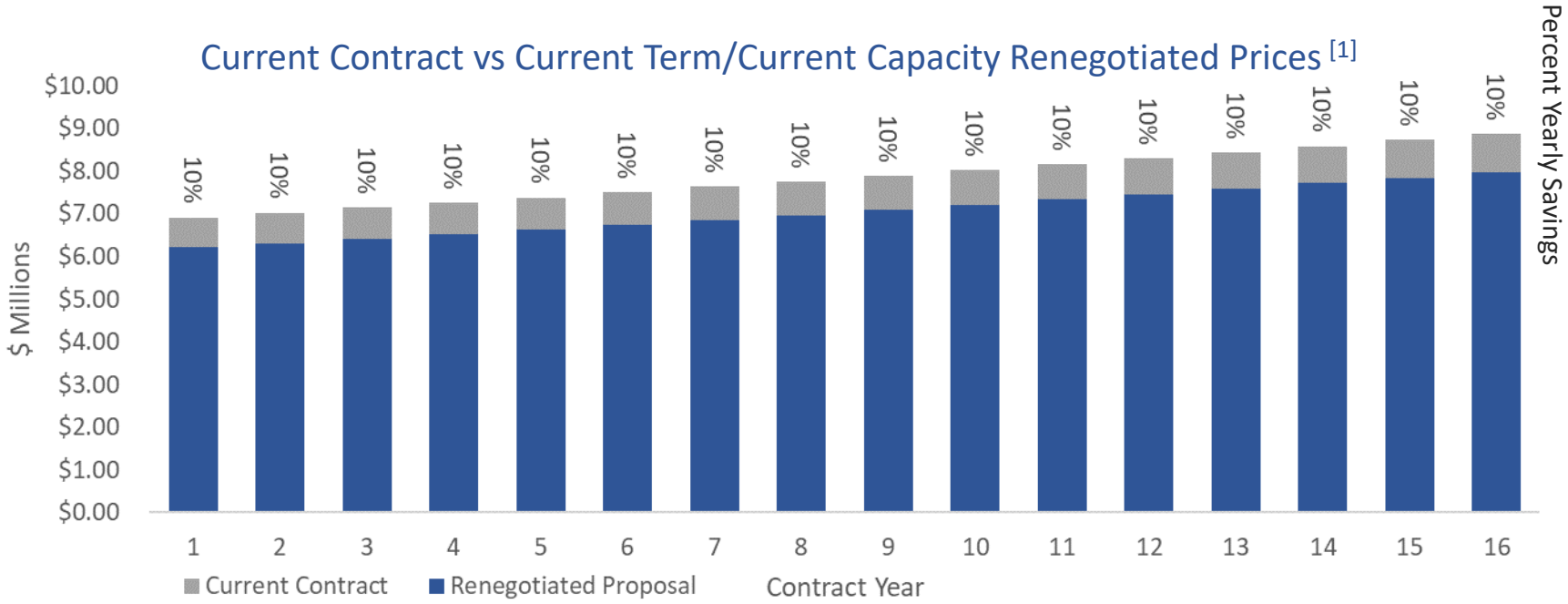
	Year 1	Final Year	Total Cost[2]
Current Contract	$21.9 Million	$30.4 Million	$600 Million
Renegotiated Proposal	$20.8 Million	$18.5 Million	$490 Million
Savings ($ Millions)	$1.1 Million	$11.8 Million	$110 Million
Savings (%)[2]	5%	39%	18%

***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

San Fermín Solar Farm



- 20 MW solar facility
- 4.5 MW of additional capacity being negotiated at market prices[3]
- 5 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

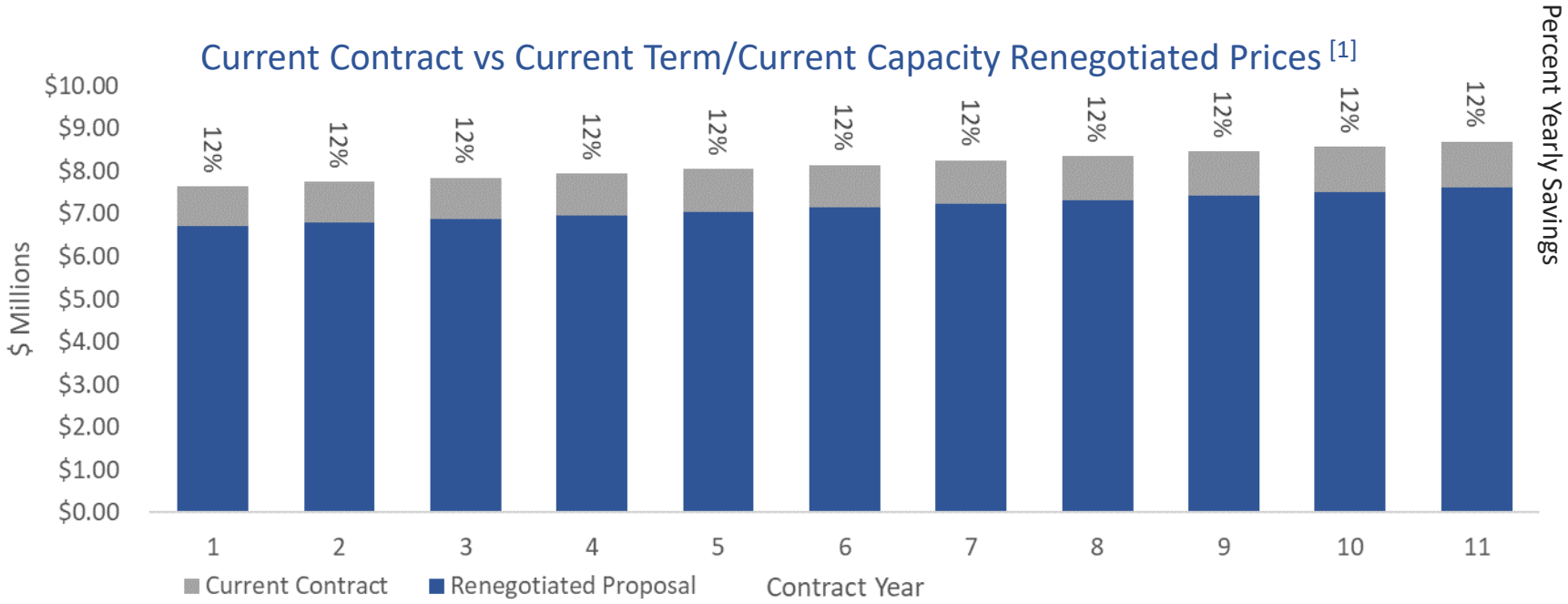
	Year 1	Final Year	Total Cost[2]
Current Contract	$6.9 Million	$8.9 Million	$130 Million
Renegotiated Proposal	$6.2 Million	$8.0 Million	$110 Million
Savings ($ Millions)	$0.7 Million	$0.9 Million	$20 Million
Savings (%)[2]	10%	10%	10%

***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Punta Lima Wind Farm



- 26 MW wind facility
- 0 MW of additional capacity being negotiated at market prices[3]
- 20 year term starting from new reconstruction date. Additional years after current term being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

	Year 1	Final Year	Total Cost[2]
Current Contract	$7.6 Million	$8.7 Million	$90 Million
Renegotiated Proposal	$6.7 Million	$7.6 Million	$80 Million
Savings ($ Millions)	$0.9 Million	$1.1 Million	$10 Million
Savings (%)[2]	12%	12%	12%

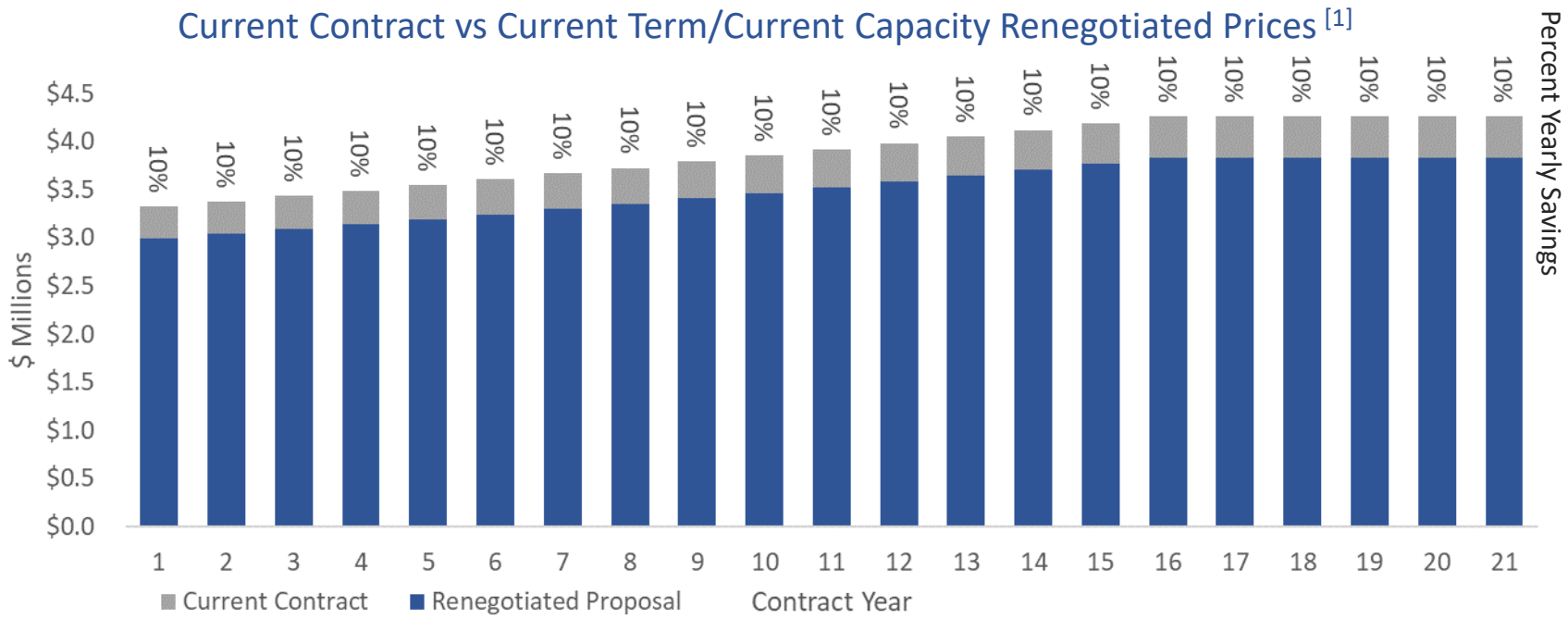
***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Horizon Energy

Autoridad de Energía Eléctrica



- 10 MW solar facility
- 10 MW of additional capacity being negotiated at market prices[3]
- 5 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

	Year 1	Final Year	Total Cost[2]
Current Contract	$3.3 Million	$4.3 Million	$80 Million
Renegotiated Proposal	$3.0 Million	$3.8 Million	$70 Million
Savings ($ Millions)	$0.3 Million	$0.4 Million	$10 Million
Savings (%)[2]	10%	10%	10%

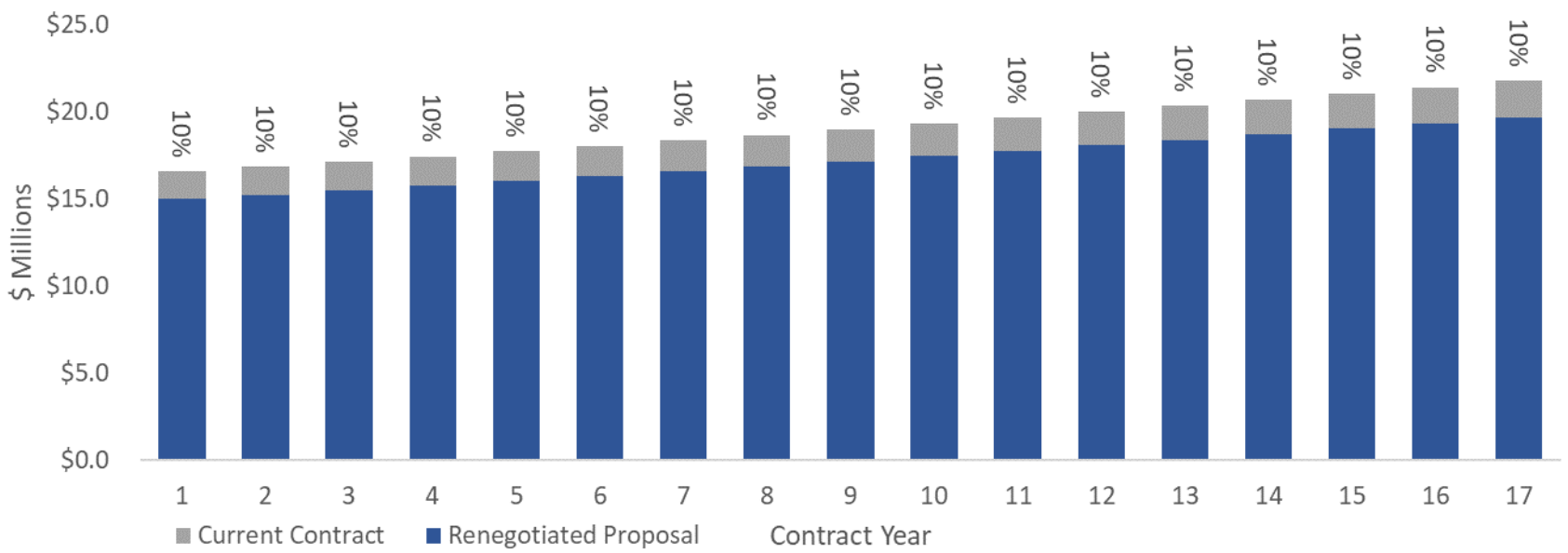
***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Oriana Energy

Autoridad de Energía Eléctrica



- 50 MW solar facility
- 10 MW of additional capacity being negotiated at market prices[3]
- 10 year term extension being negotiated at market prices [3]

[3] Market Prices have been determined by the governing board to be $0.100/kWh escalated at a 2% and capped at $0.141/kWh.

	Year 1	Final Year	Total Cost[2]
Current Contract	$16.6 Million	$21.8 Million	$320 Million
Renegotiated Proposal	$15.0 Million	$19.7 Million	$290 Million
Savings ($ Millions)	$1.6 Million	$2.1 Million	$30 Million
Savings (%)[2]	10%	10%	10%

***Subject to Significant Revision - For Directional Use Only.**

[1] Total savings assume equivalent terms and capacity to provide a simple comparison of current contract values and renegotiated contract values. Note that many projects have offered increased capacity and term extensions at the Governing Board's defined Market Prices. The Final Year is the for the Final Year of the current contract.

[2] Total cost has been round. Percent savings is based off non-rounded total cost savings.

Autoridad de
Energía Eléctrica

PREPA

Update on Non-Operating Renewables

May 2020

Overview of Non-Operating RE PPOAs

Autoridad de Energía Eléctrica

Non-Operating PPOA Projects								
#	Project Name	Expected COD (after signing) [1]	Type	MW	Term	Year 1 Energy Price ($/kWh)	Energy Esc Rate	Energy Price Cap ($/kWh)
1.	Xzerta-Tec	30 months	Solar	60	25	$0.099	2%	$0.141
2.	SolarBlue	24 months	Solar	25	25	$0.0995	2%	$0.141
3.	Blue Beetle	29 months	Solar	30	25	$0.0999	2%	$0.141
4.	Montalva Solar Farm	31 months	Solar	80	25	$0.0985	2%	$0.141
5.	Ciro One	33 months	Solar	90	25	$0.0989	2%	$0.141
6.	Guayama Solar Energy	33 months	Solar	25	25	$0.0995	2%	$0.141
7.	Solar Project San Juan	36 months	Solar	20	25	$0.100	2%	$0.141
8.	Vega Baja Solar Project	36 months	Solar	15	25	$0.100	2%	$0.141
9.	REA Vega Baja	36 months	Solar	25	25	$0.09999	2%	$0.141
10.	REA Hatillo (North)	36 months	Solar	25	25	$0.09999	2%	$0.141

***Subject to Significant Revision - For Directional Use Only.**

[1] Expected COD is an approximation based on the current timeframes under negotiation for the respective renegotiated PPOAs.

Overview of Non-Operating RE PPOAs (cont'd)

Autoridad de Energía Eléctrica

Non-Operating PPOA Projects								
#	Project Name	Expected COD (after signing)[1]	Type	MW	Term	Year 1 Energy Price ($/kWh)	Energy Esc Rate	Energy Price Cap ($/kWh)
11.	Caracol	30 months	Solar	30	25	$0.0975	2%	$0.141
12.	Sierra	30 months	Solar	25	25	$0.0975	2%	$0.141
13.	Atenas	30 months	Solar	40	25	$0.098	2%	$0.141
14.	ReSun	24 months	Solar	35	25	$0.099	2%	$0.141
15.	Solaner	36 months	Solar	35	25	$0.100	2%	$0.141
16.	Morovis	33 months	Solar	33	25	$0.099	2%	$0.141
17.	Windmar (Sebana Seca)	30 months	Solar	70	25	Unable to reach agreement		
18.	M Solar	30 months	Solar	70	25	Unable to reach agreement		
19.	YFN Yabucoa Solar	NA months	Solar	25	25	Unable to reach agreement		

*__Subject to Significant Revision - For Directional Use Only.__

[1] Expected COD is an approximation based on the current timeframes under negotiation for the respective renegotiated PPOAs.

Non-Operating RE PPOA Savings

Autoridad de Energía Eléctrica

Non-Operating PPOA Projects						
#	Project Name	Current Capacity (MW)	Current Contract Total Cost ($Millions)[1]	Renegotiated Total Cost ($Millions) [1]	Total Savings ($Millions) [1]	Savings (%) [1]
1.	Xzerta-Tec	60	$480	$330	$150	32%
2.	SolarBlue	25	$210	$140	$70	34%
3.	Blue Beetle	30	$250	$160	$90	34%
4.	Montalva Solar Farm	80	NA	$430	NA	NA
5.	Ciro One	90	$830	$490	$340	41%
6.	Guayama Solar Energy	25	$220	$140	$80	37%
7.	Solar Project San Juan	20	$160	$110	$50	30%
8.	Vega Baja Solar Project	15	$120	$80	$40	30%
9.	REA Vega Baja	25	$210	$140	$70	35%
10.	REA Hatillo (North)	25	$220	$140	$80	37%

***Subject to Significant Revision - For Directional Use Only.**

[1] Total cost is on a non-discounted basis and have been rounded. Percent savings is based off non-rounded total cost savings.

Non-Operating RE PPOA Savings (cont'd)

Autoridad de Energía Eléctrica

Non-Operating PPOA Projects						
#	Project Name	Current Capacity (MW)	Current Contract Total Cost ($Millions)[1]	Renegotiated Total Cost ($Millions) [1]	Total Savings ($Millions) [1]	Savings (%) [1]
11.	Caracol	30	$260	$160	$100	38%
12.	Sierra	25	$220	$130	$90	38%
13.	Atenas	40	$350	$220	$130	38%
14.	ReSun	35	$310	$190	$120	39%
15.	Solaner	35	$290	$190	$100	35%
16.	Morovis	33	$300	$180	$120	39%
Total (Commercially Agreed)[2]		**~500**	**>$4,000**	**~$3,000**	**>$1,000**	**~35%**

*__Subject to Significant Revision - For Directional Use Only.__

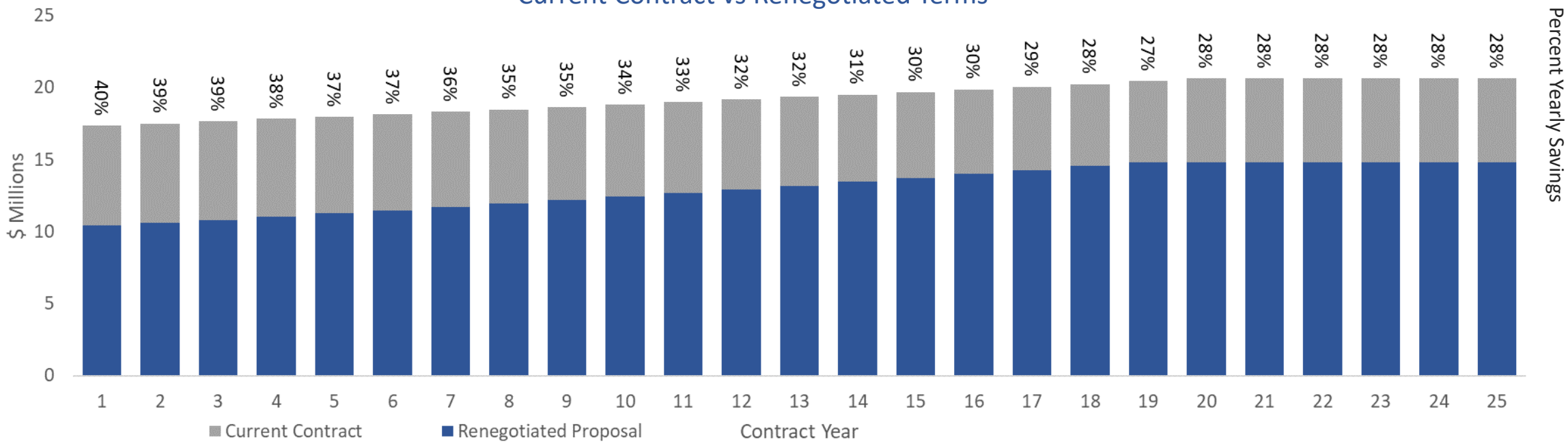
[1] Total cost is on a non-discounted basis and have been rounded. Percent savings is based off non-rounded total cost savings.

[2] Total cost and savings exclude Montalva due to the nature of Montalva's master agreement vs. the renegotiated PPOA.

Xzerta-Tec

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$17.3 Million	$20.6 Million	$480 Million
Renegotiated Proposal	$10.4 Million	$14.8 Million	$330 Million
Savings ($ Millions)	$6.9 Million	$5.8 Million	$150 Million
Savings (%)[2]	40%	28%	32%

***Subject to Significant Revision - For Directional Use Only.**

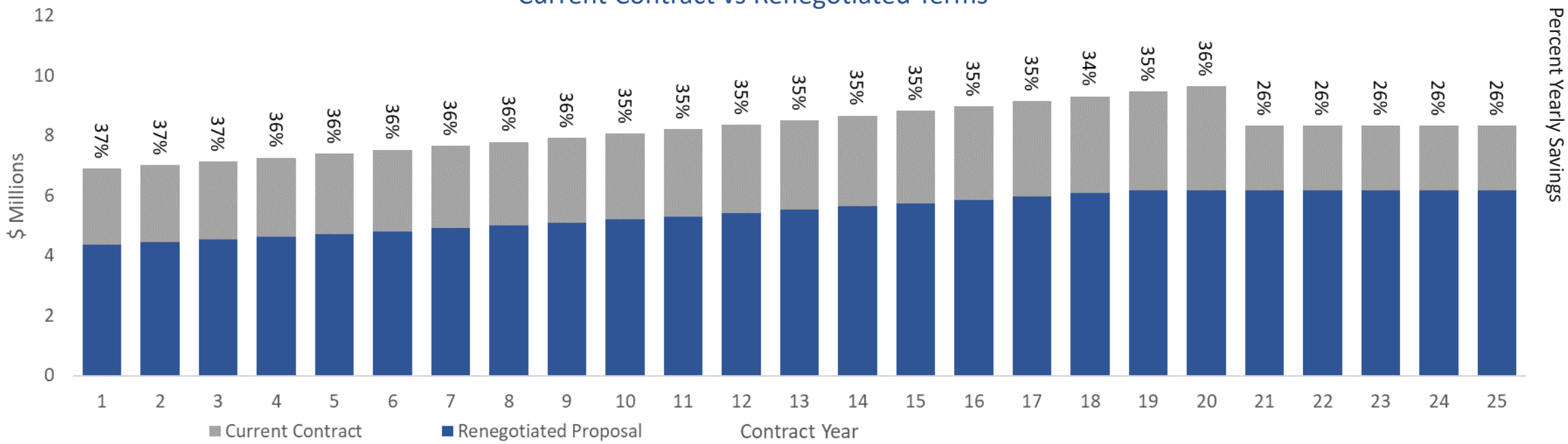
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

SolarBlue

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$6.9 Million	$8.3 Million	$210 Million
Renegotiated Proposal	$4.4 Million	$6.2 Million	$140 Million
Savings ($ Millions)	$2.5 Million	$2.1 Million	$70 Million
Savings (%)[2]	37%	26%	34%

***Subject to Significant Revision - For Directional Use Only.**

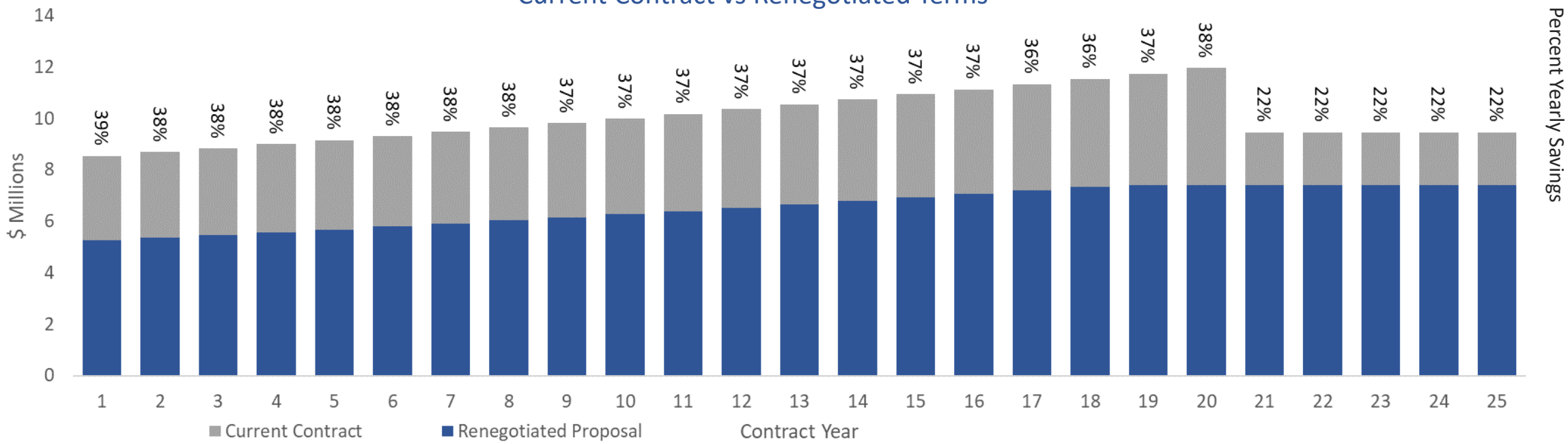
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Blue Beetle

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$8.5 Million	$9.5 Million	$250 Million
Renegotiated Proposal	$5.3 Million	$7.4 Million	$160 Million
Savings ($ Millions)	$3.3 Million	$2.0 Million	$90 Million
Savings (%)[2]	39%	22%	34%

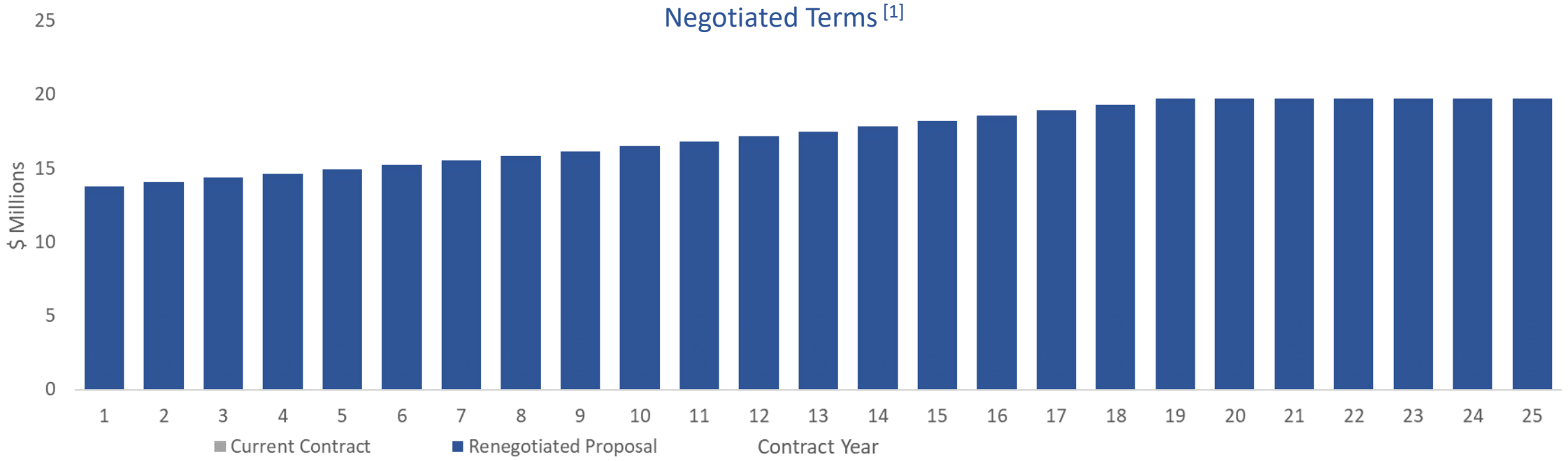
***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Montalva Solar Farm

Autoridad de Energía Eléctrica



	Year 1	Final Year	Total Cost[2]
Renegotiated Proposal	$13.8 Million	$19.8 Million	$430.0 Million

***Subject to Significant Revision - For Directional Use Only**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

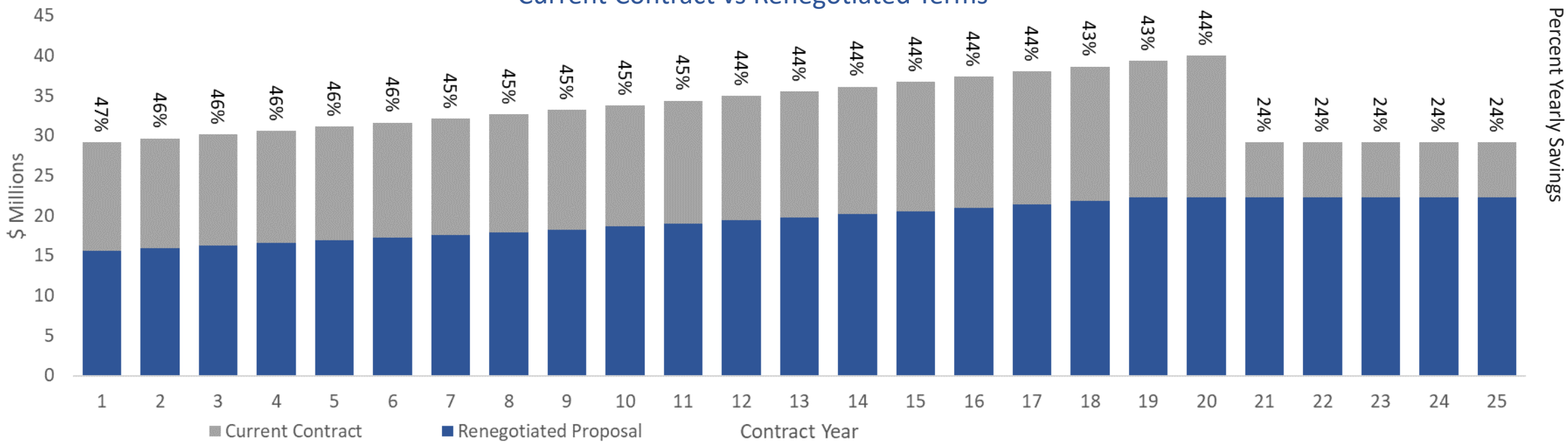
[2] Total cost has been rounded.

Montalva Solar Farm has a Master Agreement rather than a PPOA with PREPA. The negotiated terms of the new PPOA is pursuant to that master agreement. No savings are calculated due to no previous PPOA.

CIRO One

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$29.2 Million	$29.2 Million	$830 Million
Renegotiated Proposal	$15.6 Million	$22.2 Million	$490 Million
Savings ($ Millions)	$13.6 Million	$6.9 Million	$340 Million
Savings (%)[2]	47%	24%	41%

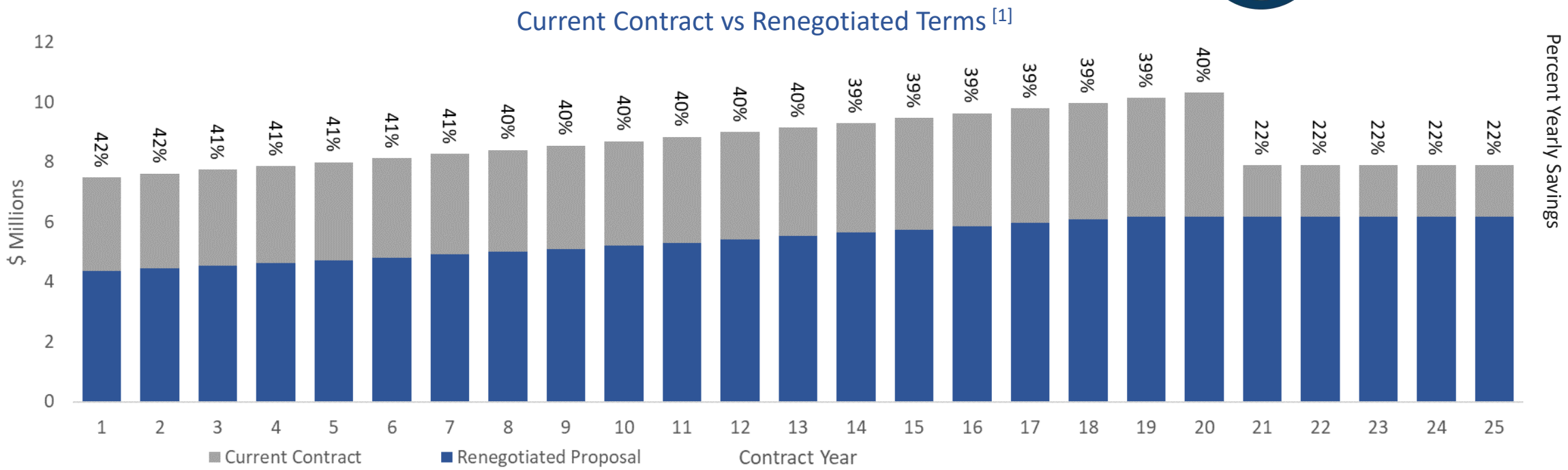
***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Guayama Solar Energy

Autoridad de Energía Eléctrica



	Year 1	Final Year	Total Cost[2]
Current Contract	$7.5 Million	$7.9 Million	$220 Million
Renegotiated Proposal	$4.4 Million	$6.2 Million	$140 Million
Savings ($ Millions)	$3.1 Million	$1.7 Million	$80 Million
Savings (%)[2]	42%	22%	37%

***Subject to Significant Revision - For Directional Use Only.**

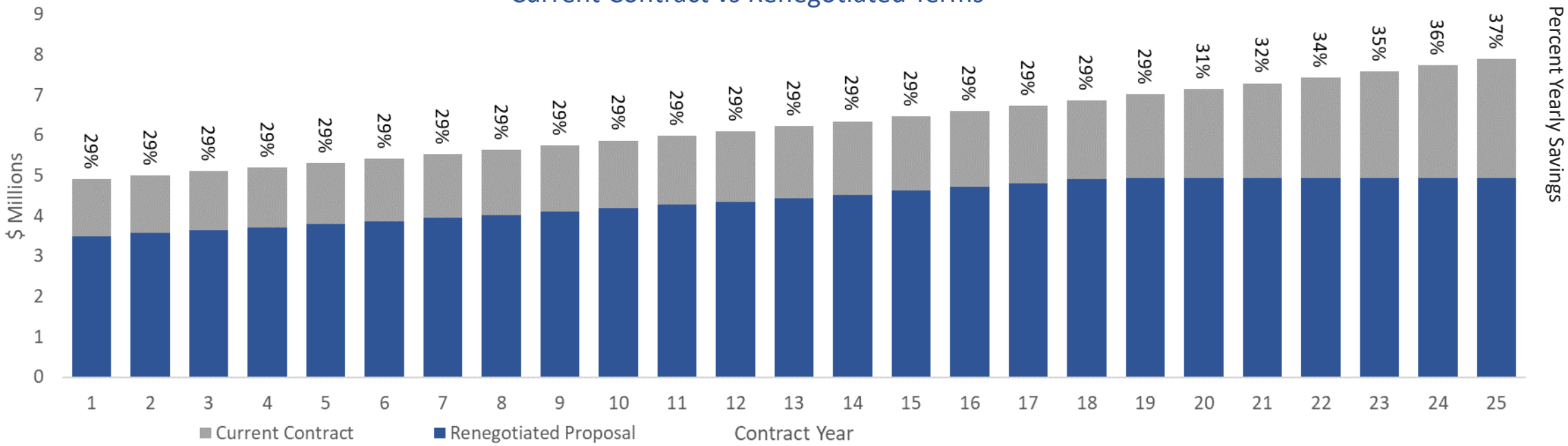
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Solar Project San Juan

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$4.9 Million	$7.9 Million	$160 Million
Renegotiated Proposal	$3.5 Million	$4.9 Million	$110 Million
Savings ($ Millions)	$1.4 Million	$2.9 Million	$50 Million
Savings (%)[2]	29%	37%	30%

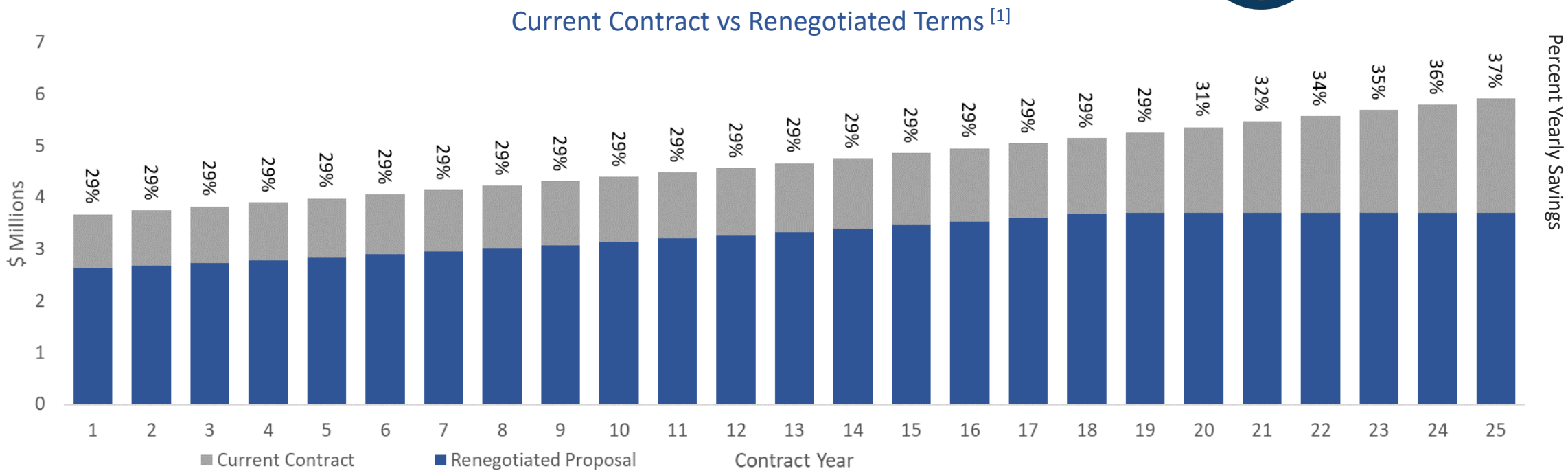
***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Vega Baja Solar Project

Autoridad de Energía Eléctrica



	Year 1	Final Year	Total Cost[2]
Current Contract	$3.7 Million	$5.9 Million	$120 Million
Renegotiated Proposal	$2.6 Million	$3.7 Million	$80 Million
Savings ($ Millions)	$1.1 Million	$2.2 Million	$40 Million
Savings (%)[2]	29%	37%	30%

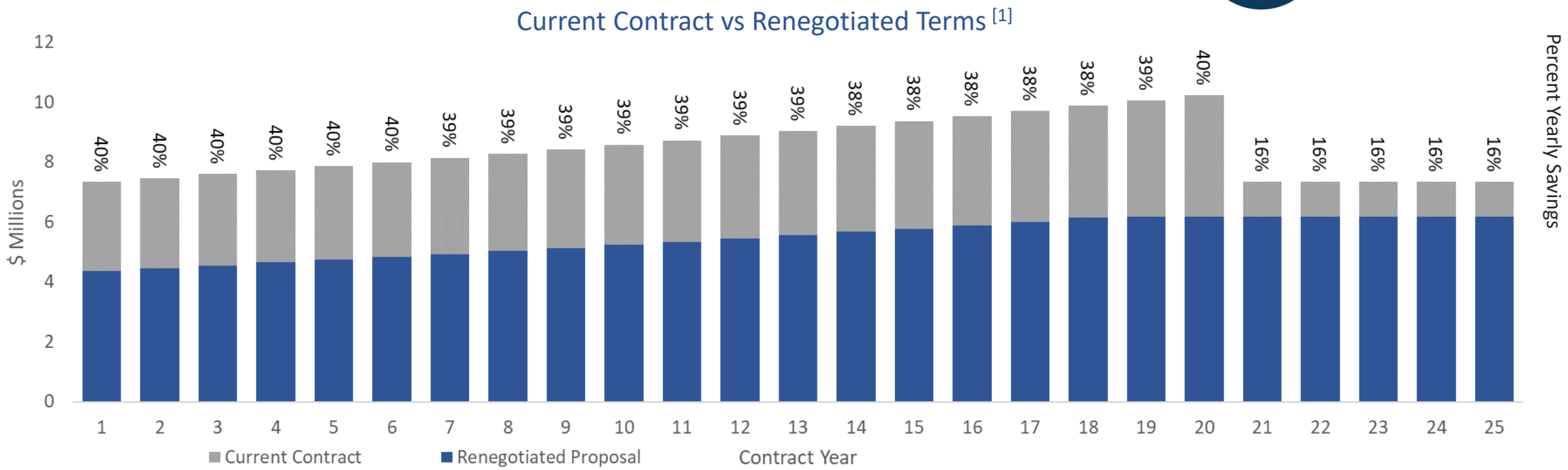
***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

REA Vega Baja

Autoridad de Energía Eléctrica



	Year 1	Final Year	Total Cost[2]
Current Contract	$7.3 Million	$7.3 Million	$210 Million
Renegotiated Proposal	$4.4 Million	$6.2 Million	$140 Million
Savings ($ Millions)	$3.0 Million	$1.2 Million	$70 Million
Savings (%)[2]	40%	16%	35%

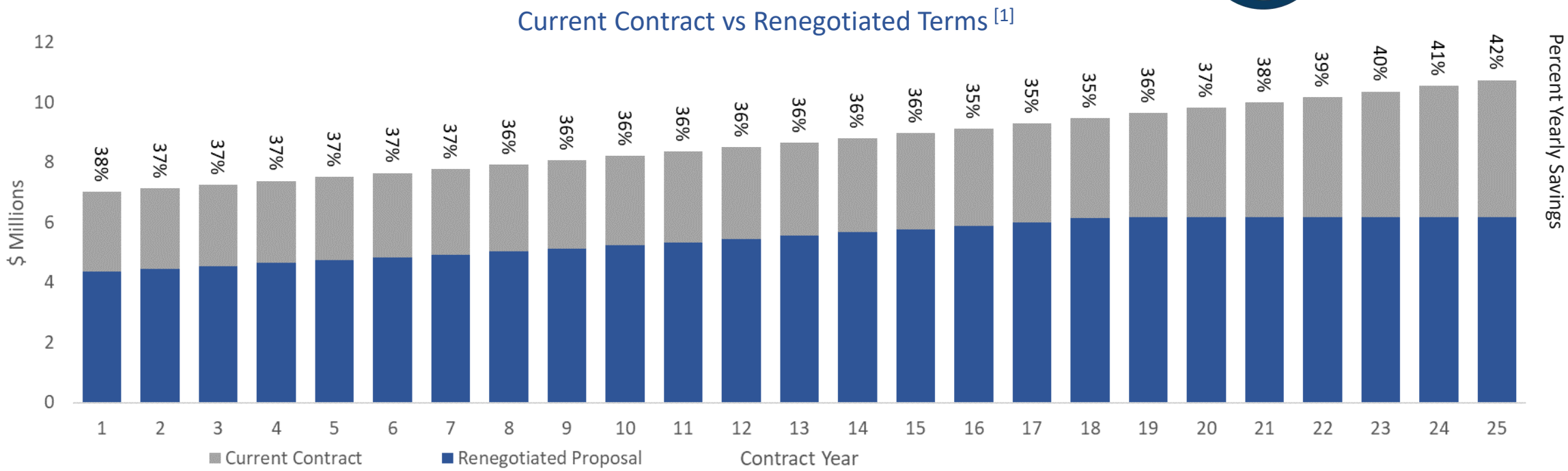
***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

REA Hatillo (North)

Autoridad de Energía Eléctrica



	Year 1	Final Year	Total Cost[2]
Current Contract	$7.0 Million	$10.7 Million	$220 Million
Renegotiated Proposal	$4.4 Million	$6.2 Million	$140 Million
Savings ($ Millions)	$2.6 Million	$4.6 Million	$80 Million
Savings (%)[2]	38%	42%	37%

***Subject to Significant Revision - For Directional Use Only.**

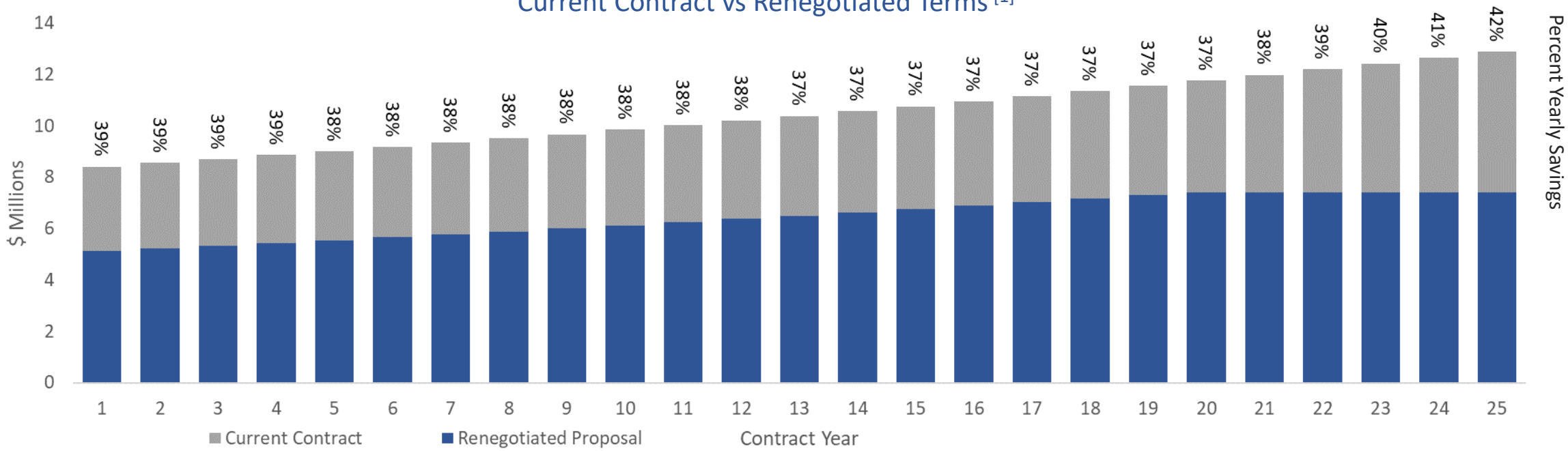
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Caracol

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$8.4 Million	$12.9 Million	$260 Million
Renegotiated Proposal	$5.1 Million	$7.4 Million	$160 Million
Savings ($ Millions)	$3.3 Million	$5.5 Million	$100 Million
Savings (%)[2]	39%	42%	38%

***Subject to Significant Revision - For Directional Use Only.**

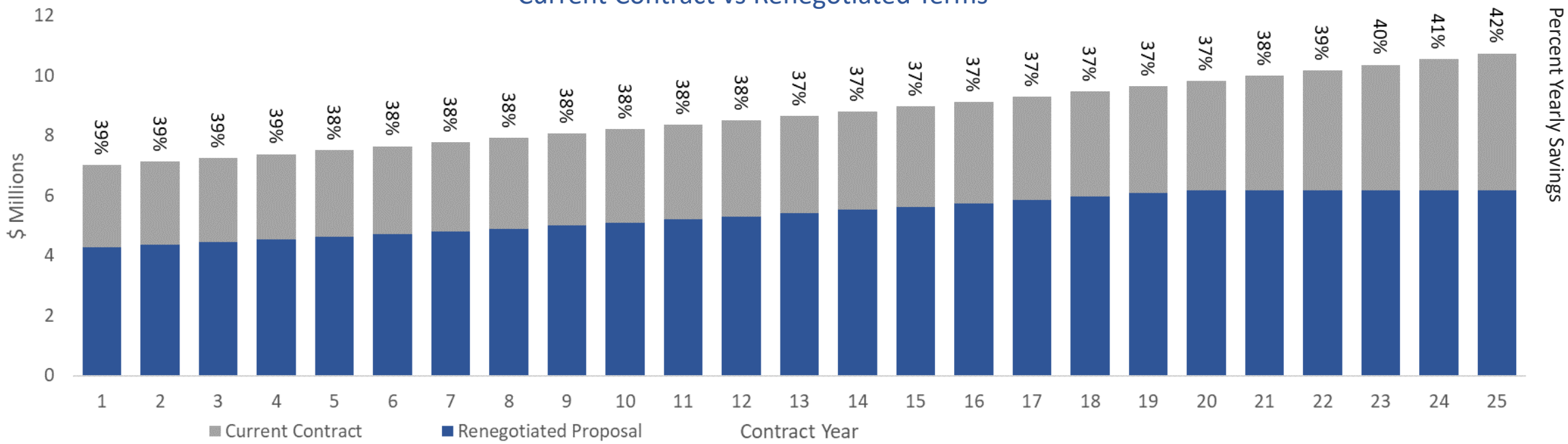
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Sierra

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$7.0 Million	$10.7 Million	$220 Million
Renegotiated Proposal	$4.3 Million	$6.2 Million	$130 Million
Savings ($ Millions)	$2.7 Million	$4.6 Million	$90 Million
Savings (%)[2]	39%	42%	38%

***Subject to Significant Revision - For Directional Use Only.**

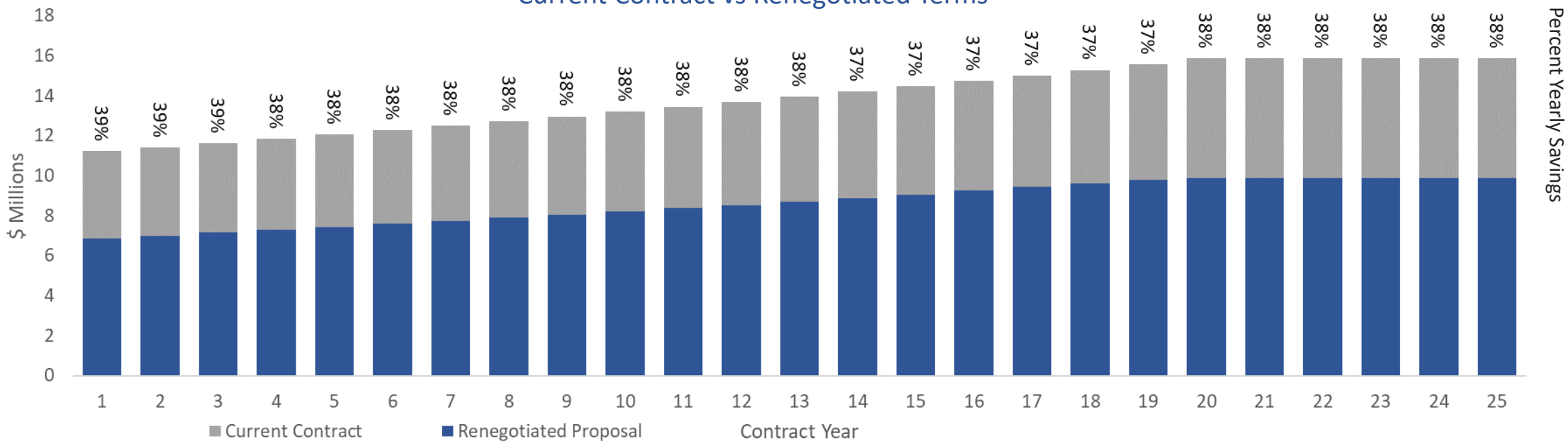
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Atenas

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$11.2 Million	$15.9 Million	$350 Million
Renegotiated Proposal	$6.9 Million	$9.9 Million	$220 Million
Savings ($ Millions)	$4.3 Million	$6.0 Million	$130 Million
Savings (%)[2]	39%	38%	38%

***Subject to Significant Revision - For Directional Use Only.**

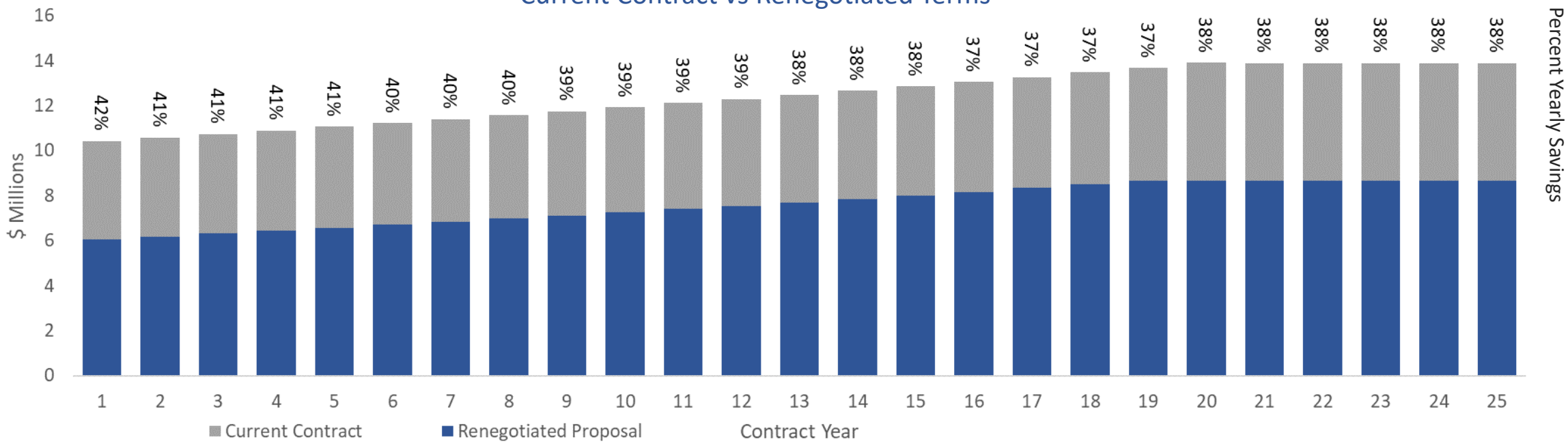
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

ReSun

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms[1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$10.4 Million	$13.9 Million	$310 Million
Renegotiated Proposal	$6.1 Million	$8.6 Million	$190 Million
Savings ($ Millions)	$4.4 Million	$5.2 Million	$120 Million
Savings (%)[2]	42%	38%	39%

***Subject to Significant Revision - For Directional Use Only.**

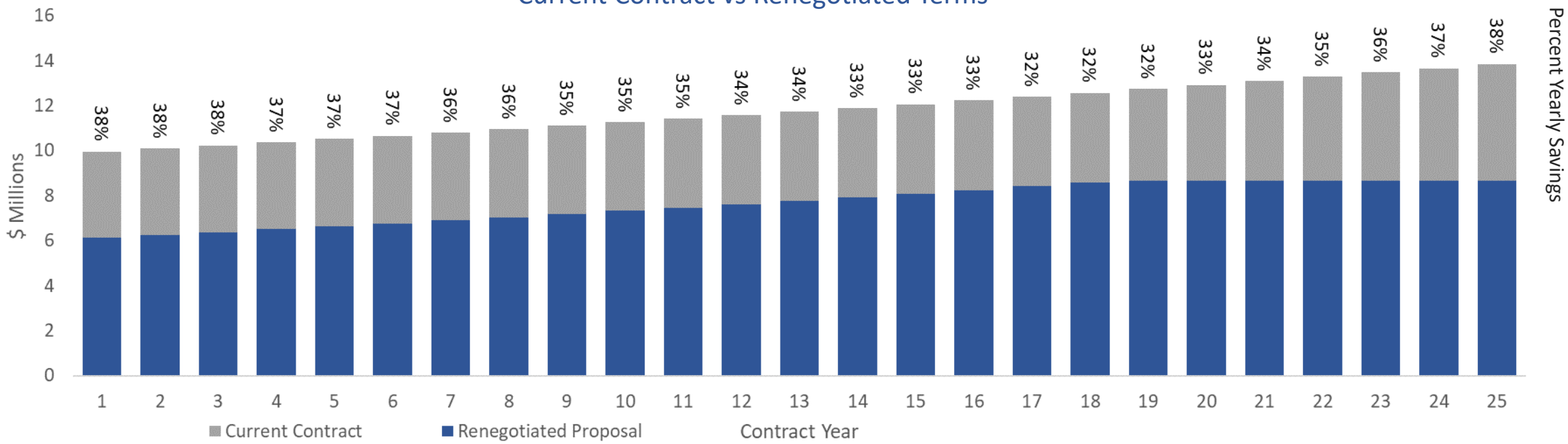
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Solaner

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms [1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$10.0 Million	$13.8 Million	$290 Million
Renegotiated Proposal	$6.1 Million	$8.6 Million	$190 Million
Savings ($ Millions)	$3.8 Million	$5.2 Million	$100 Million
Savings (%)[2]	38%	38%	35%

***Subject to Significant Revision - For Directional Use Only.**

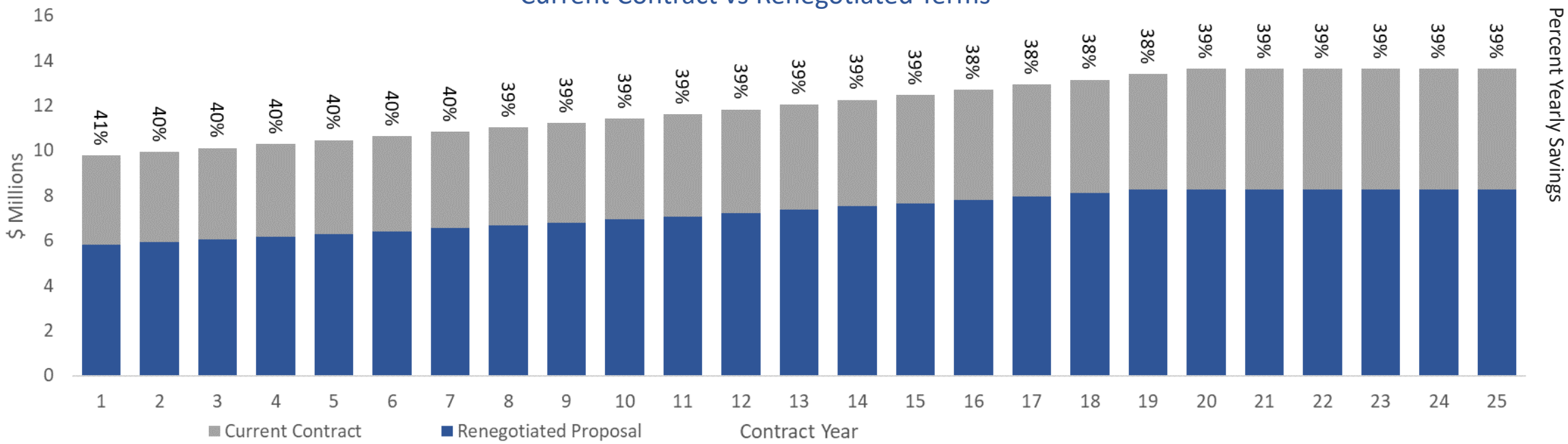
[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Morovis

Autoridad de Energía Eléctrica

Current Contract vs Renegotiated Terms[1]



	Year 1	Final Year	Total Cost[2]
Current Contract	$9.8 Million	$13.6 Million	$300 Million
Renegotiated Proposal	$5.8 Million	$8.3 Million	$180 Million
Savings ($ Millions)	$4.0 Million	$5.4 Million	$120 Million
Savings (%)[2]	41%	39%	39%

***Subject to Significant Revision - For Directional Use Only.**

[1] Cost is calculated on an annual non-discounted basis using proposed prices with generic assumptions about the facility. Subject to refinement.

[2] Total cost has been rounded. Percent savings is based off non-rounded total cost savings.

Non-Operating Interconnections Cost Summary

Autoridad de Energía Eléctrica

#	Project Name	kV	Miles	Current Estimate ($M)
1.	Xzerta-Tec	115	0.57	$3.2
2.	SolarBlue	38	1	$5.8
3.	Blue Beetle	115	0.2	$2.9 - $4.7
4.	Montalva Solar Farm	115	7.81	$15.7
5.	Ciro One	115	3.42	$8.1
6.	Guayama Solar Energy	38	1.19	$4.9
7.	Solar Project San Juan	38	0.5	$3.7
8.	Vega Baja Solar Project	38	0.18	$4.5
9.	REA Vega Baja	38	2.2	$8.1
10.	REA Hatillo (North)	38	0.03	$3.7
11.	Caracol	38	0.14	$1.0
12.	Sierra	38	0.14	$3.4
13.	Atenas	38	0.4 – 1.55	$9.3
14.	ReSun	115	0.05	$2.6 - $4.4
15.	Solaner	115	0.08	$4.1
16.	Morovis	115	4.34	$12.1
Total (Commercially Agreed)				**$90 - $100**

***Subject to Significant Revision - For Directional Use Only.**

Annex C

Slide Deck: Interconncetion Facility Risk Allocation

Puerto Rico
Electric Power
Authority

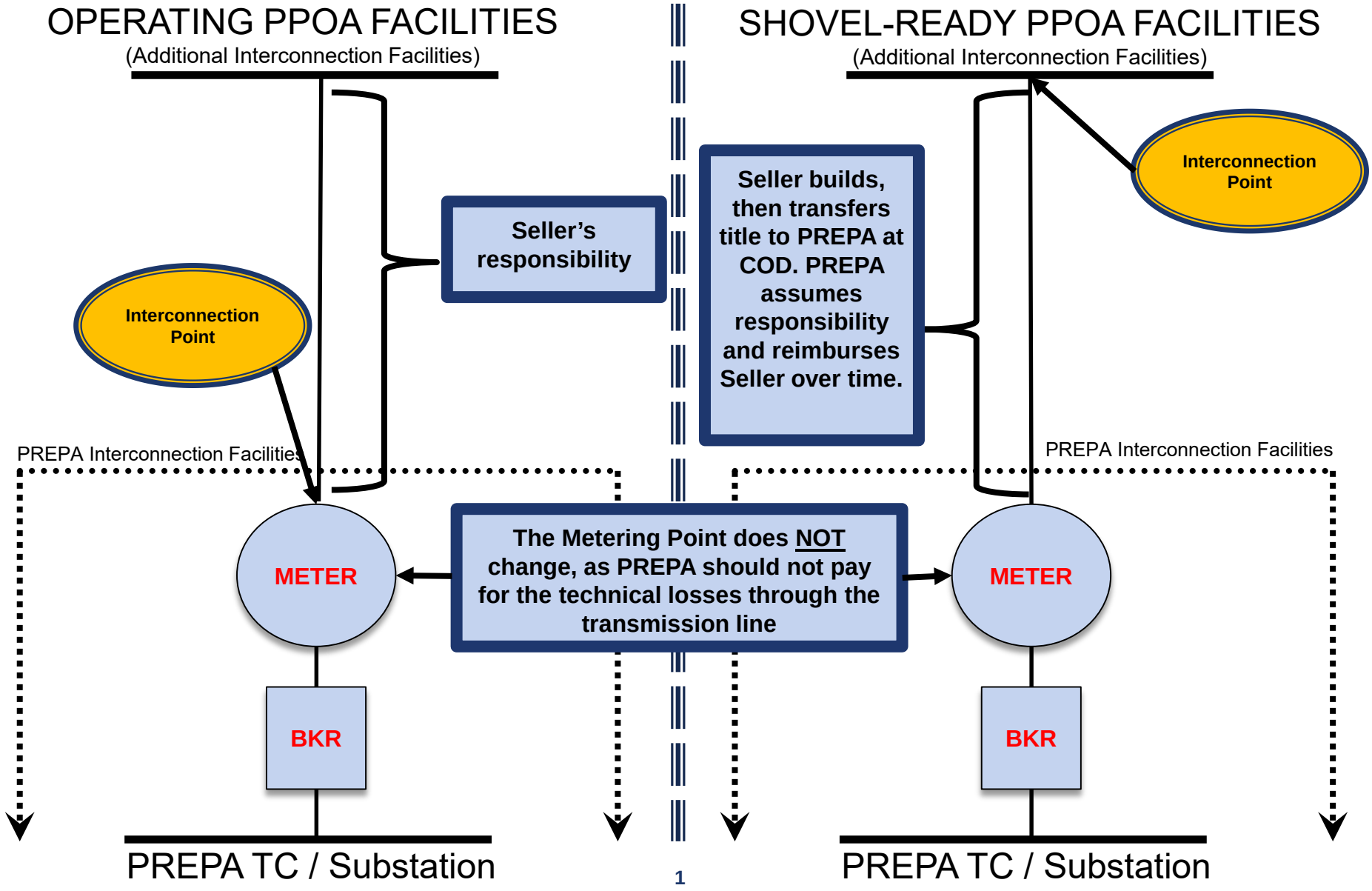
Puerto Rico Electric Power Authority

Non-Operting Solar Projects
PPOA Status Update
Interconnection Facility Risk Allocation - Interconnection Point, Costs, Maintenance and Risks

April 23, 2020

Interconnection Point Difference
Existing Operating vs. Shovel Ready

Puerto Rico Electric Power Authority

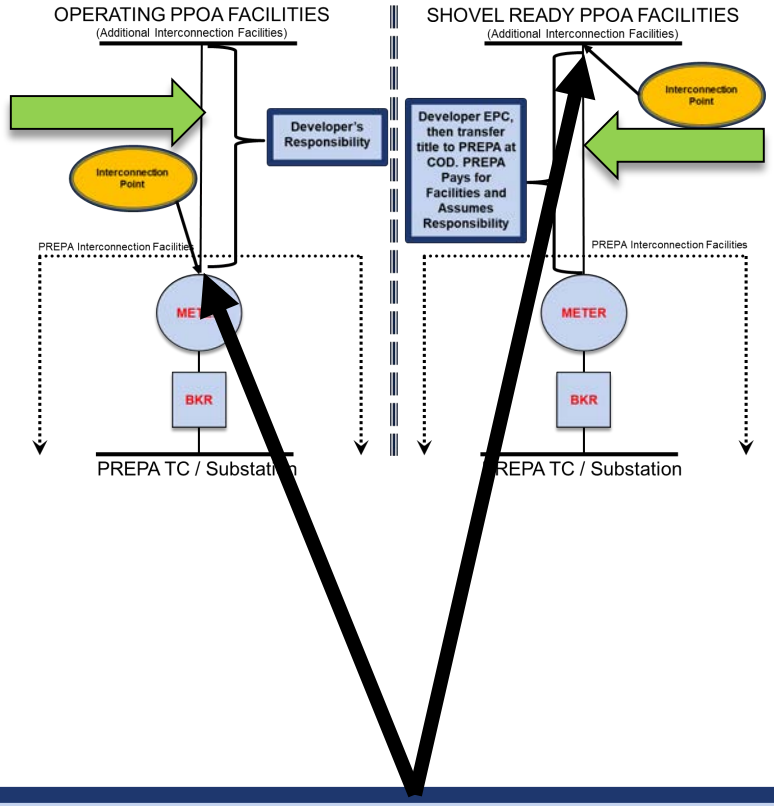


Interconnection Point Difference Existing Operating vs. Shovel Ready

Puerto Rico Electric Power Authority

Seller's **responsibilities after COD for transmission line:**

- **O&M:** Vegetation management
- **Recovery from a Force Majeure event**



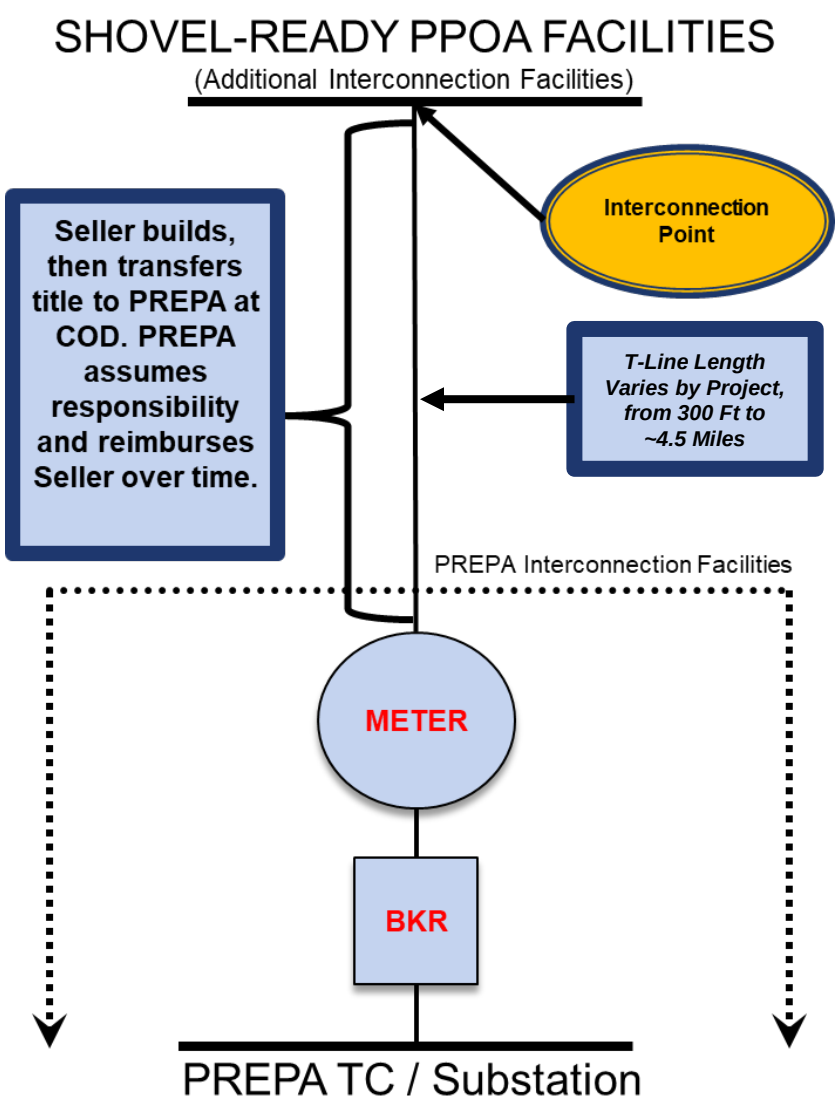
PREPA's **responsibilities after COD for transmission line:**

- **O&M**: Vegetation management (cost) & repairs (cost & risk)
- **Recovery from a Force Majeure event (Risk)**

The change in Interconnection Point changes PREPA's current view and responsibilities for managing the Shovel-Ready PPOAs vs. the Operating PPOAs

PREPA's Responsibilities After COD for These Transmission Lines

Puerto Rico Electric Power Authority



- **O&M Cost (not including potential repairs)*:**
  - Vegetation management: estimated at $55K per mile (based on MasterLink Contract), pruning cycle = every 2 years
  - All Shovel-Ready Projects = ~18 miles of transmission line
  - Total estimated cost = ~$500K per FY
- **Recovery from an Outage* or Force Majeure Event (Risk):**
  - If a FM event occurred, PREPA has 200-300 (daylight) hours to restore the transmission line to service before incurring Deemed Energy payments.
  - This requires PREPA to consider prioritizing restoration of these transmission lines vs. other critical lines which would restore service on a larger scale to PREPA customers.

** Seller has 2 years of Warranty obligations after COD; PREPA is then responsible for repairs from Year 3 to Year 25 of the PPOA. All non-FM repairs must be completed in 40 (daylight) hours before Deemed Energy payments*

Annex D

Project Information

Annex D-1

Xzerta-Tec (60 MW)

Counterparty Background:

Xzerta Energy Group ("**Xzerta**"), together with its network of local partners, develops solar and other renewable energy projects throughout the U.S. and Caribbean. Xzerta evaluates and structures investments by Auriga Capital Management in renewable energy generation facilities and other sustainable infrastructure projects. Xzerta actively manages investments by Auriga Capital Management during all phases of project construction and operation to optimize portfolio performance.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$3,210,000	$5,500,000	($2,290,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 220 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 180 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $20,000 per Day for first 90 Days of delay for both parties; and • An amount equal to the Base Tariff ($0.099/kWh) x Expected NEO for such Day, per Day.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over a 2-year period, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Potential Issue: Press reports alleging misconduct by Juan Maldonado, an individual formerly associated with Xzerta, are below. See Exhibit 1 to Annex D-1 for the company's response.

https://caribbeanbusiness.com/puerto-rico-gov-orders-cancellation-of-govt-contracts-with-juan-maldonado-apex/

https://www.elvocero.com/gobierno/al-detalle-el-chat-de-celebraci-n-entre-el-due-o-de-apex-y-juan/article_b0ec0866-9a3b-11ea-8d38-33ed42d534a6.html

Exhibit 1 to Annex D-1

Correspondence from Sánchez-Págan & Ferrer

SÁNCHEZ-PAGÁN
& FERRER

T. 787.504.1115
F. 787.753.6580

www.spflaw.com

1519 Ponce de León Ave., Suite 1115
San Juan, Puerto Rico 00909

May 6, 2020

VIA E-MAIL
kfutch@kslaw.com

Atty. Kevin D. Futch
King & Spalding

RE: Xzerta Tec Solar I, LLC Response to PREPA's Request for Information

Dear Kevin,

On behalf of Xzerta Tec Solar I, LLC ("Xzerta"), I hereby respond to the Puerto Rico Electric Power Authority's ("PREPA") May 5, 2020 inquiry you notified via email. In your communication, you stated that certain allegations and negative press in connection to Xzerta came to PREPA's attention, referencing a Caribbean Business article published April 16, 2020. PREPA requests that Xzerta provide (i) a full explanation of the allegations; (ii) any steps taken in response to the allegations; and (iii) a breakdown of shareholders, directors and officers of the counterparty to the PPOA. In compliance with the request, the following constitutes' Xzerta's full disclosure of the information.

It is imperative to begin this response by stating that Xzerta as a company, nor any of its members, directors, officers, employees, agents or representatives acting on behalf of Xzerta, participated directly or indirectly in the alleged failed transaction for the sale of the coronavirus COVID-19 rapid test kits (the "Transaction"). Xzerta's only stated purpose is the formation and development of a photovoltaic solar energy facility to generate and sell renewable energy to PREPA. This is its only mission, and during the past eight years, all its resources have been focused in finalizing and executing the Amended and Restated Renewable Power Purchase and Operating Agreement ("PPOA").

Notwithstanding, a now former Xzerta officer, Mr. Juan Maldonado de Jesús – separately and independently from Xzerta - was involved in the Transaction. As a result of the public dissemination of the Transaction and the negative publicity it generated, Xzerta determined to sever ties with Mr. Maldonado de Jesús. The termination occurred in the first week of April 2020, prior to the commencement of any formal referral for investigation to the competent agencies, and even before governor Hon. Wanda Vázquez Garced's press conference reported in the referenced April 16, 2020 article. Given the timing of the Transaction, Xzerta concurrently notified these measures as they became effective, including the designation of Xzerta's President Mr. John

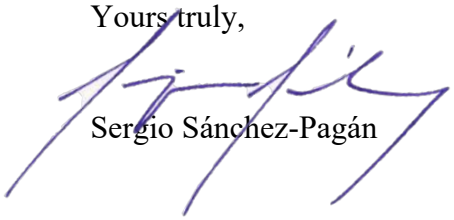
Tartaglia as its authorized representative and of Mr. Fernando Molini Vizcarrondo as the Puerto Rico General Manager.

With respect to PREPA's first request for a full explanation of the allegations, as stated, Xzerta's officers and directors did not, directly or indirectly, participate nor were they involved in the Transaction; consequently, Xzerta's personnel lack any first-hand knowledge of what transpired. As such, Xzerta is not in any position to provide real information to PREPA on this matter. Any and all information known on this matter has been obtained from what has been published on the media. Again, the person with said real information was removed from his position in Xzerta.

Finally, herein is a full disclosure of Xzerta's members. Its membership interest is held by Auriga Holdings, LLC ("Auriga") and Mr. Fernando Molini Vizcarrondo. Auriga is a New York limited liability company whose managers and members are Mr. John Tartaglia, Mr. Richard Winter, Mr. Enrique Matinavarro and Mr. Inigo Resusta. Xzerta's President is Mr. John Tartaglia and the General Manager is Mr. Fernando Molini Vizcarrondo.

Finally, Xzerta hereby confirms that it will submit the Sworn Statement prior to the execution of the PPOA.

Yours truly,



Sergio Sánchez-Pagán

cc: Atty. Francisco Santos Rivera
francisco.santos@prepa.com

Annex D-2

SolarBlue (25 MW)

Counterparty Background:

SolarBlue LLC ("**SolarBlue**") operates as a developer of renewable energy projects. SolarBlue offers an array of services such as energy conservation, operating cost reduction, energy efficient technology implementation, renewable energy solutions and clean power generation. SolarBlue has indicated that renewing land rights and financing may prove challenging so long as PREPA remains in bankruptcy.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$5,840,000	$5,900,000	($60,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 300 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 180 Days after Effective Date. Guaranteed Commercial Operation Date = 18 Months after the FNTP Date. Guaranteed Interconnection Date = 1 year anniversary of the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0995/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 80% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 80% of expected annual output over an Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Potential Issue: Former CEO of SolarBlue was convicted of fraud conspiracy charges according to the links below. See Exhibit 1 to Annex D-2 for the company's response.

https://www.orlandosentinel.com/classified/realestate/os-bz-lee-maher-20171219-story.html

https://www.justice.gov/usao-ndfl/pr/biodiesel-facility-officer-sentenced-30-months-prison-federal-grant-fraud-conspiracy

Exhibit 1 to Annex D-2

Correspondence from Shutts & Bowen

From: Harold E. Patricoff
To: Futch, Kevin
Cc: Dugat, Katie; Zisman, Stuart; Andrew R. Steel; Curtis Wolfe
Subject: RE: PREPA-SolarBlue PPOA - Request for Additional Information
Date: Friday, May 15, 2020 11:27:48 AM
Attachments: image001.png
First A&R LLC Agreement of SolarBlue Bemoga, LLC.pdf

External Sender
Dear Kevin,

You requested a full explanation of the facts surrounding Lee Maher and his involvement in SolarBlue Bemoga ("SBB"). While Mr. Maher previously served as an officer of SBB, this role in SBB was terminated in 2018.

Currently Mr. Maher has no connection or involvement at SBB. He is not an officer, director, employee, shareholder or member of the company. He holds no interest in the company whether direct or indirect. No family member of Mr. Maher holds any interest in the company whether direct or indirect.

The company is owned 100% by Orlando Solar Development, LLC and Franz Hanning is the sole manager of SBB. Orlando Solar Development, LLC is owned 100% by Franz Hanning.

Mr. Hanning is the former CEO of Wyndham Vacation Ownership (now known as "Wyndham Destinations"), a publicly-traded fortune 500 company. Neither Mr. Hanning, nor any other employee, officer, director, shareholder, member or owner of SBB have ever been convicted of any criminal offense.

Attached is the operating agreement for SBB, which confirms the ownership structure. Finally, this will confirm that an authorized representative of SBB can, upon signing of the PPOA, provide the sworn statement that was attached to your prior email.

I trust that this adequately addresses your inquiry. Please feel free to call upon me with any further questions.

Thank you,

Ed

Shutts_Logo.jpg

Harold E. Patricoff
Partner

Shutts & Bowen LLP
200 South Biscayne Boulevard, Suite 4100 | Miami, FL 33131

Direct: (305) 379-9189 | Fax: (305) 347-7889 | Cell: (305) 310-0290
E-Mail | Biography | V-Card | Website

Please note our new Miami office address

Annex D-3

Solaner (35 MW)

Counterparty Background:

Alener Solar, S.L. ("**Alener**"), the sponsor of Solaner Puerto Rico One, LLC, is an engineering company dedicated to the implementation and generation of electric and thermal energy in a sustainable manner using renewable energy sources and installing energy efficient systems. Alener started in 2004 in Spain, focusing its business on the development of renewable energies and focusing its strategy on innovation as a source of sustainable growth. Its core business focuses on generating energy and managing energy infrastructures, carrying out activities such as the promotion, technical design, engineering, installation, management and operation of the Plants. PREPA identified Solaner as one of the most advanced projects in the previous rounds of development. From March 12, 2020 to March 20, 2020, the Solaner team provided updates on site control, permitting, and financing with respect to the project.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (more than NEP Report)
$4,100,000	$3,500,000	$600,000

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = (i) for each of the first 5 Agreement Years, 220 hours, and (ii) for each Agreement Year thereafter, 185 hours, with an additional 35 hours in respect of Force Majeure affecting the PREPA Interconnection Facilities. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 12 Months after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0995/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over an Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Annex D-4

Blue Beetle (30 MW)

Counterparty Background:

Blue Beetle III, LLC, is being developed by the ESA Group ("**ESA**"), an international turnkey solar solution provider with experience in commercial and industrial solar energy systems worldwide ranging from 150 kW to 200 MW. ESA has over 15 years of experience in designing, developing, constructing and financing solar projects, including projects in Spain, Italy and the U.S. The team has stated the project will receive financial backing from Nova Feina and/or Inverelisa. The project received critical project designation from the FOMB.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$2,940,000[1]	$3,600,000	($660,000)

[1] The development costs of Blue Beetle and ReSun are tied together given the potential to share costs between the two developments. The figures set forth in the chart above reflect the assumption that ReSun is developed. If ReSun is not developed, the development costs associated with Blue Beetle will be $4,720,000, $1,120,000 greater than NEP's estimate.

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 270 Days after Effective Date. Guaranteed Commercial Operation Date = 20 Months after the FNTP Date. Guaranteed Interconnection Date = 15 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0999/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over an Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-5

Montalva Solar Farm (80 MW, with 4-Hour BESS)

Counterparty Background:

PBJL Energy Corporation ("**PBJL**") is a wholly owned Puerto Rican entity of Greenbriar Capital Corp. directed by the executive management team of former independent power producer Western Wind Energy and former renewable energy finance and utility executives who have created, financed and completed over $40 billion in projects. Mr. Jeffrey Ciachurski, the CEO of Greenbriar and former CEO of Western Wind Energy, has a successful track record of arranging for significant project financing on large wind and solar projects. The PBJL team provided updates on site control, permitting, and financing with respect to the project on February 22, 2020. PBJL will enter into a settlement agreement regarding their fraud and racketeering claims against PREPA prior to signing the PPOA.

NEP Initial Recommendation: Do not approve project. The project, initialy proposed at 160 MW, was found to have interconnection constraints that could not be solved simply with modified MTRs. PREPA negotiated the project down to 80 MW, which resolved the technical constraints for the project.

Estimated Interconnection Costs:

Current Total Estimate[6]	Estimate Used in NEP's Report	Delta (greater than NEP Report)
$15,740,000	$6,100,000	$9,640,000

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 365 Days after Effective Date. Guaranteed Commercial Operation Date = 22 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liqudiated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date; and • An amount equal to the Base Tariff ($0.0985/kWh) x Expected NEO for such Day, per Day for PREPA delay after Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over an Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 60% of Nominal Capacity (for any 3-year period during the term).

[6] **Note**: This project differs than others in that the interconnection cost estimate includes approximately $12 million in costs to rebuild an existing PREPA line in need of repair. PREPA is essentially obtaining financing through the developer to rebuild an asset it would have to reconstruct down the road. For this reason, management believes the Governing Board should not weigh the increased interconnection cost as a negative for this developer.

Annex D-6

Ciro One (90 MW)

Counterparty Background:

CIRO Energy and GCL New Energy, Inc. ("**GCL**") are the developers behind CIRO One Salinas, LLC. GCL is the U.S. based international IPP subsidiary of GCL Group, a major energy, industrial and investment company and the largest non-state owned energy group in China. GCL is headquartered in the San Fransisco Bay Area and has a 35 member team that has developed, acquired, constructed or financed over 700 MW of solar power plants, mostly in the United States. CIRO has obtained easements for the interconnection line, and provided updates on site control, permitting, and financing with respect to the project pursuant to its electronic letter dated April 21, 2020.

NEP Initial Recommendation: Approved with conditions (now satisfied).

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$8,100,000	$10,000,000	($1,900,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 270 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0985/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-7

Guayama Solar Energy (25 MW)

Counterparty Background:

CIRO Energy and GCL New Energy, Inc. ("**GCL**") are the developers behind CIRO One Salinas, LLC. GCL is the U.S. based international IPP subsidiary of GCL Group, a major energy, industrial and investment company and the largest non-state owned energy group in China. GCL is headquartered in the San Fransisco Bay Area and has a 35 member team that has developed, acquired, constructed or financed over 700 MW of solar power plants, mostly in the United States. The GCL team has experience in greenfield development, acquisition and joint venture in both U.S. and international markets. The team have obtained easements for the interconnection line, and provided updates on site control, permitting, and financing with respect to the project pursuant to its electronic letter dated April 21, 2020.

NEP Initial Recommendation: Not approved unless thermal violations resolved (now resolved; S&L report to follow).

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$4,910,000	$5,600,000	($690,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 270 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0989/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-8

Solar Project San Juan (20 MW)

Counterparty Background:

Fonroche Energy, backed by Reden Solar and working with Infravia Capital Partners and Eurazed Reden, has multiple projects in Puerto Rico, including the operating Humacoa solar project. Reden Solar develops, constructs, operates, and manages photovoltaic power plants, as well as generates electricity worldwide, including 450 MW under management.

NEP Initial Recommendation: Approved with conditions (now satisfied).

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$3,680,000[1]	$7,900,000	($4,220,000)

[1] **Note:** PREPA is considering an alternative interconnection design, which they estimate to cost $7,800,000 ($100,000 less than the NEP Report).

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 365 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.30/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.10/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-9

Vega Baja Solar Project (15 MW)

Counterparty Background:

Fonroche Energy, backed by Reden Solar and working with Infravia Capital Partners and Eurazed Reden, has multiple projects in Puerto Rico, including the operating Humacoa solar project. Reden Solar develops, constructs, operates, and manages photovoltaic power plants, as well as generates electricity worldwide, including 450 MW under management.

NEP Initial Recommendation: Approved with conditions (now satisfied).

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$4,510,000	$5,600,000	($1,090,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 365 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.30/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.10/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-10

REA Vega Baja (25 MW)

Counterparty Background:

The Stella Group, as sponsor of the REA Vega Baja project, has over 30 years of experience in developing, leasing and managing real estate in Puerto Rico and the USA. The Stella Group has completed over $100 million in new construction development and currently has over $120 million of properties under development. The Stella Group has worked with companies such as Walgreens as a preferred developer, Wendy's, Chili's, Sizzler and most recently with the University of Memphis,TN in the development of a student housing facility. The project received critical project designation from the FOMB.

NEP Initial Recommendation: Approved with conditions (now satisfied).

Estimated Interconnection Costs:

Current Total Estimate[7]	Estimate Used in NEP's Report	Delta (greater than NEP Report)
$8,100,000	$6,900,000	$1,200,000

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 365 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.30/kW x Nominal Capacity, per day until the Long-Stop Date for boht parties; and • An amount equal to the Base Tariff ($0.09999/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

[7] **Note**: NEP guidance stated that if REA accepted < $0.10 / kWh tariff, then the maximum allowable interconnection costs would be $12,109,306. The current estimate falls well below this figure.

Annex D-11

REA Hatillo (North) (25 MW)

Counterparty Background:

The Stella Group, as sponsor of the REA Hatillo project, has over 30 years of experience in developing, leasing and managing real estate in Puerto Rico and the USA. The Stella Group has completed over $100 million in new construction development and currently has over $120 million of properties under development. The Stella Group has worked with companies such as Walgreens as a preferred developer, Wendy's, Chili's, Sizzler and most recently with the University of Memphis,TN in the development of a student housing facility. PREPA added the Hatillo project to those moving forward in 2020 as part of a package negotiation from by the Stella Group.

NEP Initial Recommendation: N/A.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta
$3,700,000	N/A	N/A

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = [tbd] Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Lquidated damages for delaying COD: • $0.30/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.09999/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any 2 consecutive Agreement Years, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-12

Caracol (30 MW)

Counterparty Background:

Caracol Solar, LLC is sponsored by Roma Solar LLC, and provided updates on site control and permitting with respect to the project on April 3, 2020. PREPA added the project to those moving forward in 2020.

NEP Initial Recommendation: N/A.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta
$1,030,000	N/A	N/A

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 220 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 180 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0975/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-13

Sierra (25 MW)

Counterparty Background:

Sierra Solar Farm, LLC is sponsored by Roma Solar LLC, and provided PREPA with updates on site control and permitting with respect to the project on April 10, 2020. PREPA added the project to those moving forward in 2020.

NEP Initial Recommendation: N/A.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta
$3,405,000	N/A	N/A

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 180 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.0975/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 3-year period during the term).

Annex D-14

Atenas (40 MW)

Counterparty Background:

National Energy Partners, the sponsor for the Desarrollos del Norte Inc. d/b/a Atenas Solar Farm project, is a solar energy development company with over 10 years of experience in the solar industry. Their portfolio includes over $100 million of projects, with more in development. They have stated that they have land control in Manatí, environmental permits completed (refreshing), and have funding secured and financing partner ready to move forward, but have not provided evidence of financing.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$9,300,000	$10,900,000	($1,600,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 220 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 270 Days after Effective Date. Guaranteed Commercial Operation Date = 24 Months after the FNTP Date. Guaranteed Interconnection Date = 18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.098/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Annex D-15

Morovis (33.5 MW)

Counterparty Background:

X-Elio, the developer of the Morovis project, is a leading vertically-integrated solar developer and power producer that focuses on the development, construction, operation and management of utility-scale photovoltaic plants globally. X-Elio has developed and constructed a total of 2.0 GW of solar assets since 2015, including 5.58 MW solar facility at the Puerto Rico Convention Center. X-Elio's shareholders, KKR and Gestamp Renewables, have significant experience in the infrastructure and renewables sectors. The X-Elio team provided updates on site control, permitting, and financing with respect to the project via a presentation dated April 2019.

NEP Initial Recommendation: Approve.

Estimated Interconnection Costs:

Current Total Estimate	Estimate Used in NEP's Report	Delta (less than NEP Report)
$12,090,000	$12,600,000	($510,000)

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200-300 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 270 Days after Effective Date. Guaranteed Commercial Operation Date = 18-24 Months after the FNTP Date. Guaranteed Interconnection Date = 540 Days after the FNTP Date. Liquidated damages for delaying COD: • $0.[125]/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.099/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 80% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 80% of expected annual output over for any Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Annex D-16

ReSun (35 MW)

Counterparty Background:

ReSun (Barceloneta), LLC ("**Resun**") is a wholly owned company founded and directed by the Rubí-Barber family. Its principals and founders are Luis Alberto Rubí González, P.E. and his son, William A. Rubí Barber, P.E., both of which are practicing, licensed civil engineers. The Rubí-Barber family has a vast successful experience both as real estate developers and general contractors having developed over $500 million under former or existing companies. ReSun has stated they have site control and design work done.

NEP Initial Recommendation: Approve with conditions (now satisfied).

Estimated Interconnection Costs:

Current Total Estimate[1]	Estimate Used in NEP's Report	Delta (less than NEP Report)
$2,640,000	$3,100,000	($460,000)

[1] The development costs of ReSun and Blue Beetle are tied together given the potential to share costs between the two developments. The figures set forth in the chart above reflect the assumption that Blue Beetle is developed. If Blue Beetle is not developed, the development costs associated with Resun will be $4,420,000, $1,320,000 greater than NEP's estimate.

Select Counterparty-Specific Features:

Take or Pay (Deemed Energy)	Milestones, Delay LDs and Term	Performance Guarantees
FM Waiting Period = 200 hours. Grid System Waiting Period = 40 hours.	Guaranteed FNTP Date = 180-365 Days after Effective Date. Guaranteed Commercial Operation Date = 18 Months after the FNTP Date. Guaranteed Interconnection Date = 12-18 Months after the FNTP Date. Liquidated damages for delaying COD: • $0.125/kW x Nominal Capacity, per day until the Long-Stop Date for both parties; and • An amount equal to the Base Tariff ($0.099/kWh) x Expected NEO for such Day, per Day for PREPA delay after the Long-Stop Date.	Requirement for Seller to (i) pre-COD, install at least 85% of Nominal Capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 85% of expected annual output over for any Agreement Year, or compensate PREPA at $0.005 / kWh x total shortfall volume. Right for PREPA to terminate the PPOA if average production falls below 70% of Nominal Capacity (for any 2-year period during the term).

Annex E

D&V Legal Opinions

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **BLUE BEETLE III, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 31, 2011, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and BLUE BEETLE III, LLC ("Seller"), in connection to the development of a 30 MW Facility located in approximately two hundred and fifty (250) acres of land in the municipality of Barceloneta, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $90 million (34%)[1] over the 25-year life of the Agreement. The PPOA

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

has been referred to our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against BLUE BEETLE III, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **CARACOL SOLAR, LLC**
Non-Operating Renewable Power Purchase Agreement Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated July 20, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and CARACOL SOLAR, LLC ("Seller"), in connection to the development of a 30 MW Facility located in approximately one hundred and forty six (146) acres of land in the municipality of Moca, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $100 million (38%)[1] over the 25-year life of the Agreement. The PPOA has been referred to

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against CARACOL SOLAR, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **CIRO ONE SALINAS, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 25, 2010, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and CIRO ONE SALINAS, LLC ("Seller"), in connection to the development of a 90 MW Facility located in the Lapas District, municipality of Salinas, Puerto Rico, and the sale of all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $340 million (41%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

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transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

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(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto

Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against CIRO ONE SALINAS, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **GUAYAMA SOLAR ENERGY, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 22, 2010, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and GUAYAMA SOLAR ENERGY, LLC ("Seller"), in connection to the development of a 27 MW Facility located in the vicinity of Barrio Machete, in the municipality of Guayama, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $80 million (37%)[1] over the 25-year life of the Agreement. The PPOA has been referred to

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against GUAYAMA SOLAR ENERGY, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **MANATI SOLAR, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

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I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated December 28, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and MANATÍ SOLAR, LLC ("Seller"), in connection to the development of a 40 MW Facility located in two hundred (200) "*cuerdas*" of land in the municipality of Manatí, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $130 million (38%)[1] over

[1] This information relies on a report presented by King & Spalding, "*PREPA: Operating and Non-Operating Renewables Status Update*", dated May 2020.

the 25-year life of the Agreement. The PPOA has been referred to our attention to render an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

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B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against MANATI SOLAR, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **MOROVIS SOLAR, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated December 8, 2011, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and MOROVIS SOLAR, LLC ("Seller"), in connection to the development of a 33.5 MW Facility located in the municipality of Morovis, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $120 million (39%)[1] over the 25-year life of the Agreement. The

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

PPOA has been referred to our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against MOROVIS SOLAR, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **PBJL ENERGY CORPORATION (MONTALVA)**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

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I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated December 20, 2011, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and PBJL ENERGY CORPORATION ("Seller"), in connection to the development and construction of a solar and battery energy storage Facility located in approximately one thousand eight hundred and fifty (1,850) acres of land in the municipalities of Guánica and Lajas, Puerto Rico, and the delivery and sale of all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. The PPOA has been referred to our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A., L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to

exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the

functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad

powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the

Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III

[1] 11 USCS § 904

court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound

exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against PBJL ENERGY CORPORATION in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **RENEWABLE ENERGY AUTHORITY, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated [November 21, 2011], entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and RENEWABLE ENERGY AUTHORITY, LLC ("Seller"), in connection to the development of a 25 MW Facility located in the municipality of Hatillo, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $80 million (37%)[1] over the 25-year life of the Agreement. The PPOA

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

has been referred to our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against RENEWABLE ENERGY AUTHORITY, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **RENEWABLE ENERGY AUTHORITY, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

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I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated November 21, 2011, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and RENEWABLE ENERGY AUTHORITY, LLC ("Seller"), in connection to the development of a 25 MW Facility located in the municipality of Vega Baja, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $70 million (35%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

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transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto

Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against RENEWABLE ENERGY AUTHORITY, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **RESUN (BARCELONETA), LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated December 16, 2011, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and RESUN (BARCELONETA), LLC ("Seller"), in connection to the development of a 35 MW Facility located in the municipality of Barceloneta, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $120 million (39%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for the purpose of

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A., L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA

transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto

Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against RESUN (BARCELONETA), LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

DÍAZ & VÁZQUEZ
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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **SIERRA SOLAR FARM, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated December 18, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and SIERRA SOLAR FARM, LLC ("Seller"), in connection to the development of a 25 MW Facility located in approximately one hundred and thirty (130) "*cuerdas*" parcel / acres of land in the municipality of Quebradillas, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $90 million (38%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our

[1] This information relies on a report presented by King & Spalding, "*PREPA: Operating and Non-Operating Renewables Status Update*", dated May 2020.

attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

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> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

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L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

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(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against SIERRA SOLAR FARM, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **SOLANER PUERTO RICO ONE, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated June 13, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and SOLANER PUERTO RICO ONE, LLC ("Seller"), in connection to the development of a 35 MW Facility of AC power generating capacity located in approximately two hundred fifty (250) acres of land in the municipality of San Germán, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $100 million (35%)[1] over the 25-year life

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

of the Agreement. The PPOA has been referred to our attention for the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A.,

L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of

regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against SOLANER PUERTO RICO ONE, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **SOLAR PROJECT SAN JUAN, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 10, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and SOLAR PROJECT SAN JUAN, LLC ("Seller"), in connection to the development of a 20 MW Facility located in the municipality of San Lorenzo, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $50 million (30%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

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transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

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Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

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Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

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Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

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Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against SOLAR PROJECT SAN JUAN, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **SOLARBLUE BEMOGA, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 10, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and SOLARBLUE BEMOGA, LLC ("Seller"), in connection to the development of a 25 MW Facility located in the municipality of Dorado, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $70 million (34%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for the purpose of rendering an

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A., L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA

transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto

Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against SOLARBLUE BEMOGA, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **VEGA BAJA SOLAR PROJECT, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

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I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated October 10, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and VEGA BAJA SOLAR PROJECT, LLC ("Seller"), in connection to the development of a 15 MW Facility of AC power generating capacity located in Naguabo, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $40 million (30%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

the purpose of rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)

> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

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transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto

Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

[1] 11 USCS § 904

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

> (a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.
>
> (b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy

generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding obligation enforceable against VEGA BAJA SOLAR PROJECT, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

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PRIVILEGED AND CONFIDENTIAL

Memorandum

To: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

From: Díaz & Vázquez Law Firm P.S.C

Date: May 26, 2020

Re: **XZERTA TEC SOLAR I, LLC**
Non-Operating Renewable Power Purchase Agreement, Opinion on Enforceability and Compliance with Applicable Puerto Rico Law

---

I. Introduction

We make reference to the amended and restated Renewable Power Purchase and Operating Agreement, as amended, ("PPOA"), dated September 19, 2012, entered into by and between the Puerto Rico Electric Power Authority ("PREPA" or "Authority") and XZERTA TEC SOLAR I, LLC ("Seller"), in connection to the development of a 60 MW Facility located in the municipality of Hatillo, Puerto Rico, and to sell all the Net Electrical Output (NEO) exclusively to PREPA. Entering into the PPOA constitutes an essential part of PREPA's efforts to achieve the necessary transformation of energy resources, in order to attain a price reduction of electricity as well as efficient capacity production, for the benefit of the people of Puerto Rico. In fact, we have been informed that the renegotiated proposal of this PPOA results in a saving to PREPA of $150 million (32%)[1] over the 25-year life of the Agreement. The PPOA has been referred to our attention for the purpose of

[1] This information relies on a report presented by King & Spalding, *"PREPA: Operating and Non-Operating Renewables Status Update"*, dated May 2020.

rendering an opinion concerning its enforceability pursuant to applicable Puerto Rico law, as of the date hereof.

II. Analysis

A. Puerto Rico Government Contracting Principles

Contract law in Puerto Rico is governed by the provisions of the Civil Code of Puerto Rico and its interpretation by the Supreme Court of Puerto Rico. Article 1207 of the Civil Code, 31 L.P.R.A. sec. 3372, provides as follows:

> The contracting parties may establish the covenants, clauses and conditions they deem convenient, provided they are not contrary to the laws, morals or the public order. (Translation ours)
>
> In our legal system, the principle of contractual autonomy allows contracting parties to establish the covenants, clauses and conditions that they deem convenient. Art. 1207 of the Civil Code of Puerto Rico, 31 L.P.R.A. sec. 3372. See: Torres, Torres v. Torres Serrano, 179 D.P.R. 481, 493 (2010); Oriental Finances Services v. Nieves, 172 D.P.R. 462, 470-471 (2007). However, the contract will be null and void if it is contrary to the law, morals or public order. Pepsi-Cola v. Mun. Cidra, 186 D.P.R. 713, 752 (2012); Oriental Finances Services v. Nieves, *supra*; Morales v. Municipio de Toa Baja, 119 D.P.R. 682, 692-693 (1987).

In governmental contracts, the government of Puerto Rico is bound by the Constitution to manage public funds with the highest fiduciary and ethical principles. Jaap Corp. v. Depto. Estado et al., 187 D.P.R. 730, 739 (2013); C.F.S.E. v. Unión de Médicos, 170 D.P.R. 443, 452 (2007). In particular, Sec. 9 of Art. VI of our Constitution establishes that "public property and funds shall only be used for public purposes and for the funding and operation of the State's institutions and in any case, authorized by law". See: Art. VI, Sec. 9, Const. E.L.A., L.P.R.A., Vol. 1. (translation ours). Accordingly, all PREPA transactions must comply with these general contracting principles to be enforceable under Puerto Rico law.

B. Approval by External Governmental Agencies: Regulation of Power Purchase Agreements by Applicable Energy Laws

1. PREPA's Organic Law, Act 83-1941 as amended (Act 83-1941), and the provisions of Act 17-2019

Section 5 of Act No. 83-1941, as amended, 22 L.P.R.A. 196, grants PREPA the power to conserve, develop and utilize, and aid in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity. In furtherance of this purpose, PREPA "is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, including (but without limiting the generality of the foregoing) the following:

…

(f) To make contracts and to execute all instruments necessary or convenient in the exercise of any of its powers.

…

(y) Conduct all the necessary or convenient acts to effectuate the powers granted to it by this law or any other law.

Pursuant to the vested powers granted to PREPA by the Puerto Rico Legislature, PREPA has the power to enter into any contract that may be necessary in furtherance of its goals and purposes.

2. The "Puerto Rico Energy Transformation and Relief Act" (Act 57-2014) and the "Puerto Rico Energy Public Policy Act" (Act 17-2019)

Act 57-2014 created the Puerto Rico Energy Bureau ("Energy Bureau") as the independent government entity in charge of regulating, overseeing, and enforcing the Commonwealth of Puerto Rico's public policy on energy. As part of the energy reform, and as relevant to its contract approval rights, Act 57-2014 contains several provisions that grant the Energy Bureau the power to exercise authority over PREPA's processes, including contract approval of power purchase agreements ("PPOA's"). Act 17-2019 further requires PREPA to transition from fossil fuel generation

towards renewable energy resources at an accelerated rate. As applicable to this PPOA, both Act 57-2014 and Act 17-2019 require the Energy Bureau's approval of all PREPA contracts for the purchase of energy. See: Section 6.32(b) of Act 17-2019, as amended. ("Before execution, any contract for the purchase of energy will be submitted for the evaluation and approval of the Energy Bureau, to ensure that the price, adjustment, escalators and profit margin comply with the parameters established by the Energy Bureau"). As applicable to this PPOA, which was awarded prior to the approval of Act 57-2014, section 1.1(b) of Act 17-2019 establishes that "[a]ny power purchase agreement, or any amendment to or extension of a power purchase agreement awarded prior to the approval of Act No. 57-2014, between [PREPA], or the transmission and distribution network Contractor and any independent power producer shall be executed pursuant to the provisions of Section 6.32 of Act No. 57-2014 and the regulations adopted thereunder by the [Energy] Bureau…[Further, PPOA's] shall be awarded taking into account the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy as provided in Act No. 82-2010."

Thus, prior to its execution, any contract for the purchase of energy between PREPA and an independent power purchase producer has to be submitted for evaluation and approval by the Energy Bureau to ensure that the price, adjustment, escalators and profit margin comply with the parameters established in section 6.32 of Act 57-2014. This process allows the Energy Bureau to ensure compliance with Act 17-2019.

3. Puerto Rico Public Private Partnership Authority ("P3A")

With the approval of the Puerto Rico Electric System Transformation Act, Act 120-2018, the P3A was designated as the sole government entity authorized to, and responsible for implementing the public policy of Act 120-2018, determining the functions, services and facilities for which partnerships will be established; and determining which PREPA assets related to energy generation will be sold and/or transferred through one or more sale contracts. As a part of this designation, P3A is responsible for the development and management of all PREPA procurement transactions, including: all transactions determined by P3A in

which PREPA or the Government enters into one or more partnerships with respect to any function, service or facility of PREPA or one or more sale contracts involving PREPA assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 (Public-Private Partnership Act) and Act 120-2018.

Pursuant to the "Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as amended", P3A is required to approve all PREPA projects covered by the definition of a "PREPA Transaction" in Act 120-2018 and this Regulation. A "PREPA Transaction" has been defined as "any and all transactions determined by [the P3A] pursuant to which PREPA or the Government of Puerto Rico enters into one (1) or more Partnerships with respect to any Function, Service or Facility of PREPA or one (1) or more Sale Contracts involving PREPA Assets related to energy generation, and that is carried out pursuant to the provisions of Acts 29-2009 and 120-2018." P3A's definition of a PREPA transaction has been interpreted by P3A as broad enough to require submittal by PREPA of any transaction that is related to energy generation and purchase. Accordingly, the PPOA's must be submitted to P3A for approval.

C. Oversight Board Approval: Renegotiation of the PPOA's is a Requirement of the Fiscal Plan and Must be Submitted for Approval by the Oversight Board Pursuant to its Contract Review Policy

On June 30, 2016, the federal statute known as the "Puerto Rico Oversight, Management, and Economic Stability Act", ("PROMESA, by its acronym), 48 U.S.C. § 2101 et seq., was enacted by the United States Congress. Under this law a Federal Oversight and Management Board ("Oversight Board") was created to have broad powers over government agencies and public corporations that are designated as covered territorial instrumentalities under PROMESA. This power is even broader in the context of a Title III petition, given that the Oversight Board is the representative of the debtor (governmental entity) in such a proceeding. Additionally, once a covered instrumentality files a Fiscal Plan under PROMESA, the Oversight Board has the faculty in law to guarantee its compliance. In this context, PREPA, as a Title III debtor filed a Fiscal Plan which has been certified by the Oversight Board. Thus, PREPA is

subject to the broad powers of the Oversight Board and in general, PREPA cannot pursue transactions that are contrary to the Fiscal Plan.

On June 27, 2019, the Oversight Board certified the latest version of PREPA's Fiscal Plan. This document is comprehensive in nature and sets forth how the transformation of the energy sector in Puerto Rico will take place. It further discusses and establishes models to set a new industry structure, achieve the restoration of power generation, the rebuilding and modernizing of the power grid, the transformation of operations and how to provide for capital investment concerning PREPA. Once certified, PREPA is bound to follow the requirements of the Fiscal Plan. As relevant to the PPOA's, the Fiscal Plan identifies the providing of clean, reliable, and resilient electric service to PREPA customers at affordable prices, consistent with Puerto Rico's energy policy and the Integrated Resource Plan ("IRP"). For this purpose, the Fiscal Plan requires PREPA to seek the renegotiation of existing renewable PPOA's. See, 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019, pages 90 and 123 and Oversight Board statement dated February 12, 2020. Accordingly, PREPA is bound by the Certified Fiscal Plan and must pursue the renegotiation of existing operating and "shovel ready" PPOA's.

Pursuant to Section 204(b)(2) of PROMESA, the Oversight Board has also implemented a contract review policy that requires "[a]ll contracts or series of related contracts, inclusive of any amendments, modifications, or extensions, with an aggregate expected value of $10 million or more, including any professional advisory or personal services contracts, [to] be submitted to the Oversight Board for its approval before execution". See, Oversight Board Contract Review Policy, dated November 6, 2017 as modified on July 3, 2018. Therefore, Oversight Board approval is necessary prior to execution of the PPOA given that it is both contemplated in the Certified Fiscal Plan and required by Oversight Board's contract review policy.

D. Effects of PROMESA and Title III on the PPOA's

Pursuant to section 315 of PROMESA, on July 2, 2017, PREPA, through the Oversight Board, filed a petition in the United States District Court for the District of Puerto Rico under Title III of

PROMESA. Title III's main objective is to restructure the debts of a covered entity. As such, it incorporates various provisions from Chapter 9 and 11 of the Federal Bankruptcy Code. Among PREPA's remaining powers within the Title III proceeding, section 305 of PROMESA, equivalent to Section 904 of the Bankruptcy Code,[1] allows PREPA to continue implementing the faculties conferred to it by its enabling Act, including the power of self-administration and governance.

Section 305 of PROMESA provides that the court may not, "by any stay, order, or decree, in the case or otherwise, interfere with (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debtor; or (3) the use or enjoyment by the debtor of any income-producing property. "48 USCS § 2165. Thus, a Debtor under Title III of PROMESA may continue administering its business and may continue making the necessary determinations to carry out its duties and responsibilities, in furtherance of its ongoing operations. This remaining faculty includes the authority of PREPA's Governing Board to carry out the purposes of Act 83-1941 and other state laws applicable to PREPA like Act 120-2018, Act 29-2009, Act 57-2014 and Act 17-2019.

Notwithstanding, when it comes to a debtor's assumption of executory contracts, section 301 of PROMESA incorporated section 365 of the Bankruptcy Code governing the assumption and rejection of executory contracts. Accordingly, if PREPA so decides it can follow the dispositions of the relevant Bankruptcy Code dispositions for the assumption of the PPOA contracts in the Title III proceeding. As it relates to PPOA's, at present the Title III court has in place the "Order Pursuant to Bankruptcy Code Sections 105 and 365 and Bankruptcy Rules 2002, 6004 and 6006, Approving Procedures for the Assumption of Power Purchase and Operating Agreements" (the "Assumption Order" Case:17-04780-LTS Doc#:1199). If PREPA decides to assume the PPOA's pursuant to the order, it shall comply with certain requirements before submitting a PPOA for approval in the Title III court. Among the prerequisites for Title III submission are the following:

(a) PREPA shall first obtain the consent or approval of the Oversight Board and, to the extent required, the consent and

[1] 11 USCS § 904

approval of the Puerto Rico Energy Bureau of PREPA's assumption of any PPOA. Section 2(a) of the Assumption Order.

(b) PREPA shall set forth the following information, to the best of PREPA's knowledge: (i) a general description of the PPOA that PREPA seeks to assume, including any modifications to the PPOA that are mutually agreed to by PREPA and the affected counterparty; (ii) the name and address of the affected counterparties or parties-in-interest (and their counsel if known); (iii) a description of the deadlines and procedures for filing objections to the Assumption Notice (as set forth below); and (vi) the proposed order approving the assumption (the "Assumption Order"). Section 2(b) of the Assumption Order.

Consequently, if PREPA seeks assumption of the PPOA's pursuant to the Assumption Order in the Title III court it must follow the procedures required in said order including approval by the Oversight Board and the Energy Bureau.

III. Conclusion

PPOA's are important instruments that will allow PREPA to comply with the goals and mandates established in the Renewable Portfolio Standards which compel the transition from energy generation from fossil fuels to an aggressive integration of renewable energy, as provided in Acts 82-2010, 17-2019 and 57-2014. The PPOA has been thoroughly negotiated, is fully documented and it is in the best interests of PREPA, the requirements of Puerto Rico's Energy Policy and the rate payers. Further, PREPA's decision to assume the PPOA's represents a sound exercise of its prerogatives, is vital to PREPA's transition to renewable energy sources and allows PREPA to comply with both the Fiscal Plan as contemplated by PROMESA and Puerto Rico's Energy Public Policy.

For adequate compliance with applicable Commonwealth law, PREPA's Governing Board, the Energy Bureau, the Oversight Board and the P3A must approve the PPOA prior to execution. Assuming (i) PREPA secures the required approvals set out above, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) it is duly executed by the parties, the PPOA constitutes a valid and binding

obligation enforceable against XZERTA TEC SOLAR I, LLC in accordance with its terms. Moreover, the PPOA complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

Annex F

K&S Memorandum

KING & SPALDING

MEMORANDUM

TO: Fernando M. Padilla
Restructuring and Fiscal Affairs Administrator
Project Management Office

FROM: King & Spalding LLP

DATE: May 26, 2020

RE: Non-Operating Renewable Energy PPOA Transactions

We refer to the power purchase and operating agreements ("**PPOAs**") described in Annex A (the "**Non-Operating PPOAs**"), between PREPA and various counterparties, relating to the development, construction, operation and sale / purchase of renewable energy from planned photovoltaic solar projects located throughout Puerto Rico. PREPA recently reached agreements in principle with 16 of the 19 counterparties to the Non-Operating PPOAs[1] on full-length documentation to amend and restate these PPOAs (collectively, the "**Subject Transactions**"), which comprise over 590 MW of renewable energy generation if all reach completion. This memo discusses the commercial rationale, key features and main risks of the Subject Transactions. We rely on the Justification Memo from Fernando Padilla to José Ortiz regarding the Non-Operating Renewable Energy PPOA Transactions (the "**Justification Memo**") for all process, commercial and financial analysis.

DISCLAIMER: Please note that (i) Puerto Rico law governs each of the PPOAs, (ii) King & Spalding LLP ("**K&S**") does not have a license to practice Puerto Rico law, and (iii) Puerto Rico counsel should review the draft agreements and the resolution for enforceability / compliance with Puerto Rico law.[2]

I. Commercial Rationale and Process

PREPA, as the state-owned power utility for Puerto Rico, bears the responsibility to supply secure and reliable electric power to ratepayers in Puerto Rico at the lowest cost possible in both the short and long term, while contributing to the general welfare and sustainable future of the people of Puerto Rico, including minimizing social, environmental, and economic impacts, while carrying out the energy policy established by the Government of Puerto Rico. We understand that the Puerto Rico Energy Public Policy Act (Act 17-2019) ("**Act 17**"), one of the key pillars of Puerto Rico's energy policy, requires that 40% of the energy production in Puerto Rico come from renewable sources by 2025.

PREPA's management determined in early 2019 that the best way to achieve the targets under Act 17 as quickly as possible, and also better align PREPA's finances with the objectives of PREPA's Fiscal Plan, included renegotiating some of the approximately 50 PPOAs for non-operating renewable projects that PREPA had originally entered into between 2009 to 2012, and later renegotiated once before in and

[1] **Note:** M Solar, Windmar and YFN Yabucoa (Sonnedix) did not reach agreement with PREPA. Windmar effectively withdrew from the process on May 13, 2020, via a letter postponing any decisions until an unidentified future date.
[2] **Note:** For Puerto Rico law analysis, please see the legal memoranda from Díaz & Vázquez Law Firm, P.S.C. ("**D&V**") included in Annex E of the Justification Memo.

around 2014. The prices originally agreed under the Non-Operating PPOAs are now above the current market price, with uncapped escalation and additional charges for renewable energy credits. If developed under those terms, the energy prices and contractual conditions in the Non-Operating PPOAs would have imposed a large financial burden on PREPA and the ratepayers of Puerto Rico.

PREPA originally focused on 15 of these existing PPOAs, which grew to 19 by the end of the process, relating to projects that had (i) nearly completed their development activities during prior development rounds, (ii) demonstrated a willingness to negotiate pricing to reflect changes in the industry, and (iii) potential to commence construction in the near term in order to maximize benefits associated with Federal Investment Tax Credits. Management expected that (A) due to their experience and significant investment in Puerto Rico to date, the developers of these projects would stand a better chance of getting projects through the development stage to commercial operation more quickly than developers who had not been through the process before, and (B) getting some of these projects built would lay the groundwork for future requests for proposals and procurement offerings.

PREPA initiated extensive, arms-length negotiations with the Non-Operating PPOA developers in early 2019. PREPA conducted these negotiations via conference calls, exchange of documents and in-person meetings. Fernando Padilla and Francisco Santos of PREPA's Project Management Office led the negotiations for PREPA. PREPA engaged Filsinger Energy Partners to advise on commercial matters, Sargent & Lundy ("**S&L**") to advise on technical matters, K&S for negotiation support and advice on non-Puerto Rico law matters, and Mara Vázquez, now with D&V, for advice on Puerto Rico law matters. Over the course of negotiations, PREPA's representatives consulted with (i) these advisors concerning the impact of developer-proposed terms, market practice and typical approaches to pricing and supply terms for photovoltaic solar projects, as well as (ii) PREPA planning, operations, legal, risk management and other departments, taking their feedback into account where possible subject to management direction, and working extensively with planning and operations to ensure the projects could be integrated into the grid system effectively.

From February to May of 2019, PREPA and the developers conducted meetings to discuss the particulars of each PPOA, including project status, company background, anticipated sources of financing, project team, cost drivers, and potential price reductions to their commercial proposals. Proposed pricing came in at levels higher than contemplated by the draft Integrated Resource Plan currently before PREB and the Financial Oversight and Management Board ("**FOMB**") working-level team input. PREPA held multiple calls with the FOMB team to explain factors contributing to higher pricing, which included, among others, higher insurance premiums post-Hurricane María, Puerto Rico land and labor, as well as the cost of capital due to PREPA's non-creditworthy status.

As part of negotiations to reduce pricing to a level thought acceptable to the FOMB, a decision was made to (i) relieve the developers from the minimum technical requirements ("**MTRs**") for photovoltaic solar projects (which PREPA believed it could compensate for through utility-scale battery energy storage) and (ii) take responsibility for, and bear the cost of, the interconnection facilities for the projects. Over the course of May to August 2019, PREPA engaged in multiple meetings and calls with the project stakeholders, including the FOMB, to review progress, keep these stakeholders abreast of these negotiations and solicit input on the process. As part of the this, the FOMB communicated in or around June 2019 an

all-in price target (inclusive of renewable energy credits) of $0.105 / kWh, escalating at 2% and capped at $0.141 / kWh based on the key terms set forth above. PREPA distributed term sheets in June and July of 2019 to those counterparties whose pricing fell within the FOMB guidelines, and shared the term sheets and developer feedback with the FOMB in July 2019. On August 7, 2019, the PREPA team met with the FOMB team and received input on the key terms of the Subject Transactions. Around this time, PREPA also met informally with the Puerto Rico Energy Bureau ("**PREB**") commissioners and received a verbal "green light" to continue the negotiations with the pricing and terms presented in the meeting. The PREPA team prepared draft PPOAs in August 2019 incorporating stakeholder feedback and circulated the draft with the FOMB and members of PREPA planning, operations and legal for comment by September 2019.

In September 2019, PREPA's Governing Board (the "**Governing Board**") directed the engagement of a third-party consultant, New Energy Partners, Inc ("**NEP**"), to determine whether the Subject Transactions provided excessive returns to developers and would actually save ratepayers money. NEP concluded, after approximately two months' review (which included review of information on cost drivers previously provided by developers), that no developer was earning excess returns at the FOMB-suggested rate, but that PREPA needed a rate of $0.10 / kWh (with 2% annual escalation, capped at $0.141 / kWh, and inclusive of renewable energy credits) or less to create total system energy benefits / savings sufficient to offset the costs PREPA must incur to interconnect the projects, irrespective of any future EPA enforcement of its Mercury and Air Toxics Standard (MATS). NEP further recommended (i) full compliance by the projects with PREPA's MTRs (at the expense of the project sponsors), including the ramp rate control and frequency response requirements, (ii) construction of the interconnection to be carried out by the developer and reimbursed by PREPA (up to a pre-agreed cap) at an 8.5% rate amortized over 25 years (in the form of a monthly installment payment), (iii) specific limits on curtailment of the projects (*i.e.* fewer permitted hours of curtailment in respect of grid events and equivalent hours of curtailment for Force Majeure ("**FM**") versus the original agreements), and (iv) resolution of certain interconnection cost and/or technical issues for specific projects before moving forward, among other things. The Governing Board approved NEP's recommendations in Board Resolution 4749. PREPA re-commenced negotiations with the developers on this basis and began significant technical analysis of the projects in January 2020, though a series of earthquakes diverted resources to grid repair and restoration for much of that month.

The Puerto Rico Public Private Partnerships Authority ("**P3A**") authorized the commencement of PPOA negotiations on February 13, 2020, and PREPA released full draft PPOAs along with requests for information relating to system impact studies, and confirmation of land control and financing, thereafter. PREPA negotiated full-length documentation with developers over the next three months, while S&L conducted grid interconnection feasibility studies (including static power flow analysis using Siemens PSS®E software) in parallel to ensure the grid system could integrate the projects without material issues. S&L identified that some of the projects could cause grid overload at the developers' requested generating capacity. After negotiating reduced generating capacity for these projects, S&L's analysis identified no thermal overloads during normal operating conditions for any of the Non-Operating PPOAs. This resolved the technical concerns and interconnection cost issues raised by NEP in its recommendations (as mentioned in sub-paragraph (iv) of the preceding paragraph).

Importantly, the PPOAs now require that the developers meet PREPA's current MTRs (which PREPA updated in February 2020). The MTRs require, among other things, the ability to control ramp rate and provide frequency response/regulation – something not always found in solar projects outside of Puerto Rico – making these projects more "grid friendly" than typical photovoltaic solar projects and rendering comparison of the contract pricing with typical benchmarks more difficult. The 80 MW Montalva project

is also now expected to have a 4-hour battery energy storage system, in addition to batteries used to comply with MTRs, which will store excess solar energy generation during the day for discharge at night.[3]

By the week of May 15, 2020, PREPA had completed all of the grid interconnection feasibility analysis and reached commercial agreement on full-length PPOA documentation with 16 of 19 developers, based on the terms detailed below. According to S&L, the Subject Transactions provide forward cost savings of approximately 35%, valued in excess of **$1 billion**[4] to PREPA and the ratepayers of Puerto Rico over the term of the agreements (notional – undiscounted), and represent over 590 MW of renewable generation – a major step toward meeting the requirements of Act 17. D&V reviewed all of the commercially-agreed Non-Operating PPOAs, and, as detailed in Annex E of the Justification Memo, concluded that, assuming (i) PREPA secures Governing Board, FOMB, PREB, P3A approval of the agreements, (ii) PREPA uses funds in connection with the PPOA for a public purpose, such as providing electricity to the public, and (iii) the agreements are duly executed by the parties, each of the Non-Operating PPOAs constitutes a valid and binding obligation enforceable against the counterparty in accordance with its terms, and complies with and is enforceable under the laws of the Commonwealth of Puerto Rico.

II. Select Features of the Subject Transactions

The table below briefly summarizes select features of the Subject Transactions, including modest improvements in PREPA's favor.

	Description in Subject Transactions
All-In Pricing	$0.975 / kWh - $0.100 / kWh, escalated at 2% with a $0.141 / kWh cap, inclusive of energy, renewable energy credits and other environmental attributes, as well as any ancillary services. See Annex B and Annex D of the Justification Memo for pricing details for each Subject Transaction. Further discounted pricing for test energy and excess energy – an improvement over the Non-Operating PPOAs.
MTRs	Compliance with 2020 MTRs (Minimum Technical Requirements for Interconnection of Photovoltaic (PV) Facilities), including ramp rate and frequency control, making projects more "grid friendly."
PREPA Interconnection Facilities	Requirement for Seller to design, finance and construct the interconnection facilities to connect the project to the grid, and typically provide a 2-year warranty of / repair defects in such interconnection line. Transfer of such facilities to PREPA at COD, with reimbursement (including 8.5% interest) from PREPA over the term for direct costs (in the form of a monthly installment), subject to a pre-agreed cap

[3] **Note**: Montalva is entering into a new PPOA that will terminate the master agreement they have with PREPA, and will be required (as a condition to entering into any new PPOA) to release all of their claims and discharge with prejudice all of the proceedings relating to the lawsuit(s) that have been filed.
[4] **Note**: See Annex B of the Justification Memo for explanation / analysis of all savings figures in this memo.

	Description in Subject Transactions
	and exclusive of land cost. Operation, maintenance and repair cost and risk allocated to PREPA post-COD, as further described in Annex C of the Justification Memo.
Take or Pay (Deemed Energy)	Payment by PREPA for energy available but not taken (up to volume estimated to be available based on solar irradiation and other conditions) as a result of: • FM in excess of 200-220 hours in a year; • other curtailments or disconnections in excess of 40 hours in a year, as recommended by NEP; and • a breach by PREPA of the PPOA.
Milestones, Delay LDs and Term	Deadlines for Seller to (i) obtain financing and permits and give full notice to proceed ("**FNTP**") to its construction contractors (6-12 months after later of contract signing or receipt of the Assumption Order, as applicable); (ii) complete the interconnection line; and (iii) achieve COD (18-24 months after FNTP). Limited obligations for PREPA in the pre-COD period, including providing interconnection and facility study, providing testing and operating procedures, approving the project design and coordinating testing and project integration by certain deadlines. Reciprocal liquidated damages for delaying COD, from $0.125-$0.333 / kW (approximately $20,000 per day on the high end), which go into effect after FNTP – an improvement over the Non-Operating PPOAs. PREPA faces full deemed energy payment if it delays beyond more than 90-180 Days after the milestone for COD. Term is 25 years from COD.
Performance Guarantees	Requirement for Seller to (i) pre-COD, install at least 85% of contracted capacity or pay $200 / kW for shortfalls, and (ii) post-COD, produce at least 80-85% of expected annual output over a 1-2 year period, or compensate PREPA at $5 / MWh – an improvement over the existing Non-Operating PPOAs. Right for PREPA to terminate the PPOA if average production falls below 60-70% of Nominal Capacity (for any 2-3 year period during the term), an improvement over the Non-Operating PPOAs.

	Description in Subject Transactions
Seller Security	Requirement for Seller to post letter of credit or guarantee to cover liabilities during pre-COD construction phase– an improvement over the Non-Operating PPOAs – as well as either a similar security or a PREPA set-off right post-COD.
Assignment	Right for PREPA to assign the PPOA (without consent) as part of Transformation, as required by P3A.

III. Main Risks of the Subject Transactions

Notwithstanding the above, PREPA remains exposed to risk under the Subject Transactions. The chart below describes the allocation of certain key risks between PREPA and the counterparties.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Permits and Authorizations	✔		Permit delays (with no fault of the counterparty) constitute an FM Event granting extra time capped at a max 1-year extension. Seller otherwise has the obligation to obtain all permits for the construction and operation of the facility (the "**Facility**") by specific deadlines.
Financing	✔		Seller must secure financing for the construction of the Facility and the PREPA Interconnection Facilities by FNTP. PREPA credit risk remains a major issue for counterparties, and many projects may not be financed. The PPOA can be terminated without material liability if financing is not achieved by the required date.
Land Acquisition	✔		Seller must acquire all land rights and transfer good and valid legal title to the land rights for interconnection free and clear of all liens and claims by third parties.
Facility Design / Construction	✔		The Seller is responsible for the design and construction of the interconnection and Facility. PREPA reviews the design for interconnection and Facility and can reject if not in accordance with PPOA. Seller bears risk of deficient Facility design and construction through less Facility output and a $200 / kW credit to PREPA for capacity shortfalls at COD.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Changes to Technical Requirements	✔ (up to cost limit)	✔	PREPA has right to change certain technical requirements (*e.g.*, MTRs) and Seller bears the cost of such changes to up to a limit of around $1 million. PREPA must compensate Seller for the cost of complying with such changes above such limit.
Construction of PREPA Interconnection Facilities	✔		Seller has the responsibility to construct the PREPA Interconnection Facilities and typically provides a 2-year warranty for defects.
Maintenance and Repair of PREPA Interconnection Facilities	✔ (for warranty period)	✔	Beyond the warranty, PREPA bears the cost and responsibility for interconnection O&M post-COD, as further detailed in Annex C of the Justification Memo.
PREPA Delays		✔	If PREPA delays COD beyond the Guaranteed Commercial Operation Date, PREPA must pay delay liquidated damages to Seller (value increases to full deemed energy payment after Long-Stop Date).
Seller Delays	✔		If the COD does not occur by the Guaranteed Commercial Operation Date for any reason other than PREPA delay (see row above), Seller must pay delay liquidated damages to PREPA for 90-180 days, and PREPA will be provided with security to cover this amount.
Offtake Risk – FM affecting PREPA	✔ (up to hour limit)	✔	Seller takes risk for first 200-220 operating hours, after which PREPA makes deemed energy payments (*i.e.* pays for the volume of energy available, but not taken, as determined by irradiation and ambient conditions).
Offtake Risk – other curtailment, including dispatch instruction, emergencies, maintenance, grid constraints, new generation or lack of demand	✔ (up to hour limit)	✔	Seller takes risk for first 40 operating hours, after which PREPA makes deemed energy payments.
Offtake Risk – breach		✔	PREPA makes deemed energy payments for any unexcused failure to take available energy.
Generation Risk – FM affecting Seller	✔		Seller receives no payment if unavailable.

Event	Party Taking Risk Under PPOA		Risk / Mitigation Comments
	SELLER	PREPA	
Generation Risk – Seller scheduled / unscheduled maintenance	✔		Seller receives no payment if unavailable; scheduled maintenance set in prior year with PREPA approval and financial credit given to PREPA for production shortfalls due to unscheduled outages. See Annex D for shortfall credit details for each Subject Transaction.
Generation Risk – lack of solar irradiation	✔		Seller receives no payment to the extent output reduced due to lack of irradiation.
Generation Risk – degradation	✔		Seller receives no payment to the extent output reduced due to higher than expected degradation.
Post-Effective Date Taxes and Environmental Costs		✔ (until recovery in final years)	PREPA must reimburse Seller for additional costs resulting from changes in the payments of Taxes and Environmental Costs by Seller that are the result of the enactment of the enactment of Post-Effective Date Taxes and Post-Effective Date Environmental Costs; but has the right to recover such amount at the end of the contract term via set-off in the final years.
Other Change in Law or Government Acts	✔	✔	Both parties bear risk of Changes in Law (other than Post-Effective date Taxes and Environmental Costs). In some PPOAs, PREPA cannot claim FM relief for acts of a Puerto Rican government agency unless connected with a wider FM event (such as COVID 19 or a natural disaster).
PREPA Default		✔	PREPA faces general damages for PPOA breach. Such damages may include Seller's lost profit.
Seller Default	✔		Seller faces general damages for PPOA breach leading to termination, and reimburses PREPA for cost of PREPA Interconnection Facility if such facility becomes a stranded asset.

Annex:

Annex A – List of Non-Operating PPOAs

Annex A

List of Non-Operating PPOAs

1. Renewable Power Purchase and Operating Agreement between Xzerta-Tec Solar I, LLC and PREPA, dated September 19, 2012.

2. Renewable Power Purchase and Operating Agreement between SolarBlue Bemoga, LLC and PREPA, dated October 10, 2012.

3. Renewable Power Purchase and Operating Agreement between Solaner Puerto Rico One, LLC and PREPA, dated June 13, 2012.

4. Renewable Power Purchase and Operating Agreement between Blue Beetle III, LLC and PREPA, dated October 31, 2011.

5. Master Renewable Power Purchase and Operating Agreement between PBJL Energy Corporation and PREPA, dated December 20, 2011.

6. Renewable Power Purchase and Operating Agreement between CIRO One Salinas, LLC and PREPA, dated October 25, 2010.

7. Renewable Power Purchase and Operating Agreement between Guayama Solar Energy, LLC and PREPA, dated October 22, 2010.

8. Renewable Power Purchase and Operating Agreement between Solar Project San Juan, LLC and PREPA, dated October 10, 2012.

9. Renewable Power Purchase and Operating Agreement between Vega Baja Solar Project, LLC and PREPA, dated October 10, 2012.

10. Renewable Power Purchase and Operating Agreement between Renewable Energy Authority, LLC and PREPA, dated November 21, 2011.

11. Renewable Power Purchase and Operating Agreement between REA Energy Hatillo Solar Plant, LLC, dated December 13, 2011.

12. Renewable Power Purchase and Operating Agreement between Caracol Solar, LLC and PREPA, dated July 20, 2012.

13. Renewable Power Purchase and Operating Agreement between Sierra Solar Farm, LLC and PREPA, dated December 18, 2012.

14. Renewable Power Purchase and Operating Agreement between Desarrollos del Norte Inc. d/b/a Atenas Solar Farm and PREPA, dated December 28, 2012.

15. Renewable Power Purchase and Operating Agreement between Morovis Solar, LLC and PREPA, dated December 8, 2011.

16. Renewable Power Purchase and Operating Agreement between ReSun (Barceloneta), LLC and PREPA, dated December 16, 2011.

17. Renewable Power Purchase and Operating Agreement between Windmar Renewable Energy, LLC and PREPA, dated February 23, 2012.

18. Renewable Power Purchase and Operating Agreement between M Solar Generating, LLC and PREPA, dated May 2, 2012.

19. Renewable Power Purchase and Operating Agreement between YFN Yabucoa Solar, LLC and PREPA, dated October 17, 2012.

Exhibit C

GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority
Governing Board

RESOLUTION 4749
RENEWABLE ENERGY PROJECTS

WHEREAS: The Puerto Rico Electric Power Authority (PREPA) is a public corporation and an instrumentality of the Government of Puerto Rico created by Act of May 2, 1941, No. 83 as amended (Act No. 83). PREPA was created to provide electrical energy in a reliable way contributing to the general welfare and sustainable future of the people of Puerto Rico, maximizing benefits and minimizing social, environmental and economic impacts. In addition, provides a service based on affordable, fair, reasonable and non-discriminatory cost that is consonant with environmental protection, non-profit, focused on citizen participation and its clients.

WHEREAS Act No. 83, supra authorizes PREPA, in the management of its purposes, to grant contracts and formalize all the instruments that are necessary or convenient in the exercise of any of its powers.

WHEREAS: Act 82-2010, titled "Public Policy on Energy Diversification by Means of Sustainable and Alternative Renewable Energy in Puerto Rico Act", as amended, creates a Renewable Energy Portfolio to establish short, mid and long term compulsory compliance goals in matters of energy production by means of sustainable or alternative renewable energy.

WHEREAS: Act 17-2019, titled "Puerto Rico Energy Public Policy Act" requires 40% of the production of energy in Puerto Rico, to be based on renewable sources by the year 2025.

WHEREAS: PREPA's Integrated Resource Plan contemplates 300 MW of new solar power projects in 2020 and an additional 780MW in 2021.

WHEREAS: In order to achieve this, PREPA's Management understands that it must carry out a direct negotiation with existing PPOA counterparties that have shovel-ready projects in order to achieve more beneficial terms for PREPA and hence, the people of Puerto Rico.

WHEREAS: Under Title III of the PROMESA Act, PREPA may modify, renegotiate or resolve these PPOAs if such action is for the benefit of PREPA and the people of Puerto Rico.

WHEREAS: At the moment, PREPA has 16 shovel-ready projects (Projects) in place with several renewable energy producers.

WHEREAS: After engaging in preliminary negotiations with the 16 shovel-ready projects, PREPA engaged Subject Matter Experts, to conduct third-party review, independent interconnection and system impact study and financial capacity to execute the abovementioned projects.

WHEREAS: The criteria utilized to evaluate the projects was based on:

1. Are developers earning unreasonable rates of return beyond what is needed to compensate for PREPA counterparty risk?

2. Will rate payers save money over the life of the project?

3. Do the Projects create intractable grid integration issues that cannot be resolved at reasonable cost?

WHEREAS: As a result of the abovementioned evaluation, 5 of the 16 Projects which met all three criteria, were found to benefit ratepayers, the PREPA system and earn adequate developer returns, and therefore, should be approved. 6 Projects meet the first and third criteria but failed to meet the second criteria at the current price, and should be renegotiated. Of the last 5 Projects, one was found to have significant interconnection issues which cannot be resolved. The other 4 had either high interconnection costs or interconnection issues, which at this time prevents PREPA from moving forward with them until said issues are resolved.

WHEREAS: In addition several modifications to the PPOA were recommended and have been approved by the Governing Board.

THEREFORE: The Governing Board has determined to authorize the Chief Executive Officer:

1. to move forward with the 5 Projects which met the above-mentioned criteria.

2. to renegotiate 6 additional Projects which partially met the evaluation criteria in order for these to achieve full compliance.

3. to notify 1 Project that PREPA is rejecting it due to interconnection issues, and notify the other 4 Projects that PREPA cannot move forward at this time until interconnection cost and issues are resolved.

4. to include the recommended modifications to the PPOA as approved by the Governing Board.

Approved in San Juan, Puerto Rico, on this twentieth day of November, two thousand nineteen.

Eduardo Arosemena- Muñoz
Secretary of the Board

Exhibit D

Renewable Energy PPOA Interconnection Summary Report

Prepared for

Puerto Rico Electric Power Authority

Report CS-0034

Final Rev. 1

June 19, 2020

Project 13741.017

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Sargent & Lundy is one of the oldest and most experienced full-service architect engineering firms in the world. Founded in 1891, the firm is a global leader in power and energy with expertise in grid modernization, renewable energy, energy storage, nuclear power, and fossil fuels. Sargent & Lundy delivers comprehensive project services—from consulting, design, and implementation to construction management, commissioning, and operations/maintenance—with an emphasis on quality and safety. The firm serves public and private sector clients in the power and energy, gas distribution, industrial, and government sectors.

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VERSION LOG

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ISSUE SUMMARY AND APPROVAL PAGE

This is to certify that this document has been prepared, reviewed, and approved in accordance with Sargent & Lundy's Standard Operating Procedure SOP-0405, which is based on ANSI/ISO/ASSQC Q9001 Quality Management Systems.

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	June 19, 2020
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TABLE OF CONTENTS

FIGURES AND TABLES

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition/Clarification
AACE	Association for the Advancement of Cost Engineering
DCD	design criteria documents
GIS	gas-insulated substation
GT	gas turbine
MTRs	minimum technical requirements
Non-Operating PPOA	a PPOA in development but with no project currently in operation
Operating PPOA	a PPOA with at least one project currently in operation
PPOA	power purchase and operations agreement
PREPA	The Puerto Rico Electric Power Authority
PSS/E	Power System Simulator for Engineering Software Program
ROW	right-of-way
S&L	Sargent & Lundy
SP	steam plant
T&D	transmission and distribution
TARA	Transmission Adequacy and Reliability Assessment Software Program
TC	transmission center
TL	transmission line
TO	automatic switch

EXECUTIVE SUMMARY

From 2009 to 2012, the Puerto Rico Electric Power Authority (PREPA) entered into power purchase and operations agreements (PPOAs)—among other agreements—with 60 developers of renewable energy projects. As detailed in the "PREPA – Operating PPOA Justification Memo" and the "PREPA – Non-Operating PPOA Justification Memo," both dated May 26, 2020, PREPA management determined in 2019 that nine of the agreements with projects currently in operation (Operating PPOAs) and 19 of the agreements which reached various stages of development (Non-Operating PPOAs) should be renegotiated to better align PREPA's finances with PREPA's fiscal plan. To support PREPA in the renegotiation of these PPOAs, Sargent & Lundy (S&L) performed an initial interconnection screening study for the projects. S&L prepared this report to summarize the methodology and results of the initial interconnection study support work.

PROCESS OVERVIEW

S&L evaluated the grid interconnection feasibility of the non-operating renewable energy projects and the operating projects seeking to increase their capacity. For the non-operating projects, the evaluations included (i) performing power flow studies to evaluate the thermal impacts of the projects on the grid; (ii) developing conceptual interconnection arrangement documents; and (iii) preparing AACE level 5 cost estimates for the planned interconnections. To support the evaluations, S&L also performed various site walkdowns and desktop studies. After review of each project location, S&L developed a conceptual interconnection arrangement plan for the interconnection from the solar facility to a PREPA substation, transmission center (TC), or transmission line (TL). S&L developed cost estimates, including labor, materials, engineering, design, and support for the conceptual plans. Additionally, S&L evaluated the operating projects that are requesting capacity increases. This analysis typically only included a power flow study to evaluate thermal impacts of the projects on the grid.

Occasionally, throughout the analysis period, the location of certain project sites, the interconnection point, and/or the size of the project would be revised based on discussions with the developers, requirements of the PREPA system, or negotiation developments. The analysis was iterative, and S&L informed PREPA throughout the process and provided input on interconnection matters for the PPOA negotiations.

PROJECTS SUMMARY

Beginning in July 2019, PREPA requested S&L to review the termination points, the transmission line routes, and the feasibility for several of the non-operating projects and their associated interconnection to the PREPA system. Lists of the non-operating and operating projects are provided in Table ES-1 and Table

ES-2, respectively. The projects are located throughout Puerto Rico. The locations of the projects that have reached renegotiated terms are shown on a map in Figure ES-1.

Table ES-1 — Non-Operating Solar Projects

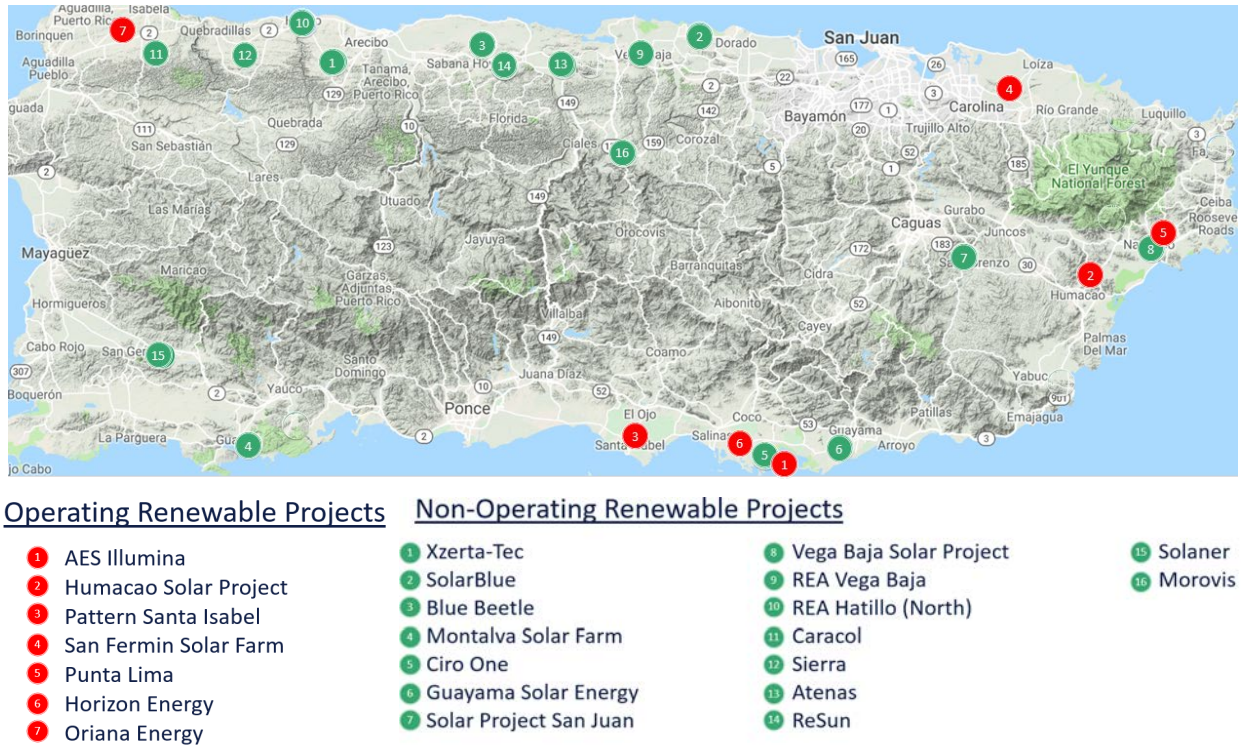
#	Project Name	Capacity (MW)	Contract Status	Location
1	Xzerta-Tec	60	Reached Agreement	Hatillo
2	SolarBlue	25	Reached Agreement	Vega Alta
3	Blue Beetle	30	Reached Agreement	Arecibo
4	Montalva Solar Farm	80	Reached Agreement	Guanica
5	Ciro One	90	Reached Agreement	Salinas
6	Guayama Solar Energy	25	Reached Agreement	Guayama
7	Solar Project San Juan	20	Reached Agreement	San Lorenzo
8	Vega Baja Solar Project	15	Reached Agreement	Naguabo
9	REA Vega Baja	25	Reached Agreement	Vega Baja
10	REA Hatillo (North)	25	Reached Agreement	Hatillo
11	Caracol	30	Reached Agreement	Moca
12	Sierra	25	Reached Agreement	Quebradillas
13	Atenas	40	Reached Agreement	Manati
14	ReSun	35	Reached Agreement	Arecibo
15	Solaner	35	Reached Agreement	San German
16	Morovis	33.5	Reached Agreement	Morovis
17	Windmar (Sabana Seca)	70	Unable to reach agreement	Toa Baja
18	M Solar	70	Unable to reach agreement	Vega Baja
19	YFN Yabucoa Solar	25	Unable to reach agreement	Yabucoa

Table ES-2 — Operating Renewable Energy Projects

#	Project Name	Project Type	Existing Capacity (MW)	Uprate Capacity (MW)	Contract Status	Location
1	AES Ilumina	Solar	20	5	Reached Agreement	Guayama
2	Humacao Solar Project	Solar	40	Not Proposed	Reached Agreement	Humacao
3	Pattern Santa Isabel	Wind	75	20	Reached Agreement	Santa Isabel
4	San Fermin Solar Farm	Solar	20	4.5	Reached Agreement	Loiza

#	Project Name	Project Type	Existing Capacity (MW)	Uprate Capacity (MW)	Contract Status	Location
5	Punta Lima	Wind	26	Not Proposed	Reached Agreement	Naguabo
6	Horizon Energy	Solar	10	10	Reached Agreement	Salinas
7	Oriana Energy	Solar	50	10	Reached Agreement	Aguadilla
8	Windmar Coto Laurel	Solar	10	4	Unable to reach agreement	Ponce
9	Windmar Cantera Martino	Solar	2.1	0.9	Unable to reach agreement	Ponce

Figure ES-1 — Project Locations Overview



Operating Renewable Projects

1. AES Illumina
2. Humacao Solar Project
3. Pattern Santa Isabel
4. San Fermin Solar Farm
5. Punta Lima
6. Horizon Energy
7. Oriana Energy

Non-Operating Renewable Projects

1. Xzerta-Tec
2. SolarBlue
3. Blue Beetle
4. Montalva Solar Farm
5. Ciro One
6. Guayama Solar Energy
7. Solar Project San Juan
8. Vega Baja Solar Project
9. REA Vega Baja
10. REA Hatillo (North)
11. Caracol
12. Sierra
13. Atenas
14. ReSun
15. Solaner
16. Morovis

INTERCONNECTION SCOPE

S&L reviewed the proposed interconnection locations for the non-operating projects and evaluated the options to interconnect the projects. S&L reviewed the interconnection points and routes through site walkdowns, satellite imagery, and PREPA single-line diagrams and drawings. S&L prepared a conceptual approach for the interconnection of the projects, which was reviewed by PREPA Planning and Operations. A summary of the interconnection point, type, voltage, and estimated transmission-line length for each evaluated project is provided in Table ES-3.

Table ES-3 — Non-Operating Projects Interconnection Scope

#	Project Name	Interconnect Point	Interconnection Type	Capacity (MW)	Voltage (kV)	TL Length* (miles)
1	Xzerta-Tec	Hatillo TC	New Single Breaker with Modification	60	115	0.57
2	SolarBlue	Breñas (9201) Substation Expansion/Sectionalizer	New Substation Expansion	25	38	1.00
3	Blue Beetle	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	New Sectionalizer	30	115	0.20
4	Montalva Solar Farm	New Sectionalizer on Line 37100 Between San German TC and Guanica TC	New Sectionalizer; rebuild Line 37100 from Sectionalizer to San German TC	80	115	7.39
5	Ciro One	Aguirre Steam Plant Transmission Center (Aguirre SP TC)	New Single Breaker with Modification	90	115	3.51
6	Guayama Solar Energy	Jobos TC	New Single Breaker with Modification	25	38	1.19
7	Solar Project San Juan	New Sectionazlier Expansion to the existing San Lorenzo (3301) substation	New Sectionalizer	20	38	0.50
8	Vega Baja Solar Project	New Sectionalizer on Line 5400 between Punta Lima TO and Naguabo (2701)	New Sectionalizer	15	38	0.18
9	REA Vega Baja	Vega Baja TC	New Single Breaker with Modification	25	38	2.20
10	REA Hatillo (North)	Hatillo (7701) and TO Substation Expansion/Sectionalizer	New Sectionalizer	25	38	0.03
11	Caracol	Moca Sectionalizer	Existing GIS Substation	30	38	0.14
12	Sierra	Quebradillas Sectionalizer	New Single Breaker with Modification	25	38	0.14
13	Atenas	Manati TC	115-kV Bus Expansion	40	115	1.55
14	ReSun	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	New Sectionalizer	35	115	0.05
15	Solaner	San German TC (6406)	New Single Breaker with Modification	35	115	0.08

#	Project Name	Interconnect Point	Interconnection Type	Capacity (MW)	Voltage (kV)	TL Length* (miles)
16	Morovis	New Sectionalizer on Line 36100 Between Ciales (8701) and Morovis (8801)	New Sectionalizer	33.5	115	4.34
17	Windmar (Sabana Seca)	Hato Tejas TC	New Single Breaker with Modification	70	115	1.00
18	M Solar	Manati TC	New Single Breaker	70	115	3.53
19	YFN Yabucoa Solar	Juan Martin Sectionalizer	New Single Breaker with Modification	25	115	0.05

* Transmission line lengths were estimated based on site walkdowns and satellite imagery.

LOAD FLOW ANALYSIS RESULTS

S&L evaluated the integration of each project alone and with combinations of other operating and non-operating (proposed) projects. S&L performed power flow studies to evaluate the thermal impacts of the projects on the grid. The studies considered three types of contingencies cases based on PREPA's Transmission System Planning Criteria and NERC Guidelines:

- **N-1:** Either (i) the loss of any generator; or (ii) the loss of any individual transmission line or transformer of 38 kV or above
- **N-2 – Line + Line:** The loss of two transmission lines of 115 kV or above (these may share a common tower or right-of-way [ROW])
- **N-1-1 – Line/Generator + Line/Transformer/Generator:** One transmission line of 115 kV or above or generator is out for maintenance with the loss of one of the following: (i) transmission line or transformer of 115 kV or above; or (ii) a generator
    - After the first N-1-0 outage, system adjustments were allowed (e.g., transformer tap adjustments, phase-angle regulator adjustments, shunt adjustments, and/or generation re-dispatch), and the N-1-0 outages for these contingencies are transmission lines that, based on input from the PREPA Operations Division, are frequently out of service

A summary of the results of the study for the non-operating projects are identified in Table ES-4. S&L identified no violations or worsened existing violations for operating projects. This includes the increased capacity proposed by the projects.

Table ES-4 — Non-Operating Projects Thermal Violations Summary

#	Project Name	Interconnect Point	Interconnection Thermal Violations Summary Results
1	Xzerta-Tec	Hatillo TC	There are no violations when the project is considered on its own. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
2	SolarBlue	Breñas (9201) Substation Expansion/Sectionalizer	There are no violations when the project is considered on its own. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
3	Blue Beetle	New Sectionalizer on Line 37400 Between Cambalache TC & Barceloneta TC	There are no violations when the project is considered on its own or with the neighboring non-operating ReSun project. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
4	Montalva Solar Farm	New Sectionalizer on Line 37100 Between San German TC and Guanica TC; rebuild Line 37100 from Sectionalizer to San German TC	There are no violations when the project is considered with normal operation of the transmission system (no contingencies). There are some violations for N-1-1 contingency cases when the project is considered alone. There are some violations for N-1-1 contingency cases when the project is considered with the non-operating Solaner project. The output of the facility would need to be curtailed if this contingency occurs.
5	Ciro One	Aguirre SP TC	No Violations
6	Guayama Solar Energy	Jobos TC	No Violations

#	Project Name	Interconnect Point	Interconnection Thermal Violations Summary Results
7	Solar Project San Juan	New Sectionazlier Expansion to the existing San Lorenzo (3301)	There are no violations when the project is considered with normal operation of the transmission system (no contingencies). Following an N-1 contingency of either of the two Line 9300 segments connecting to Solar Project San Juan, the remaining branch may reach its thermal limit, and the project may need to be temporarily curtailed.
8	Vega Baja Solar Project	New Sectionalizer on Line 5400 between Punta Lima TO & Naguabo (2701)	No New Violations Some existing violations are made moderately worse (<7%) in an extreme N-2 contingency case when both the project and GS Fajardo (no longer part of non-operational projects) are considered.
9	REA Vega Baja	Vega Baja TC	There are no violations when the project is considered on its own or with the non-operating Atenas project and M Solar (which is no longer being considered). When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
10	REA Hatillo (North)	Hatillo 7701 & TO Substation Expansion/Sectionalizer	There are no violations when the project is considered on its own. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
11	Caracol	Moca Sectionalizer	No Violations
12	Sierra	Quebradillas Sectionalizer	No Violations

#	Project Name	Interconnect Point	Interconnection Thermal Violations Summary Results
13	Atenas	Manati TC	There are no violations when the project is considered on its own or with the non-operating REA Vega Baja project and M Solar (which is no longer being considered). When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
14	ReSun	New Sectionalizer on Line 37400 Between Cambalache TC & Barceloneta TC	There are no violations when the project is considered on its own or with the neighboring non-operating Blue Beetle project. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
15	Solaner	San German TC	No violations when the project is considered on its own. Some violations occur for N-1-1 contingency cases when considered with an 80-MW Montalva non-operating project.
16	Morovis	New Sectionalizer on Line 36100 Between Ciales (8701) & Morovis (8801)	No Violations
17	Windmar (Sabana Seca)	Hato Tejas TC	Some violations are worsened for N-1 contingency cases when the project is considered alone. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*

#	Project Name	Interconnect Point	Interconnection Thermal Violations Summary Results
18	M Solar	Manati TC	There are no violations when the project is considered on its own or with the non-operating REA Vega Baja and Atenas projects. When the project is considered in conjunction with other proposed non-operating projects located electrically along the same Line 37400 there are no violations with normal operation of the transmission system (no contingencies). However existing overloads are slightly increased following contingencies and some new overloads can appear. The new overloads may require the revision of the existing relay settings in the transmission system.*
19	YFN Yabucoa Solar	Juan Martin Sectionalizer	No Violations

*Analysis was developed including M-Solar (70 MW) and Windmar Sabana Seca Projects. These projects were unable to reach an agreement.

INTERCONNECTION COST ESTIMATES

Based on the scope of the conceptual interconnection established, S&L prepared AACE Class 5 cost estimates for the interconnection of each non-operating project. The interconnection cost estimates are summarized in Table ES-5 for each project. Two projects, Blue Beetle and ReSun, interconnect at the same new sectionalizer; therefore, the projects will split the cost of the sectionalizer when both projects move forward. Additionally, S&L developed a separate cost estimate for each of the two projects should one of them not to move forward.

Table ES-5 — Non-Operating Projects Interconnection Cost Estimates

#	Project Name	Interconnect Point	TL Cost	TC/Substation Cost	Total Cost Estimate*
1	Xzerta-Tec	Hatillo TC	$1,110,000	$2,100,000	$3,210,000
2	SolarBlue	Breñas (9201) Substation Expansion/Sectionalizer	$1,800,000	$4,040,000	$5,840,000
3	Blue Beetle	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	$760,000	$2,180,000	$2,940,000
—	Blue Beetle (w/o ReSun)	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	$760,000	$3,960,000	$4,720,000
4	Montalva Solar Farm	New Sectionalizer on Line 37100 Between San German TC and Guanica TC;, rebuild Line 37100 from Sectionalizer to San German TC	$11,940,000	$3,800,000	$15,740,000

#	Project Name	Interconnect Point	TL Cost	TC/Substation Cost	Total Cost Estimate*
5	CIRO One	Aguirre SP TC	$5,000,000	$3,100,000	$8,100,000
6	Guayama Solar Energy	Jobos TC	$2,030,000	$2,880,000	$4,910,000
7	Solar Project San Juan **	New Sectionazlier Expansion to the existing San Lorenzo (3301)	$900,000	$6,900,000	$7,800,000
8	Vega Baja Solar Project	New Sectionalizer on Line 5400 between Punta Lima TO and Naguabo (2701)	$750,000	$3,760,000	$4,510,000
9	REA Vega Baja	Vega Baja TC	$5,200,000	$2,900,000	$8,100,000
10	REA Hatillo (North)	Hatillo 7701 and TO Substation Expansion/Sectionalizer	$200,000	$3,800,000	$4,000,000
11	Caracol	Moca Sectionalizer	$450,000	$580,000	$1,030,000
12	Sierra	Quebradillas Sectionalizer	$525,000	$2,880,000	$3,405,000
13	Atenas	Manati TC	$3,000,000	$6,300,000	$9,300,000
14	ReSun	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	$460,000	$2,180,000	$2,640,000
—	ReSun (w/o Blue Beetle)	New Sectionalizer on Line 37400 Between Cambalache TC and Barceloneta TC	$460,000	$3,960,000	$4,420,000
15	Solaner	San German TC (6406)	$800,000	$3,300,000	$4,100,000
16	Morovis	New Sectionalizer on Line 36100 between Ciales (8701) and Morovis (8801)	$5,740,000	$6,350,000	$12,090,000
17	Windmar (Sabana Seca)	Hato Tejas TC	$2,460,000	$2,360,000	$4,820,000
18	M Solar	Manati TC	$5,040,000	$1,400,000	$6,440,000
19	YFN Yabucoa	Juan Martin Sectionalizer	$350,000	$3,000,000	$3,350,000

* The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

** At the time of this report, the interconnection for Solar Project San Juan had not been finalized between PREPA, and the developer; therefore, the scope and cost estimate are subject to change.

1. INTRODUCTION

From 2009 to 2012, the Puerto Rico Electric Power Authority (PREPA) entered into power purchase and operations agreements (PPOAs)—among other agreements—with 60 developers of renewable energy projects. As detailed in the "PREPA – Operating PPOA Justification Memo" and the "PREPA – Non-Operating PPOA Justification Memo," both dated May 26, 2020, PREPA management determined in 2019 that nine of the agreements with projects currently in operation (Operating PPOAs) and 19 of the agreements which reached various stages of development (Non-Operating PPOAs) should be renegotiated to better align PREPA's finances with PREPA's fiscal plan. To support PREPA in the renegotiation of these PPOAs, Sargent & Lundy (S&L) performed an initial interconnection screening of the projects. S&L prepared this report to summarize the methodology and results of the initial interconnection study support work.

1.1. PROJECTS SUMMARY

Beginning in July 2019, PREPA requested S&L to review the termination points, the transmission line (TL) routes, and the feasibility for several of the operating and non-operating projects and their associated interconnection to the PREPA system. Lists of the non-operating and operating projects are provided in Table 1-1 and Table 1-2, respectively. The projects are located throughout Puerto Rico. The locations of the projects that have reached renegotiated terms are shown on a map in Figure 1-1.

Table 1-1 — Non-Operating Solar Projects

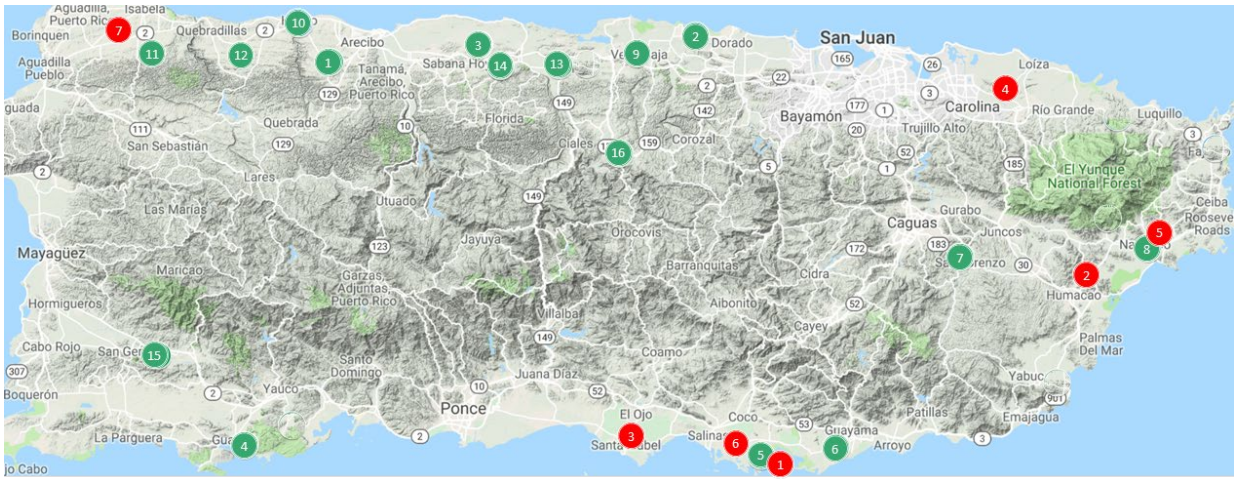
#	Project Name	Capacity (MW)	Contract Status	Location
1	Xzerta-Tec	60	Reached Agreement	Hatillo
2	SolarBlue	25	Reached Agreement	Vega Alta
3	Blue Beetle	30	Reached Agreement	Arecibo
4	Montalva Solar Farm	80	Reached Agreement	Guanica
5	CIRO One	90	Reached Agreement	Salinas
6	Guayama Solar Energy	25	Reached Agreement	Guayama
7	Solar Project San Juan	20	Reached Agreement	San Lorenzo
8	Vega Baja Solar Project	15	Reached Agreement	Naguabo
9	REA Vega Baja	25	Reached Agreement	Vega Baja
10	REA Hatillo (North)	25	Reached Agreement	Hatillo
11	Caracol	30	Reached Agreement	Moca
12	Sierra	25	Reached Agreement	Quebradillas

#	Project Name	Capacity (MW)	Contract Status	Location
13	Atenas	40	Reached Agreement	Manati
14	ReSun	35	Reached Agreement	Arecibo
15	Solaner	35	Reached Agreement	San German
16	Morovis	33.5	Reached Agreement	Morovis
17	Windmar (Sabana Seca)	70	Unable to reach agreement	Toa Baja
18	M Solar	70	Unable to reach agreement	Vega Baja
19	YFN Yabucoa	25	Unable to reach agreement	Yabucoa

Table 1-2 — Operating Renewable Projects

#	Project Name	Type	Capacity (MW)	Uprate Capacity (MW)	Contract Status	Location
1	AES Ilumina	Solar	20	5	Reached Agreement	Guayama
2	Humacao Solar Project	Solar	40	Not Proposed	Reached Agreement	Humacao
3	Pattern Santa Isabel	Wind	75	20	Reached Agreement	Santa Isabel
4	San Fermin Solar Farm	Solar	20	4.5	Reached Agreement	Loiza
5	Punta Lima	Wind	26	Not Proposed	Reached Agreement	Naguabo
6	Horizon Energy	Solar	10	10	Reached Agreement	Salinas
7	Oriana Energy	Solar	50	10	Reached Agreement	Aguadilla
8	Windmar Coto Laurel	Solar	10	4	Unable to reach agreement	Ponce
9	Windmar Cantera Martino	Solar	2.1	0.9	Unable to reach agreement	Ponce

Figure 1-1 — Project Locations Overview



Operating Renewable Projects

1. AES Illumina
2. Humacao Solar Project
3. Pattern Santa Isabel
4. San Fermin Solar Farm
5. Punta Lima
6. Horizon Energy
7. Oriana Energy

Non-Operating Renewable Projects

1. Xzerta-Tec
2. SolarBlue
3. Blue Beetle
4. Montalva Solar Farm
5. Ciro One
6. Guayama Solar Energy
7. Solar Project San Juan
8. Vega Baja Solar Project
9. REA Vega Baja
10. REA Hatillo (North)
11. Caracol
12. Sierra
13. Atenas
14. ReSun
15. Solaner
16. Morovis

1.2. SCOPE AND METHODOLOGY SUMMARY

S&L evaluated the grid interconnection feasibility of the non-operating renewable energy projects and the operating projects that are seeking to increase their capacity. For the non-operating projects, the evaluations included (i) performing power flow studies to evaluate the thermal impacts of the projects on the grid; (ii) developing conceptual interconnection arrangement documents; and (iii) preparing AACE level 5 cost estimates for the planned interconnections. To support the evaluations, S&L also performed various site walkdowns and desktop studies. After review of each project location, a conceptual plan was developed for the interconnection from the solar facility to a PREPA substation, transmission center (TC), or transmission line. S&L developed cost estimates, including labor, materials, engineering, design, and support for the conceptual plans. Additionally, S&L evaluated operating projects requesting capacity increases. This analysis typically only included a power flow study to evaluate the thermal impacts of the projects on the grid.

Occasionally, throughout the analysis period, the location of certain project sites, the interconnection point, and/or the size of the project would be revised based on discussions with the developers, requirements of the PREPA system, or negotiation developments. The analysis was iterative, and S&L informed PREPA throughout the process and provided input on interconnection matters for the PPOA negotiations. The methodology used in S&L's analysis is further described in Section 2.

2. METHODOLOGY

For the analysis, the project developers typically provided the site coordinates, capacity, and voltage. PREPA provided the interconnection point and voltage to use in the interconnection study. At times, the capacity, location, or voltage would be revised; thus, S&L performed additional analysis based on the revised information.

S&L also considered PREPA design parameters for developing the transmission line and substation interconnection scope. PREPA recently approved their design criteria documents (DCDs). The DCDs considered include the following:

- PREPA Transmission Design Criteria
- PREPA Substation Civil & Substation Design Criteria
- PREPA Protection and Control Design Criteria
- PREPA Distribution Design Criteria

Based on the above DCDs, PREPA is developing new standards that will be used for future transmission and distribution (T&D) projects and generation interconnections.

When reviewing the project size and interconnection voltage, S&L considered PREPA's interconnection guideline of projects of no greater than 25 MW connecting on the 38-kV system.

Overall, S&L's analysis was a screening-level study that developed the general scope and evaluated the ability to interconnect a project at a given location. As outlined in the recently agreed PPOAs, a full set of interconnection studies and interconnection facilities studies will be performed several months after the effective date of each PPOA. These studies will define the specific detailed interconnection requirements for each project.

2.1. TRANSMISSION LINE ROUTE AND SUBSTATION INTERCONNECTION

When feasible, S&L performed an initial site walkdown to determine if the planned solar project's substation location and the proposed interconnection point were feasible. If, based on the findings, the transmission line route or interconnection point were determined to have challenges or were infeasible, S&L worked with PREPA and the developer to determine an alternative interconnection plan. If required, S&L performed a site walkdown of the alternative. S&L performed site walkdowns for all sites except Caracol and Sierra, in which cases S&L performed desktop analyses based on available single-line diagrams and satellite imagery.

2.1.1. Transmission Line Routes

S&L selected the conceptual transmission line routes to avoid areas where costly and time-consuming wet drilling or rock drilling would be required. Additionally, S&L selected the conceptual transmission line routes to create the most direct path to the selected interconnection point while avoiding mountainous terrain, mogotes, and water crossings where feasible. In addition, S&L selected the routes to avoid residential, commercial, and population dense areas—to the extent possible—to mitigate the need for significant right of way acquisitions, business closures, and road closures during construction. Finally, S&L considered future maintenance requirements and route access for the proposed corridors.

2.1.2. Substation Interconnection

Determining the interconnection point to the PREPA system required iterative interconnection conceptual approaches to meet the needs of the solar developers and the transmission line routing. For some of the non-operating projects, existing substations will be modified; however, in some instances, a new sectionalizer will be required to interconnect the solar project.

S&L reviewed the PREPA or developer proposed interconnection point and the PREPA transmission single-line diagram to determine if the proposed interconnection point was an acceptable location to PREPA and the developer. S&L visited the proposed interconnection facility to determine if there was adequate space to install the new interconnection equipment, metering, and protection and controls. When a site visit was not possible, S&L relied on the PREPA system's single-line diagrams, drawings (if available), and satellite images.

Following completion of the initial review and the site walkdown of the proposed interconnection location, S&L created a conceptual interconnection plan and cost estimate (see Section 2.3) to review with PREPA, then with the developers when applicable, to determine if the interconnection point and scope was satisfactory to all parties. If either party had issues with the conceptual interconnection approach or cost estimate, S&L worked with PREPA and the developers to determine a new interconnection point or location for the project.

S&L considered three interconnection approaches as options for the projects: single breaker, single breaker with modification, and new sectionalizing substation. When an open bay in the identified interconnection substation was available, S&L evaluated if any modifications were needed to allow the interconnection of the project. If limited or no modifications were required, S&L proposed the "single breaker" option with associated protection and control.

In some cases, modifications to the existing equipment, breakers, protection and control, structures, and/or the control house would be required to support the interconnection and expansion of the substation. This

constituted the "single breaker with modification" approach. In cases where connecting to an existing substation or transmission center is not feasible a new three-way sectionalizing station—including a new prefabricated modular control house, fencing, breakers, metering, protection and control, structures, and other equipment as required—was proposed. The three-way sectionalizing station was designed to use a single-breaker approach, specifically used to bisect an existing transmission line or independently append to an existing transmission center.

2.2. LOAD FLOW ANALYSIS

S&L used an analytical model to evaluate (via power flow analysis) the thermal impacts the projects may have on the PREPA T&D system to determine if the equipment can accept the additional generation. The simulations identified which T&D components and facilities (such as transmission lines or transformers) may be overloaded beyond their thermal limits by each individual projects' power injection. S&L performed the analysis both under normal operating conditions and after system contingencies. This analysis is considered a screening-level study; a full set of interconnection studies will be performed for each project after the effective date of each PPOA. These studies will include additional analyses, such as determining the duty ratings of the system, dynamic analyses, and elements of compliance with PREPA's minimum technical requirements (MTRs).

2.2.1. PSS/E Model and Contingency Files

S&L used an analytical model of PREPA's T&D system—using Power System Simulator for Engineering (PSS/E) files and including contingency support files—as input for this analysis. The contingency analysis used Transmission Adequacy & Reliability Assessment (TARA) software. S&L used the PREPA T&D system model for the various studies in 2019 and 2020. In the second half of 2019, S&L updated and validated the PREPA T&D system model; the updated model more accurately represents the current configuration of PREPA's system. One of the primary purposes for this model is to study the impact of power generation additions and reductions on the T&D system. This model was updated in the following ways to better reflect the current and expected future generation availability based on discussions with the PREPA Operations Division:

- **Costa Sur Generating Station:** Unit 5 is taken out of service, and Unit 6 is operating at 300 MW of generation—this is to reflect the loss of this plant following an earthquake in January of 2020; one unit is expected to be operating in the long term on this site
- **EcoEléctrica Generating Station:** Operating at 500 MW, this is a typical generation level for this power plant
- **Mayagüez Generating Station:** This station is operating at 175 MW (there are no changes from the base model, but its generation value was verified due to its importance in frequency regulation)

The sum of the above generation changes results in a net generation loss which is compensated by increasing generation evenly among the remaining thermal units.

2.2.2. Methodology

Each project was added to the PSS/E model, dispatched to the project's interconnection limit (maximum capacity in MW) size with a power factor capability of 0.85. S&L evaluated projects in groups based on proximity to other evaluated projects to capture cumulative potential impacts if all projects were to reach commercial operation. Projects evaluated together and their impacts are discussed in the respective results section for the project. In all cases, the combined total of new generation projects is dispatched against existing thermal generation uniformly rather than adjusting individual units.

S&L developed a contingency list based on PREPA's "Transmission System Planning Criteria" and "NERC Standard TPL-001 — Transmission System Planning Performance Requirements." In general, S&L simulated the following contingencies:

- **N-1:** Either (i) the loss of any generator; or (ii) the loss of any individual transmission line or transformer of 38 kV or above
- **N-2 – Line + Line:** The loss of two transmission lines of 115 kV or above (these may share a common tower or right-of-way [ROW])
- **N-1-1 – Line/Generator + Line/Transformer/Generator:** One transmission line of 115 kV or above or generator is out for maintenance with the loss of one of the following: (i) transmission line or transformer of 115 kV or above; or (ii) a generator
    - After the first "N-1-0" outage, system adjustments were allowed (e.g., transformer tap adjustments, phase-angle regulator adjustments, shunt adjustments, and/or generation re-dispatch), and the N-1-0 outages for these contingencies are transmission lines that, based on input from the PREPA Operations Division, are frequently out of service

"N-1-1" contingencies represent a transmission line or generator outage followed by system adjustment (transformer tap adjustments, phase-angle regulator adjustments, shunt adjustments, and generation re-dispatch) and finally followed by a contingency. "N-2" events represent two concurrent facilities out of service. Per PREPA's transmission planning criteria, generation can be re-dispatched following the events to reduce circuit overloads and improve voltage regulation. "N-2 – generic line + transformer" contingencies are considered extreme and are not simulated for this analysis.

S&L used the following simulation methodology:

1. Adjustments to the system were disabled post-contingency—transformer tap adjustments, adjustments to the phase-angle regulator, and shunt adjustments were disabled.

2. Normal (Rate A) line and transformer apparent power (MVA) ratings are used as the post-contingency rating. Line ratings were provided by the PREPA Operations Division based on operational guidelines. These new line ratings were used in the base, not the contingency case; however, the nominal ratings within the PSS/E model were used when evaluating contingency impacts.

3. Following a contingency, which removes a load or generator, all dispatchable thermal units share the generation adjustment to maintain generation and load balance.

As some thermal overloads are present in the base system during some system contingencies (prior to the addition of new generation), only the impact of adding the new generation is evaluated. If the addition of the new generation causes a branch to become overloaded, or if an existing overload is made worse by 3% or greater of the branch rating, the result is flagged for PREPA's review.

2.3. COST ESTIMATE

Based on the conceptual interconnection plan (as discussed in Section 2.1) S&L developed an AACE Class 5 cost estimate. The Class 5 estimate is used for conceptual screening of projects with less than 2% design completion. S&L developed cost estimates separately for the transmission line route and transmission center, sectionalizer, or substation interconnection.

2.3.1. Transmission Line Routes

For the transmission line cost estimates, S&L considered the engineering, management, procurement, material, and construction costs for the project. The transmission line engineering and management cost estimate considered the following:

- Each project is executed independently
- Projects will be installed in phases
- Engineering and construction support will apply for the duration of the project
- Environmental and permitting requirements and support are required
- Construction management personnel are necessary
- Industry-typical subcontractors are utilized when needed
- A ROW specialist is utilized
- A geophysical survey is conducted
- A geotechnical survey is conducted
- There are environmental field studies conducted as needed

The transmission line procurement and materials portion of the cost estimate considered the following:

- The PREPA DCD structure types, hardware preferences, and structural loading criteria
- A typical conductor size and type for all projects except when specified by the developer
- The use of optical ground wire for shielding and communication

The transmission construction portion of the cost estimate considered the following:

- Independent project execution
- Mobilization and demobilization of construction crews
- ROW acquisition support, clearing, access and restoration (as required)
- The required direct embedment or drilled pier for the structures
- Installation and removal of existing structures and wires (as required)
- Construction management personnel

S&L also evaluated the transmission line cost on an average $/mile cost to determine if the estimated cost was consistent with the IRP criteria of $1.5M per mile for a solar facility interconnection.

2.3.2. Substation Interconnection

To develop the substation interconnection (the termination point) cost estimate, including sectionalizer and substation upgrades, S&L considered the engineering, management, procurement, material, and construction costs for the conceptual project. This included the following assumptions and criteria:

- Independent project execution
- Phased execution for each project
- Engineering and construction support for the duration of the project
- Environmental and permitting requirements and support
- Construction management personnel
- Utilization of industry-typical subcontractors when needed, such as when conducting:
    - A geophysical survey
    - A geotechnical study
    - Environmental field studies
- Estimates based upon typical industry standards and best practices

The substation procurement and materials portion of the cost estimate considered the following:

- Material procurement and support for stock and long lead material items

- Standard design structure types and general assemblies were used as applicable
- Typical conductor/bus size and equipment ratings for all projects
- Engineered structures and fabrication design as required

The substation construction portion of the cost estimate considered the following:

- Independent project execution
- Mobilization and demobilization of construction crews
- Land acquisition support, clearing, access and restoration (as required)
- Installation, relocation, and removal of existing structures and wires (as required)
- Construction management personnel
- Testing, commissioning, and general support through energization

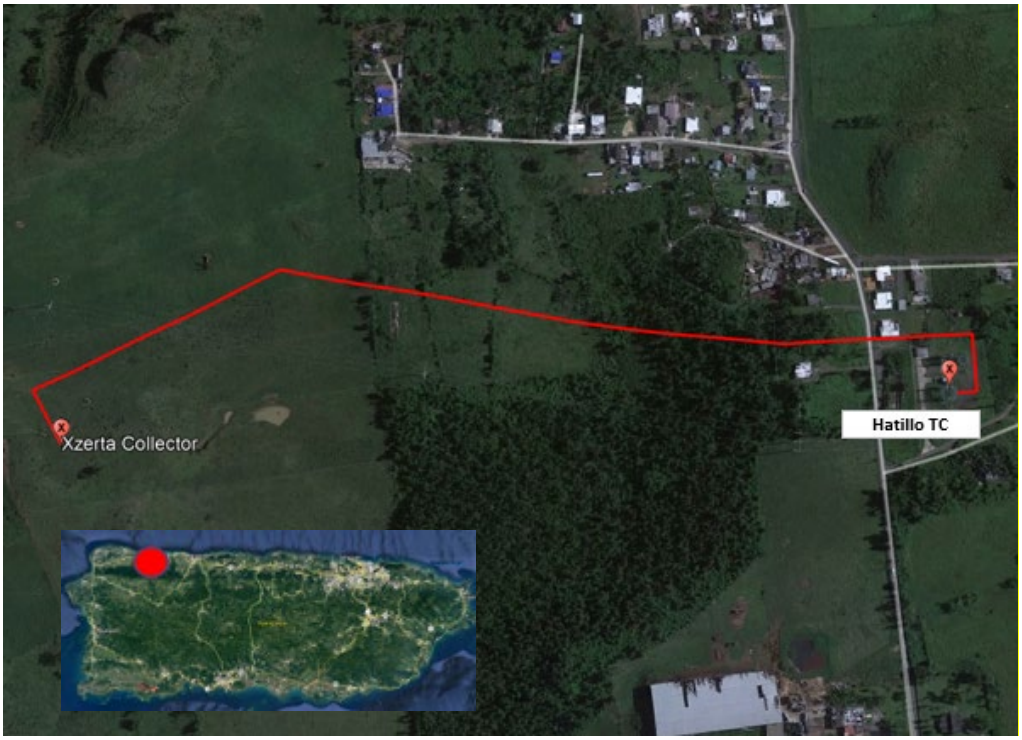
3. XZERTA-TEC

Xzerta-Tec Solar I LLC, the project company, intends to build Xzerta-Tec, a 60-MW solar project in Hatillo, Puerto Rico, as shown in Figure 3-1. The project intends to interconnect to the PREPA grid at the existing Hatillo TC at 115 kV. The key components of the project are shown in Table 3-1.

Table 3-1 — Xzerta-Tec Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Xzerta-Tec	Hatillo TC	60	115	0.57

Figure 3-1 — Xzerta-Tec Location and Route



3.1. ANALYSIS

3.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at Xzerta-Tec to verify that open bays exist on the 38-kV and 115-kV bus at the existing Hatillo TC for a new interconnection termination point. The walkdown confirmed that there are adequate bays to support the interconnection on either the 38-kV or 115-kV bus. However during negotiations, the developer requested to increase the project size from 20 MW to 60 MW. The increase in capacity required the interconnection to be moved from the 38-kV to the 115-kV bus.

The transmission line route routes were reviewed through satellite imagery and a walkdown. S&L prepared a conceptual interconnection approach which was reviewed by PREPA Planning and Operations.

3.1.2. Load Flow Analysis

Xzerta-Tec is to interconnect into the Hatillo TC substation along 115-kV Line 39100. In addition, several other solar developers also have proposed to interconnect at various locations along nearby Line 37400, either connecting directly to the line or a lower voltage. The projects are:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

S&L performed a power flow analysis that included these projects in various combinations together as well as individually to evaluate any thermal limitations. The results of the various analyses that included Xzerta-Tec are discussed below.

3.1.2.1. Xzerta-Tec Alone

When studied alone, this new generation project does not introduce any new thermal violations or worsen any existing thermal violations. As there is relatively little generation relative to the transmission available out of the Cambalache TC, there is enough capacity available in this area for a new generation project.

3.1.2.2. Combinations

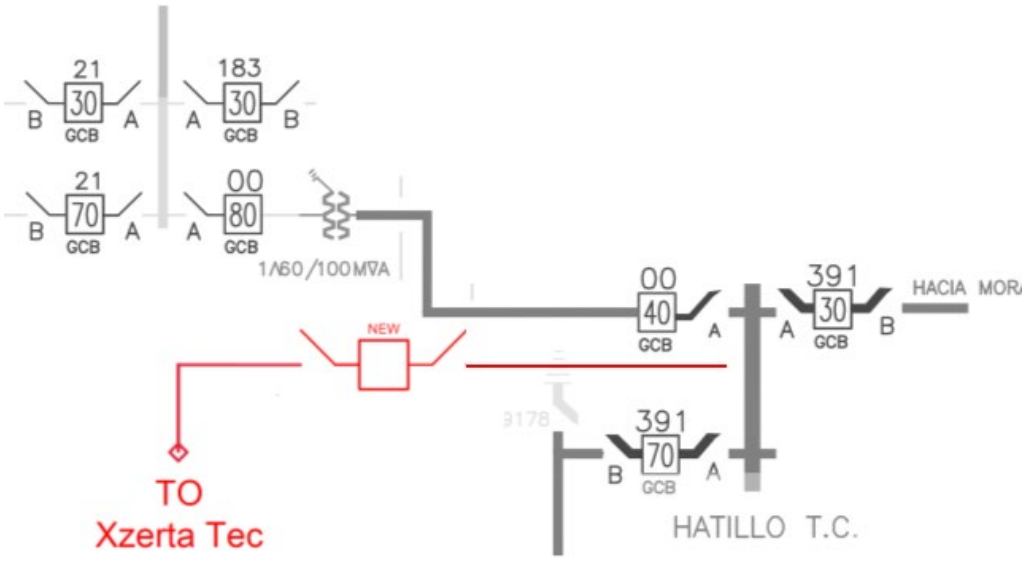
S&L performed two additional load flow studies as discussed in Section 5.1.2.5 and 5.1.2.6. When Xzerta-Tec is combined with the various other projects, new overloads are identified on Line 36400 between Dos Boca and Jyayuya following N-1 contingency cases in the south. The results are shown in Table 5-4 and Table 5-5.

3.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Hatillo TC, as shown in Figure 3-2. The scope of the interconnection includes the following:

- A new 0.57-mile, 115-kV transmission line from the project site to the Hatillo TC; the new line will cross under the existing 230-kV Line 50500 and over the existing 38-kV Lines 2100 and 18300
- Installation of a new 115-kV gas circuit breaker with gang-operated disconnect switches and surge arrestors at the existing open bay of the 115-kV box structure
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure directly outside the newly installed breaker
- Installation of a new relay, protection, control, and communication equipment required in the existing control house; it is expected that the control room can accommodate the required equipment, and the scope includes updating existing relaying as required to support the new termination

Figure 3-2 — Xzerta-Tec Interconnection



3.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $3,210,000. This estimate is based on the transmission line's scope of work estimate of approximately $1,110,000, and the substation scope of work estimate of approximately $2,100,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

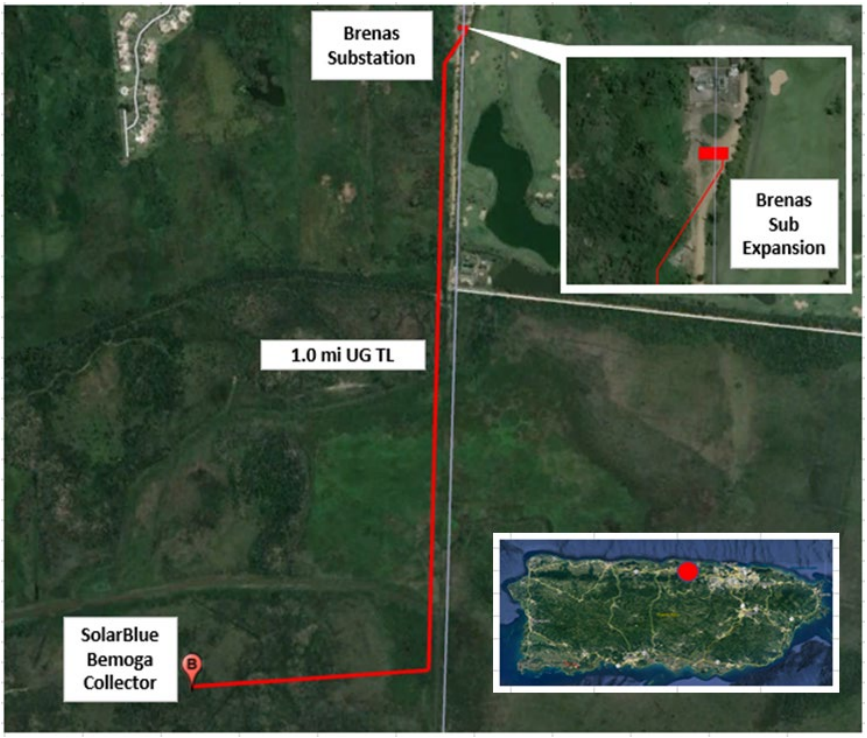
4. SOLARBLUE

SolarBlue Bemoga LLC, the developer, intends to build the (25-MW) SolarBlue in Vega Alta, Puerto Rico, as shown in Figure 4-1. The project intends to interconnect to the PREPA grid at the existing Breñas (9201) Substation at 38 kV. The key components of the project are shown in Table 4-1.

Table 4-1 — Solar Blue Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
SolarBlue	Breñas (9201)	25	115	1

Figure 4-1 — Solar Blue Location and Route



4.1. ANALYSIS

4.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Breñas (9201) Substation to determine the suitability of the substation. The walkdown confirmed the existing substation did not have adequate space, and S&L proposed to install a sectionalizer on Line 7800. After meeting with PREPA and the developer, S&L was informed there was an existing design to expand the Breñas (9201) Substation and interconnect SolarBlue on the substation expansion. Additionally, S&L performed an initial and follow-up review of the transmission

line termination in the field to determine if the preliminary route was constructible and evaluate the feasibility of the new route. S&L was also informed that SolarBlue had acquired the transmission line ROW and PREPA had acquired the land required for the Breñas (9201) Substation expansion.

4.1.2. Load Flow Analysis

SolarBlue's proposed interconnection into the 38-kV Breñas (9201) Substation along Line 7800 is a 38-kV branch connected through transformers to Line 37400. This is one of nine projects studied along Line 37400. It is located further east along Line 37400, is smaller, and is interconnecting at a lower voltage (38 kV). In the power flow study, S&L considered the SolarBlue project in various combinations with the following projects, as well as on its own, to determine if the project would worsen or create any new thermal violations.

- Xzerta-Tec (Section 3)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

Due to the eastern location, small size, and interconnection voltage, the project is generally isolated from the congestion in the middle of Line 37400. As a result, SolarBlue does not cause any new overloads or worsen any existing overloads. Initially, the project was proposed as a 20 MW project. Ultimately, PREPA and the developer agreed upon 25 MW as the project size.

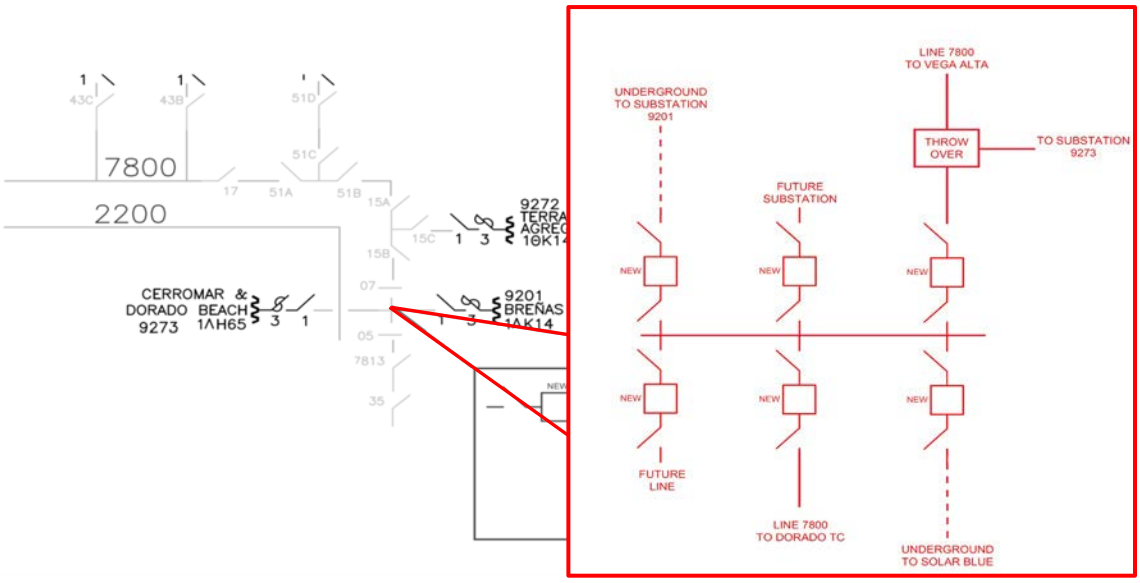
If SolarBlue is considered with Blue Beetle, ReSun, REA Vega Baja, Atenas, and M Solar, the existing 38-kV overloads on Line 2200—caused by the loss of Line 37400 between Vega Baja to Dorado—is alleviated (See Section 5.1.2.4). SolarBlue provides a power source near the Dorado TC, which reduces the reliance on Line 2200 to send power east from Vega Baja to Dorado following this contingency. Additional combinations considered are discussed in Sections 5.1.2.5 and 5.1.2.6. Note that these combinations considered M Solar, which was unable to reach an agreement.

4.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Breñas (9201) Substation, as shown in Figure 4-2. The scope of the interconnection includes the following:

- A new 1.00-mile, underground, 38-kV transmission line routed in a duct bank to the Breñas (9201) Substation termination point
- Installation of a new six-bay 38-kV box structure expansion in the south end of the Breñas (9201) Substation yard
- Installation of a new three-way, throw-over switch structure between Line 7800 to Dorado Beach, Substation 9273, and the new six-bay box (lattice) structure
- Installation of a new 38-kV metering structure for SolarBlue
- Modification of the existing transmission 38-kV termination box structure to support an expansion of the bus to the new three-way throw-over switch structure
- Installation of a new security fence, lighting, and applicable security equipment
- Installation of a new prefabricated control house

Figure 4-2 — Solar Blue Interconnection



4.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $5,840,000. This estimate is based on the transmission line's scope of work estimate of approximately $1,800,000 and the substation scope of work estimate of approximately $4,040,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

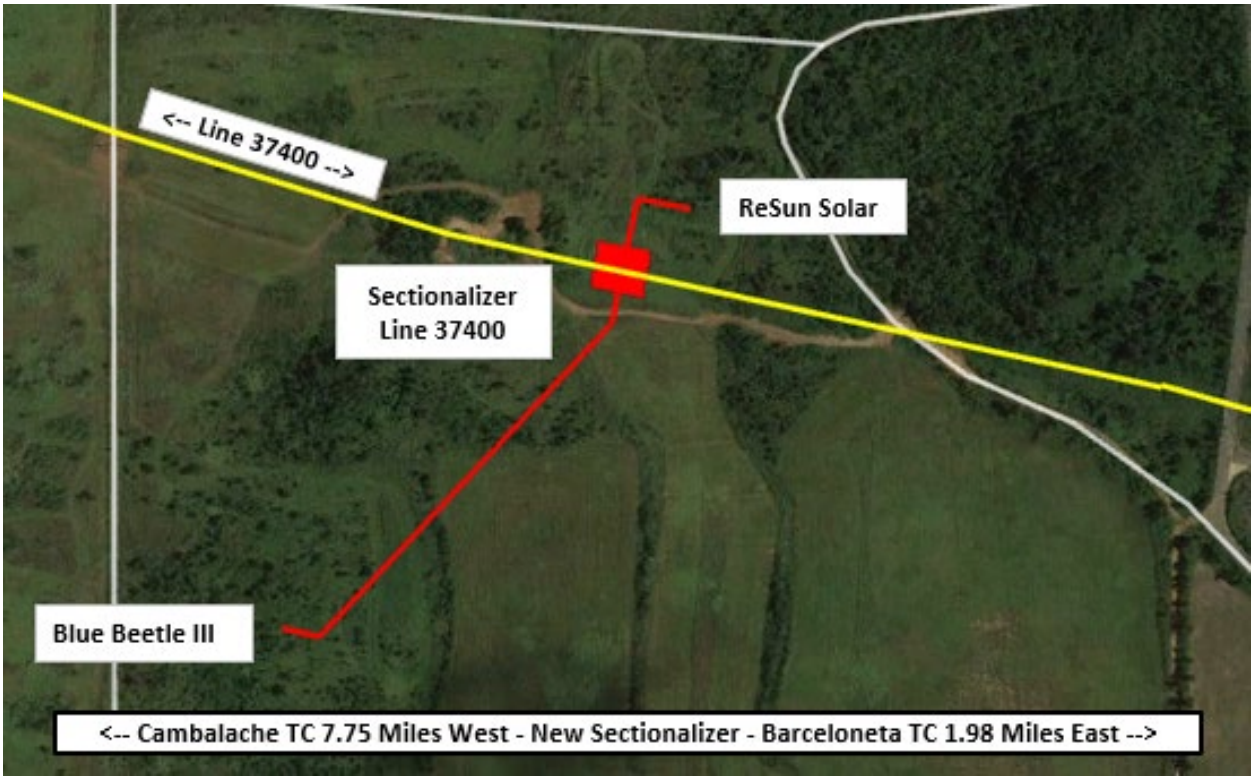
5. BLUE BEETLE

ESA Renewables LLC, the project sponsor, intends to build Blue Beetle III, a 30-MW solar project in Arecibo, Puerto Rico, as shown in Figure 5-1. The project intends to interconnect to the PREPA grid with a new sectionalizer that will be located on and bisect Line 37400 (115 kV) between the Cambalache and Barceloneta TCs. A second project, ReSun Solar may also terminate at the new sectionalizer. The conceptual interconnection approach incorporates an option for both interconnection terminations or may be used as stand-alone sectionalizer, as necessary.

Table 5-1 — Blue Beetle Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Blue Beetle	Line 37400 (Near Barceloneta TC)	30	115	0.20

Figure 5-1 — Blue Beetle Location and Route



5.1. ANALYSIS

5.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Blue Beetle and the ReSun interconnection point on Line 37400. S&L recommended (and PREPA Planning and Operations agreed) to install a new four-way sectionalizer

at the location shown in Figure 5-1 to service both the Blue Beetle and the ReSun projects. Using satellite imagery in addition to the site walkdown, S&L reviewed the transmission line routes and found them feasible.

5.1.2. Load Flow Analysis

In addition to the ReSun project, there are several other solar projects along Line 37400 as discussed in Section 3.1.2:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

S&L studied Blue Beetle with six different combinations of the above projects to provide an understanding of what thermal violations may be present for each combination. Line 37400 has a capacity of 239 MVA. Additionally, there are several load centers along this line, reducing the need to export the full capacity of these projects solely on Line 37400. It is important to mention that this analysis was developed to include the M-Solar and Windmar Sabana Seca projects, which were unable to reach an agreement.

5.1.2.1. Blue Beetle Alone and Combination 1

The first combination studied included Blue Beetle and ReSun. When considered alone or together, S&L found there were no new thermal violations and no existing violations were worsened.

Considered projects:

- Blue Beetle
- ReSun

5.1.2.2. Combination 2

The second combination considered the following projects along Line 37400:

- Blue Beetle
- ReSun

- REA Vega Baja (combined interconnection on Line 37400, previously considered)
- Atenas (combined interconnection on Line 37400, previously considered)
- M Solar (combined interconnection on Line 37400; Project no longer being considered)

When these projects are considered with full capacity and simplifying the interconnection of REA Vega Baja, Atenas, and M Solar as one combined project, new overloads are introduced and some existing overloads are worsened during an N-1 contingency. Multiple sections of the 38-kV Line 2200 near the Barceloneta TC are impacted following the loss of the 115/38-kV step-down transformer at the Cambalache TC. This forces the Cambalache 38-kV system to be supplied largely through the Barceloneta TC step-down transformers. All projects along this line contribute to these overloads, but due to proximity, Blue Beetle and ReSun are the largest contributors. These overloads are documented in Table 5-2.

Note that the 115/38-kV step-down transformer at the Hatillo TC is out of service. This outage reduces available paths to supply power to the local 38-kV system and reduces the redundancy of the system, making it less resilient to operate through contingencies and contributing to the overloads. Replacing or repairing this transformer alleviates the overloads caused by the loss of the Cambalache TC transformer by providing another path for power to flow to the 38-kV system from the west. Also note that M Solar is not currently being considered.

Table 5-2 — Combination 2 Overload Results

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Barceloneta 38 kV – UN 38 kV/1	2200	38	N-1 Cambalache 115/38-kV Transformer	48	125.57	130.12	4.55
Factor 38 kV – Acu Are 38 kV/1					117.95	122.51	4.56
Factor 38 kV – Ads 38 kV/1					99.47	104.33	4.86
Superacu Are 38 kV – TAP ACB2285C 38 kV/1					119.25	123.82	4.57
Cutler Hamer 38 kV – ADS 38 kV/1					95.76	100.67	4.91
Merck 38 kV – Une 38 kV/1					124.51	129.06	4.55
Merck 38 kV – Tap Acb2285c 38 kV/1					120.29	124.88	4.59

5.1.2.3. Combination 3

The third combination considered the same projects as the second combination with their full capacity, but with each project at different interconnection locations, as identified below.

Considered projects:

- Blue Beetle
- ReSun
- REA Vega Baja (38-kV Vega Baja TC)
- Atenas (115-kV Manati TC)
- M Solar (115-kV Manati TC)

In this configuration, new overloads are introduced and existing overloads are worsened during two N-1 contingency cases. As in Combination 2, multiple sections of 38-kV Line 2200 near the Barceloneta TC are impacted following the loss of the 115/38-kV step-down transformer at the Cambalache TC. This forces the Cambalache 38-kV system to be supplied largely through the Barceloneta TC step-down transformers. All projects along this line contribute to these overloads, but due to proximity, Blue Beetle and ReSun are the largest contributors.

As mentioned previously, the 115/38-kV step-down transformer at the Hatillo TC is out service. This outage reduces available paths to supply power to the local 38-kV system and reduces the redundancy of the system, making it less resilient to operate through contingencies and contributing to the overloads identified. Replacing or repairing this transformer alleviates the overloads caused by the loss of the Cambalache TC's transformer by providing another path for power to flow to the 38-kV system from the west.

In addition to the above overloads, the change of the REA Vega Baja project to the 38-kV system introduces new overloads for the contingency of a loss of the Vega Baja-to-Dorado section of Line 37400. This causes power to loop through the 38-kV system east from Vega Baja towards Dorado. The overloads from these two N-1 contingency cases are documented in Table 5-3. These new overloads may require the revision of the existing relay settings in the transmission system.

Table 5-3 — Combination 3 Overload Results

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Barceloneta 38 kV – Une 38 kV/1	2200	38	N-1 Cambalache 115/38-kV Transformer	48	123.89	128.53	4.64
Factor 38 kV – Superacu Are 38 kV/1					116.28	121.02	4.74
Factor 38 kV – ADS 38 kV/1					97.89	102.88	4.99
Superacu Are 38 kV – TAP ACB2285C 38 kV/1					117.58	122.3	4.72
Merck 38 kV – Une 38 kV/1					122.83	127.48	4.65
Merck 38 kV – Tap ACB2285C/1					118.62	123.33	4.71
Vega Alta 38 kV – Sams Vegalta 38 kV/1			N-1 Vega Baja 115 to Dorado 115/1	40	65.15	109.52	44.37
Sjuan Cement 38 kV – Santa Ana 38 kV/1					61.98	106.68	44.7
Santa Ana 38 kV – GE Vega Alta 38 kV/1					61.98	106.69	44.71
Ge Vega Alta 38 kV – Sams Vegalta 38 kV/1					63.7	108.23	44.53

5.1.2.4. Combination 4

Combination 4 adds the SolarBlue project to the combination considered in Combination 3.

- Blue Beetle
- ReSun
- REA Vega Baja (38-kV Vega Baja TC)
- Atenas (115-kV Manati TC)
- M Solar (115-kV Manati TC)
- SolarBlue (38-kV Breñas [9201])

Interconnecting SolarBlue to the 38-kV system near the Dorado TC alleviates overloads seen in Combination 3 associated with the N-1 contingency of a loss of the Vega Baja-to-Dorado section of Line 37400. Adding generation to the 38-kV system between the Vega Baja and Dorado TCs reduces the need to send power east through Line 2200 from Vega Baja to Dorado. Adding SolarBlue has no impact on the

additional overloads on Line 2200 near the Barceloneta TC due to the loss of the Cambalache TC's 115/38-kV transformer (Table 5-3).

5.1.2.5. Combination 5

Building on Combination 4, Combination 5 adds generation from Xzerta-Tec and Windmar Sabana Seca. The considered projects for Combination 5 are as follows:

- Blue Beetle
- ReSun
- REA Vega Baja (38-kV Vega Baja TC)
- Atenas (115-kV Manati TC)
- M Solar (115-kV Manati TC)
- SolarBlue (38-kV Breñas [9201])
- Xzerta-Tec (115-kV Hatillo TC)
- Windmar Sabana Seca (115-kV Hato Tejas TC)

In addition to the projects of Combination 4, this combination includes Xzerta-Tec and Windmar Sabana Seca. While the addition of Windmar Sabana Seca introduces no thermal violations in the load flow study, the addition of Xzerta-Tec introduces new overloads on Line 36400 between Dos Boas and Jayuya following N-1 contingencies of several line segments of Line 3900 in the south. These thermal overloads are documented in Table 5-4.

The overloads due to the loss of the Cambalache Transformer discussed in Combinations 3 and 4 are also made marginally worse (Table 5-3). The two available gas turbines (GTs) at Cambalache were also dispatched to their maximum capacity of 82.5 MW each in this scenario, but they had only a small impact due to interconnection into the 230-kV system at the Cambalache TC.

As mentioned previously, the 115/38-kV step-down transformer at the Hatillo TC is out service. This outage reduces available paths to supply power to the local 38-kV system and reduces the redundancy of the system, making it less resilient to operate through contingencies, which may contribute to the overloads identified. Replacing or repairing this transformer alleviates the overloads caused by the loss of the Cambalache Transformer by providing another path for power to flow to the 38-kV system from the west. Also note that, in addition to M Solar, Windmar Sabana Seca are not being considered. The minor new overloads, if not alleviated as previously described, may require the revision of the existing relay settings in the transmission system.

Table 5-4 — Combination 5 Overload Results

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Dos Boca 115 kV to Jayuya 115 kV/1	36400	115	N-1 Ponce 115 kV - Cerri Jdiazt 115 kV/1	59	81.91	109.87	27.96
			N-1 Jdiaz TC 115 kV - Cerri Jdiazt 115 kV/1		81.91	109.88	27.97
Barceloneta 38 kV – Une 38 kV/1	2200	38	N-1 Barceloneta 38 kV - UNE 38 kV/1	48	123.89	129.5	5.61
Factor 38 kV – Superacu Are 38 kV/1			N-1 Factor 38 kV - Superacu Are 38 kV/1		116.28	121.9	5.62
Factor 38 kV – ADS 38 kV/1			N-1 Factor 38 kV - ADS 38 kV/1		97.89	103.75	5.86
Superacu Are 38 kV – Tap ACB2285C 38 kV/1			N-1 Superacu Are 38 kV - Tap ACB2285C 38 kV/1		117.58	123.21	5.63
Cutler Hamer 38 kV – ADS 38 kV/1			N-1 Cutler Hamer 38 kV - ADS 38 kV/1		94.19	100.09	5.9
Merck 38 kV – Une 38 kV/1			N-1 Merck 38 kV - Une 38 kV/1		122.83	128.44	5.61
Merck 38 kV – Tap ACB2285C 38 kV/1			N-1 Merck 38 kV - Tap ACB2285C 38 kV/1		118.62	124.27	5.65

5.1.2.6. Combination 6

Combination 6 includes all projects considered in Combination 5 plus the addition of REA Hatillo (North). This combination includes all projects on or near Line 37400 as well as the two GT units at Cambalache at their 82.5-MW maximum capacity. The projects and their interconnection points are identified below:

- Blue Beetle
- ReSun
- REA Vega Baja (38-kV Vega Baja TC)
- Atenas (115-kV Manati TC)
- M Solar (115-kV Manati TC)
- SolarBlue (38-kV Breñas [9201])
- Xzerta-Tec (115-kV Hatillo TC)
- Windmar Sabana Seca (115-kV Hato Tejas TC)
- REA Hatillo (North) (Hatillo automatic switch [TO] bus on Line 2100)

This combination improves some overloads experienced in Combination 5 as REA Hatillo (North) provides sufficient generation to the northern 38-kV system to alleviate the overloads caused by the loss of the Cambalache step-down transformer; however, the overloads on Line 36400 between Dos Bocas and Jayuya, following the loss of Line 3900 in the south, are made marginally worse as shown in Table 5-5.

As mentioned previously, the 115/38-kV step-down transformer at Hatillo is out service. This outage reduces available paths to supply power to the local 38-kV system and reduces the redundancy of the system, making it less resilient to operate through contingencies, which may contribute to the overloads identified. Replacing or repairing this transformer would also alleviate the overloads caused by the loss of the Cambalache Transformer by providing another path for power to flow to the 38-kV system from the west. The new overloads, if not alleviated as previously described, may require the revision of the existing relay settings in the transmission system.

Table 5-5 — Combination 6 Overload Results

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Dos Boca 115 kV - Jayuya 115 kV/1	36400	115	Ponce 115 kV – Cerri Jdiazt 115 kV/1	59	81.91	113.75	31.84
			Jdiaz TC 115 kV – Cerri Jdiazt 115 kV/1		81.91	113.76	31.85

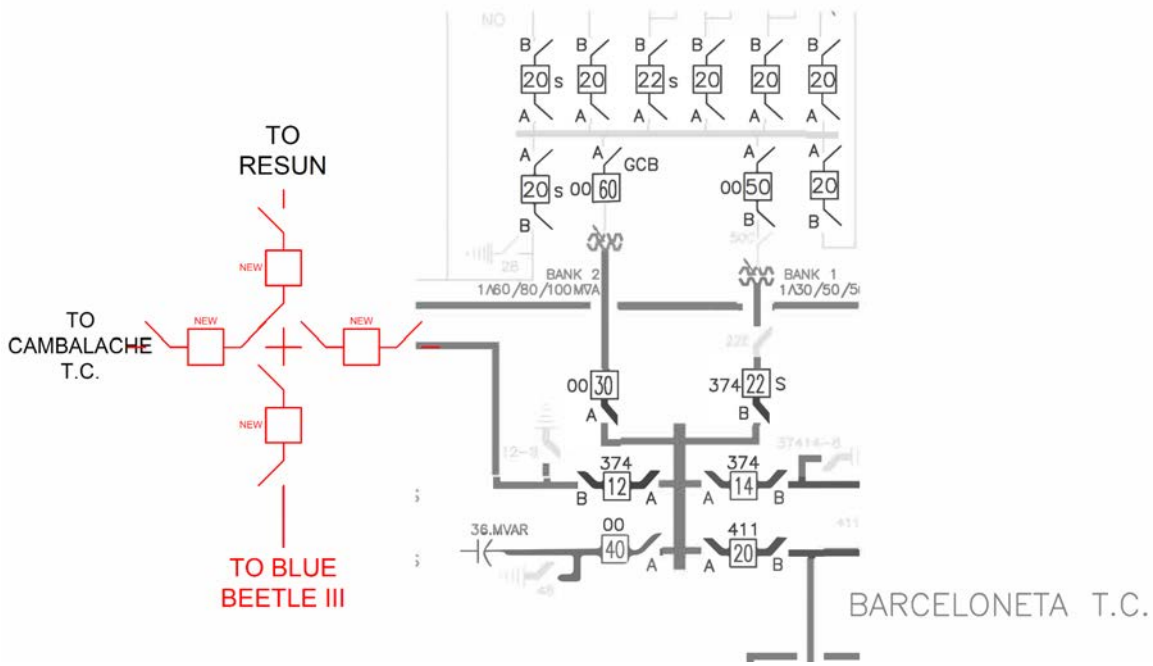
5.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the new sectionalizer that will be located on and bisect Line 37400 between the Cambalache and Barceloneta TCs, as shown in Figure 5-2. The scope of work is

inclusive of both the ReSun and Blue Beetle installations with exception to what is mentioned in this Section 5.2. The scope of the interconnection includes the following:

- A new 0.2-mile, 115-kV transmission line routed through open fields terminating at a new sectionalizing substation
- Installation of a new 115-kV sectionalizing box structure (the structure should be capable of supporting up to four termination points, including breakers, switches, surge arrestors, and metering)
- Installation of a new prefabricated control house
- Installation of a new relay, protection, control, and communication equipment in the control house
- Installation of a new security fence, lighting, and applicable security equipment
- Installation of three new 115-kV circuit breakers with gang-operated disconnect switches and surge arrestors; a fourth 115-kV circuit breaker, switches, metering, protection, controls, communication, and all other necessary equipment will be installed for ReSun, if required
- Installation of a new 115-kV metering structure for Blue Beetle
- Installation of new conduit, trenching, and ground grid, as applicable
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure

Figure 5-2 — Blue Beetle Interconnection



5.3. COST ESTIMATE

Based on the above scope of work, S&L provided two AACE Class 5 cost estimates for the transmission and conceptual interconnection approach. One estimate requires that a second solar development, ReSun, is executed in conjunction with the Blue Beetle development. In this scenario, the total estimated cost for the interconnection for Blue Beetle, including the transmission line, is $2,940,000. This estimate is based on the transmission line's scope of work estimate of approximately $760,000 and the substation scope of work estimate of approximately $2,180,000.

The second estimate independently installs Blue Beetle without ReSun. The total estimated cost for the interconnection, including the transmission line, is $4,720,000. This estimate is based on the transmission line's scope of work estimate of approximately $760,000 and the substation scope of work estimate of approximately $3,960,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

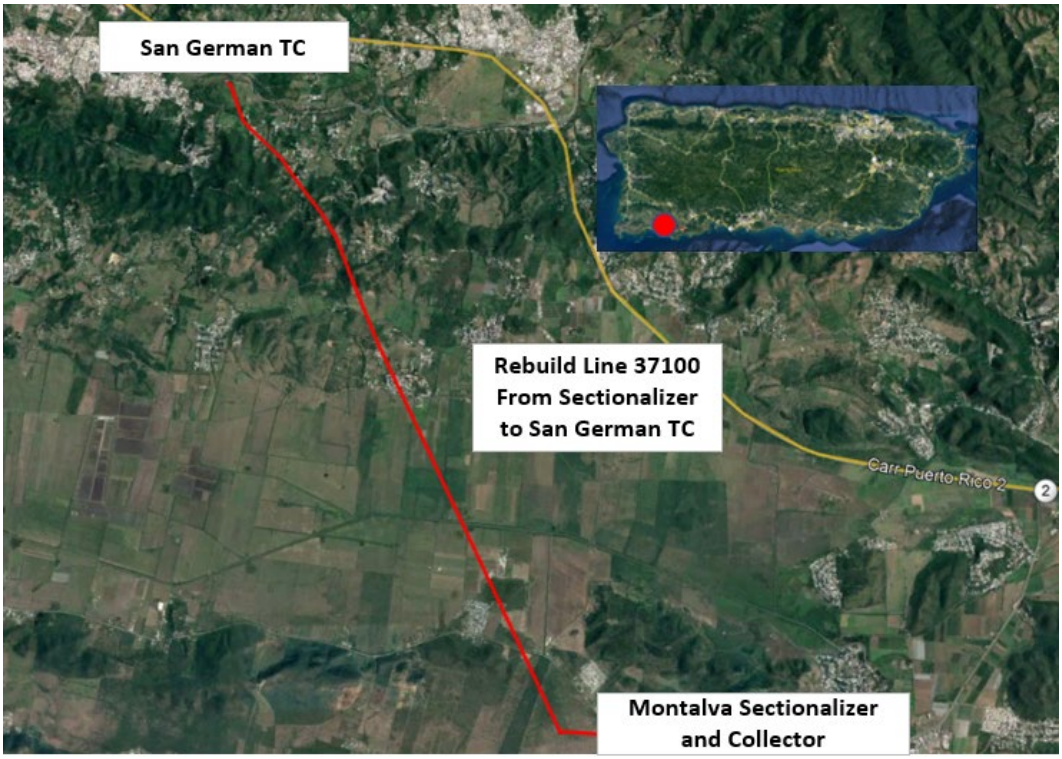
6. MONTALVA SOLAR FARM

Greenbriar Capital Corp, the project sponsor, intends to build Montalva Solar Farm, an 80-MW solar project in Guanica, Puerto Rico as shown in Figure 6-1. The project intends to interconnect to the PREPA grid with a new sectionalizer that will be located on Line 37100 between the San German TC and at 115 kV.

Table 6-1 — Montalva Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Montalva	Line 37100 Sectionalizer	80	115	7.39 (total)

Figure 6-1 — Montalva Location and Route



6.1. ANALYSIS

6.1.1. Transmission Line and Interconnection

S&L performed a walkdown of the Montalva interconnection point on Line 37100. Together with PREPA, S&L determined that a new sectionalizer would be installed at the location identified in Figure 6-1; however, several options to service the new interconnection point were developed and reviewed with PREPA:

1. Building a new 115-kV line from the Guanica TC to a new interconnection point at an open bay at the substation, eliminating the need for a sectionalizer

2. Rebuilding the entire Line 37100 from the Guanica TC to the San German TC and installing a sectionalizer to service the Montalva project

3. Rebuilding a portion of Line 37100 from a newly installed sectionalizer to the San German TC

4. Only installing a sectionalizer at the location indicated in Figure 6-1 with no transmission line rebuilds

After review of the four options with PREPA, Option 3 was selected to improve the reliability of grid in the area by rebuilding a portion of Line 37100. The other options were not selected either due to a higher cost or a concern about the reliability of the interconnection.

6.1.2. Load Flow Analysis

Line 37100, where Montalva is located, has a thermal capacity of 145.4 MVA between Mayaguez and Acacias, 137.4 MVA between the Acacias TC and the Guanica TC, and 239 MVA from the Guanica TC to the Costa Sur TC. Based on discussion with PREPA's Operations Division, Line 37100 is considered a weak line and frequently trips, particularly the section between the Acacias TC and the San German TC. The 115/38-kV step-down transformer at the Guanica TC is currently not in service, which limits 38-kV system support to the Acacias TC and the San German TC in the west and Costa Sur to the east.

As the line section between the Acacias and San German TCs trips frequently, it is modeled as a base N-1-0 outage for the simulated N-1-1 contingency cases. This outage is then combined with a contingency of any 115-kV or above transmission element (line or transformer). These N-1-1 contingency cases are particularly relevant to projects interconnecting along Line 37100.

Two additional solar projects also proposed to interconnect on Line 37100 with Montalva: Solaner (Section 17) and Windmar Santa Rosa (Section 21.2). S&L considered various combinations and sizes of the three projects. The combination of projects, along with the project sizes considered, resulted in various types of thermal violations. The analysis determined that the project would need to be reduced in size from the originally planned 100 MW to 80 MW. The combinations, sizes, and violations are discussed below. Note that the Windmar Santa Rosa project is no longer being considered as part of the non-operating projects.

6.1.2.1. Montalva Alone

If only Montalva is considered to interconnect onto Line 37100 without any additional generators, the results vary depending on the project size considered. For instance, a project size of 73 MW does not introduce any new thermal violations or worsen any existing thermal violations. This is true for N-1, N-2, and N-1-1 contingency cases.

A project size of 80 MW also does not introduce any new thermal violations with normal operation of the transmission system (no contingencies). The project also does not introduce any new thermal violations or worsen any existing thermal violations for N-1 and N-2 contingency cases; however, S&L identified overloads for the N-1-1 contingency case of an outage of Line 37100 between the Acacias TC and the San German TC followed by a loss of a section of the line east of the Montalva sectionalizer. This equates to a loss of both ends of Line 37100, requiring all existing generation on Line 37100 to flow down through the San German TC (6406) 115/38-kV transformer, overloading the 38-kV branches in the area. The overloads are shown in Table 6-2. The output of the project would need to be curtailed in this event.

Table 6-2 — Contingency Overloads Considering Montalva Alone at 80 MW

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
San German TC 38 kV to Loctite 38 kV/1	1200	38	N-1-1 – Line 37100 – Acacias 115 kV to Sgermantc 115 kV/1 followed by Guanica 115 kV to Montalva 115 kV/1	20	40.97	109.65	68.68
Sabana Grande 38 kV to Loctite 38 kV/1					44.94	104.82	59.88

6.1.2.2. Combination of Montalva and Solaner

S&L studied both Montalva and Solaner interconnecting on Line 37100. When Montalva at 80 MW and Solaner at 35 MW are interconnected with Line 37100, the projects do not introduce any new thermal violations with normal operation of the transmission system (no contingencies). The projects also do not introduce any new thermal violations, and no existing thermal overloads are made worse for N-1 or N-2 contingency cases; however, S&L identified overloads for the N-1-1 contingency case of an outage of Line 37100 between the Acacias TC and the San German TC (6406) followed by a loss of a section of the line east of Montalva sectionalizer. This equates to a loss of both ends of Line 37100, and all the generation on Line 37100 is required to flow through the San German TC (6406) 115/38-kV transformer, overloading 38-kV branches in the area. Additionally, if there is an outage of the remaining Costa Sur Unit (Unit 6 operating

at 300 MW) prior to the contingency of Line 37100 between the Guanica TC and Montalva, there may not be enough generation to support the 38-kV system in the area around Costa Sur to prevent an overload on Line 1200 near the San German TC (6406) to make up for the lost power source. The overloads are shown in Table 6-3. The output of the project would need to be curtailed in this event.

Table 6-3 — Overloads Considering Montalva at 80 MW and Solaner at 35 MW

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
S.German TC 38 kV to Loctite 38 kV/1	1200	38	N-1-1 – CS Unit 6 Outage followed by Costa Sur 115 kV to Windmar 115 kV/1	20	31.96	103.58	71.62
Yauco 2 38 kV to Sabana Grande 38 kV/1			N-1-1 – Line 37100 – Acacias 115 kV to Sgermantc 115 kV/1 followed by Costa Sur 115 kV to Windmar 115 kV/1		93.62	127.80	34.18
Sabana Grande 38 kV to Loctite 38 kV/1					58.77	156.81	98.04
S.German TC 38 kV to Loctite 38 kV/1					54.16	161.27	107.11
Yauco 2 38 kV to Sabana Grande 38 kV/1			N-1-1 – Line 37100 – Acacias 115 kV to Sgermantc 115 kV/1 followed by Guanica 115 kV to Montalva 115 kV/1		78.85	140.50	61.65
Sabana Grande 38 kV to Loctite 38 kV/1					44.94	169.36	124.42
S.German TC 38 kV to Loctite 38 kV/1					40.97	173.75	132.78
Yauco 2 38 kV to Sabana Grande 38 kV/1			N-1-1 – Line 37100 – Acacias 115 kV Sgermantc 115 kV/1 followed by		93.72	127.80	34.08
Sabana Grande 38 kV to Loctite 38 kV/1					58.75	156.80	98.05

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
S.German TC 38 kV to Loctite 38 kV/1			23 Guanica 115 kV to Windmar 115 kV/1		54.08	161.26	107.18

Overloads are also identified for the N-1-1 contingency case of an outage of Line 37100 between Acacias TC and San German TC followed by the loss of another section of the line. This equates to a loss of both ends of Line 37100, and all the generation on Line 37100 must then flow down through the San German 115/38-kV transformer, which overloads both the step-down transformer and 38-kV branches in the area. Additionally, if there is an outage of any generator at Costa Sur or EcoEléctrica prior to the contingency of Line 37100 between Guanica to Montalva, there may not be enough support to the 38-kV system in the area around Costa Sur to prevent an overload on Line 1200 near San German to make up for the lost power source. The output of the project may need to be curtailed in this event. Thermal loading increased from a range of 32% to 94% before, to a range of 104% to 174% following the N-1-1 contingency events with the inclusion of both projects

6.1.2.3. Combination of Montalva, Solaner, and Windmar Santa Rosa

Lastly, S&L considered interconnecting Montalva (80 MW), with Solaner (35 MW) and Windmar Santa Rosa (20 MW). Windmar Santa Rosa is no longer being considered in the non-operating projects. S&L identified overloads for the N-1-1 contingency case of an outage of Line 37100 between the Acacias TC and the San German TC (6406) followed by a loss of a section of the line between Windmar Santa Rosa and Costa Sur. This requires all the generation on Line 37100 to flow through the San German TC 115/38-kV transformer, which slightly overloads its nominal capacity, and overloading several 38-kV branches in the area.

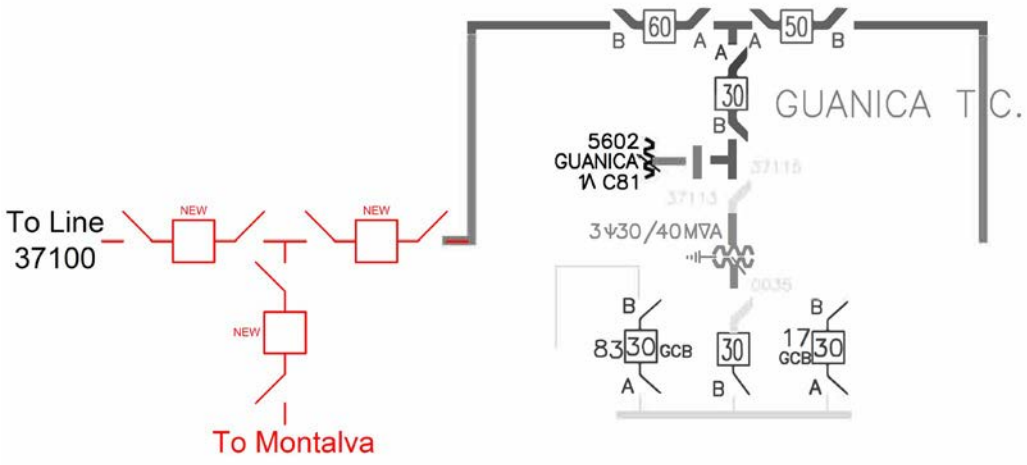
6.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the new sectionalizer that will be located on and bisect Line 37100 between the San German TC and the Guanica TC, as shown in Figure 6-2. The scope of the interconnection includes the following:

- A short (~150 ft) 115-kV strain span from Montalva to the sectionalizer
- Approximately 7.38 miles of Line 37100 will be rebuilt from the sectionalizer to the San German TC along the existing ROW
- Installation of a new 115-kV sectionalizing box structure; the structure will be designed to support up to four termination points including breakers, switches, surge arrestors, and metering
- Installation of a new prefabricated control house

- Installation of a new relay, protection, control, and communication equipment
- Installation of a new security fence, lighting, and applicable security equipment
- Installation of three new 115-kV circuit breakers with gang-operated disconnect switches and surge arrestors
- Installation of a new 115-kV metering structure
- Installation of new conduit, trenching, and ground grid, as applicable
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure
- At San German TC and Guanica TC, the existing protection and control schemes will need to be updated as necessary to match the new sectionalizer in Line 37100
- Implementation of a protection scheme that will curtail the total generation of Montalva, if necessary, in the event of an N-1-1 contingency on Line 37100; this scheme would be implemented to avoid the overloading of any equipment at San German TC and the 38-kV system

Figure 6-2 — Montalva Interconnection



6.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $15,740,000. This estimate is based on the transmission line's scope of work estimate of approximately $11,940,000 and the substation scope of work estimate of approximately $3,800,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

7. CIRO ONE

CIRO Group, the project sponsors, intends to build CIRO One, a 90-MW solar project in Salinas, Puerto Rico, as shown in Figure 7-1. The project intends to interconnect to the PREPA grid at the existing 115-kV Aguirre Steam Plant Transmission Center (Aguirre SP TC). The key components of the project are shown in Table 7-1.

Table 7-1 — CIRO One Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
CIRO One	Aguirre SP TC	90	115	3.51

Figure 7-1 — CIRO One Location and Route

7.1. ANALYSIS

7.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the CIRO One collector site and the Aguirre SP TC . A number of options were considered to interconnect the CIRO One project, including different voltages, locations, and transmission line routes. Ultimately, PREPA's Planning and Operations and the developer agreed the interconnection transmission line would be primarily routed to the Aguirre SP TC utilizing the existing PREPA ROW.

7.2. LOAD FLOW ANALYSIS

S&L evaluated the CIRO One project as a standalone project and in conjunction with nearby projects.

As a standalone project, the CIRO One project is proposed to connect directly into the 115-kV Aguirre SP TC. S&L's analysis determined that this project does not introduce any new thermal violations or worsen any existing thermal violations. The Aguirre SP TC is one of the strongest export buses on the entire PREPA system. There are four 230-kV export lines and three 115-kV export lines. This provides ample capacity and redundancy, even with the existing generation at Aguirre.

S&L also considered CIRO One with nearby existing and proposed new generation. The analysis considered the projects at their full capacity.

- Jobos GTs (21 MW – Existing Generation)
- Yabucoa GTs (21 MW – Existing Generation)
- CIRO One (New Generation, Section 7)
- Guayama Solar Energy (New Generation, Section 8)
- YFN Yabucoa Solar (New Generation, Section 19.3)
- Humacao Solar Project (Fonroche) (Existing Generation, Section 20.2)
- Pattern Santa Isabel (Uprate, Section 20.3)
- Horizon Energy (Uprate, Section 20.6)

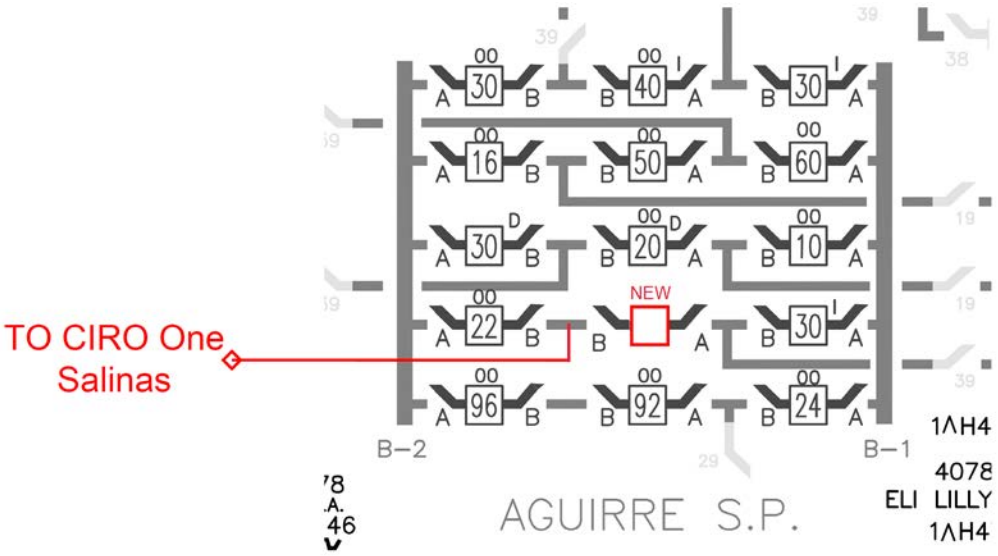
The analysis did not identify any thermal violations for all modeled contingency cases and combinations and no existing thermal violations were worsened. S&L assumed typical dispatch capacity of the existing Aguirre complex (592-MW dispatch) and AES coal generators (388-MW dispatch) in the analysis, as these generators primarily interconnect directly into the 230-kV system, which has significant capacity to export power.

7.3. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Aguirre SP TC, as shown in Figure 7-2. The scope of the interconnection includes the following factors:

- CIRO One's interconnect with the transmission line will consist of approximately 3.51 miles of 115-kV overhead line between the CIRO One collector station and the PREPA Aguirre SP TC 115-kV switchyard primarily through PREPA's existing ROW corridor
- As the line approaches Aguirre, it will turn east and pass under the existing 230-kV and 115-kV transmission lines; approximately 100'x100' of additional ROW will need to be acquired for the new transmission line
- Installation of a new 115-kV breaker in the open bay of a breaker and a half scheme located in the existing box structure will be required; the breaker will be located in the center bay (half breaker) and separate the two existing bus breakers
- Installation of a new 115-kV metering structure at the newly installed 115-kV transmission line termination point on the exterior of the existing box structure will be necessary
- Installation of primary and backup metering—using independent current and voltage transformers on a metering structure at the newly installed 115-kV transmission line termination point on the exterior of the existing box structure—is required
- There will be installation of a new relay, protection, control, and communication equipment required for the new termination in the existing control house; the existing protection and control schemes will need to be updated as necessary

Figure 7-2 — CIRO One Interconnection



7.4. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $8,100,000. This estimate is based on the transmission line's scope of work estimate of approximately $5,000,000 and the substation scope of work estimate of approximately $3,100,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

8. GUAYAMA SOLAR ENERGY

Guayama Solar Energy LLC, the project company, intends to build the Guayama Solar Energy, a 25-MW solar project in Guayama, Puerto Rico, as shown in Figure 8-1. The project intends to interconnect to the PREPA grid at the existing Jobos TC at 38 kV. The key components of the project are shown in Table 8-1.

Table 8-1 — Guayama Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Guayama Solar Energy	Jobos TC	25	115	1.19

Figure 8-1 — Guayama Location and Route

8.1. ANALYSIS

8.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at Guayama Solar Energy to verify that open bays exist on the 38-kV bus for a new interconnection termination point. The walkdown confirmed that there are adequate bays to support the interconnection. Additionally, S&L reviewed the proposed transmission line route through satellite imagery and a walkdown. S&L confirmed with PREPA that the transmission line route should utilize the existing Line 15200 ROW.

8.1.2. Load Flow Analysis

S&L evaluated this project as a standalone project and in conjunction with nearby projects. The analysis determined that Guayama does not introduce any new thermal violations or worsen any existing thermal

violations. The Jobos TC has sufficient capacity and redundancy with four 115-kV export lines. This provides sufficient capacity and redundancy.

S&L also considered Guayama Solar with nearby existing and proposed new generation. The analysis considered the projects at their full capacity.

- Jobos GTs (21 MW – Existing Generation)
- Yabucoa GTs (21 MW – Existing Generation)
- CIRO One (New Generation, Section 7)
- Guayama Solar Energy (New Generation, Section 8)
- YFN Yabucoa Solar (New Generation, Section 19.3)
- Humacao Solar Project (Fonroche) (Existing Generation, Section 20.2)
- Pattern Santa Isabel (Uprate, Section 20.3)
- Horizon Energy (Uprate, Section 20.6)

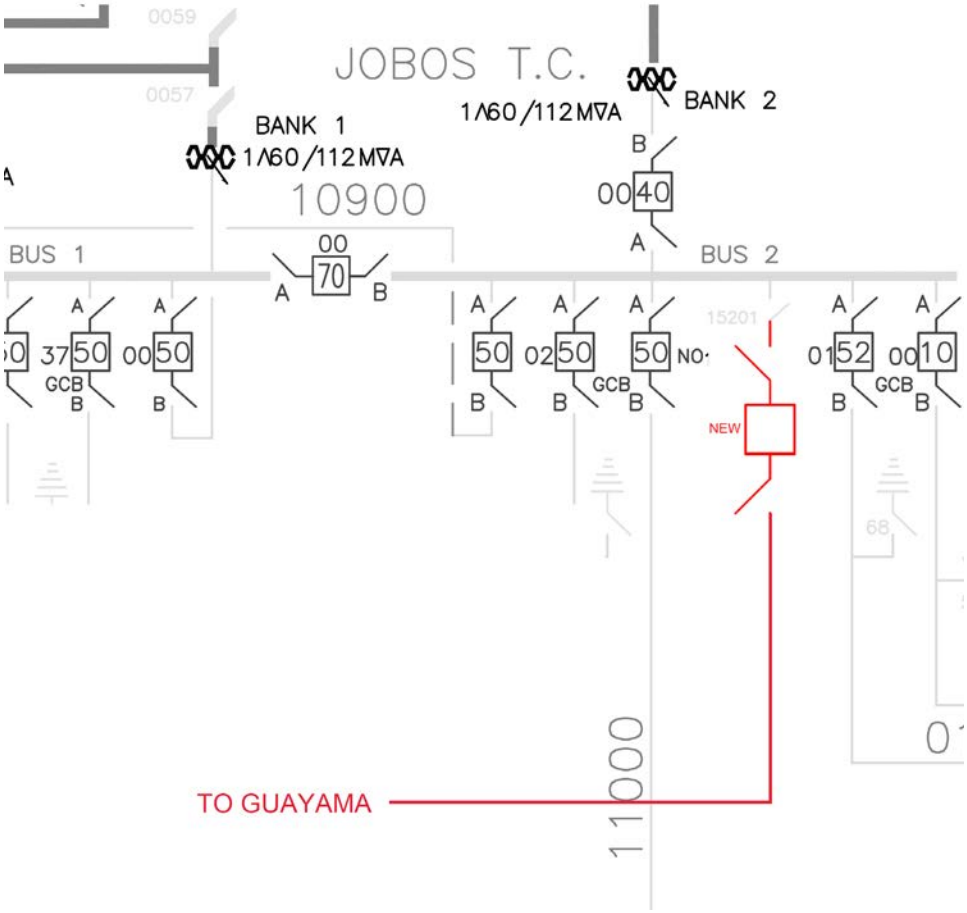
The analysis did not identify any thermal violations for all modeled contingency cases and combinations, and no existing thermal violations were worsened. S&L assumed the typical dispatch capacity of the existing Aguirre complex (592 MW) and AES coal generators (388 MW) in the analysis, as these generators primarily interconnect directly into the 230-kV system, which has significant capacity to export power.

8.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Jobos TC as shown in Figure 8-2. The scope of the interconnection includes the following considerations:

- The Guayama Solar Energy interconnect transmission line, which will consist of approximately 1.19 miles of 38-kV overhead line between the Guayama Solar Energy collector station and the PREPA Jobos TC
- Installation of a new 38-kV breaker in the open bay of the existing box structure
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure directly outside the newly installed 38-kV breaker
- Installation of a new relay, protection, control, and communication equipment required in the existing control house (the existing protection and control schemes may need to be updated)

Figure 8-2 — Guayama Solar Energy Interconnection



8.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $4,910,000. This estimate is based on the transmission line's scope of work estimate of approximately $2,030,000 and the substation scope of work estimate of approximately $2,880,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

9. SOLAR PROJECT SAN JUAN

Fonroche Energy, the project developer, intends to build Solar Project San Juan, a 20-MW solar project in San Lorenzo, Puerto Rico, as shown in Figure 9-1. The project intends to interconnect through an expansion of the San Lorenzo (3301) Substation. The key components of the project are shown in Table 9-1.

Table 9-1 — Solar Project San Juan Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Solar Project San Juan	Substation 3301 Expansion	20	38	0.5

Figure 9-1 — Solar Project San Juan Primary Location and Route

9.1. ANALYSIS

9.1.1. Transmission Line and Interconnection

Since 2013, the project originally intended to interconnect to the PREPA system on Line 9300, which is part of the 38-kV system near Juncos TC. The interconnection included a new sectionalizing substation that would bisect Line 9300 between the Gautier Benitez Sectionalizer and the San Lorenzo (3301) Substation at 38 kV. S&L reviewed the original planned interconnection point and transmission line and found it to be feasible. However, after discussions with the developer the land acquisition for the sectionalizer and the transmission line route would be very difficult. Therefore, PREPA Planning and Operations approved a secondary option to interconnect the project by expanding the existing San Lorenzo 3301 substation. This option provides a shorter transmission line route and lower overall cost.

S&L reviewed the transmission line route and 3301 San Lorenzo substation expansion through aerial imagery and pictures provided by PREPA. The analysis determined that a new box bay sectionalizer will be installed to the North of the 3301 San Lorenzo substation. The developer would be responsible for acquiring the land for this expansion. S&L prepared a conceptual interconnection approach, which was reviewed by PREPA Planning and Operations.

9.1.2. Load Flow Analysis

The interconnection point along Line 9300 provides the project with two line segments (each rated 19.7 MVA) to evacuate the power. S&L's load flow analysis identified no thermal violations as a result of this project, and the project could uprate from the originally planned 15 MW to 20 MW; however, there was one exception: Following an N-1 contingency of either of the two Line 9300 segments connecting to Solar Project San Juan, the remaining branch may reach its thermal limit and the project may need to be temporarily curtailed. In general, there are no nearby existing generators or proposed generation projects with which this project may compete for system capacity.

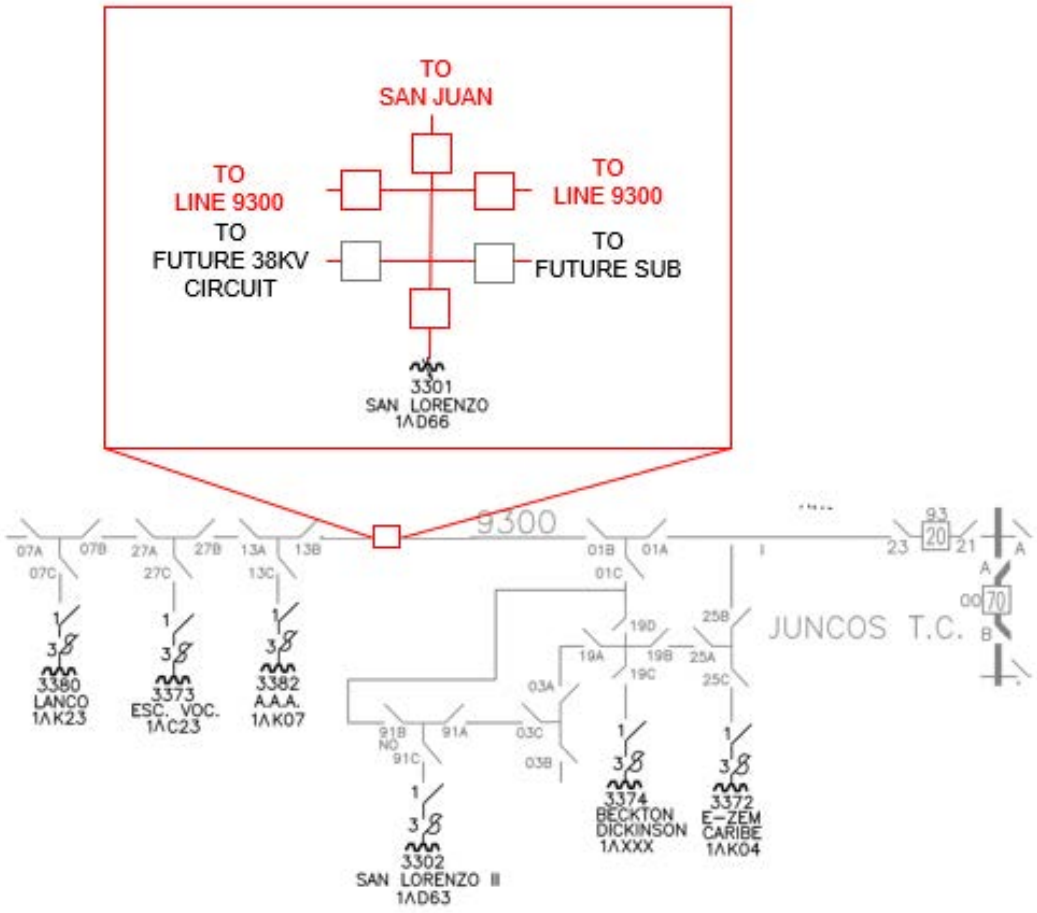
It should be noted that a segment of Line 9300 between the interconnection point and Gautier Benitez is out of service within the PSS/E model. It is not clear if this line is typically operated out of service or if this line is unavailable. If service to this line were to be restored, this would provide a third path for export power for San Juan and connect it to the Caguas TC, which would be beneficial to the PREPA grid.

9.2. SCOPE OF INTERCONNECTION

The scope of the new transmission line to interconnect the project to the existing San Lorenzo (3301) substation (as shown in Figure 9-2) includes the following:

- A new 0.50-mile, 38-kV transmission line routed through open fields, that will include a river crossing, to connect the solar collector site to terminate at the San Lorenzo (3301) Substation
- Installation of a new 38-kV sectionalizing box structure extension
- Installation of a new relay, protection, control, and communication equipment required in the existing control house, with a potentially required a control-house expansion
- Installation new 38-kV circuit breakers, including gang-operated disconnect switches and surge arrestors
- Installation of a new 38-kV metering structure for the project
- Installation of new conduit, trenching, and ground grid in the sectionalizing substation as applicable
- Installation of primary and backup metering using independent current and voltage transformers on the metering structure

Figure 9-2 — Solar Project San Juan Interconnection



9.3. COST ESTIMATE

S&L developed an AACE Class 5 cost estimate for the alternate transmission and interconnection route. The total cost of the interconnection and transmission line is $7,800,000. The cost estimate was broken down into the transmission line scope of work, estimated to cost approximately $900,000, and the substation scope, estimated to cost approximately $6,900,000.

At the time this report was issued, the interconnection for Solar Project San Juan had not been finalized between PREPA, and the developer; therefore, the scope and cost estimate are subject to change.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

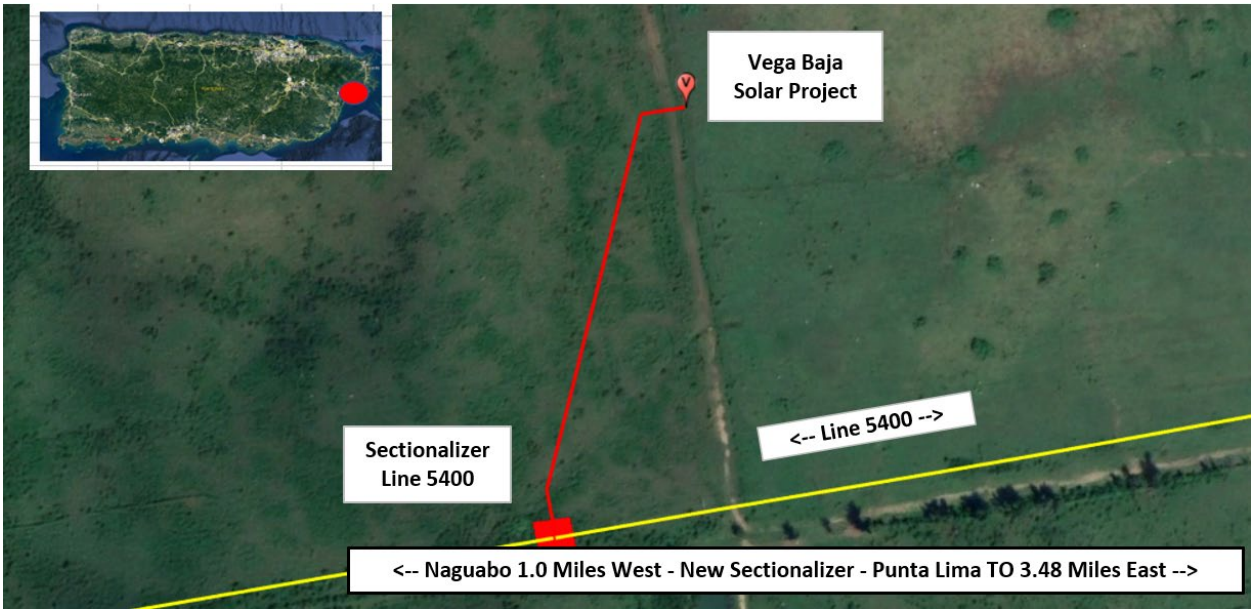
10.VEGA BAJA SOLAR PROJECT

Fonroche Energy, the project developer, intends to build the Vega Baja Solar Project, a 15-MW solar project in Naguabo, Puerto Rico, as shown in Figure 10-1. The project intends to interconnect to the PREPA grid with a new sectionalizer that will be located on Line 5400 between the Punta Lima TO and Naguabo (2701) at 38 kV. Line 5400 is an extension of the Daguao TC 38-kV system. The key components of the project are shown in Table 10-1.

Table 10-1 — Vega Baja Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Vega Baja	Line 5400 (Punta Lima TO)	15	38	0.18

Figure 10-1 — Vega Baja Location and Route



10.1.ANALYSIS

10.1.1.Transmission Line and Interconnection

S&L performed a site walkdown at the Vega Baja Solar Project interconnection point on Line 5400. It was determined that a new sectionalizer will be installed at the location in Figure 10-1 for the project. The transmission line routes were reviewed through satellite imagery and a walkdown and found to be feasible. S&L prepared a conceptual interconnection approach, which was reviewed by PREPA Planning and Operations.

10.1.2. Load Flow Analysis

Line 5400 between the project and the Daguao TC (continuing east from Punta Lima) has a rating of 20 MVA per the PSS/E model. The 20 MVA rating provides a 15-MW ceiling for Vega Baja.

S&L studied the project with the existing (not currently operating) Punta Lima Wind Farm (27-MW capacity) and the Daguao GTs (42-MW capacity) due to their proximity to Vega Baja and their ties into the 115-kW Daguao TC. Additionally, S&L dispatched the proposed GS Fajardo 25-MW solar project to full capacity at the 115-kV Fajardo TC as part of the study for Vega Baja. Note, however, that GS Fajardo is no longer considered in the non-operational projects.

S&L identified no new thermal violations as a result of this project. There are some moderate (less than 7%) increases to existing overloads for an N-2 contingency when this project and GS Fajardo are considered together. The overloads are documented in Table 10-2 and occur on various sections of Line 3100. The N-2 contingency case that increases existing overloads is the loss of Line 36800 from Canovanas to Fajardo and Line 36800 from Sabana Llana to Canovanas. This is an extreme contingency that was requested to be studied by the PREPA operations division. The contingency prevents power flow west along Line 36800 and instead forces power to loop through the 38-kV system at Fajardo towards Palmer. As the contingency is extreme, the existing overloads are large, and the increase is near the 3% higher-acceptance criteria, the addition of this project is not likely to degrade the security of the existing system. Additionally, as GS Fajardo is no longer expected to interconnect in the near term therefore, the results presented are more conservative.

Table 10-2 — Overload Results

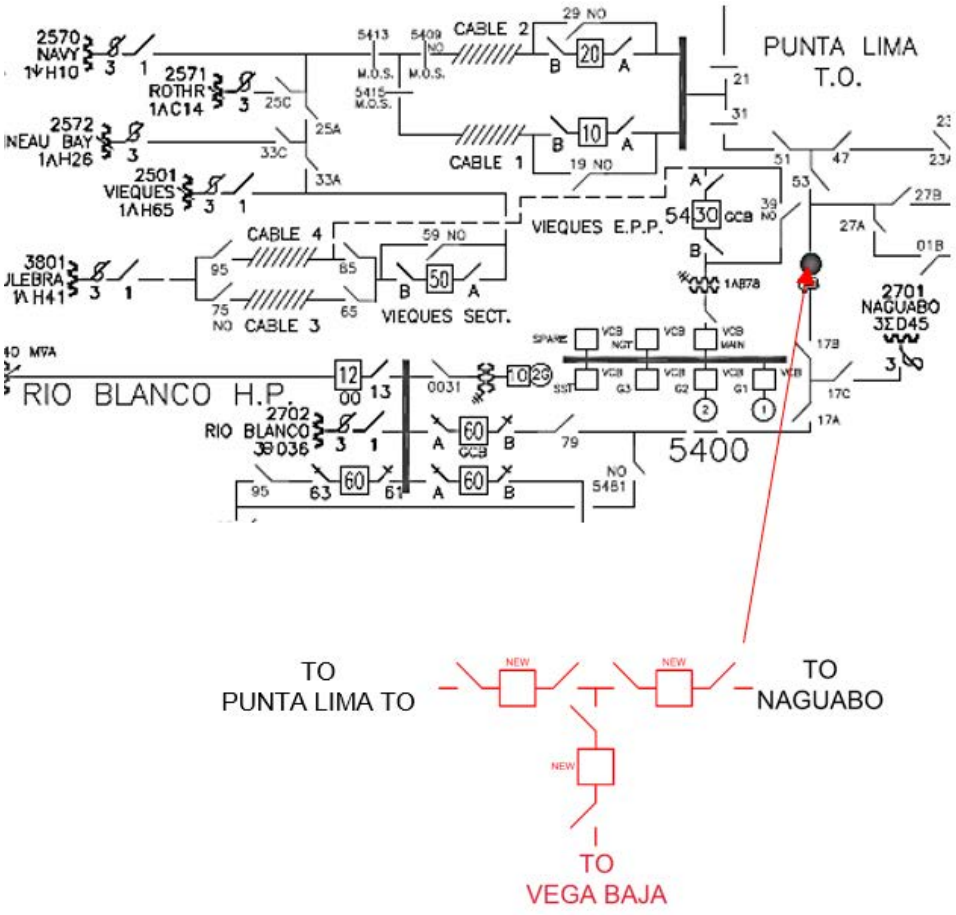
Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency Case	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Fajardo 38 kV – Hosp Fajardo 38 kV 1	3100	38	N-2 115 kV 36800 Canovanas – Palmer – Fajardo and 36800 Sabana Llana – Canovanas	48	144.88	148.36	3.48
Palmer 38 kV – Luquillo 38 kV 1					103.70	110.83	7.13
Luquillo 38 kV – Gibson 38 kV/1					116.74	122.70	5.96
Fajardo 2 38 kV – Hosp Fajardo 38 kV/1					142.61	146.31	3.7
Fajardo 2 38 kV – Pall Fajardo 38 kV/1					124.25	129.45	5.2
Gibson 38 kV to Walmart Faj 38 kV/1					116.96	122.85	5.89
Pall Fajardo 38 kV – Walmart Faj 38 kV/1					118.87	124.55	5.68

10.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the new sectionalizer that will be located on and bisect Line 5400 between the Punta Lima TO and Naguabo (2701), as shown in Figure 10-2. The scope of the interconnection includes the following:

- A new 0.18 mile 38-kV transmission line routed through open field and terminating at the new sectionalizing substation
- Installation of a new 38-kV sectionalizing box structure capable of supporting up to four termination points, including breakers, switches, surge arrestors, and metering as needed
- Installation of a new prefabricated control house
- Installation of a new relay, protection, control, and communication equipment required in the control house
- Installation of a new security fence, lighting, and applicable security equipment
- Installation of three new 38-kV circuit breakers with gang-operated disconnect switches and surge arrestors
- Installation of a new 38-kV metering structure
- Installation of new conduit, trenching, and ground grid as applicable
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure

Figure 10-2 — Vega Baja Interconnection



10.3. COST ESTIMATE

S&L developed an AACE Class 5 cost estimate for the transmission and interconnection. The total cost of the interconnection and transmission line is $4,510,000. The cost estimate was broken down into the transmission line scope of work, estimated to cost approximately $750,000, and the substation scope, estimated to cost approximately $3,760,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

11. REA VEGA BAJA

Renewable Energy Authority LLC, the project company, intends to build REA Vega Baja, a 25-MW solar project in Vega Baja, Puerto Rico, as shown in Figure 11-1. The project intends to interconnect to the PREPA grid at the existing Vega Baja TC at 38 kV. The key components of the project are shown in Table 11-1.

Table 11-1 — REA Vega Baja Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
REA Vega Baja	Vega Baja 38 TC	25	38	2.2

Figure 11-1 — REA Vega Baja Location and Route

11.1. ANALYSIS

11.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Vega Baja TC to verify that open bays exist on the 38-kV bus for a new interconnection termination point. The walkdown confirmed that a bay extension would be required for the new bus position.

The transmission line route routes were reviewed through satellite imagery and a walkdown. S&L determined that the path was feasible for the project. The developer provided the final underground transmission line route, and associated drawings for review. S&L reviewed these plans with PREPA and modified the conceptual plans and termination points according to REA's plans.

11.1.2. Load Flow Analysis

There are several other solar non-operational projects along or adjacent to Line 37400. In the power flow study, S&L considered the REA Vega Baja project in various combinations with the following projects, as well as on its own, to determine if the project would worsen or create any new thermal violations:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

11.1.2.1. REA Vega Baja Alone or Including Atenas and M Solar

When S&L studied REA Vega Baja alone and in combination with Atenas and M Solar, no new thermal violations were introduced, and any existing thermal violations were not worsened. The combinations studied included REA Vega Baja at 115 kV along Line 37400 in combination with Atenas and M Solar as well as REA Vega Baja at 38 kV at the Vega Baja TC with Atenas and M Solar interconnecting into the 115-kV Manati TC. There is sufficient capacity in the area, along with local load, to accommodate these projects. Also note that M Solar is no longer considered.

11.1.2.2.Additional Combinations

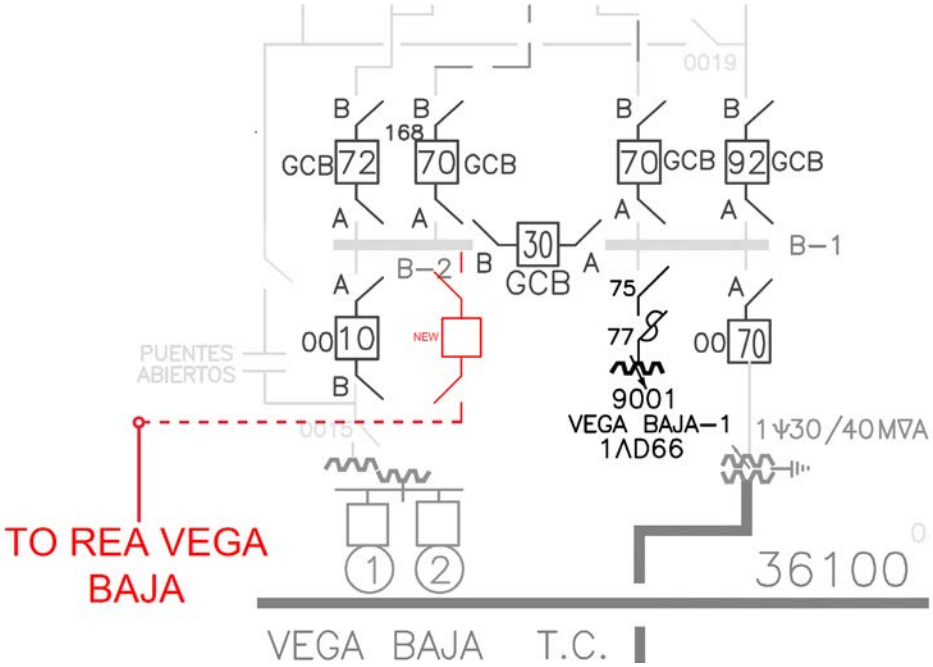
S&L performed five additional load flow studies, as discussed in Section 5.1.2.2 through 5.1.2.6. When REA Vega Baja is combined with the various other projects, new overloads are identified following several different N-1 contingency cases. The results are available in Table 5-2 through Table 5-5.

11.2.SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Vega Baja TC, as shown in Figure 11-2. The scope of the interconnection includes the following:

- The REA Vega Baja interconnect transmission line consisting of approximately 2.20 miles of 38-kV underground line between the REA Vega Baja collector station and the PREPA Vega Baja TC
- Installation of a new 38-kV box structure with underground termination risers for the new 38-kV cable from REA Vega Baja
- Installation of a new 38-kV metering structure
- Revision of the existing transmission 38-kV termination box structure to support an expansion of the existing bus to the new box structure to support a breaker and the underground termination to REA Vega Baja
- Installation of a new 38-kV gas circuit breaker for REA Vega Baja with manually gang-operated disconnect switches at the new 38-kV box structure
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure directly outside the newly installed 38-kV box structure
- Installation of a new relay, protection, control, and communication equipment required in the existing control house

Figure 11-2 — REA Vega Baja Interconnection



11.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $8,100,000. This estimate is based on the transmission line's scope of work estimate of approximately $5,200,000 and the substation scope of work estimate of approximately $2,900,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

12. REA HATILLO (NORTH)

The Stella Group, the project sponsor, intends to build REA Hatillo (North), a 25-MW solar project in Hatillo, Puerto Rico, as shown in Figure 12-1. The project intends to interconnect to the PREPA grid at the existing 38-kV Hatillo 7701/TO substation. The key components of the project are shown in Table 12-1.

Table 12-1 — REA Hatillo (North) Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
REA Hatillo (North)	Hatillo 7701/TO	25	38	0.03

Figure 12-1 — REA Hatillo Location and Route

12.1. ANALYSIS

12.1.1. Transmission Line and Interconnection

The REA Hatillo (North) development is adjacent to PREPA's 38-kV 7701/TO substation. The conceptual interconnection walkdown confirmed that a bay extension is required at the Hatillo 7701/TO substation for the new bus position and that existing equipment would need to be relocated. S&L prepared a conceptual interconnection approach, which was reviewed by PREPA Planning and Operations.

12.1.2.Load Flow Analysis

REA Hatillo (North) is proposed to interconnect into the 38-kV Hatillo TO, which is a substation along Line 37400. In addition to REA Hatillo (North), several other solar developers have also proposed to interconnect at various locations along Line 37400, either connecting directly to the line or a lower voltage. The projects are:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

Line 37400 has a capacity of 239 MVA; however, there are several load centers along this line, reducing the need to export the full capacity of these projects solely on Line 37400.

S&L performed a power flow analysis that included these projects in various combinations together as well as individually to evaluate any thermal limitations there may be. The results of the various analyses that included REA Hatillo (North) are discussed below.

12.1.2.1.REA Hatillo (North) Alone

This new generation project alone does not introduce any new thermal violations or worsen any existing thermal violations. This project is isolated on the 38-kV system near the Hatillo TC as the existing 115/38-kV step-down transformer is out of service. As there is sufficient load in the local 38-kV system, no overloads are identified.

12.1.2.2.Additional Combinations

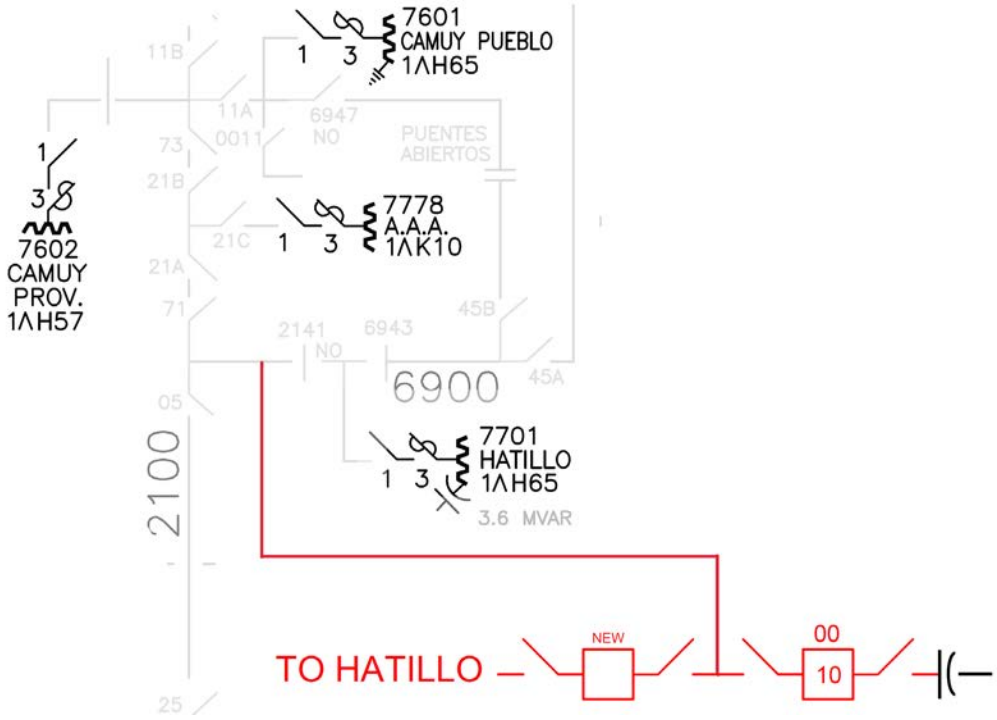
S&L also evaluated REA Hatillo (North) in Combination 6 as discussed in Section 5.1.2.6. This combination identifies new thermal overloads on Line 36400 between Dos Boca and Jayuya following contingencies in the south. The results are shown in Table 5-5.

12.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Hatillo 7701/TO, as shown in Figure 12-2. The scope of the interconnection includes the following:

- An interconnection transmission line between the REA Hatillo (North) and the Hatillo 7701/TO substation new box structure consisting of an approximate 150-ft slack span of 38-kV line
- Installation of a new 38-kV box structure expansion in the area of the existing capacitor bank, including lightning protection
- Relocation of the existing capacitor bank
- Installation of a new 38-kV metering structure
- Modification of the existing transmission 38-kV termination box structure to support an expansion of the bus to the new box structure to support a breaker and the REA Hatillo (North) interconnection termination
- Installation a new 38-kV gas circuit breaker for the REA Hatillo (North) with manually gang-operated disconnect switches at the new 38-kV box structure
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure north of the newly installed 38-kV box structure
- Updating the existing primary and backup bus protection and control to include the new breaker addition
- Installation of a new relay, protection, control, and communication equipment required for the new termination in the existing control house (it is likely that the existing control room will need to be expanded to accommodate the required equipment)

Figure 12-2 — REA Hatillo (North) Interconnection



12.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $4,000,000. This estimate is based on the transmission line's scope of work estimate of approximately $200,000 and the substation scope of work estimate of approximately $3,800,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

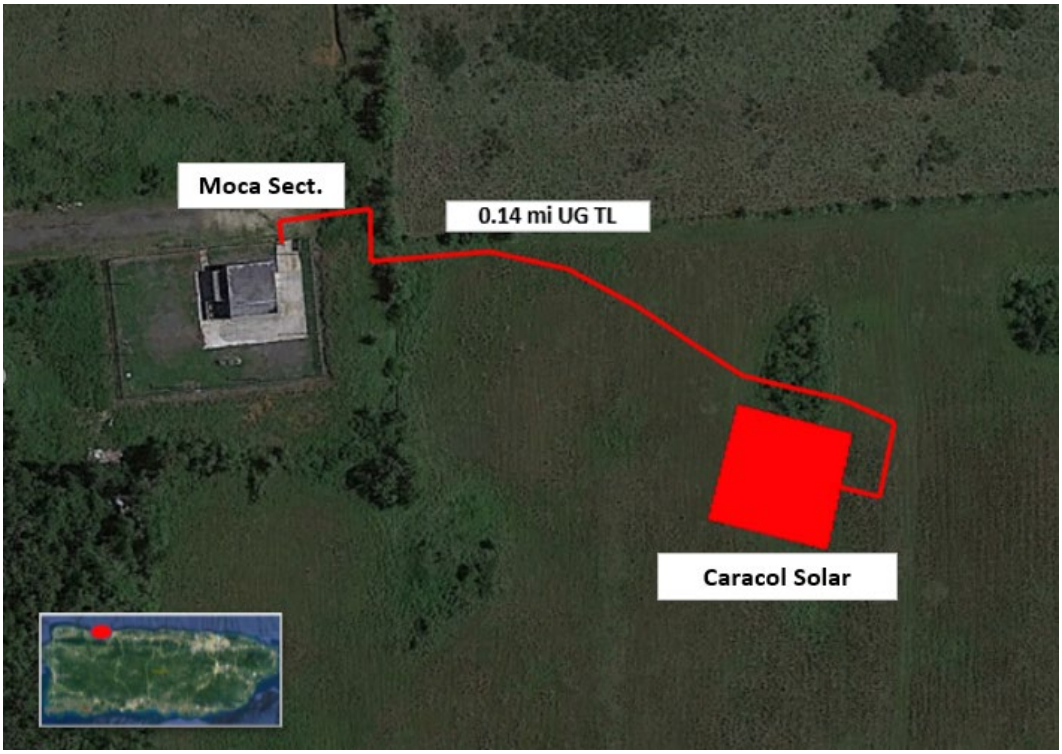
13. CARACOL

Caracol Solar LLC, the project company, intends to build Caracol, a 30-MW solar project in Moca, Puerto Rico, as shown in Figure 13-1. The project intends to interconnect to the PREPA grid at the existing 38-kV Moca Sectionalizer. The key components of the project are shown in Table 13-1.

Table 13-1 — Caracol Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Caracol	Moca Sectionalizer	30	38	0.14

Figure 13-1 — Caracol Location and Route



13.1. ANALYSIS

13.1.1. Transmission Line and Interconnection

S&L completed a desktop review of Caracol Solar LLC's proposed interconnection location based on the solar collector site location provided by the developer, the PREPA system single-line diagram, and satellite images to evaluate the suitability of the interconnection point and determine a transmission line route. The desktop review found there is an open bay position available and determined that the existing Moca

Sectionalizer can adequately support the new Caracol termination. Additionally, inspection indicated that a termination point and line route were feasible.

13.1.2. Load Flow Analysis

S&L's load flow analysis determined that the 30-MW Caracol project at the 38-kV Moca substation does not introduce any new thermal violations or worsen any existing thermal violations. S&L found the topology in the area of interconnection can support a 30-MW injection given the following factors:

1. The project is located near the main 38-kV Mora TC, making it less susceptible to overloading the 38-kV system

2. The 38-kV line between Moca substation and Mora TC also has a 65.8-MVA rating with no additional load or generation competing for capacity

3. Mora TC has two 115-kV/38-kV parallel step-down transformers which creates redundancy in protecting the 38-kV system from being isolated

4. There are both 115-kV and 230-kV lines exporting from the Mora TC with the only other generation at Mora (115 kV) being the operating Oriana Solar Facility at 50 MW; note that the load flow analysis for this project was considered with Oriana Solar (Section 20.7) dispatched at its proposed capacity of 60 MW, as Oriana interconnects directly into the 115-kV Mora TC

Due to the above factors, PREPA made an exception for the project to allow the 30-MW project on the 38-kV system.

S&L also evaluated the project with the proposed new Sierra Solar Project (Section 14) and the uprate of the Oriana Energy Solar Project (Section 20.7). S&L considered the full capacity of the projects in the model. The analysis did not identify any thermal violations for all modeled contingency cases and combinations, and no existing thermal violations were worsened. The Mora TC has two 230-kV and one 115-kV line to export power, providing ample capacity.

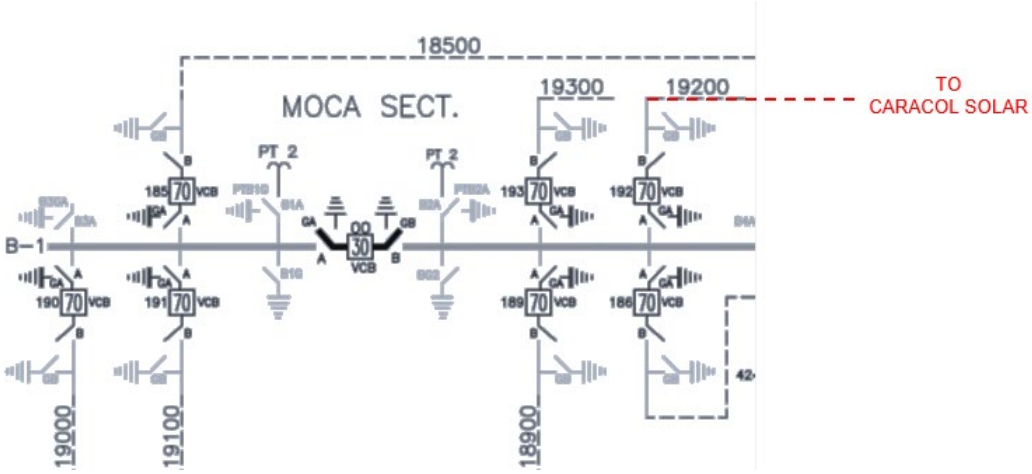
13.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Moca Sectionalizer, as shown in Figure 13-2. The scope of the interconnection includes the following factors:

- A new 0.14-mile underground 38-kV transmission line will be routed in a new duct bank to the Moca substation termination point

- The new 38-kV transmission line will be terminated using a riser structure and cable racks inside the existing 38-kV Moca Sect at an empty bay location
- S&L was unable to confirm if a breaker was already installed; therefore, the scope assumes a new 38-kV GIS breaker will be installed for Caracol Solar
- Metering equipment, including metering accuracy current and voltage transformers, will be installed at the termination point of the Caracol project at the Moca Sectionalizer, if feasible; coordination with the GIS manufacturer will be required to determine the design requirements and if an additional auxiliary structure will be required
- Installation of a new relay, protection, control, and communication equipment required for the new termination in the existing control house will be required; S&L expects the control house can accommodate the required equipment

Figure 13-2 — Caracol Interconnection



13.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $1,030,000. This estimate is based on the transmission line's scope of work estimate of approximately $450,000 and the substation scope of work estimate of approximately $580,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

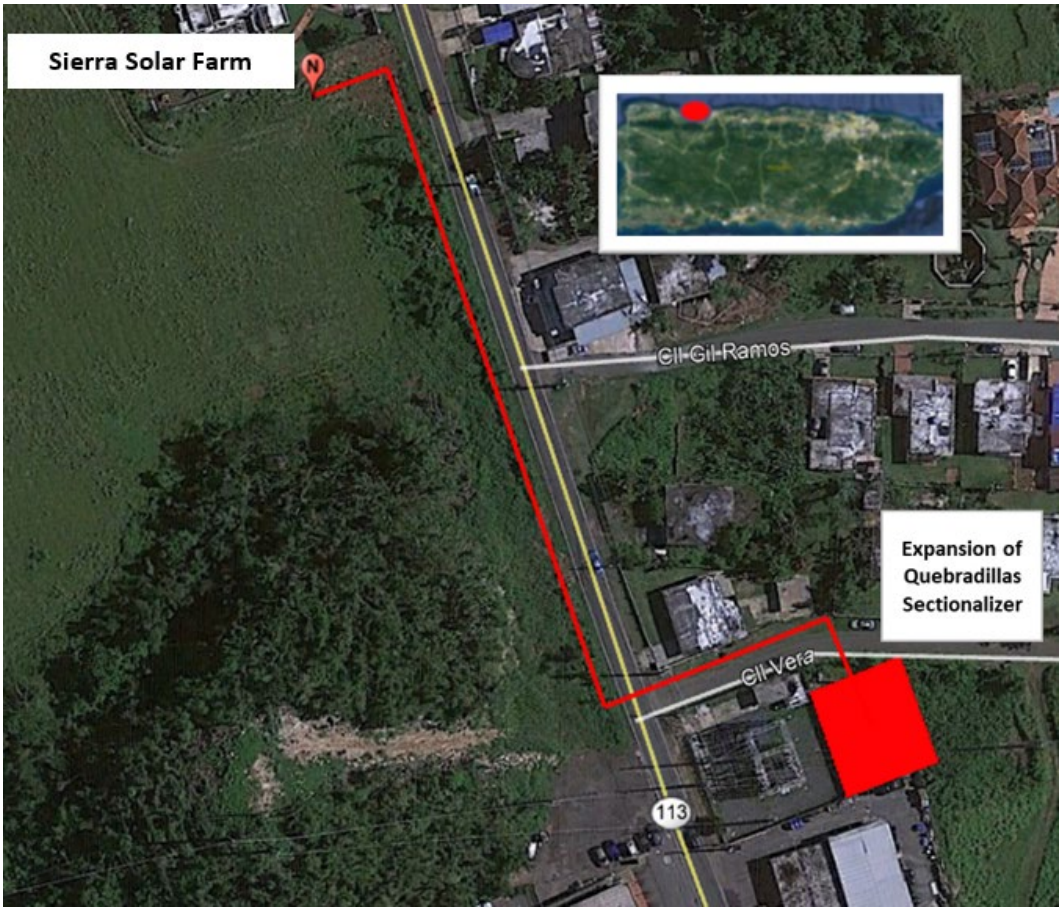
14. SIERRA

Sierra Solar Farm LLC, the project company, intends to build Sierra, a 25-MW solar project in Quebradillas, Puerto Rico, as shown in Figure 14-1. The project intends to interconnect to the PREPA grid at the existing Quebradillas Sectionalizer at 38 kV. The key components of the project are shown in Table 14-1.

Table 14-1 — Sierra Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Sierra	Quebradillas Sectionalizer	25	38	0.14

Figure 14-1 — Sierra Location and Route



14.1. ANALYSIS

14.1.1. Transmission Line and Interconnection

A desktop review was performed for Sierra project. Satellite imagery and PREPA's system one-lines were used to determine if there was an available termination point at the Quebradillas Sectionalizer. Through this inspection, S&L validated that the termination point and line route were feasible.

14.1.2. Load Flow Analysis

S&L evaluated the project alone and in combination with the proposed new Caracol Project (Section 13) and the uprate of the Oriana Energy Solar Project (Section 20.7) as discussed below.

14.1.2.1. Sierra Alone

The proposed project does not introduce any new thermal violations or worsen any existing thermal violations. The topology in the area of interconnection can support a 25-MW injection given the following factors:

1. The project is located near the main 38-kV Mora substation, making it less susceptible to overloading the 38-kV system
2. The 38-kV line between the Quebradillas Sectionalizer and Mora TC also has a 48-MVA rating
3. The Mora TC has two 115-kV/38-kV parallel step-down transformers, which creates redundancy in protecting the 38-kV system from being isolated
4. There are both 115-kV and 230-kV lines exporting power from the Mora TC

14.1.2.2. Sierra Including Nearby Projects

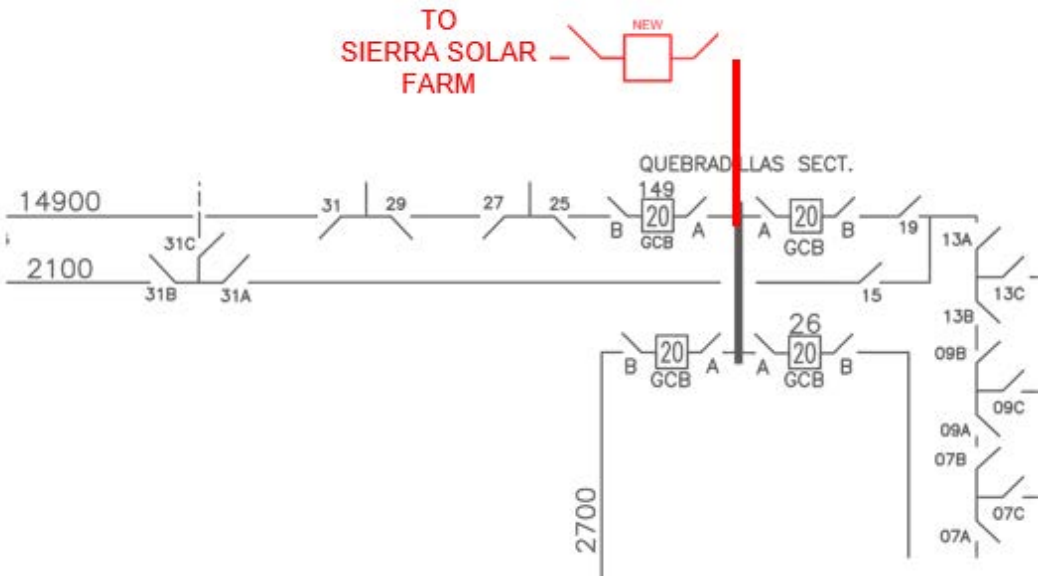
S&L considered the full capacity of the Sierra, Caracol, and Oriana projects in the model. The analysis did not identify any thermal violations for all modeled contingency cases and combinations, and no existing thermal violations were worsened. As discussed above, the Mora TC has two 230-kV lines and one 115-kV line to export power, providing ample capacity.

14.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Quebradillas Sectionalizer, as shown in Figure 14-2. The scope of the interconnection includes the following:

- The Sierra Solar Facility's interconnect transmission line, to consist of approximately 0.14 miles of 38-kV underground line between Sierra Solar and the PREPA Quebradillas Sectionalizer
- Installation of a new 38-kV box structure
- Installation of a new 38-kV metering structure
- Modification of the existing transmission 38-kV termination box structure to support an expansion of the bus to the new box structure to support a breaker and the Sierra Solar interconnection
- Installation a new 38-kV underground to overhead termination structure
- Installation a new 38-kV gas circuit breaker for Sierra Solar, with manually gang-operated disconnect switches at the new 38-kV box structure
- Installation of a new relay, protection, control, and communication equipment required in the existing control house

Figure 14-2 — Sierra Interconnection



14.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $3,405,000. This estimate is based on the transmission line's scope of work estimate of approximately $525,000 and the substation scope of work estimate of approximately $2,880,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

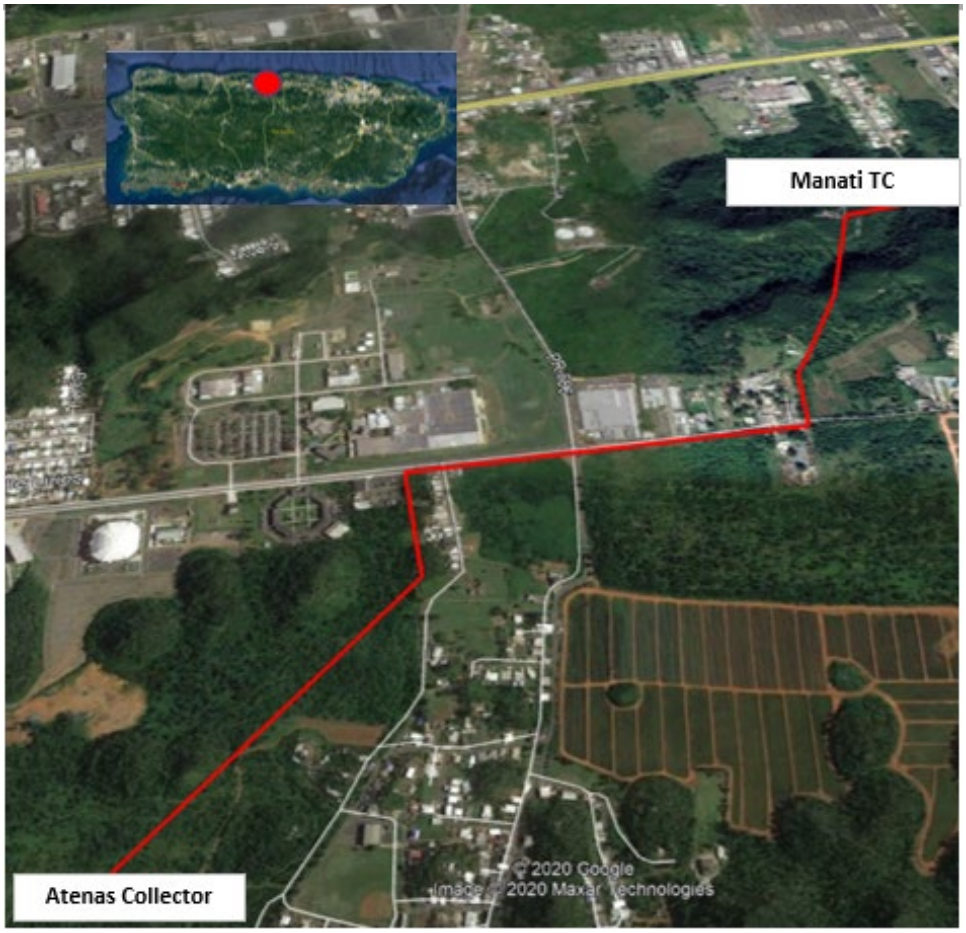
15. ATENAS

National Energy Partners is sponsoring Desarrollos del Norte Inc. d/b/a Atenas Solar Farm to build a 40-MW solar project in Manati, Puerto Rico, as shown in Figure 15-1. The project is planned to interconnect to PREPAs system at the existing Manati TC at 115 kV. The key components of the project are shown in Table 15-1.

Table 15-1 — Atenas Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
Atenas	Manati TC	40	115	1.55

Figure 15-1 — Atenas Location



15.1. ANALYSIS

15.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Manati TC to verify that open bays exist on the 115-kV bus for a new interconnection termination point. A preliminary review of the initial interconnection location, at the existing 38-kV Manati Sectionalizer, determined that it required a costly transmission line to be built around the town of Manati. A new interconnection location for the project was selected, the 115-kV Manati TC, which allowed the developer to increase the size of the project from the planned 20 MW to 40 MW.

The walkdown of the new interconnection point confirmed that a bay extension will be required for the new bus position and that existing equipment would need to be relocated. The transmission line route routes were reviewed through satellite imagery and a walkdown; it was determined that the path was feasible for the project. S&L prepared a conceptual interconnection approach, which was reviewed by PREPA Planning and Operations.

15.1.2. Load Flow Analysis

Atenas is proposed to connect into the 115-kV Manati TC, which is along Line 37400. Several other solar developers also have proposed to interconnect at various locations along Line 37400, either connecting directly to the line or a lower voltage. The projects are:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

Line 37400 has a capacity of 239 MVA; however, there are several load centers along this line, reducing the need to export the full capacity of these projects solely on Line 37400.

S&L performed a power flow analysis that included these projects in various combinations together as well as individually to evaluate any thermal limitations. The results of the various analyses that included Atenas are discussed below.

15.1.2.1.Atenas Alone or Including REA Vega Baja and M Solar

When S&L studied Atenas alone or in combination with REA Vega Baja and M Solar, no new thermal violations were introduced, and any existing thermal violations were not worsened. The combinations studied included Atenas at 115 kV along Line 37400 in combination with REA Vega Baja and M Solar as well as REA Vega Baja at 38 kV at the Vega Baja TC with Atenas and M Solar interconnecting into the 115-kV Manati TC. There is sufficient capacity in the area, along with local load, to accommodate these projects. Also note that M Solar is no longer being considered.

15.1.2.2.Additional Combinations

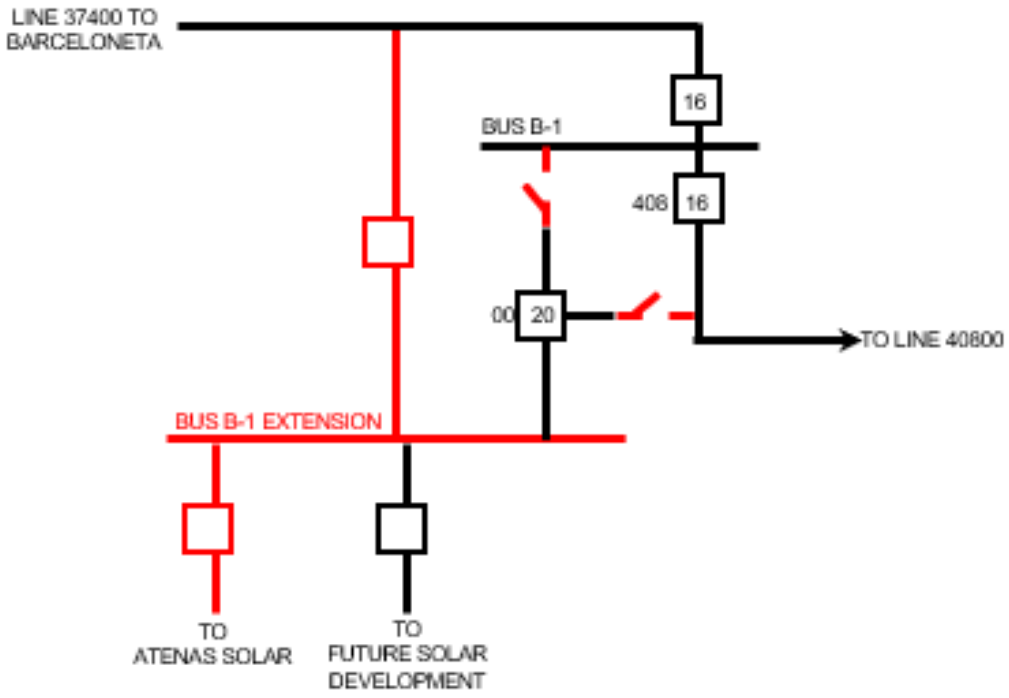
S&L performed five additional load flow studies, as discussed in Section 5.1.2.2 through 5.1.2.6. When Atenas is combined with the various other projects, new overloads are identified following several different N-1 contingency cases. The results are available in Table 5-2 through Table 5-5.

15.2.SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the Manati TC, as shown in Figure 15-2. The scope of the interconnection includes the following:

- A new 1.55-mile, 115-kV transmission line routed mostly through open fields and crossing a commercial area
- A two-bay extension of the Manati TC 115-kV bus along the south-west corner of the existing yard, designed to accommodate future terminations, where the new transmission line will terminate
- Installation of two new 115-kV breakers to interconnect with the existing Line 37400
- Installation of a new metering structure for the project
- Demolition and relocation of a warehouse in the southwest corner of the yard to make room for the 115-kV bus expansion and transmission termination
- Expansion of the existing control house to accommodate the new relay, protection, control, and communication equipment required for the bus extension

Figure 15-2 — Atenas Interconnection



15.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $9,300,000. This estimate is based on the transmission line scope of work estimate of approximately $3,000,000 and the transmission center scope of work estimate of approximately $6,300,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

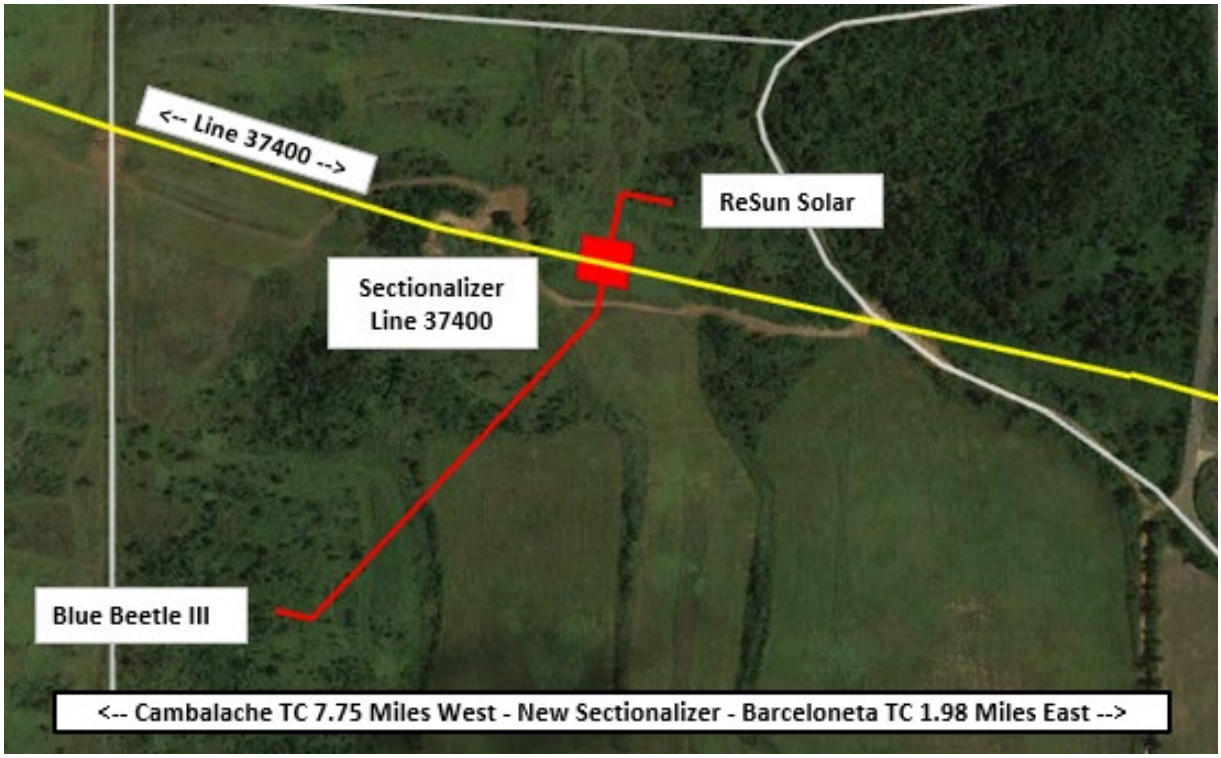
16. RESUN

ReSun Barceloneta, LLC, the project company, intends to build ReSun, a 35-MW solar project in Arecibo, Puerto Rico, as shown in Figure 16-1. The project intends to interconnect to the PREPA grid with a new sectionalizer that will be located on and bisect Line 37400 between the Cambalache TC and Barceloneta TC at 115 kV. Blue Beetle may also terminate at the new sectionalizer. The conceptual interconnection approach can incorporate both interconnection terminations or may be used as a standalone sectionalizer if needed. The key components of the project are shown in Table 16-1.

Table 16-1 — ReSun Interconnection Summary

Project Name	Interconnection Point	MW Capacity	Voltage (kV)	TL Length (miles)
ReSun	Line 37400 (Near Barceloneta)	35	115	0.05

Figure 16-1 — ReSun Location and Route



16.1. ANALYSIS

16.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Blue Beetle and the ReSun interconnection point on Line 37400. S&L recommended, and PREPA Planning and Operations agreed, to install a new four-way sectionalizer

at the location shown in Figure 16-1 to service both the Blue Beetle and the ReSun projects. Using satellite imagery in addition to the site walkdown, S&L reviewed the transmission line routes and found them feasible. S&L prepared an approach, which was reviewed by PREPA Planning and Operations.

16.1.2.Load Flow Analysis

The ReSun project is proposed to connect into a new four-way sectionalizer along line 37400 between Barceloneta TC and Cambalache TC. Several other solar developers also have proposed to interconnect at various locations along Line 37400, either connecting directly to the line or a lower voltage. The projects are the following:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)
- M Solar (Section 19.2)

Line 37400 has a capacity of 239 MVA; however, there are several load centers along this line, reducing the need to export the full capacity of these projects solely on Line 37400.

S&L performed a power flow analysis that included these projects in various combinations together as well as individually to evaluate any thermal limitations there may be. The results of the various analyses that included ReSun are discussed below.

S&L performed six load flow studies as discussed in Section 5.1.2.1 through Section 5.1.2.6. Since ReSun shares the sectionalizer interconnection with Blue Beetle (Section 5), the thermal injection results are the same. When ReSun is combined with the various other projects, new overloads are identified following several different N-1 contingency cases. The results are available in Table 5-2 through Table 5-5.

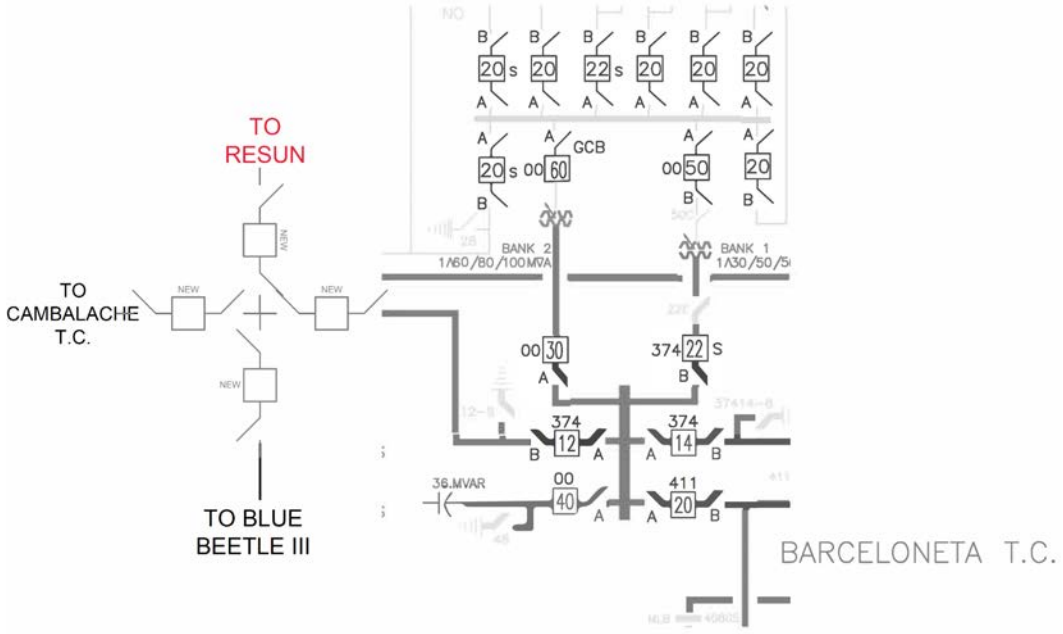
16.2.SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the new sectionalizer that will be located on and bisect Line 37400 between the Cambalache TC and Barceloneta TC, as shown in Figure 16-2. The scope of work

is inclusive of both the ReSun and Blue Beetle installations with exception to what is mentioned herein. The scope of the interconnection includes the following:

- A new 0.05-mile, 115-kV transmission line routed through open fields terminating at a new sectionalizing substation
- Installation of a new 115-kV sectionalizing box structure; the structure should be capable of supporting up to four termination points, including breakers, switches, surge arrestors, and metering
- Installation of a new prefabricated control house
- Installation of a new relay, protection, control, and communication equipment required in the control house
- Installation of a new security fence, lighting, and applicable security equipment according to PREPA standards
- Installation of three new 115-kV circuit breakers, including gang-operated disconnect switches and surge arrestors; a fourth 115-kV circuit breaker, switches, metering, protection, controls, communication, and all other necessary equipment will be installed for Blue Beetle if required
- Installation of a new 115-kV metering structure for ReSun
- Installation of new conduit, trenching, and ground grid, as applicable
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure

Figure 16-2 — ReSun Interconnection



16.3. COST ESTIMATE

Based on the above scope of work, S&L provided two AACE Class 5 cost estimates for the transmission and conceptual interconnection approach. One estimate requires that a second solar development, Blue Beetle, is executed in conjunction with the ReSun development. Based on this scenario, the total estimated cost to ReSun for the interconnection, including the transmission line, is $2,640,000. This estimate is based on the transmission line's scope of work estimate of approximately $460,000 and the substation scope of work estimate of approximately $2,180,000.

The second estimate independently installs ReSun without Blue Beetle. Based on this scenario, the total estimated cost for the interconnection, including the transmission line, is $4,420,000. This estimate is based on the transmission line's scope of work estimate of approximately $460,000, and the substation scope of work estimate of approximately $3,960,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

17. SOLANER

Solaner Puerto Rico One, LLC, the project company, intends to build Solaner, a 35-MW solar project in San German, Puerto Rico, as shown in Figure 17-1. The project intends to interconnect to the PREPA grid at the existing San Germain TC (115 kV). The key components of the project are shown in Table 17-1.

Table 17-1 — Solaner Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Solaner	San German TC (6406)	35	115	0.08

Figure 17-1 — Solaner Location and Route

17.1. ANALYSIS

17.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the San German TC to verify that open bays exist on the 115-kV bay for a new interconnection termination point. The walkdown confirmed that there are adequate bays to support the interconnection. The transmission line route routes were reviewed through satellite imagery and a

walkdown; it was determined that the path was feasible for the project. S&L prepared a conceptual interconnection approach, which was reviewed by PREPA Planning and Operations.

17.1.2. Load Flow Analysis

S&L considered several variations of this project along with two other solar projects also proposed to interconnect to Line 37100: Windmar Santa Rosa (Section 21) and Montalva (Section 6). Depending on the combination of projects as well as the project size considered, S&L identified various thermal violations.

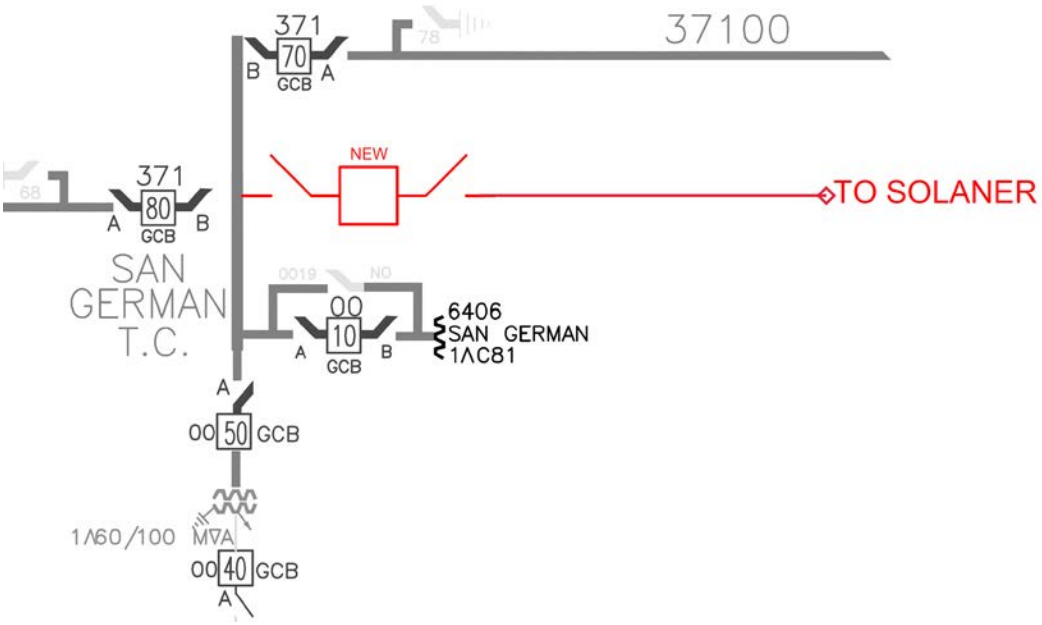
S&L studied Solaner as a standalone project with both 25-MW and 35-MW capacities. When studied alone (at either capacity) or with Windmar Santa Rosa at 20 MW, S&L did not identify any new thermal violations or worsened existing thermal violations; however, when S&L studied Solaner with Montalva, several thermal violations were identified. These violations are discussed with the Montalva project in Section 6.1.2. Note that Windmar Santa Rosa was not able to reach an agreement with PREPA for the PPOA.

17.2. SCOPE OF INTERCONNECTION

The project will connect to the PREPA system to the San German TC (6406), as shown in Figure 17-2. The scope of the interconnection work includes the following:

- Construction of approximately 0.08 miles of 115-kV underground line between the Solaner Collector station and the San German TC
- Installation of a new 115-kV gas circuit breaker with manually gang-operated disconnect switches at the new 115-kV box structure
- Installation of primary and backup metering using independent current and voltage transformers on a metering structure directly outside the newly installed 115-kV box structure
- Installation of a new relay, protection, control, and communication equipment required for the new termination in the existing control house

Figure 17-2 — Solaner Interconnect



17.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection approach. The total estimated cost for the interconnection, including the transmission line, is $4,100,000. This estimate is based on the transmission line's scope of work estimate of approximately $800,000 and the substation scope of work estimate of approximately $3,300,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

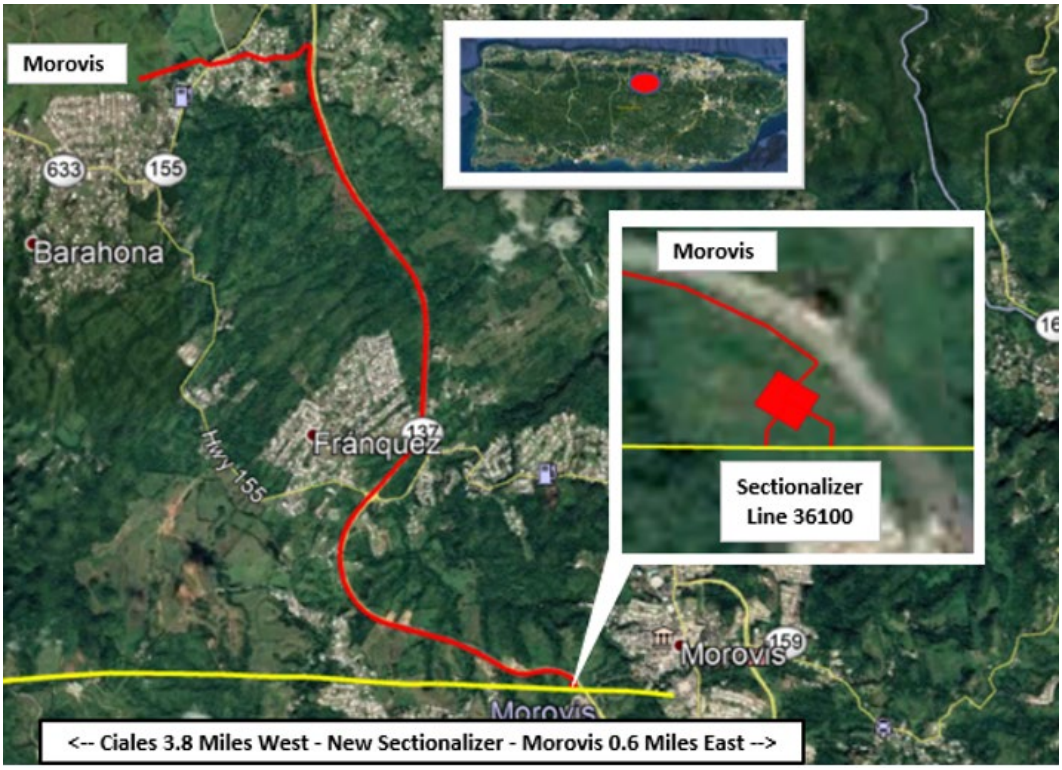
18. MOROVIS

Morovis Solar LLC, the project company, intends to build the Morovis, a 33.5-MW solar project in Morovis, Puerto Rico, as shown in Figure 18-1. The project intends to interconnect to the PREPA grid with a new sectionalizer that will be located on and bisect Line 36100 between the Ciales 8701 Substation and Morovis (8801) Substation at 115 kV. The key components of the project are shown in Table 18-1.

Table 18-1 — Morovis Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Morovis	Line 36100 (New Sectionalizer)	33.5	115	4.34

Figure 18-1 — Morovis Location and Route



18.1. ANALYSIS

18.1.1. Transmission Line and Interconnection

S&L performed a site walkdown at the Morovis interconnection point on Line 36100. S&L determined that a new sectionalizer will be installed at the location in Figure 18-1. The transmission line routes were reviewed through satellite imagery and a walkdown; they were found to be feasible. S&L prepared an approach which was reviewed by PREPA Planning and Operations.

18.1.2.Load Flow Analysis

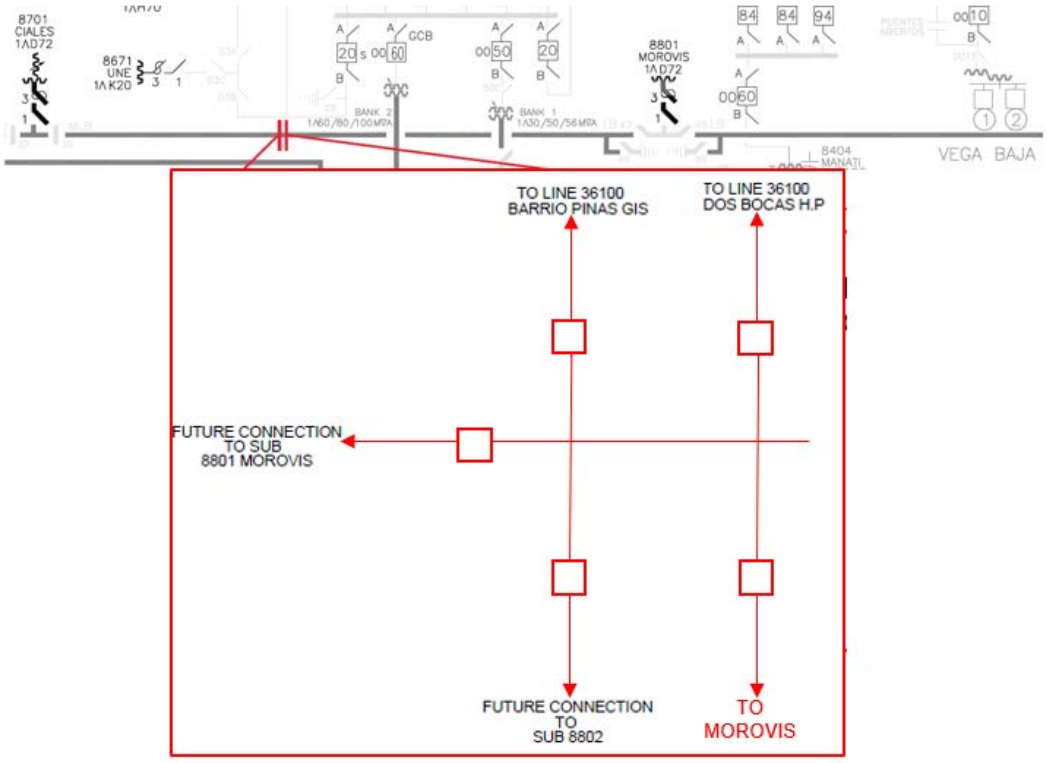
S&L's load flow analysis originally considered the project's capacity of up to 58.5 MW. The PSS/E study identified no thermal violations as a result of the full 58.5-MW addition of this project. However, the nominal capacity of the project was later modified to 33.5 MW. Morovis is the only project considered on Line 36100 west of San Juan, and there is no nearby existing generation with which this project must share line capacity. Additionally, Line 36100 has a capacity of 91.6 MVA, which allows for ample margin above the 33.5-MW capacity of the project.

18.2.SCOPE OF INTERCONNECTION

The project will connect to the PREPA system at the new sectionalizer that will be located on and bisect Line 36100 between the Ciales 8701 Substation and the Morovis (8801) Substation, as shown in Figure 18-2. The scope of the interconnection includes the following:

- The Morovis interconnect transmission line, which will consist of approximately 4.34 miles of 115-kV overhead line between Morovis and a new sectionalizer station on existing Line 36100, 3.8 miles east of the Ciales (8701) Substation and 0.6 miles west of the Morovis (8801) Substation
- Installation of a new 115-kV sectionalizing 2-bay box structure; the structure will be capable of supporting up to five termination points including breakers, switches, surge arrestors, and metering
- Installation of a new prefabricated control house
- Installation of three new 115-kV gas circuit breakers for Morovis with manually gang-operated disconnect switches at the new 115-kV sectionalizing structure
- Installation of primary and backup metering equipment using independent current and voltage transformers on a metering structure for Morovis

Figure 18-2 — Morovis Interconnection



18.3. COST ESTIMATE

Based on the above scope of work, S&L provided an AACE Class 5 cost estimate for the transmission and conceptual interconnection concepts. The total estimated cost for the interconnection, including the transmission line, is $12,090,000. This estimate is based on the transmission line's scope of work estimate of approximately $5,740,000 and the substation scope of work estimate of approximately $6,350,000.

Note: The cost estimates are inclusive of the interconnection work reimbursable to the developer per the terms of the PPOA. It excludes costs that the developer is responsible for as part of the interconnection, such as those for land acquisition and telecommunication to the facility.

19. OTHER NON-OPERATING PROJECTS

S&L studied three additional non-operating projects. The analysis included a site walkdown to determine the validity and scope of an interconnection, a load flow analysis in PSS/E, and development of a cost estimate for the interconnection. Although the project developers were not able to reach an agreement with PREPA, the findings of the load flow studies are provided for reference.

19.1. WINDMAR (SABANA SECA)

Windmar (Sabana Seca) was proposed to interconnect to the Hato Tejas TC with a 70-MW solar project at 115 kV. The scope of the interconnection included an approximately one-mile transmission line. The Hato Tejas TC is connected to Line 37400.

Table 19-1 — Windmar (Sabana Seca) Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Windmar Sabana Seca	Hato Tejas TC	70	115	1.00

Several other solar developers have also proposed to interconnect at various locations along Line 37400, either connecting directly to the line or a lower voltage. The projects are as follows:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- M Solar (Section 19.2)

19.1.1. Windmar Sabana Seca Alone

The Windmar Sabana Seca project may worsen existing thermal violations for several line segments in an N-1 contingency case. These violations occur on 38-kV Line 10700 between Dorado TC and Hato Tejas TC following the loss of the Dorado TC 115/38-kV step-down transformer. The additional generation at Hato Tejas TC flows through this line to supply loads on the 38-kV system near Dorado and are included in Table 19-2.

Table 19-2 — Overload Results

Branch (Line Name/Circuit #)	Line Number	Voltage (kV)	Contingency	Rating (MVA)	Pre-Project Post-Contingency % Loading	Post-Cont. % Loading	Difference % Loading
Pepsi Cola 38 kV to Astro Metal 38 kV/1	10700	38	N-1 Dorado 115/38-kV Transformer	20	159.57	182.15	22.58
Pepsi Cola 38 kV to Super Acu TB 38 kV/1				20.4	146.32	168.54	22.22
704 Drogucentral 38.0 Super Acu TB 38 kV/1				20.4	145.00	167.22	22.22
Astro Metal 38 kV to Rooms TO GO 38 kV/1				20	159.54	182.47	22.93
Sprint 38 kV to Rooms TO GO 38 kV/1				20	160.38	183.83	23.45

19.1.2. Additional Combinations

When Windmar Sabana Seca is combined with additional new generation projects, these overloads can be resolved. In particular, if SolarBlue is also considered, this provides a source of generation on the Dorado 38-kV system which alleviates the load on Line 107 from Hato Tejas TC to Dorado TC. This project is evaluated with other projects in the area in the Blue Beetle Combination 5 (Section 5.1.2.5) and Combination 6 (Section 5.1.2.6).

19.2. M SOLAR

The 70-MW M Solar project was proposed to connect into Manati TC at 115 kV, which is along Line 37400. S&L utilized M Solar's original transmission line route of approximately 3.53 miles to interconnect the project.

Table 19-3 — M Solar Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
M Solar	Manati TC	70	115	3.53

As discussed, there are several other solar projects along Line 37400. S&L evaluated this project's thermal impacts on the PREPA grid alone and with several combinations of the following projects:

- Xzerta-Tec (Section 3)
- SolarBlue (Section 4)
- Blue Beetle (Section 5)
- REA Vega Baja (Section 11)
- REA Hatillo (North) (Section 12)
- Atenas (Section 15)
- ReSun (Section 16)
- Windmar Sabana Seca (Section 19.1)

In addition to combinations previously discussed, S&L studied M Solar with a combined interconnection of REA Vega Baja and Atenas directly into 115-kV Line 37400. The analysis was performed with various combinations of the above projects to provide an understanding of what thermal violations are present for each combination.

19.2.1.1.M Solar Alone or Including REA Vega Baja and Atenas and SolarBlue

When M Solar is studied alone or with REA Vega Baja and Atenas, no new thermal violations are introduced and no existing violations are worsened. This includes considering the three projects connecting at 115 kV along Line 37400, the REA Vega interconnection at the Vega Baja TC at 38 kV, and Atenas and M Solar interconnecting at the Manati TC as 115 kV. S&L's analysis indicated there is sufficient capacity in the area along with local load to service to accommodate these projects.

19.2.1.2.Additional Combinations

Additional combinations of considered for M Solar on or near Line 37400 are discussed within Sections 5.1.2.2 through 5.1.2.6.

19.3.YFN YABUCOA SOLAR

YFN Yabucoa was proposed to interconnect into the Juan Martin Sectionalizer along Line 36300 at 115 kV. The 25-MW project required a 0.05-mile long transmission line.

Table 19-4 — YFN Yabucoa Solar Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
YFN Yabucoa	Juan Martin Sectionalizer	25	115	0.05

19.3.1.1.YFN Yabucoa Alone

S&L studied this project on the existing PREPA system. This project did not introduce any new thermal violations or worsen any existing thermal violations. Line 36300 has a capacity 231 MVA with sufficient operating margin to support additional generation along this line.

19.3.1.2.YFN Yabucoa Including Nearby Projects

S&L also considered YFN Yabucoa with nearby existing and proposed new generation. The analysis considered the projects at their full capacity.

- Jobos GTs (21 MW – Existing Generation)
- Yabucoa GTs (21 MW – Existing Generation)
- CIRO One (New Generation, Section 7)
- Guayama Solar Energy (New Generation, Section 8)
- Humacao Solar Project (Fonroche) (Existing Generation, Section 20.2)
- Pattern Santa Isabel (Uprate, Section 20.3)
- Horizon Energy(Uprate, Section 20.6)

The analysis did not identify any thermal violations for all modeled contingency cases and combinations, and no existing thermal violations were worsened. S&L assumed typical dispatch capacity of the existing Aguirre complex (592-MW dispatch) and AES coal generators (388-MW dispatch) in the analysis, as these generators primarily interconnect directly into the 230-kV system which has significant capacity to export power.

20. OPERATING PROJECTS

During renegotiation of the PPOAs, several operating projects requested to increase their project capacity. S&L evaluated if the uprate introduced new thermal violations or worsened any existing violations using the PSS/E model in a power flow analysis. The results of these studies are discussed below.

20.1. AES ILUMINA

AES Illumina is an existing 20-MW solar project located on Line 10900 near the Jobos TC. The project interconnects to the PREPA system at 38 kV.

Table 20-1 — AES Ilumina Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
AES Ilumina	Line 10900 (Near Jobos TC)	20	25	38

AES Ilumina proposed to uprate their solar generation project from a capacity of 20 MW to 25 MW. S&L evaluated the proposed update and determined that the increased generation does not introduce any new thermal violations or worsen any existing thermal violations. S&L also evaluated the uprate with the non-operating projects CIRO One (Section 7) and Guayama Solar Energy (Section 8) and with existing GTs at Jobos without thermal violations or increases to existing thermal violations. The Jobos TC has sufficient capacity and redundancy with four 115-kV export lines.

20.2. HUMACAO SOLAR PROJECT

Humacao Solar Project (also known as Fonroche) is a 40-MW project that connects to the PREPA system at 115 kV at Humacao TC.

Table 20-2 — Humacao Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Humacao	Humacao 115 kV TC	40	40	115

The developer did not propose an uprate in capacity for the project; therefore, S&L did not perform a power flow analysis.

20.3. PATTERN SANTA ISABEL

Pattern Santa Isabel is a 75 MW wind project located in Santa Isabel, Puerto Rico. The project connects to the PREPA system at Pattern TC at 115 kV. The developer proposed to increase the capacity of the project to 95 MW.

Table 20-3 — Pattern Santa Isabel Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Pattern – Santa Isabel	Pattern 115 kV TC	75	95	115

20.3.1.Pattern Uprate Alone

The analysis indicated that this uprate does not introduce any new thermal violations or worsen any existing thermal violations. The interconnection point is on Line 40300, which has limited generation on the line and large generators at both ends of the line. As a result, the flow along the line is maintained rather low, allowing for sufficient capacity for additional generation on this line. Line 40300 has a thermal capacity of 231 MVA.

20.3.2.Pattern Uprate Including Nearby Projects

S&L also evaluated the project considering nearby existing and proposed new generation projects dispatched at full capacity in the PSS/E model and various contingency cases. The projects considered in the combinations were as follows:

- Jobos GTs (21 MW - Existing Generation)
- Yabucoa GTs (21 MW - Existing Generation)
- CIRO One (New Generation, Section 7)
- Guayama Solar Energy (New Generation, Section 8)
- YFN Yabucoa Solar (New Generation, Section19.3)
- Humacao Solar Project (Fonroche) (Existing Generation, Section 20.2)
- Pattern Santa Isabel (Uprate, Section 20.3)
- Horizon Energy(Uprate, Section 20.6)

The analysis did not identify any thermal violations for all modeled contingency cases and combinations, and no existing thermal violations were worsened. S&L assumed typical dispatch capacity of the existing Aguirre complex (592-MW dispatch) and AES coal generators (388-MW dispatch) in the analysis, as these generators primarily interconnect directly into the 230-kV system, which has significant capacity to export power.

20.4.SAN FERMIN SOLAR FARM

The developers of San Fermin Solar Farm (San Fermin) proposed to increase the capacity of the project from 20 MW to 24.5 MW. The project connects to the San Fermin Substation at 38 kV; the project is electrically near the Canovanas TC.

Table 20-4 — San Fermin Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
San Fermin	San Fermin 38 kV (Near Canovanas 38 kV TC)	20	24.5	38

The analysis found that this uprate does not introduce any new thermal violations or worsen any existing thermal violations. The 38-kV system near Canovanas has sufficient margin to support the uprate. Additionally, 115-kV Line 36800 and Line 41200 have enough capacity to support more generation at Canovanas. As this area in the east lacks generation in general relative to its load this uprate alleviates some of the transmission load to import power to the area.

There is no existing generation or new generation projects with which this uprate may compete for system capacity.

20.5. PUNTA LIMA

The Punta Lima wind farm connects to the PREPA system at the Daguao TC at 115 kV. The project developers did not propose an uprate to the project that was analyzed with this study. Note that this operating project was severely damaged by Hurricane María and has not operated since. The project owner plans to rebuild the project and is in discussion with PREPA on the matter.

Table 20-5 — Punta Lima Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Punta Lima	Daguao 115-kV TC	26	26	115

20.6. HORIZON ENERGY

Horizon Energy is a solar project that interconnects to the PREPA system on the 38-kV level near the Jobos TC. The project developer proposed an uprate of 5 MW from 10 MW to 20 MW.

Table 20-6 — Horizon Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Horizon	Carcel Juv 38 kV (Near Jobos TC)	10	20	38

20.6.1. Horizon Energy Uprate Alone

The analysis indicated that this uprate does not introduce any new thermal violations or worsen any existing thermal violations. The lines on the 38-kV system near Horizon Energy are rated for 48 MVA and have enough margin to support the uprate. Additionally, the Jobos TC has sufficient capacity and redundancy

with four 115-kV export lines. This provides sufficient capacity and redundancy even with the existing gas turbine generation at Jobos.

20.6.2.Horizon Energy Uprate Including Nearby Projects

S&L also evaluated the project considering nearby existing and proposed new generation projects dispatched at full capacity in the PSS/E model and various contingency cases. The projects considered in the combinations were as follows:

- Jobos GTs (21 MW - Existing Generation)
- Yabucoa GTs (21 MW - Existing Generation)
- CIRO One (New Generation, Section 7)
- Guayama Solar Energy (New Generation, Section 8)
- YFN Yabucoa Solar (New Generation, Section19.3)
- Humacao Solar Project (Fonroche) (Existing Generation, Section 20.2)
- Pattern Santa Isabel (Uprate, Section 20.3)
- Horizon Energy (Uprate, Section 20.6)

The analysis did not identify any thermal violations for all modeled contingency cases and combinations and no existing thermal violations were made worse. S&L assumed typical dispatch capacity of the existing Aguirre complex (592-MW dispatch) and AES coal generators (388-MW dispatch) in the analysis as these generators primarily interconnect directly into the 230-kV system which has significant capacity to export power.

20.7.ORIANA ENERGY

The Oriana Energy solar project connects to the Mora Substation at 115 kV. The current capacity of the project is 50 MW with a proposed increase to 60 MW.

Table 20-7 — Oriana Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Oriana	Line 2700 (Moca Substation)	50	60	115

S&L evaluated the project alone and with the proposed new solar projects Caracol (Section 13) and Sierra (Section 14). S&L considered the full capacity of the projects in the model. The analysis did not identify any thermal violations for all modeled contingency cases and combinations and no existing thermal violations were made worse. The Mora TC has two 230-kV and one 115-kV line to export power providing ample capacity.

20.8. WINDMAR COTO LAUREL

Windmar Coto Laurel solar project interconnects to the PREPA system on the 38-kV level at the Juana Diaz TC. The project developer proposed an uprate of 4 MW bringing the current capacity of the project (10 MW) to 14 MW.

Table 20-8 — Windmar Coto Laurel Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Windmar Coto Laurel	Juana Diaz 38 kV TC	10	14	38

The analysis found that this uprate does not introduce any new thermal violations or worsen any existing thermal violations. The 38-kV system near Juana Diaz has sufficient margin to support the uprate. Additionally, the Jobos TC has sufficient capacity and redundancy with four 115-kV export lines. This provides sufficient capacity and redundancy even with the existing gas turbine generation at Jobos.

There is no existing generation or new generation projects with which this uprate may compete for system capacity.

20.9. WINDMAR CANTERA MARTINO

Windmar Cantera Martino solar project interconnects to the PREPA system at 38 kV on the La Rambla Substation. The project is electrically near the Canas TC with a current capacity of 2.1 MW. The developer proposed to increase the project capacity to 3 MW.

Table 20-9 — Windmar Cantera Martino Interconnection Summary

Project Name	Interconnection Point	Existing Capacity (MW)	Uprated Capacity (MW)	Voltage (kV)
Martino	La Rambla 38 kV (Near Canas 38-kV TC)	2.1	3	38

The analysis found that this uprate does not introduce any new thermal violations or worsen any existing thermal violations. The 38-kV system near La Rambla Substation has sufficient margin to support the uprate. Additionally, there is substantial load coming from the La Rambla substation which does not require the power from the project to be exported to other areas of the RPEPA system. However, PREPA Operations Division indicated that the Windmar Cantera Martino facility has limited voltage regulation capabilities. PREPA Planning Division completed a study that confirmed that the voltage profile in the area is out of the limits established by the ANSI C84.1-2016 standard. PREPA indicated that for the proposed uprate, Windmar Cantera Martino would need to comply with the requirements established in the new MTRs to improve its voltage regulation capabilities and avoid voltage profile issues.

21. ADDITIONAL PROJECTS

There were several additional non-operating projects that S&L evaluated and studied for thermal violations separately and with conjunction of other projects. These projects did not move forward with negotiations and are no longer active. However, the results of S&L's analysis is discussed below.

21.1. GS FAJARDO

The developers of the GS Fajardo solar project proposed a 25-MW solar project to connect directly into the 38-kV Fajardo TC. S&L performed a walkdown of the transmission line route and interconnection and completed a load flow analysis to evaluate any thermal violations that may be caused by the addition of the project.

Table 21-1 — GS Fajardo Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
GS Fajardo	Fajardo TC	25	38	0.97

Due to electrical proximity to the project, S&L studied the project considering the capacity of other generation. The generation projects considered were the existing Daguao GT (42 MW capacity), operating Punta Lima wind farm (26 MW capacity), and non-operating Vega Baja Solar Project (15-MW capacity, Section 10). The projects connect to the neighboring Daguao TC at 115 kV and 38 kV.

The analysis did not identify any new thermal violations as a result of the project. However, there are some moderate increases (less than 7%) for an N-2 contingency case when GS Fajardo and Vega Baja are considered together. The results are documented in Section 10.1.2.

21.2. WINDMAR SANTA ROSA

The Windmar Santa Rosa project developers proposed a 20-MW solar project to connect along Line 37100. The project would tie into the San German TC (6406) at 115 kV. S&L only completed a load flow analysis for this project. The results are discussed below.

Table 21-2 — Windmar Santa Rosa Interconnection Summary

Project Name	Interconnection Point	Capacity (MW)	Voltage (kV)	TL Length (miles)
Windmar Santa Rosa	Line 37100 (Guanica)	20	115	0.05

S&L studied the project for potential thermal overloads in various combinations with two other projects proposed to interconnect to the PREPA system on Line 37100: Montalva (Section 6) and Solaner (Section

17). Depending on the combination of projects as well as project sizes considered the thermal violations vary. S&L considered various combinations and sizes of the three projects. The combination of projects along with the project sizes considered resulted in various types of thermal violations.

When studied alone or with Solaner (35 MW), the project does not introduce any new thermal violations or worsen any existing thermal violations. Introducing the capacity from the three projects together identifies several thermal violations as discussed in Section 6.1.2.3.

Exhibit E

2013-P00042

RENEWABLE POWER PURCHASE AND OPERATING AGREEMENT

BETWEEN

GRUPOTEC USA, INC

AND THE

PUERTO RICO ELECTRIC POWER AUTHORITY

TABL E OF CONTENTS

POWER PURCHASE AND OPERATING AGREEMENT

BETWEEN

GRUPOTEC USA, INC.

AND

THE PUERTO RICO ELECTRIC POWER AUTHORITY

This Agreement (the "Agreement") entered into and effective as of this 19 day of Septiembre 2012. (the "Effective Date") by and between the Puerto Rico Electric Power Authority, hereinafter referred to as PREPA, a public corporation and governmental instrumentality of the Commonwealth of Puerto Rico, created by Act of May 2, 1941, No. 83, as amended, employer's Social Security number 660-43-3747 represented in this act by its Acting Executive Director, Josué Antonio Colon Ortiz, of legal age, married, engineer and resident of Caguas, Puerto Rico and Grupotec USA, Inc; hereinafter referred to as "SELLER" with its principal office at 2270 Caminito Preciosa N, La Jolla, California, 92037 and authorized to do business in Puerto Rico under certificate 15554-F and federal identification number 680-68-1673. SELLER is represented in this act by Mr. Manuel Folgado Tomas, of legal age, single and resident of La Jolla, California, who is duly authorized to execute this Agreement on behalf of Seller as certified by Corporate Resolution dated March 5, 2012. PREPA and SELLER are herein individually referred to as a "Party" and collectively referred to as "Parties".

RECITALS

WHEREAS, SELLER, executed on March 16, 2012, a Master Power Purchase and Operating Agreement; and

WHEREAS, SELLER proposes to pursue the development of several photovoltaic solar energy facilities with an aggregate capacity of up to 100MWs. Each facility will not exceed 20 MWs.

WHEREAS, SELLER proposes to develop a 15 MW photovoltaic solar energy system in Hatillo, Puerto Rico (the "Facility") and to interconnect the Facility with the PREPA electric system; and

WHEREAS, SELLER desires to sell the Net Electrical Output exclusively to PREPA; and

WHEREAS, PREPA is the electric utility engaged in the generation, transmission, distribution, and sale of electric energy within the Commonwealth of Puerto Rico and desires to purchase all of such electricity produced by the Facility and delivered to the Interconnection Point; and

WHEREAS, the Parties will effectuate such sales and purchases of energy in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of these premises and of the mutual covenants and agreements set forth herein, SELLER and PREPA, intending to be legally bound, hereby agree to the following:

ARTICLE 1. DEFINITIONS

Whenever the following terms appear in this Agreement, whether in the singular or in the plural, present or past tense, they shall have the meaning stated below:

1.1 AAA – means the American Arbitration Association.

1.2 Additional Interconnection Facilities - means all equipment and facilities located on SELLER's side of the Interconnection Point constructed and installed for the purpose of interconnecting the Facility with PREPA's electric transmission system, as identified in Appendix B.

1.3 Affiliate - means, with respect to a Person, each such other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person.

1.4 Agreed Operating Procedures - has the meaning set forth in Section 4.3.

1.5 Agreement - has the meaning set forth in the first paragraph of this Agreement.

1.6 Agreement Year - means the period, which begins on the Commercial Operation Date of the Facility and ends on the first anniversary thereof, and each one (1) year period thereafter commencing on each anniversary date.

1.7 Billing Period- has the meaning set forth in Section 10.4.

1.8 Breach - has the meaning set forth in Section 17.1.

1.9 Business Day - means a Day other than (a) a Saturday, a Sunday or a Day on which commercial banks in San Juan, Puerto Rico are required or authorized to close, or (b) any other Day recognized as a holiday by PREPA, which, as of the date of this Agreement, are those Days listed on Appendix A hereto. PREPA will promptly notify SELLER in writing of any changes to the holidays recognized by PREPA.

1.10 Commencement of Construction - means the issuance by SELLER of full notice to proceed in writing under the primary construction contract for the Facility.

1.11 Commercial Operation Date - means the first Day following the date on which the Facility is declared available for continuous operation by SELLER subject to the provisions of Articles 4 and 12.

1.12 Court of Competent Jurisdiction - means the state courts of the Commonwealth of Puerto Rico, the United States District Court for the District of Puerto Rico, the United States Court of Appeals for the First Circuit, and the United States Supreme Court.

1.13 Day - means the 24-hour period beginning and ending at 12:00 midnight Puerto Rico Time.

1.14 Development Abandonment - means that SELLER permanently ceases the development and construction of the Facility prior to the Commercial Operation Date, which abandonment shall be deemed to have occurred only after all of SELLER's or its construction contractors' personnel have failed to be present on the Site and SELLER

has otherwise ceased development and construction activities related to the Facility for more than one hundred and twenty (120) consecutive Days (other than as a result of a Force Majeure, a Legal Challenge or any act or omission by PREPA, including a Breach by PREPA of its obligations hereunder).

1.15 Effective Date – has the meaning set forth in the first paragraph of this Agreement.

1.16 Emergency - means an operational condition or situation affecting PREPA's system (including system security and reliability) that in the sole and reasonable judgment of PREPA is likely to result in imminent significant disruption of service to a significant number of customers or is imminently likely to endanger life or property.

1.17 Environmental Costs - has the meaning set forth in Section 18.1.

1.18 Facility - has the meaning set forth in the first recital.

1.19 FERC - means the Federal Energy Regulatory Commission, or any successor thereto.

1.20 Financial Closing Date - means the first date on which documents between SELLER and the Project Lenders that provide binding commitments for funding for the construction of the Facility have been executed and funds for the construction of the Facility are initially drawn by SELLER.

1.21 Force Majeure - has the meaning set forth in Section 15.1.

1.22 GAAP - means Generally Accepted Accounting Principles, as promulgated by the Financial Accounting Standards Board or its predecessors or successors.

1.23 Generating Capacity - means the net electrical generating capacity of the Facility (gross electric generating capacity less station use) expressed in kilowatts as determined pursuant to testing and made available from the Facility to PREPA at the Interconnection Point.

1.24 Indemnifying Party and Indemnified Person - have the respective meanings set forth in Section 14.1.

1.25 Indemnitees - means, with respect to either PREPA or SELLER , (i) permitted successors and assigns, and (ii) as to both the Party and its permitted successors and assigns, their respective lenders, Affiliates, directors, officers, equity-holders, partners, employees, representatives, agents and contractors, and each of their respective heirs, successors and assigns.

1.26 Initial Synchronization Date - means the date when SELLER's electricity generating equipment is synchronized with PREPA's electrical transmission or distribution equipment.

1.27 Interconnection Facilities - means the PREPA Interconnection Facilities and the Additional Interconnection Facilities.

1.28 Interconnection Point - means the physical point where Net Electrical Output is delivered to PREPA's system as specified in Appendix B.

1.29 Interest - means the compensation for the accrual of monetary obligations under this Agreement computed Monthly and prorated daily from the time each such obligation is past due based on an annual interest rate equal to the lesser of: (a) (1) (x) for payments due under Article 18 and (y) for payments due under Article 11 during the first five (5) Days after such a payment is due, in each case, the Prime Commercial Lending Rate as set by Citibank NA., New York, New York or any other bank as mutually agreed by the Parties or any other equivalent rate as mutually agreed by the Parties ("Prime Rate"), and (2) for payments due under Article 11 beginning on the sixth (6^{th}) Day after such a payment is due, the Prime Rate plus five percent (5%); and (b) the maximum rate allowable under Article 1649 of the Puerto Rico Civil Code or successor statute applicable to past due amounts. The provisions of this definition shall not be construed to limit the applicable rate of interest on the project debt.

1.30 Legal Challenge - means any action, suit or proceeding brought or commenced by a third party seeking to contest the validity of this Agreement, any Permit or the development, construction or operation of the Facility which materially impairs the ability of the Parties to perform their respective obligations hereunder or delays the development, construction or operation of the Facility.

1.31 Modification Limit – means the lesser of (i) one percent (1%) of the total cost as of the Commercial Operation Date of the modules, inverters and racking system at the Facility, and any substation equipment on Seller's side of the Delivery Point, and (ii) one million five hundred thousand dollars ($1,500,000).

1.32 Month - means a calendar month which shall begin at 12:00 midnight on the last Day of the preceding calendar month and end at 12:00 midnight on the last Day of the current calendar month.

1.33 Net Electrical Output or NEO - means the net electrical energy output (expressed in kWh) from the Facility measured at the Interconnection Point.

1.34 Non-Scheduled Outage - means an interruption of all or a portion of the electrical output of the Facility that is required for any purpose including inspection, preventive maintenance, or corrective maintenance and which has not been included in the Scheduled Outage Program.

1.35 Operation Security - has the meaning set forth in Section 17.4.

1.36 Party or Parties - has the meaning set forth in the first paragraph of this Agreement.

1.37 Pending Permits - means Permits required for the construction or operation of the Facility which have been duly and properly filed by SELLER and which SELLER is prosecuting with due diligence, but which, through no fault of SELLER, remain pending with the relevant governmental authority.

1.38 Permanent Closing - means, after the Commercial Operation Date, (a) the available hours for the Facility equal zero (0) for any period of twenty-four (24) consecutive Months, excluding periods of outages due to Force Majeure, Legal Challenge, Pending Permits or any action or omission of PREPA, including a Breach of this Agreement, or (b) the available hours for the Facility equal zero (0) for any period of forty-two (42) consecutive Months whether or not a Force Majeure event has been claimed by SELLER , excluding periods of outages due to any action or omission of PREPA.

1.39 Permits - means all permits, licenses, approvals, authorizations, consents, variances or waivers issued by federal, Commonwealth and local agencies, commissions, authorities, and regulatory bodies with jurisdiction over SELLER and the Facility which are necessary for the development, construction, operation, maintenance or financing of the Facility.

1.40 Person - means an individual, partnership, corporation, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization, or a government or agency or political subdivision thereof.

1.41 Pre-Operation Period - means the period beginning on the Initial Synchronization Date and ending on the Commercial Operation Date.

1.42 PREPA Interconnection Facilities - means all equipment and facilities located on PREPA's side of the Interconnection Point constructed and installed or upgraded for the purpose of interconnecting the Facility with PREPA's electric transmission and distribution system, as identified in Appendix B.

1.43 Project Lenders - means any Person providing, arranging, insuring or guaranteeing all or part of the construction or permanent financing or other funding, including any tax equity financing, for the Facility or any portion thereof, or any agent, trustee or other Person representing or acting on behalf of any such Person.

1.44 Proposed Initial Synchronization Date - has the meaning set forth in Section 4.2.

1.45 Prudent Electrical Practices - means those practices, methods, conduct and actions (including the practices, methods, conduct and acts engaged in or approved by a significant portion of the power industry in the United States and Puerto Rico) that, at a particular time, in the exercise of reasonable discretion at the time a decision was made, could reasonably have been used in electrical engineering and operations to operate equipment for the generation, transmission, distribution and delivery or electricity, in a manner consistent with applicable laws and applicable standards for reliability, safety and economy, including the National Electrical Safety Code, the National Electrical Code, and any other applicable federal, state or local code. Prudent Electrical Practice is not limited to the optimum practice, method or act to the exclusion of all others, but rather is a spectrum of possible practices, methods or acts which can fall within this description.

1.46 Prudent Utility Practices - means practices, methods, conduct and actions (including the practices, methods, conduct and acts engaged in or approved by a significant portion of the power industry in the United States and Puerto Rico) that, at a particular time, in the exercise of reasonable discretion at the time a decision was made, could have been expected to accomplish the desired result in a manner consistent with applicable laws and applicable standards for reliability, safety and economy. Prudent Utility Practice is not limited to the optimum practice, method or act to the exclusion of all others, but rather is a spectrum of possible practices, methods or acts which can fall within this description.

1.47 PURPA - means the Public Utility Regulatory Policies Act of 1978 as amended and the regulations promulgated thereunder in effect as of the Effective Date or as they are amended in the future from time to time.

1.48 Qualified Operator - means SELLER or an Affiliate of SELLER or, if a third party, an entity with at least three (3) years of experience operating solar energy facilities of a

similar type and size as the Facility or another qualified and experienced operator reasonably acceptable to PREPA.

1.49 Qualifying Facility - means a facility which is a Qualifying Facility under Section 201 of PURPA.

1.50 Scheduled Outage - means a planned interruption of the Net Electrical Output that has been coordinated in advance with PREPA with a mutually agreed start and duration pursuant to Article 8.

1.51 Scheduled Outage Program - has the meaning set forth in Section 8.1.

1.52 Site – A 86 "cuerdas" parcel located in Hatillo, Puerto Rico.

1.53 Technical Dispute - has the meaning set forth in Section 22.13(b).

1.54 Technical Dispute Notice - has the meaning set forth in Section 22.13(b).

1.55 Taxes - has the meaning set forth in Section 18.1.

1.56 Term - means the initial Term of this Agreement as specified in Article 5 plus any renewal Term determined pursuant to this Agreement.

1.57 Year - means a calendar year, which shall be the twelve (12) Month period beginning 12:00 midnight on December 31 and ending at 12:00 midnight on the subsequent December 31.

1.58 Rules of Interpretation -- The rules of interpretation listed below shall be followed when interpreting this Agreement:

(a) Words importing the singular also include the plural and vice versa.

(b) References to natural persons or parties include any person having legal capacity.

(c) References to a Person include such Person's successors and assigns; provided, however, that with respect to a Party and its rights and obligations under this Agreement, references to a Party shall only include

such Party's successors and assigns if such successors and assigns are permitted by this Agreement.

(d) Words importing one gender include the other gender.

(e) The words "include" and "including" mean "including, but not limited to" and corresponding grammatical variants.

(f) Except as otherwise expressly stated herein, all references in this Agreement to this Agreement (including the Appendices hereto) or to contracts, agreements, or other documents shall be deemed to mean this Agreement (including the Appendices hereto) and such contracts, agreements or other documents, as the same may be modified, supplemented, or amended from time to time.

(g) Except as otherwise expressly stated herein, all references to Preambles, Recitals, Sections, Articles, and Appendices in this Agreement are references to the Preamble, Recitals, Sections, Articles, and Appendices of this Agreement.

(h) Words and abbreviations not defined in this Agreement which have well-known technical or design, engineering, or construction industry meanings are used in this Agreement in accordance with such recognized meanings.

(i) The terms "hereof," "herein," "hereto," "hereunder" and words of similar or like import, refer to this entire Agreement, together with its Appendices, and not any one particular Article, Section, Appendix, or other subdivision of this Agreement.

(j) The headings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties hereto, nor should they be used to aid in any manner in the construction of this

Agreement.

(k) All references to "$" or "dollars" set forth herein shall refer to United States Dollars.

ARTICLE 2. SALE AND PURCHASE OF ENERGY

2.1 SELLER agrees to sell and PREPA agrees to accept delivery of and purchase all of the Net Electrical Output at the Interconnection Point, as of and following the Initial Synchronization Date, subject to the terms and conditions of this Agreement.

2.2 SELLER agrees to pay PREPA, for the cost incurred by PREPA in performing the evaluations and studies such as the interconnection study, voltage schedule, relay review, standard operating procedures (SOP's), notice to proceed pursuant to Section 9.7, supervision of switchyard acceptance testing and any other activities of PREPA needed to interconnect the Facility to PREPA's system, the amount (in U.S. Dollars) resulting from the product of (a) $5.00, multiplied by (b) the estimated Generating Capacity of the Facility. Payment will be made on the Effective Date. If the Generating Capacity is increased, SELLER agrees that SELLER shall pay to PREPA the amount (in U.S. Dollars) resulting from the product of (a) $5.00, multiplied by (b) the increase of the Generating Capacity of the Facility.

ARTICLE 3. NOTICES

3.1 All notices and other communications hereunder shall be in writing, other than disconnect orders which may be oral and immediately confirmed by facsimile and shall be deemed duly given upon receipt after being delivered by hand or sent by registered or certified mail, return receipt requested, postage prepaid or by recognized overnight courier service or by facsimile, addressed as follows:

If to SELLER to:

Grupotec USA, Inc.
101 Ave. Ortegon
Apartamento 501
Guaynabo, P.R. 00966
Attention: Manuel Folgado Tomas
Tel: 312 -554-9146
Fax: 858-750-2768
E-Mail: mfolgado@grupotec.es

If to PREPA:

Puerto Rico Electric Power Authority (if by hand)
1110 Ponce de León Avenue
Office #714
Santurce, Puerto Rico

With a copy to:

Power Purchase Contracts Administration
Puerto Rico Electric Power Authority (if by mail)
GPO Box 364267
San Juan, Puerto Rico 00936-4267
Attention: Director of Planning and Environmental Protection

3.2 Either Party hereto may change, by notice as above provided; the Persons or addresses to which all such notices are to be sent.

ARTICLE 4. PRE-OPERATION PERIOD

4.1 SELLER shall submit to PREPA an estimate of the energy (kWh) to be delivered by the project (daily, monthly and annual), and the SELLER's preliminary and non-binding Facility's licensing and milestone construction schedules within thirty (30) Days after the Effective Date. SELLER shall notify PREPA of any material changes to SELLER's licensing and construction milestone schedules. SELLER shall submit progress reports to PREPA by the fifth (5th) Business Day of every Month commencing on the first Month following the Effective Date and until the Commercial Operation Date.

4.2 SELLER shall notify PREPA in writing of the proposed Initial Synchronization Date (the "Proposed Initial Synchronization Date") and the start-up and testing schedule for the Facility not later than sixty (60) Days prior to such Proposed Initial Synchronization Date. SELLER shall have the right to postpone or accelerate such date with at least two (2) weeks advance notice to PREPA. PREPA and SELLER shall agree on the actual Initial Synchronization Date and PREPA shall have the right to have a representative present on the Initial Synchronization Date.

4.3 SELLER and PREPA shall mutually develop detailed written operating procedures (the "Agreed Operating Procedures") no later than one hundred twenty (120) Days prior to the Initial Synchronization Date. The Agreed Operating Procedures will be by mutual agreement, taking into consideration Prudent Utility Practices, the design of the Facility and its interconnection to PREPA's System and shall be consistent with the terms and conditions of this Agreement. The Agreed Operating Procedures shall be the procedures as to how to integrate the Facility electric energy output into PREPA's System. Topics covered shall include, but not necessarily be limited to, method of day-to-day communications, key personnel lists for both SELLER and PREPA's dispatching centers, clearances and switching practices, outage scheduling, daily available capacity and energy reports, a redacted and otherwise scaled down version of the Facility's Complex operations log, reactive power support and Emergency procedures, including policies for the delivery by PREPA to SELLER of prompt written notice of the occurrence of an Emergency and follow-up and frequent status reports on any ongoing Emergency. The Agreed Operating Procedures may only be modified with the written consent of the Parties.

4.4 For purposes of conducting such investigations and evaluations as the Parties may deem reasonable and necessary to determine the feasibility of the Facility and the technical

aspects related to the sale of Net Electric Output of the Facility, the Parties agree to cooperate reasonably and in good faith and provide each other and their respective Representatives reasonable and timely access to relevant personnel, advisors (including environmental consultants), properties, and books and records, provided the information is not privileged, confidential or protected under other agreements with third parties or by law or regulation. Subject to the conditions stated in the previous sentence, each Party hereby agrees to cooperate and exchange information necessary to permit, finance, construct and operate the Facility.

4.5 To the extent legally permitted, the Parties agree to cooperate reasonably and in good faith in the mutually beneficial endeavor to obtain (i) control of, or other required access and rights to, the real property upon which the Facility and the Interconnection Facilities will be located, (ii) financing for the Facility and the Interconnection Facilities and (iii) all necessary Permits, endorsements and approvals for siting and construction of the Facility and the Interconnection Facilities.

ARTICLE 5. TERM

5.1 The Term of this Agreement shall begin with the Effective Date and shall continue for a period of Twenty Five (25) Agreement Years after the Commercial Operation Date, unless extended or earlier terminated in accordance with the terms hereof. If the Term is extended, the word "Term" shall thereafter be deemed to mean the original Term so extended.

5.2 The Term of this Agreement may be extended by mutual agreement of the Parties for up to two consecutive periods of five (5) Years each, following the expiration of the initial Twenty Five Agreement Year Term. The intention to extend the Term of this Agreement shall be notified in writing by certified or registered mail to the other Party not less than

eighteen (18) Months prior to the expiration of the initial Term or other Terms, as the case may be; unless either Party shall give written notice by certified or registered mail to the other of its intent not to extend the Term of this Agreement not less than eighteen (18) Months prior to the expiration of the initial Term or other Term, as the case may be. During any extension Term, all provisions contained herein remain in effect.

ARTICLE 6. REPRESENTATIONS, WARRANTIES, AND COVENANTS

6.1 SELLER covenants and warrants that the Facility shall be operated and maintained by a Qualified Operator in accordance with: (a) the Agreed Operating Procedures; (b) Prudent Electrical Practices; and (c) Prudent Utility Practices, including synchronizing, voltage and reactive power control.

6.2 SELLER shall, at all times and in all material respects, comply with laws, ordinances, rules and regulations applicable to it and the use, occupancy, and operation of the Facility, including all environmental laws and regulations. SELLER shall give all required notices, shall procure and maintain all Permits and shall pay all charges and fees required in connection therewith. SELLER shall complete all environmental impact studies necessary for the design, construction, operation and maintenance of the Facility. Once obtained, SELLER shall submit to PREPA copies of all material Permits.

6.3 SELLER shall have sole responsibility for the payment of any and all fines or other penalties incurred by or imposed upon SELLER or its agents, suppliers, employees or subcontractors for noncompliance by SELLER, its agents, employees, suppliers, or subcontractors with laws, rules, regulations or ordinances applicable to or in connection with the development, construction, ownership and/or the proper operation of the Facility and the Additional Interconnection Facilities as determined by applicable governmental authority having jurisdiction over The Facility, and PREPA shall be held harmless by

SELLER from any such fines or penalties and expenses related to these, including all reasonable attorneys' fees, except to the extent caused by PREPA's fault or negligence, or PREPA's breach of this Agreement.

6.4 SELLER represents and warrants as of the Effective Date as follows:

(a) SELLER is a Corporation duly organized and validly existing under the laws of California; SELLER has all requisite power and authority to conduct its business, to own its properties, and to execute, to deliver, and to perform its obligations under this Agreement;

(b) The execution, delivery, and performance by SELLER of this Agreement have been duly authorized, and do not and will not (i) require any additional internal consent or approval of SELLER ; or (ii) violate any provision of SELLER'S certificate of formation or operating agreement, or any material indenture, contract or agreement to which it is a party or by which it or its properties may be bound, or any law, ordinance, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect;

(c) SELLER is not in default under any document or instrument referred to in clause (ii) of the preceding paragraph (b), which default could reasonably be expected to have a material adverse effect on the ability of SELLER to perform its obligations under this Agreement; and

(d) This Agreement is a legal, valid and binding obligation of SELLER, enforceable against SELLER in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

(e) Except as previously disclosed in writing, there is no pending action or proceeding in which SELLER is a party before any court, governmental agency or arbitrator that could reasonably be expected to affect materially and adversely the financial condition or operations of SELLER or the ability of SELLER to perform its obligations under, or which purports to affect the legality, validity or enforceability of, this Agreement as in effect on the date hereof.

6.5 From and after the Commercial Operation Date, SELLER shall maintain a minimum working capital in an amount specified by the Project Lenders.

6.6 In the event SELLER intends to sell the Facility, it shall notify PREPA of its intention to sell sixty (60) Days in advance of the intended date of such sale. PREPA shall have the right to approve the new owner, which approval shall not be unreasonably withheld, conditioned or delayed;

6.7 SELLER agrees that, following the Financial Closing Date, and thereafter during the Term of this Agreement, it will cause to be delivered to PREPA yearly its certified financial statements prepared in accordance with GAAP.

6.8 SELLER agrees that it will cause to be delivered to PREPA an annual certification of the names of its corporate officers.

6.9 PREPA agrees that all information obtained from SELLER, which is not otherwise generally available to the public (but without limitation of any liability PREPA may have to SELLER for information having become generally available to the public through the negligence or willful misconduct of any of PREPA, its Affiliates or their respective employees, agents and representatives), shall be kept confidential and used solely by PREPA in connection with the performance of its obligations under this Agreement. Disclosure of such information may be made only within PREPA's organization to key

personnel, and to third parties serving as PREPA's legal, financial or technical advisors, whose duties justify their need to review and know such material. PREPA shall require each Person (and personnel thereof) to agree in writing for the benefit of SELLER to maintain the confidentiality of such information. To the extent PREPA is required to disclose such information by any court, governmental agency or to the extent necessary to secure governmental approval or authorization, PREPA shall promptly notify SELLER and use its reasonable efforts to seek a confidentiality agreement that assures confidential treatment of the information consistent with the terms of this Section 6.11. In the event PREPA is not successful in obtaining a confidentiality agreement, PREPA shall use reasonable efforts to obtain through court action the appropriate protective order.

6.10 PREPA hereby represents and warrants that, throughout the Term, all payments by PREPA to SELLER under this Agreement shall be treated as current expenses as defined by the terms of the Trust Agreement dated as of January 1, 1974, as amended, (the "1974 Agreement") between PREPA and State Street Bank and Trust Company, as successor trustee, and any successor indentures or agreement, including any amendments, supplements or modifications thereto.

6.11 (a) SELLER agrees to use its reasonable efforts, when soliciting and obtaining personnel to perform services for the Facility in Puerto Rico, to achieve a goal that is not less than thirty percent (30%) of the total personnel hours expended in the construction of the Facility prior to the Commercial Operation Date and not less than fifty percent (50%) expended in SELLER'S performance of the services pursuant to this Agreement following the Commercial Operation Date shall be performed by individuals who are bona fide residents of Puerto Rico as defined in subsection 6.11(c).

(b) SELLER agrees to use its reasonable efforts, when soliciting and selecting subcontractors and vendors to perform services for the Facility in Puerto Rico, to achieve a goal that not less than thirty percent (30%) of such construction services hereafter performed in Puerto Rico pursuant to this Agreement prior to the Commercial Operation Date, as measured by person-hours on an annual basis, shall be performed by business concerns that are owned and controlled by one or more individuals who are bona fide residents of Puerto Rico as defined in subsection 6.11(c). For purposes of the preceding sentence, "owned and controlled" means a business: (i) which is at least fifty-one percent (51%) owned by one or more of such individuals (e.g., in the case of a corporate form of organization such individuals must hold at least fifty-one percent (51%) of all voting stock of the corporation; in the case of a partnership or other form of business concern such individuals must hold at least fifty-one percent (51%) of the beneficial interests in the partnership or business concern); and (ii) whose management and daily business operations are controlled by one or more of such Persons (who need not be owners of the business).

(c) For purposes of this Section 6.11, an individual shall be considered a bona fide resident of Puerto Rico, if said individual has been a resident of Puerto Rico immediately prior to commencing work on the Facility. To the extent that despite SELLER'S reasonable efforts SELLER has failed to achieve the goals set forth in Section 6.11(a) or Section 6.11(b), SELLER may for purposes of calculating satisfaction of said goals include the services of individuals who at some time prior to commencing work on the Facility, but not necessarily including the period of time immediately prior to commencing work on the Facility, were residents of Puerto Rico for at least five (5) consecutive years and who relocated

to Puerto Rico in order to perform work on the Facility. SELLER shall, in good faith, be entitled to rely on the representation of each individual applicant and of each subcontractor or vendor as to whether such individual, subcontractor or vendor meets the criteria set forth herein. SELLER shall require equivalent undertakings from its subcontractors.

(d) Nothing contained herein shall be interpreted as obligating SELLER to take any action which would be in violation of the United States Constitution, federal law or the laws of Puerto Rico or of any affirmative action program or equal opportunity obligation to which SELLER or its Affiliates are or may be bound under federal law or the laws of Puerto Rico.

6.12 PREPA represents and warrants as of the Effective Date as follows:

(a) Pursuant to Act No. 83 of May 2, 1941, as amended, PREPA is a public corporation duly organized and validly existing under the laws of the Commonwealth of Puerto Rico and has all requisite power and authority to conduct its business as now conducted, to own its properties, and to execute, to deliver, and to perform its obligations under this Agreement;

(b) The execution and delivery by PREPA of this Agreement, and the Agreement itself, have been duly authorized by PREPA's Governing Board in accordance with applicable law, and (i) do not and will not require any additional internal consent or approval of PREPA; (ii) do not and will not violate any provision of Act No. 83 of May 2, 1941, as amended, or its regulations, or any material indenture, contract or agreement to which it is a party or by which its properties may be bound;

(c) PREPA is not in default under any document or instrument referred to in clause (ii) of the preceding paragraph (b), which default could reasonably

be expected to have a material adverse effect on the ability of PREPA to perform its obligations under this Agreement; and

(d) This Agreement is a legal, valid, and binding obligation of PREPA, enforceable against PREPA in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

6.13 Neither Party shall be relieved of its obligations under this Agreement as a result of subcontracting any of its obligations to a third party.

ARTICLE 7. DISPATCHING

7.1 The Facility will be designated by PREPA as a "must run" unit (to the full extent of the Generating Capacity) and will not be disconnected except to the extent necessary due to Force Majeure or an Emergency that cannot be avoided or mitigated without the shutdown or disconnection of the Facility.

7.2 PREPA may require SELLER to disconnect the Facility or reduce the amount of Net Electrical Output due to operating problems that may affect safety margins or reliability levels in PREPA's electrical system; provided, however, any reduction in the level of Net Electrical Output required by PREPA hereunder shall be based upon and implemented in a manner consistent with Prudent Utility Practices. PREPA shall not be entitled to reduce Net Electrical Output under this Agreement due to a) economic factors, (b) any inconvenience, or other condition not expressly included in the preceding sentence, (c) any condition of any nature including those specified in the preceding sentence if PREPA is not promptly and prudently seeking a remedy or cure in accordance with Prudent Utility Practices, or (d) any other circumstance that can be mitigated by PREPA through economic means- Some of these situations may include but are not limited to; power

quality problems in line 9200, as well as outages and disconnections ("vias libres") of the abovementioned transmission center due to disturbances, maintenance and/or improvement.

7.3 Notwithstanding Sections 7.1 and 7.2 above, PREPA may also disconnect the Facility when the following conditions are present: (a) the Facility fails to comply with the requirements of APPENDIX E - MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS, which include but are not limited to power factor, low/high voltage ride through, low/high frequency ride through, voltage control requirements, power quality requirements and frequency response, as set forth in APPENDIX E on the Effective Date or, if PREPA has amended the requirements of APPENDIX E, then only if such amendment is applicable to the Facility pursuant to Section 9.13, and (x) the Seller has received written notice of any such amendment; (y) Seller has had an appropriate period of time to comply with any such amended requirement, and (z) PREPA has agreed to reimburse Seller for any costs in excess of the Modification Limit pursuant to Section 9.13; (b) SELLER fails to perform annual tests for compliance with the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS as required in Section 12.2 and (c) SELLER fails to keep the Facility PSS/E mathematical models current with the future versions of the PSS/E program thirty (30) days after a PSS/E version upgrade is notified. For the avoidance of doubt, any disconnection due to (a) and (b) above may be of an extended or permanent nature if not cured by SELLER in a timely manner; and PREPA shall have no liability to SELLER in connection with those disconnections as per Sections 7.1, 7.2 and 7.3. Following the Commercial Operation Date, SELLER will provide to PREPA a non-binding estimate of next Day and next week production, based on the previous Day production, estimated strength of the solar radiation the next Day and week and based on the meteorological forecast for the region and site. The Parties

shall include in the Agreed Operating Procedures the procedures and protocols necessary for providing said estimates.

ARTICLE 8. CONTROL AND OPERATION OF THE FACILITY

8.1 SELLER shall, at least sixty (60) Days prior to the Commercial Operation Date, submit a written schedule of Scheduled Outages ("Scheduled Outage Program") for the remaining portion of the first Year of the Facility's operations and, if the Commercial Operation Date occurs after September 1, for the following two Years, setting forth the proposed Scheduled Outage periods. Thereafter, SELLER shall submit to PREPA, in writing, by September 1 of each Year, its proposed Scheduled Outage Program for the next two Years.

8.2 SELLER shall use reasonable efforts to notify PREPA of any Non-Scheduled Outages at least twenty four (24) hours in advance and coordinate all Non-Scheduled Outages with PREPA.

8.3 If an Emergency is declared by PREPA, PREPA's dispatching centers may disconnect the Facility from PREPA's system to the extent permitted by Article 7. If a curtailment pursuant to Article 7 is declared by PREPA, PREPA's dispatching centers may curtail the Facility's output. The Facility will remain disconnected from PREPA's system following an Emergency until SELLER has received permission to reconnect from PREPA's dispatching center. Any disconnection or reduction in the Facility's output required by PREPA under this Agreement shall be of no greater scope and of no longer duration than is required by the Emergency or operating problem pursuant to Article 7, consistent with Prudent Utility Practices. Upon an Emergency or curtailment pursuant to Article 7 that results in any disconnection or reduction in the Facility's output, PREPA shall, as soon as practicable after the occurrence of the Emergency or operating problem, provide written

notice to SELLER describing the particulars of the occurrence and its estimated duration and shall diligently use all reasonable efforts, consistent with Prudent Utility Practices, to remedy the Emergency or operating problem. In any situation where PREPA causes a reduction of Net Electrical Output or a disconnection of the Facility, PREPA shall treat the Facility no less favorably than other facilities connected to PREPA's grid.

8.4 PREPA shall have no liability to Seller in connection with any disconnection or reduction in the Facility's output required by PREPA under Section 7.1, Section 7.2 or Section 8.3 unless (a) the Facility is otherwise capable of generating and delivering electrical output, (b) Seller has provided PREPA with written notice of such capability. If the Facility has a Scheduled Outage or a Non-Scheduled Outage, and such Scheduled Outage or Non-Scheduled Outage occurs or would occur coincident with an Emergency, PREPA may request that SELLER shall make all good faith efforts, consistent with Prudent Utility Practices and with PREPA's approval, to reschedule the Scheduled Outage or Non-Scheduled Outage or if the Scheduled Outage or Non-Scheduled Outage has begun, to expedite the completion thereof.

8.5 SELLER shall provide and install as a minimum at its expense the following communication facilities linking the Facility with PREPA's dispatching centers:

(a) One dual ported Remote Terminal Unit ("RTU"), including setup installation and configuration, which shall be specified by PREPA.

(b) Two voice grade telecommunication circuits for the RTU. One for communication with Monacillos Transmission Center ("Monacillos TC"), the other for Ponce Transmission Center ("Ponce TC").

(c) A voice telephone extension for the purpose of accessing PREPA's dial-up metering equipment and for communicating with Monacillos TC and Ponce TC.

(d) Telephone line and equipment to transmit and receive facsimile messages to confirm the oral communication between PREPA and SELLER.

(e) The communication facilities shall provide for digital access using PREPA's TDM (Time Division Multiplexer) and Ethernet network.

(f) One voice grade telecommunication circuit for the Facility backup telemeter's communication with -PREPA Transmission Centers.

(g) A Dynamic System Monitor equipment in accordance with APPENDIX D TECHNICAL SPECIFICATIONS FOR THE DYNAMIC SYSTEM MONITOR, for recording the power disturbance caused by electro-mechanic swings and to measure the system response to the swing disturbance. Items provided by SELLER in accordance with this Section 8.7 shall be subject to the approval of PREPA, which approval shall not be unreasonably withheld or delayed.

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8.6 Each Party shall keep complete and accurate records and other data required for the proper administration of this Agreement.

(a) All such records shall be maintained for a minimum of five (5) years after the preparation of such records or data and for any additional length of time required by regulatory agencies with jurisdiction over the Parties; provided, however, that neither Party shall dispose of or destroy any records that are specifically designated by the other Party even after five (5) years without thirty (30) Days prior notice to the other Party. If notice is given to the notifying Party during the thirty (30) Day period, the notifying Party shall promptly deliver the records and data to the Party wishing to retain the records.

(b) SELLER shall maintain an accurate and up-to-date operating log at the Facility with records of (i) real and reactive power for each hour, (ii) changes in operating status and Scheduled Outages, and (iii) any unusual conditions found during inspections.

(c) Either Party shall have the right from time to time, upon fourteen (14) Days written notice to the other Party and during regular business hours, to examine the records and data of the other Party relating to the proper administration of this Agreement any time during the period the records are required to be maintained.

8.7 At PREPA's request, SELLER shall provide certifications of tests and inspections of the electric and protection equipment, which may impact PREPA's electrical system. PREPA shall have the right to visit and visually monitor the Facility during operation and testing, including any acceptance testing of the Facility.

ARTICLE 9. FACILITIES DESIGN AND INTERCONNECTION

9.1 PREPA agrees to allow the Facility to interconnect to PREPA's System at the Interconnection Point in accordance with the terms of this Agreement. Appendix B sets forth: (a) a description of the Interconnection Facilities, (b) a specification of the Interconnection Point, and (c) the information required for the interconnection study needed to interconnect the Facility to PREPA's system.

9.2 In accordance with this Article 9, SELLER shall at its own cost, (i) design, obtain the land rights necessary, acquire all materials and equipment necessary, construct and install the SELLER's Interconnection Facilities and (ii) design, obtain the land rights necessary, acquire all materials and equipment necessary, construct, install and transfer to PREPA, PREPA's Interconnection Facilities. Such transfer by SELLER to PREPA of PREPA's

Interconnection Facilities shall include, to the fullest extent allowed by applicable law, the underlying equipment supply and construction contracts, all remaining equipment supplier warranties in respect of PREPA's Interconnection Facilities.

9.3 SELLER shall provide PREPA with relay settings for review and inspection by PREPA not later than ninety (90) Days prior to the Proposed Initial Synchronization Date. If these are not found to be acceptable to PREPA, SELLER agrees to comply with any reasonable request made by PREPA to provide acceptable relay settings prior to the Initial Synchronization Date. PREPA agrees to give any comments or suggested changes which it is entitled to give to SELLER pursuant to this Section 9.3 within thirty (30) Days after SELLER submits any relay settings to PREPA.

9.4 PREPA shall prepare and submit to SELLER a written voltage schedule for the Facility no later than thirty (30) Days prior to the Proposed Initial Synchronization Date. From and after the Commercial Operation Date, PREPA may change such voltage schedule upon thirty (30) minutes prior written notice, or in accordance with the Agreed Operating Procedures, provided that such voltage schedule is in accordance with the Design Limits of the Facility. SELLER shall use such voltage schedule in the operation of its Facility. This voltage schedule shall be based on the normally expected operating conditions for the Facility and the reactive power requirements of PREPA's System.

9.5 SELLER shall submit to PREPA (a) the engineering design of the Facility, including the Interconnection Facilities, which design shall be consistent with Prudent Electrical Practices and with the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E, (b) the relay protection scheme and (c) the data required in Appendix B including an official Siemens - PTI certified PSS/E mathematical model of the specific PV facility and manufacturer's performance data reasonably required to

perform the interconnection study within thirty (30) Days following its receipt by SELLER.

9.6 PREPA shall perform an interconnection study and deliver the same to SELLER within sixty (60) Days of SELLER's provision to PREPA of the Facility design package of Section 9.5. The interconnection study shall, at a minimum, (a) determine the power capabilities of the major interconnection equipment required to complete the Interconnection Facilities, (b) specify the maximum fault currents necessary to specify short circuit duty and interrupting ratings, (c) approve or disapprove generator step up (GSU) transformer impedance and transformer tap ranges necessary for proper control of voltage and reactive power flow, (d) designate the PREPA dispatching centers that will coordinate the operation of the Facility and (e) specify PREPA's design requirements for the Facility and the Interconnection Facilities. At the time PREPA delivers to SELLER such interconnection study, PREPA shall also deliver to SELLER such other information required by SELLER to design the Interconnection Facilities in compliance with PREPA's System and to protect the Facility from damage that may result from PREPA's System performance, including (but not limited to) voltage and frequency fluctuations.

9.7 Following SELLER's receipt of the PREPA interconnection study and the other information required to be delivered to SELLER by PREPA under Section 9.6, SELLER shall submit to PREPA the final engineering design of the Facility, including the Interconnection Facilities (the "Final Design"). SELLER agrees Final Design will be consistent in all material respects with the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E. Furthermore, SELLER agrees to install equipment necessary to comply with the requirements of APPENDIX E - MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS, which include but are not limited to power factor, low/high voltage ride through, low/high frequency ride

through, voltage control requirements, power quality requirements and frequency response, to the extent set forth in APPENDIX E on the Effective Date or, if PREPA has amended the requirements of APPENDIX E, then to the extent that such amendment is applicable to the Facility pursuant to Section 9.13, and (x) the Seller has received written notice of any such amendment; (y) Seller has had an appropriate period of time to comply with any such amended requirement, and (z) PREPA has agreed to reimburse Seller for any costs in excess of the Modification Limit pursuant to Section 9.13. No later than thirty (30) Days following SELLER's delivery to PREPA of the Final Design, PREPA hall complete its review of the Final Design and deliver to SELLER written notice that PREPA either (i) accepts the Final Design (the "Approved Design") and confirms that the Interconnection Facilities will, if constructed in accordance with such design, be in compliance with PREPA's interconnection requirements and that the Facility and such Interconnection Facilities will be allowed to interconnect with PREPA's System in accordance with this Agreement, or (ii) does not accept such design, in which case PREPA shall simultaneously deliver to SELLER a written and detailed description of PREPA's objections to such design and PREPA's required modifications thereto, which modifications shall be made in good faith and be reasonable and consistent with Prudent Electrical Practices (PREPA's "Technical Input"). If PREPA has provided Technical Input to SELLER in accordance with the foregoing, then no later than ten (10) Days following SELLER'S delivery to PREPA of SELLER's revised Final Design, which revised Final Design shall be consistent with both MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E and Technical Input, PREPA shall review such revised Final Design and notify SELLER in writing either that (i) such revised design constitutes the Approved Design or (ii) PREPA does not accept such design, in which case PREPA shall simultaneously deliver to SELLER PREPA's

further Technical Input. The foregoing process shall be repeated until an Approved Design is achieved. The Parties shall use good faith efforts to agree upon an Approved Design within sixty (60) days of SELLER's submission of the revised Final Design, after SELLER has received PREPA's Technical Input for the first time. SELLER shall not, without PREPA's written consent, commence construction of the Interconnection Facilities until the Approved Design is achieved; provided, that SELLER may, at its risk, order long-lead equipment prior to achievement of the Approved Design.

9.8 Prior to the initial interconnection of the Facility with PREPA's System, SELLER shall retain a contractor approved in writing by PREPA (such approval not to be unreasonably withheld, delayed or conditioned after SELLER has submitted to PREPA information about the experience of the contractor) to perform the acceptance testing of the Interconnection Facilities, which testing shall be performed pursuant to testing protocols and requirements, which testing protocols and requirements shall be provided by PREPA not later than sixty (60) Days following the Effective Date. SELLER shall provide to PREPA no less than ten (10) Days advance notice of such testing and PREPA shall have a representative witness and evaluate the testing. No later than ten (10) Days following completion of such testing and submission to PREPA of the testing book to be generated by the testing contractor, PREPA shall review such testing book and notify SELLER in writing that PREPA either (i) accepts such testing book or (ii) does not accept such testing book, in which case PREPA shall simultaneously deliver to SELLER a written and detailed description of PREPA's objections to such testing book and PREPA's required modifications thereto, which modifications shall be made in good faith and be reasonable and consistent with Prudent Electrical Practices. If PREPA has provided required modifications to the testing book, then no later than five (5) Days following SELLER's delivery to PREPA of a revised testing book, PREPA shall review such

revised testing book and notify SELLER in writing either that the same is approved or that PREPA continues to have required modifications thereto. The foregoing process shall be repeated until the testing book is approved by PREPA, such approval not to be unreasonable withheld, delayed or conditioned. PREPA shall be responsible for the final determination as to whether the Interconnection Facilities have been adequately designed constructed and tested and that the same comply with PREPA's requirements. PREPA shall use good faith efforts to accept SELLER's testing book within twenty (20) days after SELLER's delivery to PREPA of a revised testing book, after SELLER has received PREPA's objections to the testing book for the first time. PREPA acknowledges and agrees that SELLER is not providing design, engineering or testing services or advice to PREPA in respect of the Facility or the Interconnection Facilities.

9.9 As a condition to SELLER's right to interconnect with PREPA's System, (i) SELLER shall provide written notice (which shall include a copy of the red line drawing used for the construction of the Interconnection Facilities) to PREPA that the Interconnection Facilities have been substantially completed and tested in accordance with Sections 9.7 and 9.8 (the "IF Completion Notice") and (ii) PREPA shall inspect such Interconnection Facilities to confirm they were constructed in accordance with the Approved Design, which inspection and confirmation shall be completed promptly, but in any case within five (5) Days following PREPA's receipt of SELLER's IF Completion Notice. If PREPA determines in good faith that the Interconnection Facilities have not been constructed in accordance with the Approved Design and that such deviation would, if the Facility is synchronized with SELLER's System, adversely affect the operations of PREPA's System, PREPA shall so advise SELLER in writing within five (5) Days following PREPA's inspection of the Interconnection Facilities and SELLER shall be required to

correct any such deviation prior to interconnecting the Facility to PREPA's System (in which case the first sentence of this Section 9.10 shall again apply).

9.10 SELLER shall provide PREPA with as-built drawings of the SELLER's Interconnection Facilities (one line diagram and protection scheme) within one hundred twenty (120) Days after the Commercial Operation Date and within one hundred twenty (120) Days after any material modification of the SELLER's Interconnection Facilities to the extent the information in such as-built drawings are affected.

9.11 SELLER agrees to comply with any reasonable request made by PREPA to provide acceptable relay settings prior to the Initial Synchronization Date in accordance with Section 9.3. SELLER further agrees that control and protection scheme parameters such as: ramp rates, higher frequency fluctuations, low voltage ride-through, voltage support and dynamic power factor will be consistent in all material respects with the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E. SELLER shall procure equipment with electrical capabilities to comply with the above-mentioned parameters.

9.12 SELLER shall own and be responsible for the safe and adequate operation and maintenance of all SELLER's Interconnection Facilities, other than metering equipment, but including SELLER's back-up meters and metering devices, if any. After transfer from SELLER, PREPA shall own and be responsible for the safe and adequate operation and maintenance of PREPA's Interconnection Facilities, all risk of loss and ownership in respect thereof shall be borne exclusively by PREPA and PREPA shall indemnify, defend and hold SELLER harmless for any and all claims of PREPA or any other Person for any losses, liabilities, claims, costs or damages of any nature arising from PREPA's Interconnection Facilities or the procurement, construction, installation, testing or transfer to PREPA of PREPA's Interconnection Facilities.

9.13 PREPA reserves the right to change the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E in conformance with Prudent Electrical Practices; provided, however, that SELLER shall not be obligated to implement any such change unless PREPA can demonstrate that, were it not for such change, imminent and substantial harm to human life, property, or PREPA's system, specifically as it relates to reliability and safety margins, would result. In the event that SELLER is obligated to implement any such change, SELLER shall assume the cost of any required modifications to the Facility, up to a total cost which, when added to any costs previously, required by PREPA and incurred by SELLER pursuant to Section 9.13 or 9.14, does not exceed the Modification Limit. In the event that such change reduces the Facility's net electrical output, the amount by which SELLER's revenue is reduced due to such reduced output shall be considered a cost of such change. In the event that SELLER's costs when added to any costs previously incurred by SELLER pursuant to Section 9.13 or 9.14, exceed the Modification Limit, then PREPA, at SELLER's request shall increase the Energy Purchase Price to allow SELLER to recover, in a term of eighteen (18) months, that portion of the cost in excess of the Modification Limit.

9.14 Each Party shall notify the other in advance of any changes to its system that would affect the proper coordination of protective devices on the two interconnected systems or that would otherwise affect either Party's Interconnection Facilities. PREPA reserves the right to modify or expand its requirements for protective devices in the SELLER Interconnection Facilities in conformance with Prudent Electrical Practices. If PREPA desires to change its requirements for protective devices, SELLER shall not be obligated to implement any such change unless PREPA can demonstrate that, were it not for such change, imminent and substantial harm to human life, property, or PREPA's system, specifically as it relates to reliability and safety margins, would result. In the event that

SELLER is obligated to implement any such change, SELLER shall assume the cost of any required modifications to the Facility, up to a total cost which, when added to any costs previously, required by PREPA and incurred by SELLER pursuant to Section 9.13 or 9.14, does not exceed the Modification Limit. In the event that such change reduces the Facility's net electrical output, the amount by which SELLER's revenue is reduced due to such reduced output shall be considered a cost of such change. In the event that SELLER's costs when added to any costs previously incurred by SELLER pursuant to Section 9.13 or 9.14, exceed the Modification Limit, then PREPA, at SELLER's request shall increase the Energy Purchase Price to allow SELLER to recover, in a term of eighteen (18) months, for that portion of the cost in excess of the Modification Limit.

9.15 SELLER agrees to keep the Facility PSS/E mathematical models current with the future versions of the PSS/E program. Current PSS/E mathematical models shall be provided to PREPA not later than thirty (30) days after a PSS/E version upgrade is notified. The SELLER shall submit to PREPA an official report from Siemens PTI that validates and certifies the required mathematical models, including the subsequent revisions to keep the mathematical models current with future versions of the PSS/E program.

ARTICLE 10. METERING

10.1 PREPA shall own and maintain all meters and metering devices used to measure the delivery and receipt of Net Electrical Output, for payment purposes. SELLER shall install primary and back-up meters and metering devices subject to Section 10.3 as part of the Additional Interconnection Facilities; provided that such meters and metering devices shall be subject to PREPA's approval.

10.2 All meters and metering equipment used to determine the Net Electrical Output delivered to PREPA shall be located at the Interconnection Point and sealed. The seals may only

be broken by PREPA personnel when the meters are to be inspected, tested or adjusted. PREPA shall give SELLER prior notice thereof and SELLER shall have the right to have a representative present during the meter inspection, testing or adjustment. If either Party believes that there has been a meter failure or stoppage, it shall immediately notify the other Party to coordinate an inspection or test at the earliest convenient date.

10.3 At least annually, at PREPA's cost and, in addition from time to time upon two (2) weeks prior written notice by either Party at its cost (unless the results demonstrate that meters for which PREPA has operation and maintenance responsibility are outside the limits established in American National Standard Institute Code for Electricity Metering (ANSI C12.16, latest version: "ANSI C12.16"), in which case such additional tests shall be at PREPA's cost), PREPA will test and verify the meter(s), including backup meters, in accordance with the provisions for meter testing as established by ANSI C12.16. When, as a result of such a test, a meter is found to be within the range specified by the standard, no adjustment will be made to the amount paid to SELLER for Net Electrical Output delivered to PREPA. If the meter is found to be outside the range specified by the standard, (a) the meter shall be adjusted, repaired, replaced, and/or recalibrated as near as practicable to a condition of zero error by the Party owning such defective or inaccurate device at that Party's expense; and (b) PREPA will use the backup meters to calculate the correct amount of Net Electrical Output delivered to PREPA for the actual period during which inaccurate measurements were made. If the actual period cannot be determined to the mutual satisfaction of the Parties, a period equal to the time elapsed since the most recent test, but in no case for a period in excess of six (6) Months will be used. If the backup meters are not available, or if the testing of the backup meters demonstrates that those meters are out of calibration, the meter readings shall be adjusted based on the corrected meter readings of the most accurate meter for the actual period during which

inaccurate measurements were made. If the actual period cannot be determined to the mutual satisfaction of the Parties, for a period equal to one half of the time elapsed since the most recent test, but in no case for a period in excess of six (6) Months would be used. To the extent that the adjustment period covers a period of deliveries for which payment has already been made by PREPA, PREPA shall use the corrected measurements as determined in accordance with this Section 10.3 to recalculate the amount due for the period of the inaccuracy and shall subtract the previous payments by PREPA for this period from such recomputed amount. If the difference is a positive number, the difference shall be paid by PREPA to SELLER; if the difference is a negative number, that difference shall be paid by SELLER to PREPA or PREPA may offset such amounts against payments due to SELLER by PREPA hereunder. Payment of such difference by the owing Party shall be made not later than thirty (30) Days after the owing Party receives notice of the amount due, unless PREPA elects payment via an offset. Each Party shall comply with any reasonable request of the other Party concerning the sealing of meters, the presence of a representative of the other Party when the seals are broken and the test is made, and other matters affecting the accuracy of the measurement of electricity delivered from the Facility.

10.4 For purposes of this Article 10 and Article 11 - COMPENSATION, PAYMENT AND BILLINGS, the "Billing Period" shall be defined as a period not to exceed thirty-three (33) Days nor less than twenty-eight (28) Days. The Billing Period schedule shall be prepared by PREPA and submitted to SELLER on or before January 1 of each Year. PREPA shall notify SELLER in advance of any change to the Billing Period schedule. During each one (1) Year period, following the Initial Synchronization Date, PREPA shall read the meters at least twelve (12) times to determine the amount of Net Electrical Output delivered to PREPA from the Facility. At PREPA's option, PREPA may choose

to read the meters more frequently and totalize such readings in accordance to the Billing Periods. PREPA shall provide SELLER with a written statement containing the reading details and totals within ten (10) Days following the end of each Billing Period.

ARTICLE 11. COMPENSATION, PAYMENT AND BILLINGS

11.1 For each Billing Period, PREPA shall pay SELLER an Energy Payment for the Net Electrical Output measured in accordance with Section 10.3. SELLER shall include the Energy Payment in the monthly invoice presented to PREPA pursuant to Section 11.3. The Energy Payment shall be calculated as per following Section 11.2.

11.2 (a) Energy Payment - Beginning with the Pre-Operation Period and continuing throughout the Term of this Agreement:

EP = EPP x NEO

Where:

EP is the Energy Payment

EPP is the Energy Purchase Price, which for the first Agreement Year shall be subject to the Year that the Facility enters into Commercial Operations as determined from the table below:

Year in which Facility enters into Commercial Operation	Rate per kWh
2013	$0.15
2014	$0.15
2015	$0.14

NEO is the Net Electrical Output expressed in kilowatt hours

On an annual basis on the first anniversary of the Commercial Operation Date and each year thereafter, the Energy Purchase Price shall be escalated in an amount equal to two percent (2.0%).

An example of the Energy Payment is included in Appendix C.

11.3 On or before the fifteenth (15th) Day following the end of each Billing Period (or if later, within five (5) Days after SELLER receives the meter reading data pursuant to Section 10.4), SELLER shall provide PREPA with a written invoice for the Net Electrical Output delivered to PREPA, and such invoice shall be paid by PREPA within forty-seven (47) Days after the end of the Billing Period. Interest shall accrue on the payments due to SELLER commencing on the Day after the date on which PREPA is required to make any such payment pursuant to the preceding sentence. Notwithstanding the payment requirements set forth in this Section, any amounts owed to a Party by the other Party pursuant to this Agreement that are not paid when due to the Party to whom they are owed, may, at the discretion of such obligee Party be offset against the amounts due to the other Party from such obligee Party; provided that such amounts are undisputed or have been determined to be owed to the obligee Party by a final award pursuant to Section 22.13; and provided, further, that the obligee Party shall provide the other Party with five (5) Business Days' advance written notice describing in reasonable detail the amounts to be set off before effecting any such set off. Payments to a Party shall be made by wire transfer to an account with a bank to be specified by such Party in writing, which specification shall be notified to the other Party at least thirty (30) Days prior to the Initial Synchronization Date, or with such other banks as may thereafter be specified by a Party in writing. Either Party may by written notice to the other, change the address to which such payments to the notifying Party are to be sent.

11.4 If for reasons other than a Force Majeure or an Emergency or the conditions established in Article 7, but subject to Prudent Utility Practices and Prudent Electrical Practices, PREPA opts not to receive the Net Electrical Output that would have been provided by the SELLER's Complex in accordance with this Agreement, PREPA shall pay SELLER

as provided in this Section 11.4 for such Net Electrical Output that would have been delivered to the Interconnection Point but for the outage, disconnection, curtailment or reduction. The calculation of such Net Electrical Output that would have been delivered to the Interconnection Point but for the outage, disconnection, curtailment or reduction shall be determined in accordance with Appendix F. In addition to this payment for Net Electrical Output, PREPA will pay proportionate amounts of Green Credits and/or Production Tax Credits lost due to PREPA's option not to receive such Net Electrical Output. The value of the Production Credits would be calculated by multiplying the Net Electrical Output not received as determined in Appendix F by the value per kWh for Production Tax Credit determined by the Internal Revenue Service for that year and any other governmental agency in the case of non-federal Production Tax Credits. The value of the Green Credits would be calculated by multiplying the Net Electrical Output not received as determined in Appendix F by the applicable GCPP as defined in Section 11.2. The burden of proof regarding the per kWh values for Green Credits and/or Production Credits lost shall be SELLER's responsibility. For instance in which PREPA curtails the Facility, PREPA shall send a report to SELLER explaining in detail the particulars that cause the curtailment. If SELLER disputes the causes of the curtailment included in the aforementioned report, such dispute shall be resolved by binding arbitration in accordance with the Dispute Resolution process provided for in Section 22.12.

ARTICLE 12. TESTING AND INITIAL SYNCHRONIZATION

12.1 Subject to Section 2.1, SELLER declares (but does not represent, warrant or covenant) that the estimated nameplate Generating Capacity for the Facility at commencement of commercial operations is expected to be approximately 20 MW.

12.2 SELLER shall perform tests to verify that the PV Facility complies with each of the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E (frequency ride through, voltage ride through, power factor requirements, voltage regulation requirements, frequency response, ramp rate control, power quality requirements, etc...) and the power limit device of Section 12.1. SELLER shall submit to PREPA field test reports certified by an independent laboratory or company specialized in acceptance tests of renewable power generating facilities evidencing that the PV Facility meets each of the MINIMUM TECHNICAL REQUIREMENTS FOR SOLAR PV PROJECTS of APPENDIX E and the power limit device of Section 12.1. The field tests shall be witnessed and coordinated with PREPA's Acceptance Tests and Planning personnel. These tests shall be repeated on an annual basis in order to maintain the PV facility interconnected to the grid. For the avoidance of doubt, manufacturer's test reports shall not be accepted as a means to comply with this requirement.

12.3 Following the acceptance tests of the Facility, SELLER shall notify PREPA in writing of the test results, the Generating Capacity and the Commercial Operation Date. PREPA may have an eyewitness during the performance of the tests.

ARTICLE 13. LIABILITY

13.1 Each Party shall be responsible for the energy and facilities, located on its respective side of the Interconnection Point. The energy made available by SELLER to PREPA under this Agreement shall become the property of PREPA at the Interconnection Point, and, except as provided in Section 13.2 below, SELLER shall not be liable to PREPA for loss or damage to PREPA's generation, transmission, and distribution system, resulting directly or indirectly from the use, misuse or presence of said energy once it passes the Interconnection Point.

13.2 Each Party shall be liable for all foreseeable damages suffered by the other as a necessary consequence of SELLER or PREPA's respective negligent performance or omissions or failure to perform its respective obligations under this Agreement, including during any cure period in accordance with Article 17, as stated under Article 1060 of the Puerto Rico Civil Code, subject to the terms of Section 13.3 below.

13.3 Notwithstanding anything to the contrary in this Agreement, neither Party nor its officers, directors, agents, employees and representatives shall in any event be liable to the other Party or its officers, directors, agents, employees or representatives for claims for incidental, consequential or indirect damages to persons or property, whether arising in tort, contract or otherwise, connected with or resulting from performance or non-performance under this Agreement including without limitation, claims made by either Party's customers or suppliers, or claims made by third parties, or claims made by either Party for lost profits (except payments specifically provided for in Article 11).

13.4 Notwithstanding anything in this Agreement to the contrary, Seller's aggregate liability to PREPA for damages during the term of this Agreement shall not exceed three million dollars ($3,000,000) [calculated at a rate of $200,000 per MW].

ARTICLE 14. INDEMNIFICATION

14.1 Subject to the provisions of this Article 14, each Party (the "Indemnifying Party") shall indemnify and hold harmless the other Party and each of its Indemnitees (each such Person, an "Indemnified Person") from and against any and all damages, claims, losses, liabilities, actions, causes of action, costs, expenses and obligations (including all attorneys' fees) whether arising in contract, tort or otherwise to third parties for or on account of injury, bodily or otherwise, or death of persons or for damage to or destruction of third party property, in each case to the extent resulting from or arising out of the

Indemnifying Party's violation of law, negligence, willful misconduct or failure to perform under this Agreement.

14.2 In the event any Party to this Agreement receives notice of any claim or cause of action for which such Party elects to assert a right of indemnification and hold harmless from the other Party, the Party receiving such notice must give prompt written notice to the other Party of the claim. The Party required to give the indemnification and hold harmless under the terms and provisions of this Agreement will have control of the defense of any such claim or cause of action (except to the extent prevented by any legal conflict of interest) including the selection of counsel to handle same. In addition to the counsel so selected, the Party being indemnified and held harmless shall be entitled to be represented by counsel of his or its own choosing but, in such event, the cost and expense of said additional counsel shall be borne by the indemnitee.

14.3 As of the Effective Date and for the Term, SELLER shall indemnify and hold harmless PREPA for any and all judgments (including expenses such as reasonable costs and attorneys' fees) required to be incurred by PREPA as a result of claims of any nature whatsoever resulting from any environmental harm due to the actions of SELLER or SELLER's agents or employees in the design, planning, construction or operation of the Facility or arising as a result of the presence at the Facility of pollutants, hazardous substances, materials or wastes in excess of amounts and concentrations permitted by applicable federal or Commonwealth laws, rules or regulations then in effect. In the event SELLER fails to reimburse PREPA for such expenses within thirty (30) days of receipt of written notice from PREPA stating that such expenses were incurred, PREPA may offset the amount of such expenses against amounts due SELLER from PREPA under this Agreement. In the event SELLER disputes that claimed expenses are due to

the actions of SELLER or SELLER's agents, such dispute shall be resolved pursuant to Article 22.12.

ARTICLE 15. FORCE MAJEURE

15.1 "Force Majeure" means any cause beyond the reasonable control of and not the result of the fault or negligence of the Party claiming the Force Majeure. Except as provided in Section 15.4, the Party claiming the Force Majeure shall be excused from performing hereunder and shall not be liable for damages or otherwise to the extent the non-performance or inability to perform is due to a Force Majeure event. The burden of proof as to whether a Force Majeure event has occurred and caused a non-performance or inability to perform shall be on the Party claiming the Force Majeure. The suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure event, consistent with Prudent Utility Practices.

15.2 Provided that the provisions of Section 15.1 are met, Force Majeure events may include the following: acts of God, strikes, industrial disturbances, acts of public enemy, war, blockades, boycotts, riots, insurrections, epidemics, earthquakes, storms, floods, civil disturbances, lockouts, fires, explosions, interruptions of services due to the act or failure to act of any governmental authority and requirements of, actions by or failures to act by any governmental authority but only to the extent such requirements, actions, or failures to act prevent or delay; despite due diligence, to obtain any licenses, permits, or approvals required by any governmental authority.

15.3 A Party claiming excuse due to Force Majeure shall, within ten (10) Days after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence and its estimated duration and shall diligently use all reasonable efforts, consistent with Prudent Utility Practices, to remedy its inability to

perform and resume in full its performance under this Agreement; provided that this obligation shall not require the settlement of any strike, walkout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute are contrary to its best interest.

15.4 Neither Party shall be excused by reason of Force Majeure from the obligation to make any payments, when due, to the other Party.

15.5 If a Party Disputes the other Party's claim of Force Majeure, such Dispute shall be resolved pursuant to Section 22.13.

ARTICLE 16. TERMINATION

16.1 Termination of this Agreement shall occur only upon: (a) expiration of the Term of this Agreement as provided in Article 5; (b) mutual written consent of the Parties; (c) the election of PREPA following a Development Abandonment or Permanent Closing; (d) the election of the non-defaulting Party following the occurrence of a Breach under Article 17; (e) the election of PREPA following delay by SELLER in achieving Commencement of Construction by twenty four (24) Months after the Effective Date; (f) delay by SELLER in achieving the Commercial Operation Date by the date which is thirty-six (36) Months after the Effective Date; or (g) the circumstances provided in Section 16.2. The deadlines in (e) and (f) shall each be extended on a day-for-day basis for any delay in achieving such deadline due to a Force Majeure event, Pending Permits or Legal Challenge, or any delay caused by any act or omission of PREPA, but in no event longer than forty-eight (48) Months, as extended by any delay caused by any act or omission of PREPA.

16.2 The Parties agree that the continued effectiveness of this Agreement is dependent on SELLER'S determination that the Facility to be constructed in accordance with this

Agreement is financially feasible. If SELLER notifies PREPA that the Facility is not financially feasible as reasonably determined by SELLER on or before the Commencement of Construction Date, then either Party may terminate this Agreement without liability by written notice to the other Party.

16.3 Cancellation, expiration or earlier termination of this Agreement shall not relieve the Parties of obligations incurred prior to, or as a result of, such cancellation, expiration or earlier termination of this Agreement, which by their nature should survive such events, including this Section 16.3 and Articles 13 and 14. Without limiting the foregoing, termination of this Agreement shall not discharge either Party hereto from any obligation it owes to the other Party under this Agreement by reason of any transaction, loss, cost, damage, expense or liability which shall occur or arise (or the circumstances, events, or basis of which shall occur or arise) prior to termination. It is the intent of the Parties hereby that any such obligation owed (whether the same shall be known or unknown at termination or whether the circumstances, events or basis of the same shall be known or unknown at termination) shall survive termination. Any indebtedness by either Party to the other shall be considered payable within ninety (90) Days of the termination of this Agreement.

ARTICLE 17. BREACH OF AGREEMENT, DELAYS, AND SECURITY

17.1 A "Breach" of this Agreement shall be deemed to exist upon any of the following events:

(a) A default by a Party in the due and punctual payment of any monetary amount to be paid to the other Party when and as the same becomes due and payable, and the same is not cured within ten (10) Days after the date on which the defaulting Party receives written notice from the other Party of such failure; and

(b) Subject to Article 15, a default in any material respect by a Party in the performance of, or in compliance with, any of the other terms, covenants, or conditions contained in this Agreement, and the same is not cured within one hundred twenty (120) Days after the date on which the defaulting Party receives written notice from the other Party of such failure, or such longer period (not to exceed an additional cure period of one hundred fifty (150) Days if the default is capable of being cured and the defaulting Party is diligently pursuing such cure).

17.2 Upon the occurrence of a Breach, the non-defaulting Party shall be entitled to invoke its remedies under this Agreement and/or under the law. If the other Party Disputes in writing that a Breach by it has occurred, the Parties shall resolve the matter in the manner prescribed in Section 22.12.

17.3 Before the Commercial Operation Date, SELLER shall provide to PREPA, at SELLER'S sole expense, an irrevocable direct pay letter of, or letters of credit issued by, a local bank or any other bank, which such issuing bank and letters of credit shall be subject to PREPA's approval, such approval not to be unreasonably withheld, conditioned or delayed, in the amount of (a) $30.00, multiplied by (b) the Generating Capacity of the Facility (the "Operation Security"). If the Generating Capacity is increased as per Section 12.4, SELLER agrees to increase the Operation Security in the amount (in U.S. Dollars) resulting from the product of (a) $30.00, multiplied by (b) the increase of the Generating Capacity of the Facility. The Operation Security shall be maintained for the Term of this Agreement. Upon a Breach under Article 17 by SELLER, PREPA may draw from the Operation Security required above to offset any damages PREPA may be entitled to under this Agreement; provided that PREPA either obtains (a) the written agreement of SELLER to the level of such damages (after giving effect to the deduction

of any amounts which SELLER asserts are due and payable to it from PREPA but remain unpaid), or (b) obtains a judgment pursuant to the Dispute resolution mechanism provided in Section 22.12 requiring that SELLER pay such amount to PREPA free of any escrow or similar security arrangement. If the Operation Security will expire or cease to exist prior to such agreement or judgment and SELLER fails to provide a replacement Operation Security at least thirty (30) Days prior to the expiration of the then current Operation Security, PREPA may draw from the Operation Security an amount equal to the lesser of (i) PREPA's claim of damages and (ii) the remaining undrawn face amount of the Operation Security (after giving effect to the deduction of any amounts which SELLER has asserted to PREPA, on or before the date of such drawing, are due and payable to it from PREPA but remain unpaid); provided that PREPA places the amount so drawn in an escrow account in a bank, and pursuant to escrow arrangements reasonably acceptable to SELLER until the appropriate amount of damages due to PREPA (after giving effect to the aforesaid deductions, if any) is determined or, if earlier, until a replacement Operation Security is provided to PREPA (upon which issuance of a replacement Operation Security, the amounts deposited in the escrow account shall immediately be released to SELLER). Following such agreement or determination PREPA may draw from the escrow account (or from any replacement Operation Security) and retain amounts equal to the amount of damages, if any, determined in the aforesaid manner to be due to PREPA, and PREPA shall deliver to SELLER all amounts remaining in the escrow account, if any. The costs of such escrow account shall be borne by PREPA. Drawing under the Operation Security shall not be the exclusive remedy available to PREPA.

ARTICLE 18. TAXES AND ENVIRONMENTAL COSTS

18.1 (a) "Taxes" shall mean any and all taxes, fees or other charges of any nature, excluding income taxes and repatriation (tollgate) taxes, that are imposed or assessed on or as a result of the ownership or operations of the Facility by federal, Commonwealth or municipal governmental bodies or agencies responsible for implementing tax laws, rules, regulations or orders. "Environmental Costs" shall mean any and all fixed and variable costs incurred by Seller resulting from the imposition or assessment on or as a result of the ownership or operations of the Facility by laws, rules, regulations or orders relating to the environment issued by federal, Commonwealth or municipal governmental bodies or agencies. "Post-Effective Date Taxes" shall mean all Taxes resulting from tax laws, rules, regulations or orders enacted, approved or issued after the Effective Date. "Post-Effective Date Environmental Costs" shall mean all Environmental Costs resulting from laws, rules, regulations or orders enacted, approved or issued after the Effective Date.

(b) "Taxes" shall mean any and all taxes, fees or other charges of any nature, excluding income taxes and repatriation (tollgate) taxes, that are imposed or assessed on or as a result of the ownership or operations of the Facility by federal, Commonwealth or municipal governmental bodies or agencies responsible for implementing tax laws, rules, regulations or orders. "Environmental Costs" shall mean any and all fixed and variable costs incurred by Seller resulting from the imposition or assessment on or as a result of the ownership or operations of the Facility by laws, rules,

regulations or orders relating to the environment issued by federal, Commonwealth or municipal governmental bodies or agencies. "Post-Effective Date Taxes" shall mean all Taxes resulting from tax laws, rules, regulations or orders enacted, approved or issued after the Effective Date. "Post-Effective Date Environmental Costs" shall mean all Environmental Costs resulting from laws, rules, regulations or orders enacted, approved or issued after the Effective Date.

(c) Seller shall be responsible for all income taxes, repatriation (tollgate) taxes and Environmental Costs applicable to the construction and operation of the Facility; provided that, PREPA shall reimburse Seller for all additional costs resulting from changes in the payments of Taxes by Seller that are the result of the enactment of Post-Effective Date Taxes and for all changes in Seller's Environmental Costs that are the result of the enactment of Post-Effective Date Environmental Costs, all applicable to Seller by reason of the ownership or operation of Facility for the purpose of the sale by Seller to PREPA of Net Electrical Output or Generating Capacity (collectively called "Changes"). Such Changes payable by PREPA according to the foregoing shall be paid to Seller in equal monthly installments due on the same dates and on the same terms as payments made under Section 11.2 hereof

(d) All such Changes paid by PREPA according to the preceding Section 18.1(b), shall be recorded in an unfunded tracking account to be maintained by PREPA. Seller shall be entitled, upon reasonable notice and during business hours, to audit PREPA's records reflecting the

balance in the tracking account and to identify and object to any error in such calculations. If the Parties are unable to agree on an adjustment to the balance in the tracking account within thirty (30) days of PREPA's receipt of Seller's objection, then such matter may be referred to dispute resolution by either Party pursuant to Section 22.12.

(e) If there is a balance in the tracking account at the end of the eighteenth (18th) Agreement Year ("Balance"), Seller agrees that PREPA may retain up to fifty percent (50%) of the amounts due in each Billing Period thereafter which shall reduce the tracking account balance by an amount equal to such Balance provided such amount is undisputed or determined to be owed pursuant to a final award pursuant to Section 22.12. This monthly retention shall be eliminated when the tracking account balance equals zero; provided that if any portion of the Balance has not been repaid at the end of the twenty fifth-(25th) Agreement Year plus any extension as per Article 5, PREPA shall have the option to extend the Term for up to an additional two (2) Agreement Years as necessary to repay the Balance plus Interest by applying such monthly retention as set forth above. If the Agreement is so extended, the Energy Payment for the twenty-sixth (26) Agreement Year and thereafter shall be agreed by the Parties at such time. If there is a deficit in the tracking account at the end of the twenty fifth (25th) Agreement Year, an amount sufficient to compensate Seller for such deficit shall be paid by PREPA to Seller within forty-seven (47) days provided such amount is undisputed or determined to be owed pursuant to a final award pursuant to Section 22.12. In the

event this Agreement is terminated according to Article 17 herein, and there is a balance in the tracking account ("Termination Balance"), such Termination Balance plus Interest shall be paid to PREPA within thirty (30) days provided such amounts are undisputed or determined to be owed pursuant to a final award pursuant to Section 22.12. Notwithstanding, during the Term of this Agreement and before any termination of this Agreement takes place, Seller shall have the option to prepay all or any portion of the Balance or the anticipated Termination Balance, if applicable, at any time or from time to time.

(f) The Parties agree that payments or credits by PREPA for Changes as a result of a Post-Effective Date Tax or a Post-Effective Date Environmental Cost shall be subject to an annual Fiscal Year audit and shall be properly adjusted if applicable. Both Parties shall be entitled to participate in such audit.

18.2 Seller will promptly pay and discharge all lawful Taxes, assessments and governmental charges or levies imposed upon or in respect of all or any part of its property or business, all trade accounts payable in accordance with usual and customary business terms, and all claims for work, labor or materials which, if unpaid, might become a lien or charge upon any of its property; provided, however, that Seller shall not be required to pay any such Tax, assessment, charge, levy, account payable or claim if: (a) the validity, applicability or amount thereof is being contested in good faith by appropriate actions or proceedings which will prevent the forfeiture or sale of any property of Seller or any material interference with the use thereof by Seller, and (b) Seller shall set aside on its books reserves deemed by it to be adequate with respect thereto. PREPA shall pay or cause to

be paid all taxes, fees or other charges of any nature on or with respect to the Net Electrical Output at and from the PREPA's Interconnection -Facilities, including, without limitation, taxes, fees or other charges of any nature assessed on or with respect to the purchase and sale of the Net Electrical Output at the Interconnection Point (including, without limitation, sales tax, excise tax, municipal license tax and value-added tax).

ARTICLE 19. INSURANCE

19.1 SELLER shall obtain and maintain, and shall require subcontractors to obtain and maintain, in full force and effect during the life of this Agreement and thereafter as provided herein, policies of insurance covering all operations engaged in by this Agreement, which shall be formally agreed with insurance companies authorized to do business in Puerto Rico, and to that effect it shall provide in original certificates of insurance and endorsements, as follows:

(a) Workman's Compensation Insurance: SELLER shall provide and maintain Workmen's Compensation Insurance as required by the Workmen's Compensation Act of the Commonwealth of Puerto Rico. SELLER - shall also be responsible for compliance with said Workmen's Compensation Act by all his subcontractors, agents, and invitees. SELLER shall furnish PREPA a certificate from the State Insurance Fund showing that all personnel employed in the work are covered by the Workmen's Compensation Insurance, in accordance with this Agreement. Imported technical personnel are exempted, as per Act of May 16, 1958 No 16. SELLER shall furnish evidence of such exemption and certificate from the insurance carrier covering said personnel.

(b) Commercial General Liability Insurance: SELLER shall provide and maintain Commercial General Liability Insurance with limits of $1,000,000 per occurrence and $2,000,000 aggregate.

(c) Automobile Liability Insurance: SELLER shall provide and maintain Automobile Liability Insurance with limits of $1,000,000 combined single limit covering all owned, non-owned and hired automobiles.

(d) Excess Umbrella Liability Insurance: SELLER shall provide and maintain Excess Umbrella Liability Insurance with limits of $4,000,000 per occurrence in excess of the limits of insurance provided in subparagraph (c) above.

(e) All Risk Physical Damage Property Insurance: SELLER shall provide and maintain All Risk Physical Damage Property Insurance, including machinery coverage, to cover all real and personal property of SELLER (including earthquake and hurricane occurrence) to one hundred percent (100%) of replacement cost to the extent available on commercially reasonable terms as determined by SELLER and subject to a reasonable deductible, which shall be the total responsibility of the SELLER. This policy of insurance shall be placed into effect on the Commercial Operation Date. The insurance as required in this Section 19.1(e) shall cover work at the Site and shall also cover portions of the work located away from the Site and portions of the work in transit. The policy shall include as insured property scaffolding, false work, and temporary buildings located at the Site.

(f) Boiler and Machinery Insurance: SELLER shall provide and maintain boiler and machinery insurance, if any, required by the contract documents

or by law, covering insured objects during installation and until final acceptance by PREPA. This insurance shall name as insured SELLER and PREPA.

(g) Employer's Liability Insurance: SELLER shall provide and maintain Employer's Liability Insurance with minimum bodily injury limits of $1,000,000 for each employee and $1,000,000 for each accident, covering against the liability imposed by law upon SELLER as a result of bodily injury, by accident or disease, including death arising out of and in the course of employment, outside of and in the course of employment, and outside of and distinct from any claim under the Workmen's Compensation Act of the Commonwealth of Puerto Rico.

19.2 Requirements under the Policies: The Commercial General Liability Insurance and Automobile Liability Insurance required under this Agreement shall be endorsed to include:

(a) As Additional Insured, using ISO Additional Insured Endorsement CG 20 26 11 85 or a substitute providing equivalent coverage:

Puerto Rico Electric Power Authority
Risk Management Office
PO Box 364267
San Juan, PR 00936-4267

(b) A thirty (30) Days' cancellation or nonrenewable notice to be sent by certified mail with return receipt to the above address.

(c) An endorsement including this Agreement under contractual liability coverage and identifying it by number, date and the Parties.

(d) Waiver of Subrogation in favor of PREPA.

(e) The breach of any of the Warranties or Conditions in these policies by the Contractor shall not prejudice PREPA's rights under this policy.

19.3 Construction Facility Requirements: The contractors and designers retained by SELLER to construct the Facility shall obtain and maintain in full force and effect before the Commencement of Construction of the Facility, policies of insurance covering all constructions engaged in by this Agreement, which shall be formally agreed with insurance companies authorized to do business in Puerto Rico, and to that effect SELLER shall provide in the original certificate of insurance and endorsements, as follows:

(a) Workmen's Compensation Insurance: SELLER shall provide and maintain Workmen's Compensation Insurance as required by the Workmen's Compensation Act of the Commonwealth of Puerto Rico. SELLER shall also be responsible for compliance with said Workmen's Compensation Act by all its subcontractors, agents, and invitees. SELLER shall furnish PREPA a certificate from the State Insurance Fund showing that all personnel employed in the work are covered by the Workmen's Compensation Insurance, in accordance with this Agreement. Imported technical personnel are exempted, as per Act of May 16, 1958, No. 16. SELLER shall furnish evidence of such exemption and certificate from the insurance carrier covering said personnel.

(b) Employer's Liability Insurance: SELLER shall provide and maintain Employer's Liability Insurance with minimum bodily injury limits of $1,000,000 for each employee and $1,000,000 for each accident, covering against the liability imposed by law upon SELLER as a result of bodily injury, by accident or disease, including death arising out of and in the

course of employment and outside of and distinct from any claim under the Workmen's Compensation Act of the Commonwealth of Puerto Rico.

(c) Commercial General Liability Insurance: SELLER shall provide and maintain Commercial General Liability Insurance ("CGL") with limits of $1,000,000 per occurrence and $2,000,000 aggregate. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage. Continuing CGL insurance shall cover liability arising from products-completed operations and liability assumed under an insured contract for at least three (3) years following substantial completion of the work.

(d) Automobile Liability Insurance: SELLER shall provide and maintain Automobile Liability Insurance with limits of $1,000,000 combined single limit covering all owned, non-owned and hired automobiles.

(e) Excess Umbrella Liability Insurance: SELLER shall provide and maintain Excess Umbrella Liability Insurance with limits of $4,000,000 per occurrence in excess of the limits of insurance provided in subparagraph (c) above.

(f) Builder's Risk Insurance: SELLER shall provide and maintain in force Builder's Risk Insurance for the entire work. Such insurance shall be written in an amount equal to the total contract sum as well as subsequent modifications of that sum. The insurance shall apply on a replacement cost basis and coverage shall be written on a completed value form as follows:

(g) The insurance as required above shall be written to cover all risks of physical loss except those specifically excluded in the policy, and shall inure at least against the perils of fire, lightning, explosion, windstorm or hail, smoke aircraft or vehicles, riot or civil commotion, theft, vandalism, malicious mischief, earthquake, windstorm and collapse.

(h) Any deductible applicable to the insurance purchased in compliance with this requirement shall be paid by SELLER.

(i) Waiver of Subrogation. SELLER waive all rights against PREPA and its officers, directors, agents, and employees for recovery for damages caused by fire and other perils to the extent covered by builders risk or property insurance purchased pursuant to the requirements of this Agreement, or any other property insurance applicable to the work.

19.4 Requirements under the Policies: The Commercial General Liability Insurance and Automobile Liability Insurance required under this Agreement shall be endorsed to include:

(a) As Additional Insured, using ISO Additional Insured Endorsement CG 20 26 11 85 or a substitute providing equivalent coverage:

Puerto Rico Electric Power Authority
Risk Management Office
PO Box 364267
San Juan, PR 00926-4267

(b) A thirty (30) Days' cancellation or nonrenewable notice to be sent by certified mail with return receipt to the above address.

(c) An endorsement including this Agreement under contractual liability coverage and identifying it by number, date and the Parties.

(d) Waiver of Subrogation in favor of PREPA.

(e) The breach of any of the Warranties or Conditions in these policies by the Contractor shall not prejudice PREPA's rights under this policy.

ARTICLE 20. ASSIGNMENT

20.1 This Agreement shall not be assigned or transferred by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. Any attempt to assign this Agreement without the prior written consent of the corresponding Party shall be void.

20.2 Notwithstanding the provisions of Section 20.1, SELLER shall have the right to assign this Agreement without PREPA's consent to (a) any of its affiliates or parent companies (b) the Project Lenders as partial collateral security in order to obtain financing or other funding. PREPA agrees to enter into consent to assignment with the Project Lenders containing terms and conditions that are customary for transactions of this kind and acknowledges that the Project Lenders may require certain modifications to this Agreement. PREPA agrees to cooperate in good faith in this regard and to provide other customary and reasonable documents and acknowledgments as the Project Lenders may reasonably request, including, without limitation, a legal opinion issued by PREPA's counsel. In addition, SELLER shall have the right to assign this Agreement to any trustee under the financing documents or corporation or partnership. If SELLER shall assign this Agreement pursuant to this Section 20.2, then so long as any such assignment, or any consolidation, modification or extension of any such assignment shall remain outstanding, the following provisions shall apply:

(a) Following receipt by of written notice of such assignment, PREPA shall, if serving notice upon SELLER pursuant to the provisions of this

Agreement, also serve a copy of such notice upon the assignee, at the address provided in the notice of assignment.

(b) Following receipt by PREPA of written notice of such assignment, PREPA shall, if serving notice upon SELLER pursuant to the provisions of this Agreement, also serve a copy of such notice upon the assignee, at the address provided in the notice of assignment.

(c) From and after the date that such notice has been given to an assignee, said assignee shall have an extended period for remedying or commencing the remedy of any alleged default, or causing the same to be remedied, equal to thirty (30) Days in addition to the cure period given to SELLER pursuant to the terms of this Agreement to remedy (or such additional period as PREPA may agree with, and for the benefit of, the Project Lenders). PREPA shall accept such performance by or on behalf of such assignee as if the same had been done by SELLER.

(d) The making of an assignment pursuant to the preceding provisions of this Section shall not be deemed to constitute an assignment or transfer of this Agreement, nor shall any assignee referred to above, as such, be deemed to be an assignee or transferee of this Agreement so as to require such assignee, as such, to assume the performance of any of the terms and conditions of SELLER to be performed hereunder; provided, however, that the purchaser at any sale of this Agreement in any proceeding for the foreclosure of any assignment, or the assignee or transferee of this Agreement in any proceedings for the foreclosure of any assignment, or the assignee or transferee of this Agreement under any instrument of assignment or transfer in lieu of the foreclosure of any assignment, shall

be deemed to be an assignee or transferee within the meaning of this subsection and shall be deemed to have agreed to perform all of the terms, covenants and conditions on the part of SELLER to be performed hereunder from and after the date of such purchase and assignment.

(e) Not withstanding any other provision of this Agreement, any sale of this Agreement in any proceeding for the foreclosure of any assignment, or the assignment or transfer of this Agreement in lieu of the foreclosure of any assignment, shall be deemed to be a permitted sale, transfer or assignment of this Agreement, and this Agreement shall continue in full force and effect following any such sale, transfer or assignment.

(f) No agreement between PREPA and SELLER modifying, amending, canceling or surrendering this Agreement shall be effective without the prior written consent of all assignees.

(g) If this Agreement is terminated prior to the expiration of the Term due to a Breach by SELLER (in which case PREPA shall notify the Project Lenders of such termination) or if this Agreement is rejected or disaffirmed pursuant to any bankruptcy law or proceeding or other similar law or proceedings affecting creditors' rights generally with respect to a bankruptcy proceeding relating to SELLER or otherwise, PREPA agrees, if there are outstanding obligations to a Project Lender, subject to the receipt of all necessary approvals, to enter into a new power purchase and operating agreement with the Project Lender (or its designee or nominee; provided that such designee or nominee (x) is controlled by the Project Lender, (y) is approved by PREPA, or (z) has a tangible net worth of at least twenty five million dollars ($25 million) (or its direct or indirect

parent has a tangible net worth of at least seventy five million dollars ($75 million)) and has, or engages an operator which has, at least three (3) years of experience operating solar energy facilities of a similar type and size as the Facility) for the remainder of the Term upon all of the covenants, agreements, terms, provisions and limitations of this Agreement, effective as of the date of such termination.

20.3 Notwithstanding the provisions of Section 20.1, SELLER reserves the right to assign all of its rights, title and interest under this Agreement to any Affiliate of SELLER - without the consent of PREPA, provided such Affiliate agrees to be bound by the terms of this Agreement and to fully perform the obligations of SELLER - hereunder. PREPA shall be notified of SELLER'S intention to assign this Agreement at least thirty (30) Days in advance. Upon such assignment, SELLER will thereafter be relieved of all obligations arising under this Agreement.

ARTICLE 21. QUALIFYING FACILITY STATUS

SELLER will cause the Facility to achieve status as a Qualifying Facility pursuant to PURPA and agrees to maintain the Facility's status as a Qualifying Facility. For the avoidance of doubt, in the event the Facility loses its status as a Qualifying Facility pursuant to PURPA, SELLER shall vigorously pursue and use reasonable efforts to re-obtain Qualifying Facility status. Notwithstanding the above, should SELLER be unable to obtain such status, this Agreement shall remain in full force and effect and SELLER shall comply, in its relationship with PREPA, with all other provisions of PURPA and the regulations approved under PURPA by FERC or any successor applicable to the relationship between qualifying facilities and electric utilities, in particular those provisions that protect, defend, preserve and/or are propitious to electric utilities;

provided, however, that nothing under PURPA or the regulations thereunder shall materially adversely affect in any way the rights, duties, and obligations of the Parties under this Agreement.

ARTICLE 22. MISCELLANEOUS PROVISIONS

21.1 This Agreement, including the appendices hereto, may be amended or waived only by written agreement between the Parties. A waiver of any Breach shall extend only to the particular Breach waived and shall not limit or otherwise affect any rights that either Party may have with respect to any other or future Breach.

21.2 The failure of either Party to insist in any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect, unless such waiver is in a written agreement between the Parties.

21.3 This Agreement is intended solely for the benefit of the Parties hereto and, solely to the extent rights thereto are provided in this Agreement, for the benefit of the Project Lenders as third party beneficiaries. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any Person not a Party to this Agreement.

21.4 No officer, employee, or agent of SELLER or PREPA or municipal governments shall be entitled to any share or part of this Agreement or to any benefit that may arise therefrom that would be in violation of any law, rule, regulation order, or policy of the Commonwealth of Puerto Rico or PREPA.

21.5 This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter

into any agreement or undertaking for, or act on behalf of, or to act as, or be an agent or representative of, or to otherwise bind, the other Party.

21.6 PREPA agrees to provide electric service to SELLER as requested by SELLER, at the most advantageous rate available to SELLER, based on PREPA's approved tariff and shall be consistent with rates charged by PREPA to similar customers.

21.7 Certifications:

(a) Prior to the signing of this Agreement, SELLER has submitted the originals of the following documents or certifications:

(i) Certification by SELLER, which indicates that it has filed its Income Tax Returns during the five (5) previous years, if required, and that it does not owe taxes to the Commonwealth of Puerto Rico; or is paying such taxes by an installment plan in full compliance with its terms.

(ii) An Income Tax Return Filing Certificate, issued by the Treasury Department of Puerto Rico, Area of Internal Revenues, assuring that SELLER has filed its Income Tax Return for the last five (5) years, if required. To obtain such Certificate, SELLER will use the Request for Copy and/or Certification of Income Tax Returns Form issued by the Treasury Department of Puerto Rico. In addition, SELLER shall submit a Certification of Debt issued by the Area of Internal Revenues.

(iii) Certification issued by the Municipal Revenues Collection Center, assuring that SELLER does not owe any tax to such governmental agency. To obtain such Certification, SELLER

will use the form issued by the Municipal Revenues Collection Center.

(iv) Certificate, issued by the Department of Labor and Human Resources of Puerto Rico, evidencing that SELLER has paid to the Department of Labor and Human Resources of Puerto Rico, if applicable, its employees' contributions, in accordance with the Puerto Rico Employment Security Act (unemployment, temporary disability or sickness or social security for chauffeurs); or is paying such contributions by an installment plan in full compliance with its terms. To obtain such Certificate, SELLER will use the form issued by the Department of Labor and Human Resources of Puerto Rico.

(v) Certificate, issued by the Child Support Administration (ASUME) evidencing that SELLER is in compliance with the retention, if applicable, that as an employer must do.

(vi) A sworn statement to the effect that, as of the Effective Date, neither SELLER nor any of its members, directors, managers, officers or employees have been convicted of, nor have they pled guilty to, any crime as enumerated in Article 3 of Public Law No. 458 of December 29, 2000 of the Commonwealth of Puerto Rico, as amended. In accordance with Article 6 of Public Law No. 458 of December 29, 2000 of the Commonwealth of Puerto Rico, as amended, SELLER acknowledges that its conviction or guilty plea for any of the crimes as enumerated in

Article 3 of such Act shall entail, in addition to any other applicable penalty, the automatic rescission of this Agreement. In addition, but only to the extent required by Public Law No. 458, PREPA shall have the right to demand the reimbursement of payments made pursuant to this Agreement that directly result from the committed crime.

(b) If any of the previously required certifications referred to in Section 22.9 shows a debt, and SELLER has requested a review or adjustment of this debt, SELLER will certify that it has made such request at the Effective Date. If the requested review or adjustment is denied and such determination is final, SELLER will provide, immediately, proof of payment of this debt to PREPA; otherwise, SELLER accepts that the owed amount be offset by PREPA and retained at the origin, deducted from the corresponding payments.

(c) Specifically, SELLER recognizes that submittal of the aforementioned certifications and a document referred to in Section 22.9 is an essential condition of this Agreement.

21.8 This Agreement shall inure to the benefit of and be binding upon SELLER and PREPA and their respective successors and assigns.

21.9 This Agreement is intended by the Parties as the final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement with respect to the subject matter hereof and supersedes all prior written and oral understandings between the Parties with respect thereto.

21.10 If any provision hereof shall be held invalid, illegal or unenforceable by the holding of an arbitral authority convened pursuant to Section 22.12, such holding shall not invalidate or render unenforceable any other provision hereof.

21.11 SELLER certifies as of the Effective Date that, to its actual knowledge, it does not receive payment or benefit of any nature for services rendered regularly through an appointment to a governmental agency, body, public corporation or municipality of Puerto Rico.

21.12 Dispute Resolution:

(a) If a dispute arises between the Parties regarding the application, interpretation, enforceability, validity, performance, or breach of this Agreement or matters arising therefrom or relating thereto, whether sounding in contract, tort, unfair competition, law, equity or any other legal form (a "Dispute"), then such Dispute shall be resolved solely by either a Technical Determination (as defined and subject to the terms set forth in (b) below) or a final and binding arbitration in accordance with this Section 22.13. In the event of a Dispute under this Agreement, the disputing Party may promptly provide written notice of the Dispute (a "Dispute Notice") to the other Party. Following delivery of the Dispute Notice, the Parties shall either (i) agree in writing to submit such Dispute for a Technical Determination as provided in clause (b) below or (ii) absent such agreement, nominate a member of its respective senior management, who shall have decision-making authority on behalf of such Party, and such senior management members shall promptly meet and seek to achieve settlement, if possible, by negotiation and mutual agreement. If the Dispute is not resolved or submitted for Technical

Determination within forty-five (45) Days after the Dispute Notice is received by the recipient Party (or such longer period of time as may be mutually agreed by the Parties in writing), then either Party may submit the Dispute to final and binding arbitration by issuing a demand for arbitration. The arbitration shall be conducted by a panel of three arbitrators, one selected by each Party within (10) ten Days of the submission of the dispute and the third selected by the two Party-appointed arbitrators within twenty (20) Days of the appointment of the second arbitrator. Any arbitrator not timely selected shall, at the request of any Party, be appointed in accordance with AAA's listing, ranking and striking process. Unless otherwise agreed in writing by the Parties, discovery in each mandatory arbitration conducted pursuant to this Section 22.13 shall be completed within ninety (90) Days, and the arbitration panel may restrict the scope and number of discovery demands permitted, including but not limited to the number of depositions that may be taken, to ensure compliance with this 90-Day limitation. During that period, the arbitrators shall be available to receive and consider all such evidence as is relevant and, within reasonable limits due to the restricted time period, to hear as much argument as is feasible, giving a fair allocation of time to each Party to the arbitration. The arbitrators shall use all reasonable means to expedite discovery and to sanction noncompliance with reasonable discovery requests or any discovery order.

(b) In addition, unless otherwise agreed in writing by the Parties, a hearing on each mandatory arbitration shall be conducted at the end of the discovery period but no later than one hundred and twenty (120) Days after

appointment of the third arbitrator in the arbitration panel and the hearing shall be completed in no longer than five (5) Business Days. The arbitrators shall not consider any evidence or argument not presented during such period and shall not extend such period except by the written consent of both Parties. The arbitration panel shall render a written decision stating the reasons therefore (the "Award") as soon as practicable after the close of the hearing but, in any case, no later than thirty (30) Days after the close of the hearing. The arbitrators shall have the right only to interpret and apply the terms and conditions of this Agreement and to order any remedy allowed by this Agreement, but may not change any term or condition of this Agreement, deprive either Party of any right or remedy expressly provided hereunder, or provide any right or remedy that has been excluded hereunder. All hearings shall be held and the Award shall be rendered in San Juan, Puerto Rico. The Award shall be final and binding.

(c) If a Dispute hereunder is one that the Parties agree is of a technical nature that would be best resolved through a technical review in proceedings before the Consulting Engineer, either Party may submit such Dispute (a "Technical Dispute") for resolution by the Consulting Engineer (a "Technical Determination") by providing to the other Party and the Consulting Engineer a written notice, specifying the matter to be determined (a "Technical Dispute Notice"). Proceedings before the Consulting Engineer shall be held in San Juan, Puerto Rico, unless otherwise agreed in writing by the Parties. Within thirty (30) Days of the engagement of the Consulting Engineer for a Technical Dispute (or such

longer period of time as the Parties may mutually agree in writing), the Consulting Engineer shall conduct a hearing; provided that the Parties may agree in writing to waive the hearing and have the Consulting Engineer reach a decision on the basis of written submissions alone. The Consulting Engineer shall render a written decision on the Technical Dispute as soon as practicable after the close of the hearing but, in any case, no later than fifteen (15) Days after the close of the hearing. The Consulting Engineer shall have no authority to award damages excluded by this Agreement, and the Parties hereby waiving their right, if any, to recover such excluded damages in connection with any Technical Dispute.

(d) Any arbitration conducted pursuant to this Section 22.13 shall be governed by the Federal Arbitration Act, 9 U.S.C. § 1 et seq. which shall control over any local law regarding arbitration. The Award rendered in any such arbitration shall be final and binding on the Parties, may be entered and enforced in any Court of Competent Jurisdiction, and shall be subject to judicial review only on the grounds contained in the Federal Arbitration Act. Unless the Consulting Engineer or arbitral panel, as applicable, decides otherwise, the expenses of the arbitration proceedings, including the expenses of the Consulting Engineer and the arbitrators, but excluding the Parties' own expenses and attorneys' fees, shall be shared equally by the Parties. The Parties are committed to the prompt and efficient resolution of Disputes. Accordingly, if one or more arbitrations are already pending with respect to a Dispute under this Agreement, then any Party may request that any arbitration or any new Dispute arising under this Agreement be consolidated into any prior arbitration. The new

Dispute or arbitration shall be so consolidated; provided that the arbitral tribunal for the prior arbitration determines that: (i) the new Dispute or arbitration presents significant issues of law or fact common with those in the pending arbitration; (ii) no Party would be unduly prejudiced and (iii) consolidation under these circumstances would not result in undue delay for the prior arbitration. Any such order of consolidation issued by the arbitral tribunal shall be final and binding upon the Parties. The Parties waive any right they have to appeal or to seek interpretation, revision or annulment of such order of consolidation. The arbitral tribunal for the arbitration into which a new Dispute is consolidated shall serve as the arbitral tribunal for the consolidated arbitration. The Parties agree that upon such an order of consolidation, they will promptly dismiss any arbitration brought under this Agreement or any related Agreement, the subject of which has been consolidated into another arbitral proceeding under this Agreement or related agreement. The Parties also agree that the time limitations on discovery and hearing duration set forth in Section 22.13(a), above, shall apply to each consolidated arbitration, unless the arbitration panel determines that certain or all of those limitations are impracticable in a particular instance.

21.13 SELLER certifies as of the Effective Date, to its actual knowledge, that no public employee has any personal or economic interest in this Agreement.

21.14 SELLER agrees to comply with the provisions of Act of June 18, 2002, No 84, which establishes a Code of Ethics for the Contractors, Suppliers and Economic Incentive Applicants of the Executive Agencies of the Commonwealth of Puerto Rico.

21.15 SELLER shall be considered as an independent contractor, for all material purposes under this Agreement, and all Persons engaged or contracted by SELLER for the performance of its obligations herein, shall be considered as its employees or agents or those of its subcontractors, and not as employees or agents of PREPA.

21.16 All invoices submitted by SELLER shall include the following Certification in order to be processed for payment by PREPA:

No Interest Certification:

Under penalty of absolute nullity, I hereby certify that to our actual knowledge no employee, official or director of PREPA is a Party or has any interest in the profits or benefits to be obtained under this Agreement, or if any employee, official or director of PREPA has any interest in the profits or benefits under this Agreement, a waiver has been previously obtained. I also certify that the only consideration to provide the services under this Agreement is the payment agreed with PREPA's authorized representative under this Agreement. The total amount of this invoice is fair and correct. The services were provided and no payment has been received for this invoice.

_____

Contractor's Signature

21.17 SELLER shall retain the Green Credits associated with the Energy generated by the Facility

21.18 PREPA unconditionally and irrevocably agrees that the execution, delivery and performance by it of this Agreement and the other project documents to which it is a party constitute private and commercial acts. In furtherance of the foregoing, PREPA hereby irrevocably and unconditionally agrees that to the extent permitted by applicable law, (a) should any proceedings be brought against PREPA or its assets in any

jurisdiction in connection with this Agreement or any of the transactions contemplated by this Agreement, no claim of immunity from such proceedings shall be claimed by or on behalf of PREPA on behalf of itself or any of its assets; (b) it waives any right of immunity which it or any of its assets now has or may have in the future in any jurisdiction in connection with any such proceedings; and (c) consents generally in respect of the enforcement of any judgment against it in any such proceedings in any jurisdiction, to the giving of any relief or the issuance of any process in connection with such proceedings, including the making, enforcement or execution against or in respect of any of its assets.

21.19 Counterparts. This Agreement may be executed in any number of counterparts with the same effect as if both Parties hereto had signed the same document. All counterparts shall be construed together and shall constitute one instrument.

ARTICLE 23. CHOICE OF LAW AND VENUE

22.1 This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Puerto Rico and, to the extent applicable, the laws of the United States of America. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Section 22.12.

IN WITNESS WHEREOF, the Parties hereto have agreed to execute this Agreement in San Juan, Puerto Rico, as of the date first written above.

PUERTO RICO ELECTRIC
POWR AUTHORITY

Josué Antonio Colón Ortíz
Acting Executive Director

GRUPOTEC USA, INC.

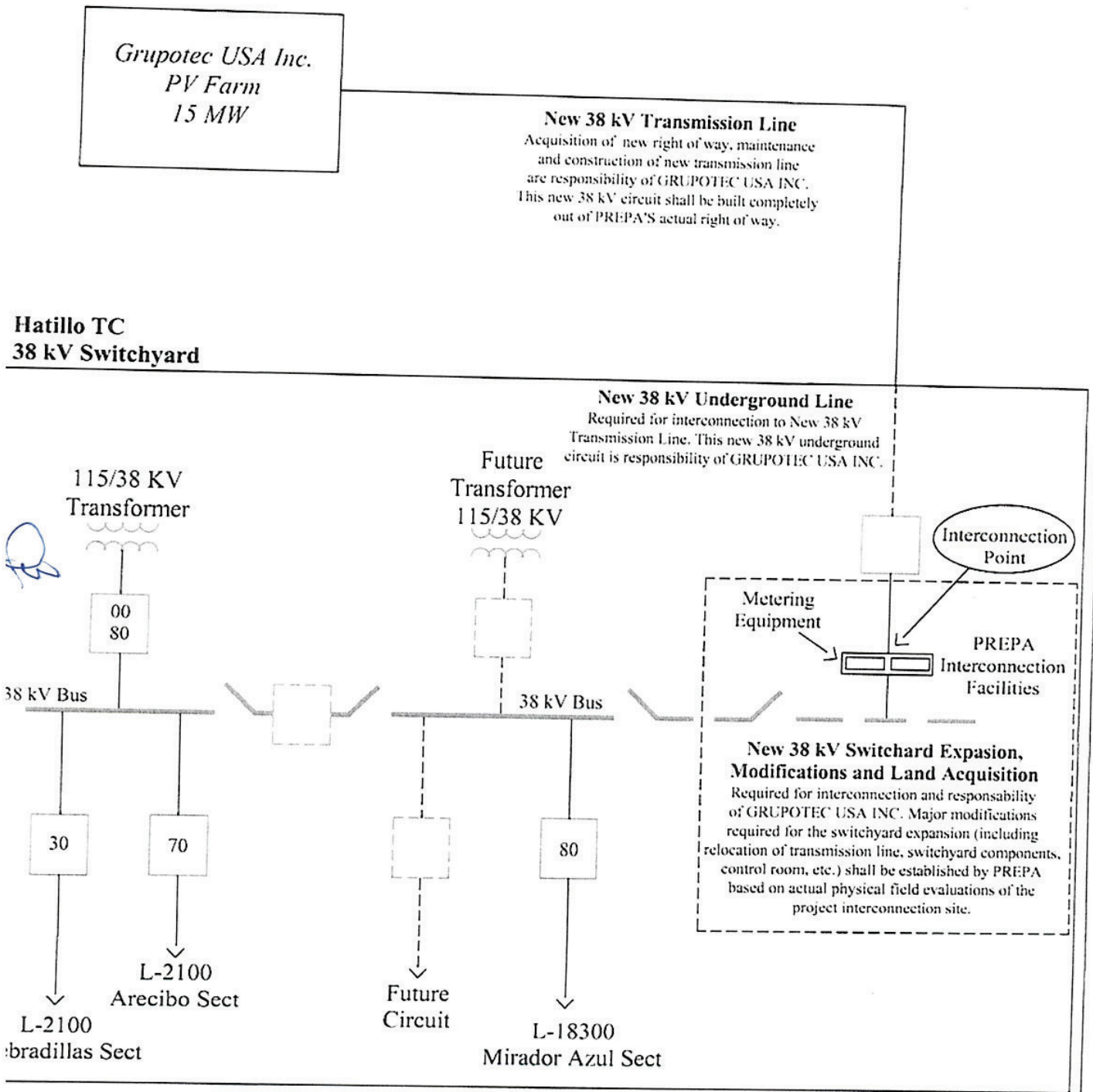
Manuel Folgado Tomas
Managing Partner

Appendix A- HOLIDAYS

The following holidays are recognized by PREPA. All holidays which fall on a Sunday are observed the following day, Monday:

DAY	CELEBRATION
January 1	New Year's Day
January 6	Three Kings Day
2nd Monday in January	E.M. de Hostos
3rd Monday in January	Martin Luther King
3rd Monday in February	George Washington
March 22	Abolition of Slavery
Friday of Holy Week	Good Friday
3rd Monday in April	Jose de Diego
Last Monday in May	Memorial Day
July 4	Independence Day
3rd Monday in July	Luis Munoz Rivera
4th Monday in July	Jose Celso Barbosa
July 25	Commonwealth Constitution
1st Monday in September	Labor Day
October 12	Columbus Day
November 11	Veterans Day
4th Thursday in November	Thanksgiving Day
December 25	Christmas Day

GRUPOTEC USA INC.
ELECTRICAL INTERCONNECTION
HATILLO, P.R.



Grupotec USA Inc. Electrical Interconnection Hatillo TC	COMPAÑIA AEE (Puerto Rico Electric Power Authority)	AUTORIDAD DE ENERGIA ELECTRICA DE PUERTO RICO SELLO OFICIAL

Appendix B- INTERCONNECTION

Seller shall provide the following information to PREPA within ninety (90) Days following the Effective Date. Data submitted in a preliminary or estimated form shall be updated within thirty (30) Days after final equipment arrangements and specifications are established.

1. Electrical one-line diagram of the Facility.

2. Explanation of proposed equipment protection and control scheme (may be shown functionally on the one-line diagram).

3. Site plan showing plant layout, property lines, access roads and switchyard boundaries.

4. Preliminary equipment layout and arrangement for switchyard and generator step-up transformers (GSU).

5. Reactive Power Capacity curve of generators.

6. Station auxiliary load.

7. Station auxiliary transformer data – impedance, connection winding, load loss and no load tap changer.

8. GSU impedance, load loss, no load taps changer, connection and winding.

9. Generator reactances

    a. Saturated and unsaturated;
    b. Synchronous, transient, sub transient, and rotor mutual;
    c. Direct axis and quadrature axis.

10. Stator leakage reactances.

11. Generator Short Circuit Ratio.

12. Generator kilowatt rating.

13. Generator kilovar rating.

14. Explanation of the excitation system and the IEEE Excitation System Model including time constants, gains, limits, block diagrams, exciter saturation curves and configuration.

15. Additional data necessary for initial transient stability study. At a minimum:

a. H - Inertia constants of turbo generators shaft (MW-second/MVA).

b. R_a - Stator resistances of generators.

c. Generators time constants:

   i. Open circuit and short circuit;
   ii. Transient and sub transient;
   iii. Direct axis and quadrature axis.

d. Generator saturation curves.

e. Explanation of the mechanical system. IEEE Turbines Governor (mechanical system) Model covering speed governing, turbine time constants, gains, limits, block diagrams, damping coefficient, droop, dead band, and configuration.

f. Over speed protection system - purpose, model, description, setting, data, and curves (as fast valving).

g. Any other control system model (as compensator, stabilizer and excitation limiter models), including the time constants, gains, limits, description, block diagrams and configuration.

16. Seller's requirements for power supplied by PREPA during construction and start-up.

17. Project schedule (I-J or bar chart format) including but not limited to the following milestones:

- QF status obtained
- Engineering 30% complete
- One-line diagram approved
- Financial Closing Date
- Major licenses/permits
- Major material procurement
- Start Construction
- Engineering 70% complete
- Utility technical submittals complete
- Operating procedures finalized
- Start test and start-up
- Initial synchronizing date
- Commercial operation

18. PSSE Mathematical Model (Parameters and Data Requirements)

The Contractor shall submit to PREPA the PSSE mathematical model with the following information and data related to the proposed units. The data shall be submitted initially in a preliminary or estimated form. The data shall be updated and officially certified according to PREPA requirements when final field adjustments and machine parameters measurements and field tests are performed to the units by the contractor:

1. Turbo-Generators data, including but not limited to the following:

a. MVA Base and Voltage Base
b. MVA, MW and MVAR Ratings
c. Voltage Ratings
d. Inertia Constant of Turbo Generators
e. Moment of Inertia
f. Speed (rpm)
g. Ra - Stator Resistances
h. Generator Saturation Curves
i. Reactive Power Capacity Curves
j. Generator Short Circuit Ratio
k. Generator Reactances
1) Saturated and Unsaturated
2) Synchronous, Transient, Subtransient and Rotor Mutual
3) Direct Axis and Quadrature Axis
4) Positive, Negative and Zero Sequence
l. Generator Time Constants
1) Open Circuit and Short Circuit
2) Transient and Subtransient
3) Direct Axis and Quadrature Axis
m. Stator Leakage Reactances
n. Over Speed Protection System - purpose, model, description setting, data, and curves.

2. Excitation System Data, Excitation System Dynamic Mathematical Model and Detailed Explanation

a. IEEE Excitation System Model, including but not limited to the time constants, gains, limits, block diagrams, exciter saturation curves and configuration.

b. The dynamic mathematical model of the excitation system shall be fully compliant with the latest and future versions of PSS/E dynamic simulations platform.

c. Any other control system model (as compensator, stabilizer and excitation limiter models), including but not limited to the time constants, gains, limits, description, block diagrams and configuration.

3. Turbine Speed Control and Mechanical System Data, Turbine Speed Control and Mechanical System Dynamic Mathematical Model and Detailed Explanation

a) Turbine System Model - IEEE Turbine Speed Control and Mechanical System Model, including but not limited to the speed governing, turbine time constants, gains, limits, damping coefficient, droop, dead band, block diagrams and configuration.

b) The dynamic mathematical model of the turbines system shall be fully compliant with the latest and future versions of PSS/E dynamic simulations platform.

4. Manufacturer standard assumption values, or field settable ranges, for all gains, time constants, and limits appearing in the excitation and mechanical systems block diagrams, and in any other control system.

5. Generators step up (GSU) transformers data (manufacturer test report), including but not limited to the impedance, connection, winding, MVA ratings, voltage ratings, load loss (kW) and no load tap changer.

6. Turbo-generators protective relays - purpose, description, data, and setting (as loss of field, negative-sequence, ground over current and directional relays).

7. Station auxiliary load (MW and MVAR).

8. Station auxiliary and start-up transformers data (if required), including but not limited to the impedance, connection winding, MVA ratings, voltage rating, load loss (kW) and no load tap changer.

Appendix C - Example of Price Index Calculations

Year *	¢/KWH
1	0.15
2	0.153
3	0.156
4	0.159
5	0.162
6	0.166
7	0.169
8	0.172
9	0.176
10	0.179
11	0.183
12	0.187
13	0.190
14	0.194
15	0.198
16	0.202
17	0.206
18	0.210
19	0.214
20	0.219
21	0.223
22	0.227
23	0.232
24	0.237
25	0.241

* On an annual basis on the first anniversary of the Commercial Operation Date and each year thereafter, the Energy Payment shall be escalated in an amount equal to two percent (2%).

APPENDIX - D

Technical Specification for Dynamic System Monitor

1. Introduction

The following specification defines the minimum requirements for an instrument used in the monitoring and register of dynamic disturbances on electric power systems.

2. Hardware

2.1 Inputs

2.1.1 The equipment shall have at least 32 analog inputs with a minimum resolution of 16 bit for the A/D converter and minimum sampling rate of 1000 samples/second. The analog inputs shall permit at least the following types of signals:

a. Seven (7) ac voltages (125 V rms minimum)
b. Six (6) ac currents (5 A rms minimum)
c. Two (2) dc voltages of at least 800 V
d. Two (2) dc signals of the range of 0 – 100 mV
e. Fifteen (15) dc signals of the range of 0 – 20 mA

2.1.2 The equipment shall have at least 16 digital inputs. The minimum input voltage range of the digital inputs should be 0 – 250 V. The digital inputs should be included as a user defined software triggering input.

2.1.3 The equipment shall be able to record power system frequency with a resolution of at least 0.001Hz.

2.2 The equipment shall have a built-in microprocessing unit with color monitor, keyboard and mouse from which all commands, controls and setup parameters may be entered. All setup parameters shall be store in a non-volatile media, to prevent loss of setup data if power is interrupted. This microprocessing unit shall be of industrial grade to insure long life in a typical substation or generation plant environment.

2.3 Memory and storage capacity

The equipment shall have a solid state memory (hard disk or flash) with the required capacity to stores at least 500 events of at least 2 minutes of length (each) with one cycle of resolution. The equipment shall maintain the date and time in an internal battery-backed clock.

2.4 The equipment shall have an Ethernet 10/100 Mbps port (LAN interface) for local or remote network communication.

2.5 Power Source

The equipment shall operate from a voltage source of 120 Vac ± 10%, 60 Hz.

2.6 Signal Conditioning modules

The equipment should have modules with the capacity of perform basic filtering functions like low-pass, high-pass, band-pass and band-stop. Also the modules shall have the capacity of perform adjustable attenuation and gain of the signals.

2.7 Measurement accuracy

2.7.1 Voltage measurement error shall be less than ± 1 % of reading
2.7.2 Current measurement error shall be less than ±1% of reading

3. Software

3.1 The software platform of the equipment shall be compatible with the latest version of windows operating system.

3.2 The equipment remote communication shall be thru TCP/IP network connectivity (LAN). The remote communication should permit at least the set up and data retrieval of the equipment. The equipment should have the capability to perform at least the following functions remotely:

- Modification of the configuration
- Retrieval of captured events
- Remote event triggering

3.3 The equipment shall have the capacity of time synchronization with GPS system via a network time server. Optionally the equipment could have an IRIG-B serial time code interface for the GPS synchronization.

3.4 Triggers

3.4.1 The equipment shall support user defined programmable triggers. Triggering shall be initiated based upon primary quantities (voltage, current, and frequency), calculated quantities (watts, Var, power factor, etc), or digital signals.

3.4.2 The trigger thresholds shall be based upon the following:

- Level threshold (high level, low level, in-band, out-band, etc)
- Rate of change (ex. frequency variation (df/dt))
- Manual input (keyboard trigger)
- Request from remote computer
- Event input status (digital signal)

3.4.3 A re-trigger function shall be available which permits the equipment to generate a new event register if a second disturbance is detected while the recording of the first disturbance is still in process. This process should continue if more disturbances occur in the new registers.

3.5 The acquisition software shall include a user selectable pre-trigger interval option as well as a user defined post trigger interval for the information captured. The range of the pre-trigger interval should be from 0 to 60 seconds and the range for the post trigger interval should be of at least 0 to 120 seconds. In addition, the date, time, and type of trigger that initiated the event shall be included as part of the disturbance record.

3.6 The acquisition software shall have the following capabilities:

- Time displays (ex. Oscilloscope)
- Multiple displays in real-time and multiple signals in displays
- Display resizing in real time
- Programmable conversion of range and units of signals
- Independent range for signals

3.7 The acquired data shall be available in a format directly compatible with Siemens Power Technologies International (Siemens PTI) PSS/E plotting software.

3.8 The software shall support data export in ASCII, CSV and PSS/E formats.

3.9 The software shall support image export in JPG, BMP and GIF formats.

3.10 The software shall have the following analysis capabilities for the data and signals (actual and calculated):

- Fast Fourier Transform (FFT)
- Peak analysis
- Filter functions
- Series and scalar mathematic (square root, inversion, square, gain, offset, etc)

3.11 The software shall performs the following power engineering calculations and measurements:

- Three phase and single phase Power (Real, reactive, apparent)
- Power Factor
- Power angle
- rms line and phase voltage
- rms current
- Power system frequency
- DC voltage and currents

4. General

4.1 Environmental Conditions

4.1.1 Operating temperature: 0° C to 50° C
4.1.2 Operating humidity: 95 %, non-condensing

4.2 Equipment cabinet and corresponding accessories

The cabinet should have test switches at the front of the panel for the three phase voltages and currents of two generators and a phase A voltage of the bus. The test switches should have a minimum rating of 600 V rms and 30 A rms; semi flush mounted, back connected, equal or similar to ABB FT-1, style no. 129A514G01.

The signals (analog and digital) should terminate on terminal blocks inside the cabinet, before the connection to the Dynamic System Monitor. The AC, DC, digital, exciter voltage and exciter current signals should be in different terminal blocks. The terminal blocks should have a minimum rating of 600 V rms and 30 A rms (**except the exciter voltages signals**, see below). Examples of terminal blocks are: GE CR151B2 and Marathon 1512 STD. The current signals should terminate on shorting type heavy duty terminal blocks equal or similar to Marathon, catalog number 1506SC. The terminal blocks used for the excitation voltage of the generators must have a nominal voltage capacity greater than 800 V DC. A switch or breaker for isolation purposes is also required for the excitation voltage and current signals.

4.3 Documentation

4.3.1 The equipment shall include a documentation package that contains the user, operation and maintenance manuals and the mechanical and electrical equipment drawings. The documentation should be in hard copy and in digital format.

4.3.2 The equipment documentation shall include a copy of the software.

4.4 Warranty

The equipment warranty shall include part and service for a period not less than 60 months from the delivery day.

4.5 Equipment Training, Installation Support and Commissioning

An on-site equipment operation and configuration training should be included.

Appendix E

MINIMUM TECHNICAL REQUIREMENTS FOR INTERCONNECTION OF PHOTOVOLTAIC (PV) FACILITIES

The proponent shall comply with the following minimum technical requirements:

1. VOLTAGE RIDE-THROUGH:

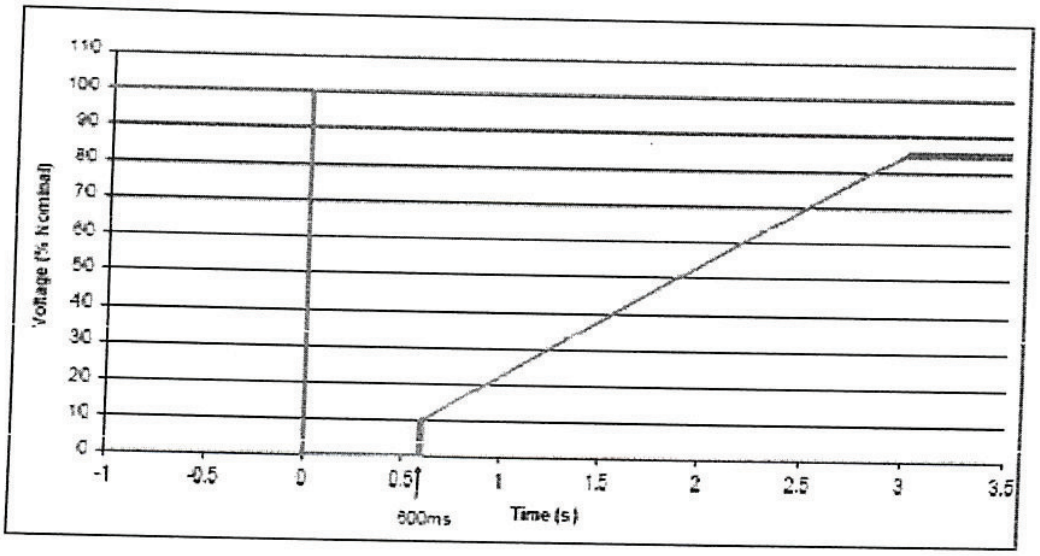


Figure 1 Low Voltage Ride-Through Requirements

a. PREPA's Low Voltage Ride-Through (LVRT) Requirements:

   i. From Figure 1, PREPA requires all generation to remain online and be able to ride-through three phase and single phase faults down to 0.0 per-unit (measured at the point of interconnection), for up to 600 ms.

   ii. All generation remains online and operating during and after normally cleared faults on the point of interconnection.

   iii. All generation remains online and operating during backup-cleared faults on the point of interconnection.

iv. During the fault conditions, the PV facility shall operate on maximum reactive current injection mode.

b. PREPA's Overvoltage Ride-Through (OVRT) Requirements:

i. PREPA requires all generation to remain online and able to ride-through symmetrical and asymmetrical overvoltage conditions specified by the following values:

Overvoltage (pu)	Minimum time to remain online (seconds)
1.4 – 1.25	1
1.25 – 1.15	3
1.15 or lower	indefinitely

2. VOLTAGE REGULATION SYSTEM (VRS)

Constant voltage control shall be required. Photovoltaic System technologies in combination with Static Var Controls, such as Static Var Compensators (SVCs), STATCOMs, DSTATCOMs are acceptable options to comply with this requirement. A complete and detailed description of the VRS control strategy shall be submitted for evaluation.

a) Photovoltaic Facilities (PVF) must have a continuously-variable, continuously-acting, closed loop control VRS; i.e. an equivalent to the Automatic Voltage Regulator in conventional machines.

b) The VRS set-point shall be adjustable between 95% to 105% of rated voltage at the POI. The VRS set-point must also be adjustable by PREPA's Energy Control Center via SCADA.

c) The VRS shall operate only in a voltage set point control mode. Controllers such as Power Factor or constant VAR are not permitted.

d) The VRS controller regulation strategy shall be based on proportional plus integral (PI) control actions with parallel reactive droop

compensation. The VRS Droop shall be adjustable from 0 to 10% and must also be adjustable by PREPA's Energy Control Center via SCADA.

e) At zero percent (0%) droop, the VRS shall achieve a steady-state voltage regulation accuracy of +/- 0.5% of the controlled voltage at the POI.

f) The VRS shall be calibrated such that a change in reactive power will achieve 95% of its final value no later than 1 second following a step change in voltage. The change in reactive power should not cause excessive voltage excursions or overshoot.

g) The generator facility VRS must be in service at any time the PVF is electrically connected to the grid regardless of MW output from the PVF.

3. Reactive Power Capability and Minimum Power Factor Requirements

The total power factor range shall be from 0.85 lagging to 0.85 leading at the point of interconnection (POI). The reactive power requirements provide flexibility for many types of technologies at the Renewable Energy Facility. The intent is that a PVF can ramp the reactive power from 0.85 lagging to 0.85 leading in a smooth continuous fashion at the POI.

The +/- 0.90 power factor range should be dynamic and continuous at the point of interconnection (POI). This means that the PVF has to be able to respond to power system voltage fluctuations by continuously varying the reactive output of the plant within the specified limits. The previously established power factor dynamic range could be expanded if studies indicate that additional continuous, dynamic compensation is required. It is required that the PVF reactive capability meets +/- 0.85 Power Factor (PF) range based on the PVF Aggregated MW Output, which is the maximum MVAr capability corresponding to maximum MW Output. It is understood that positive (+) PF is where the PVF is producing MVAr and negative (-) PF is where the PVF is absorbing MVAr.

This requirement of MVAr capability at maximum output shall be sustained throughout the complete range of operation of the PVF as established by Figure 2.

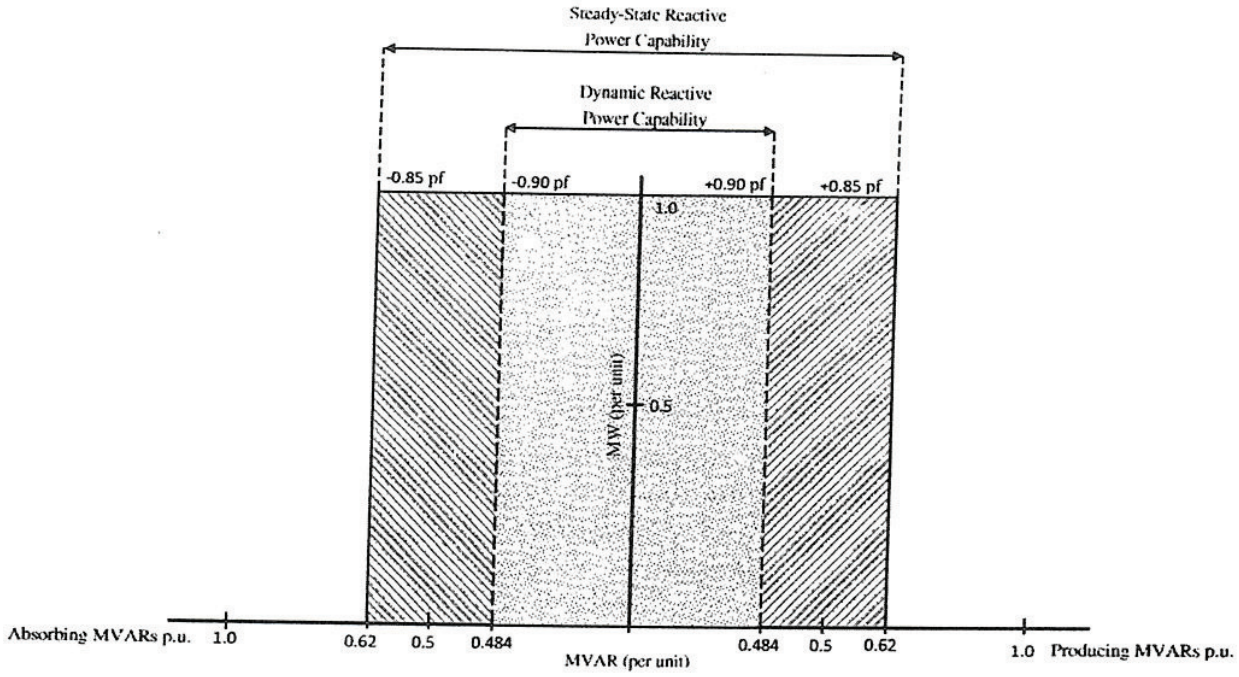


Figure 2 Reactive Power Capability Curve

4. Short Circuit Ratio (SCR) Requirements:

Short Circuit Ratio values (System Short Circuit MVA at POI/PV Facility MVA Capacity) under 5 shall not be permitted. The constructor shall be responsible for the installation of additional equipment, such as synchronous condensers, and controls necessary to comply with PREPA's minimum short circuit requirements.

5. Frequency Ride Through (FRT):

- 57.5 - 61.5 Hz — No tripping (continuous)
- 61.5 - 62.5 Hz — 30 sec
- 56.5 - 57.5 Hz — 10 sec
- < 56.5 or > 62.5 Hz — Instantaneous trip

6. FREQUENCY RESPONSE/REGULATION:

PV facility shall provide an immediate real power primary frequency response, proportional to frequency deviations from scheduled frequency, similar to governor response. The rate of real power response to frequency deviations shall be similar to or more responsive than the droop characteristic of 5% used by conventional generators. PV facility shall have controls that provide both for down-regulation and up-regulation. PV technologies, in combination with energy storage systems such as, but not limited to BESS, flywheels, hybrid systems are acceptable options to comply with PREPA's frequency response and regulation requirements.

For large frequency deviations (for example in excess of 0.3 Hz), the PV facility shall provide an immediate real power primary frequency response of at least 10% of the maximum AC active power capacity (established in the contract) for a time period not less than 10 minutes. The time response (full 10% frequency response) shall be less than 1 second. During disturbances or situations that provoke the system frequency to stay below 59.7 Hz for 10 minutes or more, after the ninth minute the real power primary frequency response shall not decrease at a ramp rate higher than 10% of the maximum AC active power capacity per minute. For smaller frequency deviations (for example less than 0.3 Hz), the PV facility response shall be proportional to the frequency deviation, based on the specified 5% droop characteristic. The operational range of the frequency response and regulation system shall be from 10% to 100% of the maximum AC active power capacity (established in the contract). The PV facility power output at the POI shall never exceed the maximum AC active power (established in the contract).

7. RAMP RATE CONTROL:

Ramp Rate Control is required to smoothly transition from one output level to another. The PV facility shall be able to control the rate of change of power output during some circumstances, including but not limited to: (1) rate of increase of power, (2) rate of decrease of power, (3) rate of increase of power when a curtailment of power output is released; (4) rate of decrease in power when curtailment limit is engaged. A 10 % per minute rate (based on AC contracted capacity) limitation shall be enforced. This ramp rate limit applies both to the increase and decrease of power output and is independent of meteorological conditions.

8. Power Quality Requirements:

The developer shall address, in the design of their facilities potential sources and mitigation of power quality degradation prior to interconnection. Design considerations should include applicable standards including, but not limited to IEEE Standards 142, 519, 1100, 1159, and ANSI C84.1. Typical forms of power quality degradation include, but are not limited to voltage regulation, voltage unbalance, harmonic distortion, flicker, voltage sags/interruptions and transients.

9. Special Protection Schemes:

PV facility shall provide adequate technology and implement special protection schemes as established by PREPA in coordination with power management requirements.

10. General Interconnection Substation Configuration:

An interconnecting generation producer must interconnect at an existing PREPA switchyard. The configuration requirements of the interconnection depend on where the physical interconnection is to occur and the performance of the system with the proposed interconnection. The interconnection must conform, at a minimum, to the original designed configuration of the switchyard. PREPA, at its sole discretion, may consider different configurations due to physical limitations at the site.

11. Modeling and Validation

The Contractor shall submit to PREPA a Siemens - PTI certified PSS/E mathematical model and data related to the proposed PV facility. When referred to the PV facility model, this shall include but is not limited to PV inverters, transformers, collector systems, plant controllers, control systems and any other equipment necessary to properly model the PV facility for both steady-state and dynamic simulation modules. It is required that the Contractor submits both an aggregate and detailed version of the PV facility model. At a later stage in the process, it is also required that the Contractor submits as-built PSS/E mathematical models of the PV Facility.

The Contractor shall be required to submit user manuals for both the PV inverter and the PV facility models including a complete and detailed

description of the voltage regulation system (VRS) and frequency regulation system model implementation. The mathematical models shall be fully compatible with the latest and future versions of PSS/E. It is preferred that the models are PSS/E standard models. In the case that the Contractor submits user written models, the Contractor shall be required to keep these models current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. The Contractor shall submit to PREPA an official report from Siemens - PTI that validates and certifies the required mathematical models, including subsequent revisions. The data and PSS/E model shall also be updated and officially certified according to PREPA requirements when final field adjustments and parameters measurements and field tests are performed to the facility by the contractor. The mathematical model (either PSS/E standard or user written model) of the PV facility shall be officially certified by Siemens - PTI before a specific and validated PSS/E mathematical model of the complete PV facility be submitted to PREPA. The Contractor shall be responsible of submitting the official reports and certifications from Siemens – PTI, otherwise the mathematical model shall not be considered valid.

The Contractor shall be responsible to submit Siemens – PTI certified PSSE mathematical models of any kind of compensation devices (ie. SVC, STATCOMs, DSTATCOMs, BESS, etc.) used on the PV facility. It is preferred that the models are standard models provided with PSS/E. In the case that the Contractor submits user written models, the PV facility Contractor shall be required to keep these models current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. In its final form, the mathematical model shall be able to simulate each of the required control and operational modes available for the compensation device and shall be compatible with the latest and future versions of PSSE. Final adjustments and parameters settings related with the control system commissioning process shall be incorporated to the PSSE mathematical model and tested accordingly by the PV facility Contractor and PREPA system study groups. The Contractor shall also perform on-site field tests for the identification, development, and validation of the dynamic mathematical models and parameters required by PREPA for any kind of compensation devices used at the PV facility. The mathematical models of the PV facility and its required compensation devices shall be officially certified by Siemens - PTI before a specific and validated PSS/E mathematical model of the complete PV facility be submitted to PREPA. The Contractor shall be responsible of submitting the official reports and certifications from

Siemens – PTI, otherwise the mathematical models shall not be considered valid.

PV facility Owners that provide user written model(s) shall provide compiled code of the model and are responsible to maintain the user written model compatible with current and new releases of PSS/E until such time a standard model is provided. PREPA must be permitted by the PV facility Owner to make available PV Facility models if required to external consultants with an NDA in place.

12. TRANSIENT MATHEMATICAL MODEL

The Contractor shall be responsible of providing a detailed transient model of the PV facility and to show that it is capable of complying with PREPA's transient Minimum Technical Requirements.

13. DYNAMIC SYSTEM MONITORING EQUIPMENT

The developer of the PV facility shall be required to provide and install a dynamic system monitoring equipment that conforms to PREPA's specifications.

APPENDIX F - DETERMINATION OF NET ELECTRICAL OUPUT NOT RECEIVED

To calculate the Net Electrical Output not received by PREPA during any time period the following method will be used:

A. First, the specific time period ("Event Hours") of the Day ("Event Day") that PREPA opts not to receive Net Electrical Output ("NEO") will be determined.

B. Second, the average solar irradiation as measured by the working pyranometers in Seller's Complex as well as the average temperature will be determined for the Event Hours.

C. Third, Seller will provide output curves (Output Curves) for the Facility based on the power curves provided by the manufacturer and taking into account all factors that may affect the output such as, but not limited to, temperature derating, DC and AC losses, inverter losses and transformer losses. Seller will validate the Output Curves during the first three months of operation of the Facility. Output Curves will be used to calculate the Net Electrical Output that would have been generated by Seller's Complex during the Event Hours. Appendix F-1 illustrates the format of the Output Curves. Seller will provide PREPA the actual power curve furnished by the manufacturer of the solar panels installed in Seller's Complex.

D. Fourth, in order to ascertain the reliability of the above calculation of Net Electrical Output, the same calculations described in the above paragraphs B and C will be made for the same time period as the Event Hours in the nearest Day prior and in the nearest Day following the Event Day for which data is available ("Comparable Hours"). The Net Electrical

Output so calculated will be compared to the Actual Net Electrical Output delivered to PREPA for the same time periods. If, the Net Electrical Output calculated from the Output Curve is plus or minus 5% (five percent) of the actual Net Electrical Output delivered to PREPA no adjustments will be made to the Net Electrical Output calculated in Paragraph C.

E. If the calculations described in the preceding Paragraph D show a variance in Net Electrical Output of more than 5% (five percent), the Net Electrical Output calculated from the Output Curve for the Event Hours will be adjusted by multiplying it by a ratio, ("Adjustment Ratio")

- The Adjustment Ratio will be calculated by taking the arithmetic average of the two ratios resulting of using the Net Electrical Output delivered to PREPA for the Comparable Hours as the numerator and the Net Electrical Output predicted by the Output Curve for the Comparable Hours as the denominator.

F. If any period during the Event Hours and thus the Comparable Hours are for a time period that is not exactly equal to the time period that the meters measure and record, the information data for that shorter time period not measured will be calculated by prorating it over the time period recorded. For example if the Event Hours is ten (10) minutes and pertinent data is recorded and kept for fifteen (15) minute intervals, the data for the shorter time period will be calculated as the product of the data for the fifteen (15) minute interval multiplied by the ratio of ten (10) divided by fifteen (15)— the actual Event Hours divided by the time interval for which records for these data are available.

APPENDIX F – OUTPUT CURVES

To be provided by Seller and accepted by PREPA, two weeks after the Initial Synchronization Date.

OUTPUT CURVES SHALL BE REVISED ANNUALLY.

AMENDMENT NO. 1 TO THE
RENEWABLE POWER PURCHASE AND OPERATING AGREEMENT
BETWEEN
GRUPOTEC USA, INC.
AND THE
PUERTO RICO ELECTRIC POWER AUTHORITY

This Amendment No. 1 (the "Amendment No.1") is made on 19 day of September, 2012, by and between Grupotec USA, Inc. (Grupotec) and the Puerto Rico Electric Power Authority (PREPA), a public corporation and governmental instrumentality of Commonwealth of Puerto Rico (collectively, the "Parties").

RECITALS

WHEREAS, the Parties entered into a Master Renewable Power Purchase and Operating Agreement (the "MRPPOA") dated March 16th, 2012, for the sale of energy to PREPA from photovoltaic solar systems ranging from 1 to 20 Mw, for up to 100 MW in the aggregate, in various locations in Puerto Rico (the Facility); and

WHEREAS, the Parties desire to amend certain provisions of the MRPPOA;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, agree as follows:

1. Annex B- Article 5 – of the MRPPOA. Section 5.2 is hereby amended by deleting the first sentence in that section in its entirety and replacing it with the following:

"The Term of this Agreement may be extended by mutual agreement of the Parties for up to two consecutives periods of five (5) Years each, following the expiration of the initial Twenty Five Agreement Years Term.

2. Annex B- Article 15. Sections 15.4 and 15.5 of the MRPPOA. Article 15, Force Majeure, is hereby amended by inserting sections 15.4 and 15.5 to read as follows:

15.4. Neither Party shall be excused by reason of Force Majeure from the obligation to make any payments, when due, to the other Party.

15.5 If a Party Disputes the other Party's claim of Force Majeure, such Dispute shall be resolved pursuant to section 22.12.

3. Representations and Warranties of each Party.

(a) PREPA hereby represents and warrants to Grupotec: (i) the execution and delivery by PREPA of this Amendment, and the Amendment itself, have been duly authorized by PREPA's Governing Board and any other applicable PREPA governing body in accordance with

applicable law, and (A) do not and will not require any additional internal or external consent or approval, (B) do not and will not violate any provision of Act No. 83 of May 2, 1941, as amended, or its regulations, or any material indenture, contract or agreement to which it is a party or by which its properties may be bound; and (ii) this Amendment is a legal, valid, and binding obligation of PREPA, enforceable against PREPA in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

(b) Grupotec hereby represents and warrants to PREPA: (i) the execution, delivery, and performance by Grupotec of this Amendment have been duly authorized, and do not and will not (A) require any additional internal consent or approval of Grupotec, or (B) violate any provision of Grupotec's certificate of formation or operating agreement, or any material indenture, contract or agreement to which it is a party or by which it or its properties may be bound, or any law, ordinance, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect; and (ii) this Amendment is a legal, valid and binding obligation of Grupotec, enforceable against Grupotec in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

3. Ratification. Except as expressly amended hereby, the Power Purchase Agreement and all documents, instruments and agreements related thereto are hereby ratified and confirmed in all respects.

4. No Implied Waiver. This Amendment shall be limited precisely as written and shall not be deemed to be a consent granted pursuant to, or a waiver or modification of, any other term or condition of the Power Purchase Agreement, whether or not known to the Parties, or to prejudice any other right or rights which the Power Purchase Agreement may now have or have in the future.

5. Counterparts. This Amendment may be executed in multiple original or facsimile counterparts, each of which shall be deemed an original and shall be binding upon the Party who executed the same, but all of such counterparts shall constitute the same Amendment.

6. Governing Law. This Amendment shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Puerto Rico and, to the extent applicable, the laws of the United States of America. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Section 22.12 of the Power Purchase Agreement.

11. Capitalized Terms. Unless otherwise stated, capitalized terms used in this Amendment which are not defined in this Amendment have the meaning given in the Power Purchase Agreement.

IN WITNESS WHEREOF, the Parties hereto have agreed to execute this Agreement in San Juan, Puerto Rico, as of the date first written above.

PUERTO RICO ELECTRIC POWER AUTHORITY

Josué Antonio Colon Ortiz
Acting Executive Director

GRUPOTEC USA, INC.

Manuel Folgado Tomas
Managing Partner

AEE 100,0-108A

ESTADO LIBRE ASOCIADO DE PUERTO RICO
AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO

SAN JUAN, PUERTO RICO

Edificio NEOS, Ofic. 601
1110 Ave. Ponce de León
Santurce PR
www.aeepr.com

Oficina Director
Asuntos Jurídicos
Tel. 521-2633
Fax 521-3249

13 de marzo de 2013

Sonia M. Miranda Vega
Directora de Planificación
y Protección Ambiental

Jorge A. Concepción Rivera
Director de Asuntos Jurídicos

Radicación de Enmienda de Contrato

Según las disposiciones de la Orden Ejecutiva Núm. 1991-24 del 18 de junio de 1991 sobre la radicación de contratos, le informamos que se otorgó la siguiente enmienda:

NÚMERO DE CONTRATO	:	2013-P00042B Grupotec/Xzerta-Tec Solar, LLC
SEGURO SOCIAL	:	660-68-1673
TÉRMINO	:	2/enero/2013 hasta 18/septiembre/2032
FECHA OTORGAMIENTO	:	2/enero/2013
COSTO TOTAL	:	($4,190,000.00)
REGISTRO	:	TOMO 8 PÁGINA 18 TIPO 03

Acompañamos el original de dicha enmienda para la acción correspondiente.

Anejo

2013-P0042B

AMENDMENT NO. 1 TO THE
RENEWABLE POWER PURCHASE AND OPERATING AGREEMENT
BETWEEN
XZERTA-TEC SOLAR I, LLCAND THE
PUERTO RICO ELECTRIC POWER AUTHORITY

This Amendment No. 1 (the "Amendment No.1") is made on 2 day of January, 2013, by and between Xzerta-Tec Solar I, LLC , ("SELLER") and the Puerto Rico Electric Power Authority ("PREPA"), a public corporation and governmental instrumentality of Commonwealth of Puerto Rico (collectively, the "Parties").

RECITALS

WHEREAS, Grupotec USA, Inc. ("Grupotec") entered into a Master Renewable Power Purchase and Operating Agreement (the "MPPOA") dated March 16, 2012, for the sale of energy to PREPA from photovoltaic solar systems ranging from 1 to 20 MW, for up to 100 MW in the aggregate, in various locations in Puerto Rico ; and

WHEREAS, Grupotec executed on September 19, 2012 a Renewable Power Purchase and Operating Agreement ("PPOA") for the development of a 15 MW photovoltaic solar system in Hatillo, Puerto Rico; and

WHEREAS, Grupotec assigned all of its rights, title and interest in and to the PPOA, as Seller, to SELLER, an Affiliate of Grupotec, effective as of November 18, 2012; and

WHEREAS, the Parties desire to amend certain provisions of the PPOA.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

Effective as of the date first written above, the PPOA is amended as set forth herein:

1. References to Facility capacity of 15MW in the PPOA, are hereby amended by deleting "15MW" and replacing them with "20MW".

2. Appendix C- Example of Price Index Calculations in the PPOA is hereby amended by deleting that Appendix in its entirety and replacing it with Appendix C Amended-Price Calculation, attached hereto as Exhibit A.

3. The Electrical Interconnection Diagram set forth in Appendix B – Interconnection in the PPOA is hereby amended by deleting references to "15MW" in such diagram and replacing them with "20MW".

4. Article 5 – Term, Sections 5.1 and 5.2 in the PPOA, is each hereby amended by deleting, in each Section, the phrase "Twenty Five (25)" and replacing it with the phrase "Twenty (20)".

5. Article 11 - Compensation, Payment and Billings, Section 11.1 in the PPOA is hereby amended by deleting the Section in its entirety and replacing it with the following:

11.1 For each Billing Period, PREPA shall pay SELLER both an Energy Payment and a Green Credits Payment for the Net Electrical Output measured in accordance with Section 10.3. SELLER shall include both the Energy Payment and Green Credits Payment and the Net Electrical Output in the monthly invoice presented to PREPA pursuant to Section 11.3. The Energy Payment and Green Credit Payment shall be calculated as per following Section 11.2.

6. Article 11 – Compensation, Payment and Billings, Section 11.2 in the PPOA is hereby amended by deleting that Section in its entirety and replacing it with the following:

"11.2 (a) Energy Payment - Beginning with the Pre-Operation Period and continuing throughout the Term of this Agreement:

EP = EPP x NEO

Where:

EP is the Energy Payment

EPP is the Energy Purchase Price, which for the first Agreement Year shall be subject to the Year that the Facility enters into Commercial Operation as determined below:

Years in which Facility enters into Commercial Operation	Rate per kWh of NEO
2013	$0.15
2014	$0.15
2015	$0.14

NEO is the Net Electrical Output expressed in kilowatt hours

On an annual basis on the first anniversary of the Commercial Operation Date and each year thereafter, the Energy Purchase Price shall be escalated in an amount equal to two percent (2.0%).

An example of the Energy Payment is included in Appendix C Amended.

(b) Green Credits Payment - Beginning with the Pre-Operation Period and continuing throughout the Term of this Agreement:

GCP = GCPP x NEO

Where:

GCP is the Green Credits Payment

GCPP is the Green Credit Purchase Price, which for the first Agreement Year and each Agreement Year throughout the Term of the Agreement shall be equal to two cents ($0.020) per kWh of NEO.

Green Credit Purchase Price shall not be subject to escalation for the Term."

7. Article 22- Miscellaneous Provisions, Section 22.17 in the PPOA, is hereby amended by deleting that Section in its entirety and replacing it with the following:

22.17 Contemporaneously with the sale of Net Electrical Output hereunder and in consideration for the Green Credits Payment as set forth in Section 11.2, SELLER shall sell and convey to PREPA the Green Credits associated with the Energy actually generated by the Facility and sold to PREPA by SELLER hereunder, measured in kilowatt hours in an amount equal to the Net Electrical Output. SELLER shall execute reasonable documentation to confirm the registration of the Green Credits with the North American Renewables Registry or another similar registry acceptable to SELLER and PREPA (""Registry"") and the transfer of such Green Credits as reasonably requested by PREPA in accordance with the rules of the Registry, in each case, at the expense of SELLER. The term "Green Credits" shall mean "renewable energy certificates" ("RECs") and "environmental and social attributes", as such terms are defined in the Puerto Rico Green Energy Incentives Act (Act No. 83 of July 19, 2010), renewable energy credits, environmental attributes, emissions reductions, offsets, allowances or benefits, however entitled (or payments in lieu thereof), whether monetary, fiscal or in the form of physical property, now or in the future available to the Facility, as a facility that generates or produces electricity by means of "green energy" (as such term is defined in the Puerto Rico Green Energy Incentives Act), or from renewable or non-polluting resources, granted to SELLER as the owner or operator of the Facility, in each case, from any government, regulatory agency or third party, including renewable energy credits established pursuant to the Green Energy Incentives Act of Puerto Rico, but shall exclude (i) any investment tax credits, production tax credits and grants in lieu thereof, (ii) other tax benefits or credits, (iii) any depreciation, and (iv) proceeds from (i) thru (iii), in each case, associated with the Facility or otherwise available to Seller, each of which are expressly reserved to Seller.

8. Representations and Warranties of each Party.

(a) PREPA hereby represents and warrants to SELLER: (i) the execution and delivery by PREPA of this Amendment, and the Amendment itself, have been duly authorized by PREPA's Governing Board and any other applicable PREPA governing body in accordance with applicable law, and (A) do not and will not require any additional internal or external consent or approval, (B) do not and will not violate any provision of Act No. 83 of May 2, 1941, as amended, or its regulations, or any material indenture, contract or agreement to which it is a party or by which its properties may be bound; and (ii) this Amendment is a legal, valid, and binding obligation of PREPA, enforceable against PREPA in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

(b) SELLER hereby represents and warrants to PREPA: (i) the execution, delivery, and performance by SELLER of this Amendment have been duly authorized, and do not and will not (A) require any additional internal consent or approval of SELLER, or (B) violate any provision of SELLER's certificate of formation or operating agreement, or any material indenture, contract or agreement to which it is a party or by which it or its properties may be bound, or any law, ordinance, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect; and (ii) this Amendment is a legal, valid and binding obligation of SELLER, enforceable against SELLER in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

9. Ratification. Except as expressly amended hereby, the PPOA and all documents, instruments and agreements related thereto are hereby ratified and confirmed in all respects.

10. No Implied Waiver. This Amendment shall be limited precisely as written and shall not be deemed to be a consent granted pursuant to, or a waiver or modification of, any other term or condition of the PPOA, whether or not known to the Parties, or to prejudice any other right or rights which the PPOA may now have or have in the future.

11. Counterparts. This Amendment may be executed in multiple original or facsimile counterparts, each of which shall be deemed an original and shall be binding upon the Party who executed the same, but all of such counterparts shall constitute the same Amendment.

12. Governing Law. This Amendment shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Puerto Rico and, to the extent applicable, the laws of the United States of America. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Section 22.12 of the PPOA.

13. Capitalized Terms. Unless otherwise stated, capitalized terms used in this Amendment which are not defined in this Amendment have the meaning given in the Power Purchase and Operating Agreement.

IN WITNESS WHEREOF, the Parties hereto have agreed to execute this Amendment in San Juan, Puerto Rico, as of the date first written above.

PUERTO RICO ELECTRIC POWER AUTHORITY	XZERTA-TEC SOLAR I, LLC
Josué A. Colon Ortiz Executive Director	Manuel Folgado Tomas Authorized Signatory

EXHIBIT A

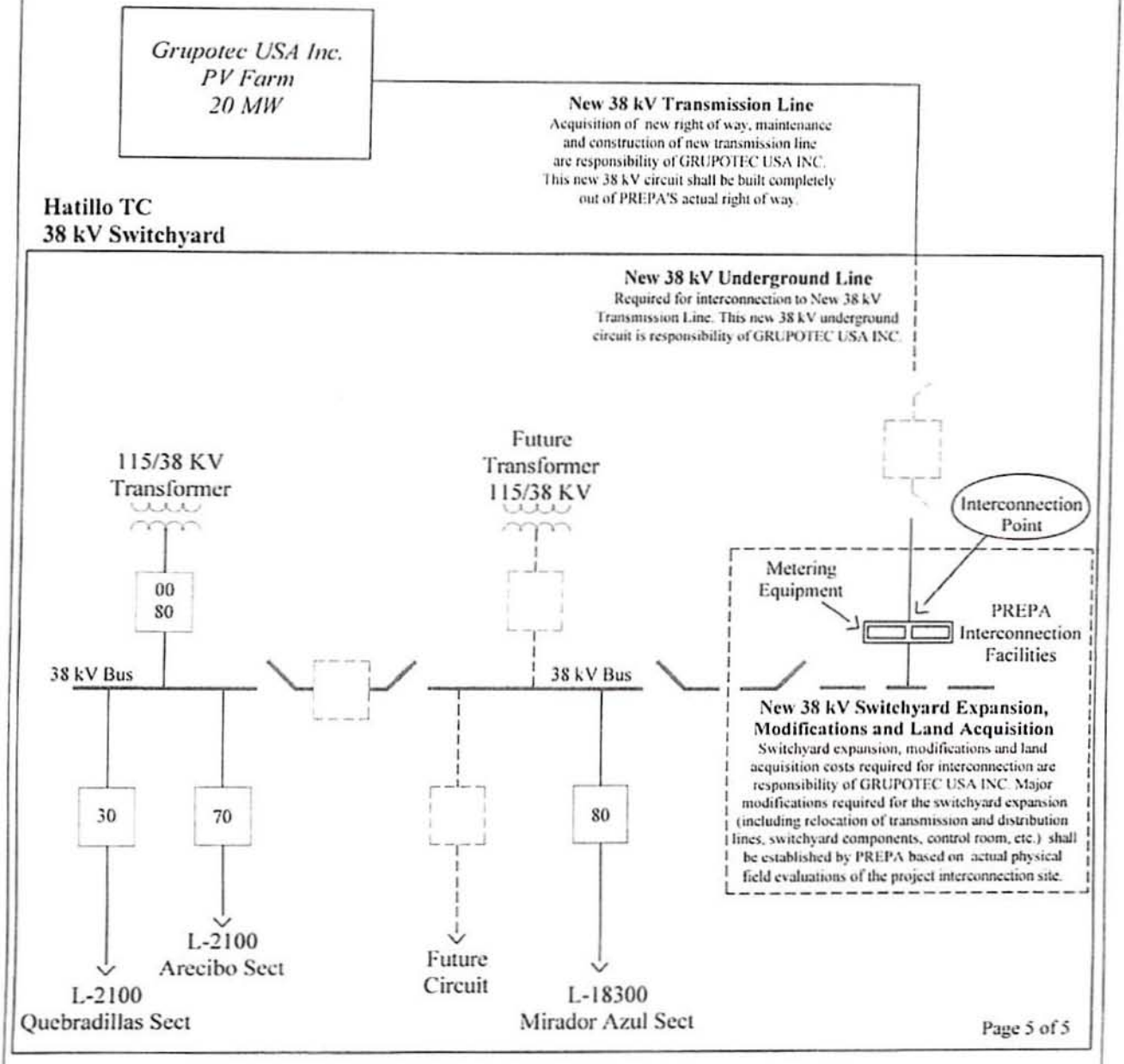
Amended **Appendix C -Price Calculation**

Year *	Energy Purchase Price $/KWH	Green Credit Purchase Price $/KWH
1	0.15	0.02
2	0.153	0.02
3	0.156	0.02
4	0.159	0.02
5	0.162	0.02
6	0.166	0.02
7	0.169	0.02
8	0.172	0.02
9	0.176	0.02
10	0.179	0.02
11	0.183	0.02
12	0.187	0.02
13	0.190	0.02
14	0.194	0.02
15	0.198	0.02
16	0.202	0.02
17	0.206	0.02
18	0.210	0.02
19	0.214	0.02
20	0.219	0.02

MFT

* On an annual basis on the first anniversary of the Commercial Operation Date and each year thereafter, the Energy Purchase Price shall be escalated in an amount equal to two percent (2.0%).

GRUPOTEC USA INC.
ELECTRICAL INTERCONNECTION
HATILLO, P.R.



Grupotec USA Inc. Electrical Interconnection Hatillo TC	AEE (Puerto Rico Electric Power Authority)

Cantidad
2,700,000.00
Cuenta
01-41042-54714-668
01-2321-23235

2013-P000042C

SECOND AMENDMENT CONTRACT
RENEWABLE POWER PURCHASE AND OPERATING AGREEMENT BETWEEN
XZERTA-TEC SOLAR I, LLC AND PUERTO RICO ELECTRIC POWER AUTHORITY

APPEAR

AS FIRST PARTY: Puerto Rico Electric Power Authority, hereinafter referred to as PREPA, a public corporation and government instrumentality of the Commonwealth of Puerto Rico, created by Act 83 of May 2, 1941, as amended, represented in this act by its Executive Director, engineer Juan Francisco Alicea Flores, of legal age, married, and resident of Caguas, Puerto Rico.

AS SECOND PARTY: Xzerta-Tec Solar I, LLC, hereinafter referred to as SELLER, a limited liability company organized and existing under the laws of Delaware, authorized to do business in Puerto Rico, represented in this act by its Authorized Signatory, mister Manuel Folgado Tomas, of legal age, and resident of Hollywood, Florida, by virtue of Resolution dated as of April 10, 2014.

WITNESSETH

In consideration of the mutual covenants hereinafter stated, the parties agree themselves, their personal representatives, and successors as follows:

STATE

WHEREAS, Grupotec USA, Inc. ("Grupotec") executed on September 19, 2012 a Renewable Power Purchase and Operating Agreement ("Agreement") for the development of a 15 MW photovoltaic solar system in Hatillo, Puerto Rico;

WHEREAS, Grupotec assigned all of its rights, title and interest in and to the Agreement, to SELLER, an Affiliate of Grupotec, and effective November 18, 2012;

WHEREAS, PREPA and SELLER executed on January 2, 2013 Amendment No. 1 to the Agreement, the Agreement as amended is hereinafter referred to as the Agreement; and

WHEREAS, the Parties hereby agree to amend certain provisions of the Agreement.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

1. Article 1, DEFINITIONS, is amended to include the term "Contracted Capacity" and defines it as follows: Contracted Capacity - means the maximum AC Capacity to be exported by SELLER at the Interconnection Point, which shall be 20 MW.

2. Article 4, PRE-OPERTAION PERIOD, the first sentence in Section 4.3 is deleted in its entirety and is replaced by: SELLER and PREPA shall mutually develop detailed written operating procedures (the "Agreed Operating Procedures") no later than April 30, 2014.

3. Article 5, TERM, Sections 5.1 and 5.2 in the Agreement, are hereby amended by (a) deleting, in each such Section, the word "Twenty (20)" and replacing it with the word "Twenty-Five (25)", and (b) changing the language of the first sentence of Section 5.2, as follows: The Term of this Agreement may be extended by mutual agreement of the Parties for up to one period of five (5) Years, following the expiration of the initial Twenty Five Agreement Year Term.

4. Article 6.4, clause (a) in the Agreement is hereby amended by deleting the word "California" and replacing it with the word "Delaware".

5. Article 7, DISPATCHING, is deleted in it's entirely and replaced by:

   7.1 PREPA agrees that the Facility will be designated as a "must run" unit (to the full extent of the Contracted Capacity of 20 MW AC) and will not be disconnected except to the extent necessary due to a Force Majeure or an Emergency that cannot be avoided or mitigated without the shutdown or disconnection of the Facility.

   7.2 Notwithstanding Section 7.1, PREPA may require SELLER to disconnect the Facility or reduce the amount of Net Electrical Output by curtailment due to operating conditions that may affect safety margins or reliability levels in PREPA's electrical system; provided, however, any disconnection or reduction in the level of Net Electrical Output required by PREPA hereunder shall be based upon and implemented in a manner consistent with Prudent Utility Practices. PREPA shall not be entitled to disconnect the Facility or reduce the Net Electrical Output under this Agreement due to (a) economic factors, (b) any inconvenience or other condition not expressly included in the preceding sentence, (c) any condition of any nature including those specified in the preceding sentence if PREPA is

not promptly and prudently seeking a remedy to cure in accordance with Prudent Electrical Practices, or (d) any other circumstance that can be mitigated by PREPA through economic means.

7.3 Notwithstanding Sections 7.1 and 7.2 above PREPA may also disconnect the Facility, or reduce the Net Electrical Output by curtailment, when the following conditions are present: (a) the Facility fails to comply with the requirements of APPENDIX E, MINIMUM TECHNICAL REQUIREMENTS FOR INTERCONNECTION OF PHOTOVOLTAIC (PV) FACILITIES or if PREPA has amended the requirements of APPENDIX E, then only if such amendment is applicable to the Facility pursuant to Section 9.13 and (x) the SELLER has received written notice of any such amendment; (y) SELLER has had an appropriate period of time to comply with any such amended requirement and (z) PREPA has agreed to reimburse SELLER for any costs in excess of the Modification Limit pursuant to Section 9.13; (b) SELLER fails to perform annual tests for compliance with the MINIMUM TECHNICAL REQUIREMENTS FOR INTERCONNECTION OF PHOTOVOLTAIC (PV) FACILITIES as required in Section 12.2, and (c) SELLER fails to keep the Facility PSS/E mathematical models current with the future versions of the PSS/E program thirty (30) Days after a PSS/E version upgrade is notified in writing by PREPA to SELLER, provided however that: (i) the notice includes all the necessary technical information to update the models, and (ii) the upgrade of these models is feasible in that time period. For the avoidance of doubt, any disconnection, or reduction in Net Electrical Output by curtailment, due to (a) and (b) above may be of an extended or permanent nature if not cured by SELLER in a timely manner, as will be established in the Agreed Operating Procedures. PREPA shall have no liability to SELLER in connection with those disconnections as per Sections 7.1, 7.2 and 7.3. Any disconnection, or reduction in Net Electrical Output by curtailment, shall end immediately after SELLER cures such non-compliance, provided that PREPA has confirmed such cure, such confirmation not to be unreasonably withheld, as established in the Agreed Operating Procedures.

7.4 Following the Commercial Operation Date, SELLER will provide to PREPA a non-binding estimate of short term, next Day hourly and next week hourly

production, based on the previous Day production, estimated strength of the solar radiation the next Day and week and based on the meteorological forecast for the region and site. The Parties shall include in the Agreed Operating Procedures the procedures and protocols necessary for providing said estimates.

7.5 PREPA acknowledges no intent to reduce Net Electrical Output by curtailment or disconnection under this agreement outside of those described in this Article 7 and Article 8.

6. Article 8, CONTROL AND OPERATION OF THE FACILITY, is deleted in its entirety and replaced by:

8.1 SELLER shall, at least sixty (60) Days prior to the Commercial Operation Date, submit a written schedule of Scheduled Outages ("Scheduled Outage Program") for the remaining portion of the first Year of the Facility's operations and, if the Commercial Operation Date occurs after September 1, for the following Year, setting forth the proposed Scheduled Outage periods. Thereafter, SELLER shall submit to PREPA, in writing, by September 1 of each Year, its proposed Scheduled Outage Program for the next Year.

8.2 SELLER shall use reasonable efforts to notify PREPA of any Non-Scheduled Outages at least twenty four (24) hours in advance and coordinate all Non-Scheduled Outages with PREPA.

8.3 If an Emergency is declared by PREPA, PREPA's dispatching centers may disconnect the Facility from PREPA's system, or reduce the Net Electrical Output by curtailment, to the extent permitted by Article 7. If a curtailment pursuant to Article 7 is declared by PREPA, PREPA's dispatching centers may curtail the Facility's output. The Facility will remain disconnected from PREPA's system, or curtailed, following an Emergency until SELLER has received permission to reconnect from PREPA's dispatching center. Any disconnection or reduction in the Facility's output required by PREPA under this Agreement shall be of no greater scope and of no longer duration than is required by the Emergency or operating condition pursuant to Article 7, consistent with Prudent Utility Practices. Upon an Emergency or curtailment pursuant to Article 7 that results in any disconnection or reduction in the Facility's output, PREPA shall, as soon as

practicable after the occurrence of the Emergency or operating condition, provide written notice to SELLER describing the particulars of the occurrence and its estimated duration and shall diligently use all reasonable efforts, consistent with Prudent Utility Practices, to remedy the Emergency or operating condition. In any situation where PREPA causes a reduction of Net Electrical output or a disconnection of the Facility, PREPA shall treat the Facility no less favorably than other facilities connected to PREPA's grid on such occurrences.

8.4 PREPA shall have no liability to SELLER in connection with any disconnection or reduction in the Facility's output required by PREPA under Section 7.1, Section 7.2, Section 7.3 or Section 8.3. If the Facility has a Scheduled Outage or a Non-Scheduled Outage, and such Scheduled Outage or Non-Scheduled Outage occurs or would occur coincident with an Emergency, PREPA may request that SELLER shall make reasonable efforts, consistent with Prudent Utility Practices and with PREPA's approval, to reschedule the Scheduled Outage or Non-Scheduled Outage or if the Scheduled Outage or Non-Schedule Outage has begun, to expedite the completion thereof.

8.5 Each Party shall cooperate with the other in establishing Emergency plans, including recovery from a local or widespread electrical blackout; voltage reduction in order to effect load curtailment; and other plans which may arise. SELLER shall make technical information and data available to PREPA concerning start-up times and black-start capabilities.

8.6 SELLER shall provide as a minimum at its expense, and PREPA shall install at SELLER expense, the following communication facilities linking the Facility with PREPA's dispatching centers (provided that any expense or costs associated with PREPA's Interconnection Facilities will be considered part of Seller's cost for use of the existing bay as described in Article 9.2, except as SELLER's responsibility in item (e) below):

(a) One Remote Terminal Unit ("RTU"), including setup installation and configuration; which shall be specified by PREPA.

(b) Two independent telecommunication circuits. One voice grade to link the SCADA system to the facility RTU using DNP protocol though a designated PREPA communication node. A second fiber optic circuit

to link PREPA's network to the facility in order to access protection equipment, revenue meters and the DSM, trough the ruggedcom security device as specified by PREPA.

(c) A voice telephone extension for the purpose of communicating with Monacillos TC and Ponce TC.

(d) A telephone line and equipment to transmit and receive facsimile messages to confirm the oral communication between PREPA and SELLER.

(e) A Dynamic System Monitor (DSM) equipment in accordance with APPENDIX D - TECHNICAL SPECIFICATIONS FOR THE DYNAMIC SYSTEM MONITOR, for recording the power disturbance caused by electro-mechanic swings and to measure the system response to the swing disturbance. SELLER shall be responsible of providing, installing, wiring and commissioning of all the equipment and components for the DSM system necessary in the Interconnection Facilities.

The items provided by SELLER in accordance with this Section 8.6 shall be subject to the approval of PREPA, which approval shall not be unreasonably withheld or delayed.

8.7 Each Party shall keep complete and accurate records and other data required for the proper administration of this Agreement.

(a) All such records shall be maintained for a minimum of five (5) years after the preparation of such records or data and for any additional length of time required by regulatory agencies with jurisdiction over the Parties; provided, however, that neither Party shall dispose of or destroy any records without thirty (30) Days prior notice to the other Party. Within ten (10) Days after receipt of the notice of intention to destroy or dispose, the other Party shall have the right to require the notifying Party in writing to retain and deliver to it certain records at its sole cost and expense. Any records so notified shall be delivered to the Party requesting their return in no more than ten (10) Days.

(b) SELLER shall maintain an accurate and up-to-date operating log at the Facility with records of (i) real and reactive power for each hour, (ii) changes in operating status and Scheduled Outages, and (iii) any unusual conditions found during inspections.

(c) Either Party shall have the right from time to time, upon fourteen (14) Days written notice to the other Party and during regular business hours, to examine the records and data of the other Party relating to the proper administration of this Agreement any time during the period the records are required to be maintained.

8.8 At PREPA's request, SELLER shall provide certifications of tests and inspections of the electric and protection equipment, which may impact PREPA's electrical system. PREPA shall have the right to visit and visually monitor the Facility during operation and testing, including any acceptance testing of the Facility.

7. Article 16, TERMINATION, in the Agreement is hereby amended by deleting in its entirety and replacing it with the following:

Termination of this Agreement shall occur only upon: (a) expiration of the Term of this Agreement as provided in Article 5; (b) mutual written consent of the Parties; (c) the election of PREPA following a Development Abandonment or Permanent Closing; (d) the election of the non-defaulting Party following the occurrence of a Breach under Article 17; (e) the election of PREPA following delay by SELLER in achieving Commencement of Construction by thirty (30) Months after the Effective Date; (f) delay by SELLER in achieving the Commercial Operation Date by the date which is forty two (42) Months after the Effective Date; or (g) the circumstances provided in Section 16.2. The deadlines in (e) and (f) shall each be extended on a day-for-day basis for any delay in achieving such deadline due to a Force Majeure event, Pending Permits or Legal Challenge, or any delay caused by any act or omission of PREPA, provided that in the event such delay is due to a Force Majeure Event, Pending Permits or Legal Challenge, such extension will in no event be longer than forty-eight (48) Months.

8. Article 9, FACILITIES DESIGN AND INTERCONNECTION, Section 9.2 is deleted in its entirety and is replaced by:

In accordance with this Article 9, SELLER shall interconnect the Facility to the Interconnection Facilities through the use of an existing PREPA bay at the Interconnection Facilities. The Final Design will include the use of such existing bay. Seller's cost for the use of the existing bay will be $2,319,139 as set forth in PREPA's quote to Seller dated December 21, 2012, with no

additional incidental costs or charges by PREPA above such quoted amount to effectuate interconnection of the Facility to PREPA's grid. Provided that such payment shall be made as follows: a) 50% within thirty (30) days before the commencement of PREPA's Interconnections Facilities work by PREPA, (b) 25% thirty (30) days following the commencement of PREPA Interconnection Facilities works by PREPA and (c) twenty five percent (25%) at the achievement of the Initial Synchronization Date.

PREPA shall provide to Seller a list of materials and equipment, to perform the PREPA Interconnections Facilities work, before May 31, 2014. Seller shall have the option, but not the obligation, to purchase such materials and equipment and deduct the amount of such purchase from any milestone payments due. The list of materials and equipment will include detailed technical specifications and commercial brands preferred. The Parties shall agree on which equipment and materials will be provided by Seller and PREPA, before June 21, 2014.

PREPA shall complete all such interconnection work required to achieve an Initial Synchronization Date no later than, subject to no occurrence of Force Majeure, Emergency, or delay in delivery of materials and equipment purchased by Seller or PREPA, that would prevent PREPA from completing such interconnection work, on or before the later of (a) the mechanical completion date of the Facility and (b) 180 days after Commencement of Construction. The Parties shall prepare a schedule of time for the interconnection work considering the delivery of the equipment to complete all such interconnection work on or before the Initial Synchronization Date.

9. Article 11, COMPENSATION, PAYMENT AND BILLINGS, Section 11.2 in the AGREEMENT is hereby amended by deleting that Section in its entirety and replacing it with the following:

11.2(a) Energy Payment-Beginning with the Pre-Operation Period and continuing throughout the Term of this Agreement:

$$EP = EPP \times NEO$$

Where: EP is the Energy Payment.

EPP is the Energy Purchase Price, which for the first Agreement Year shall be $0.150/kWh. If the Facility achieves Commencement of Construction after March 19, 2015, provided the Agreed Operating Procedures are received prior to the date set forth in Article 4.3, the EPP for the first Agreement Year shall be $0.140/kWh, however, if the Agreed Operating Procedures are received after the date set forth in Article 4.3 the EPP for the first Agreement Year shall be $0.15/kWh provided the Commencement of Construction occurs prior to one year following the receipt by Seller of the Agreed Operating Procedures.

NEO is the Net Electrical Output expressed in kilowatt hours.

The Energy Purchase Price for Agreement Years 2 to 20 shall be escalated in an amount equal to one percent (1.0%). For Agreement Years 21 to 25 the Energy Purchase Price shall be equal to the Energy Purchase Price of the 20th Agreement Year.

11.2(b) Green Credits Payment – Beginning with the Pre-Operation Period and continuing throughout the Term of this Agreement:

GCP = GCPP x NEO

Where: GCP is the Green Credits Payment

GCPP is the Green Credit Purchase Price, which for the first Agreement Year and each Agreement Year throughout the Term of the Agreement shall be equal to $0.015 per kWh of NEO. The Green Credit Purchase Price shall not be subject to escalation.

10. Article 22. Miscellaneous Provisions: All sections are hereby amended by deleting in each Section the phrase "21" and replacing it with the phase "22". In addition, (i) the phrase "22.9" in Sections 22.7 (b) and (c) are replaced with "22.7" and (ii) the phrase "22.13" in Section 22.12(a) and 22.12(d) is replaced by "22.12".

11. Article 23. Choice of Law and Venue: The section label "22.1" is hereby amended to read "23.1".

12. Substitution of Appendix B, INTERCONNECTION: Effective as of the date hereof, Appendix B of the Agreement is hereby substituted and replaced in its entirety by Appendix B attached hereto.

13. Substitution of Appendix C, EXAMPLE OF PRICE INDEX CALCULATION: effective as of the date hereof, Appendix C of the Agreement is hereby substituted and replaced in its entirety by Appendix C – AMENDED ENERGY AND GREEN CREDITS PURCHASE PRICE attached hereto.

14. Substitution of Appendix E, MINIMUM TECHNICAL REQUIREMENTS FOR INTERCONNECTION OF PHOTOVOLTAIC (PV) FACILITIES: effective as of the date hereof, Appendix E of the Agreement is hereby substituted and replaced in its entirety by Appendix E attached hereto.

15. The above mentioned amendments apply to all terms and conditions of the Agreement, as applicable.

16. Representations and Warranties of each Party.

    (a) PREPA hereby represents and warrants to SELLER: (i) the execution and delivery by PREPA of this Amendment, and the Amendment itself, have been duly authorized by PREPA's Governing Board and any other applicable PREPA governing body in accordance with applicable law, and (A) do not and will not require any additional internal or external consent or approval, (B) do not and will not violate any provision of Act No. 83 of May 2, 1941, as amended, or its regulations, or any material indenture, contract or agreement to which it is a party or by which its properties may be bound; and (ii) this Amendment is a legal, valid, and binding obligation of PREPA, enforceable against PREPA in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

    (b) SELLER hereby represents and warrants to PREPA: (i) the execution, delivery, and performance by SELLER of this Amendment have been duly authorized, and do not and will not (A) require any additional internal consent or approval of SELLER, or (B) violate any provision of SELLER's certificate of formation or operating agreement, or any material indenture, contract or agreement to which it is a party or by which it or its properties may be bound, or any law, ordinance, rule, regulation, order, writ, judgment, injunction,

decree, determination or award presently in effect; and (ii) this Amendment is a legal, valid and binding obligation of SELLER, enforceable against SELLER in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of rights generally.

17. Ratification. Except as expressly amended hereby, the Agreement and all documents, instruments and agreements related thereto are hereby ratified and confirmed in all respects.

18. No Implied Waiver. This Amendment shall be limited precisely as written and shall not be deemed to be a consent granted pursuant to, or a waiver or modification of, any other term or condition of the Agreement, whether or not known to the Parties, or to prejudice any other right or rights which the Agreement may now have or have in the future.

19. Counterparts. This Amendment may be executed in multiple original or facsimile counterparts, each of which shall be deemed an original and shall be binding upon the Party who executed the same, but all of such counterparts shall constitute the same Amendment.

20. Governing Law. This Amendment shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Puerto Rico and, to the extent applicable, the laws of the United States of America. The Parties herein agree that all Disputes arising hereunder shall be resolved pursuant to Section 22.12 of the Agreement.

21. Novation: SELLER and PREPA expressly agree that no amendment or change order which could be made to the Agreement and this Second Amendment, during its term, shall be understood as a Contractual Novation, unless both parties agree to the contrary, specifically and in writing. The previous provision shall be equally applicable in such other cases where PREPA gives the SELLER a time extension for the compliance of any of its obligations under the Agreement as amended or where PREPA dispenses the claim or demand of any of its credits or rights under the Agreement as amended.

22. Capitalized Terms. Unless otherwise stated, capitalized terms used in this Amendment which are not defined in this Amendment have the meaning given in the Agreement.

IN WITNESS WHEREOF, the Parties hereto have agreed to execute this Second Amendment in San Juan, Puerto Rico, on this day of May 2, 2014.

Puerto Rico Electric Power Authority

Juan Francisco Alicea Flores
Executive Director
Social Security 660-43-3747

Xzerta-Tec Solar I, LLC

Manuel Folgado Tomas
Authorized Signatory
Social Security 660-68-1673

APPENDIX B - INTERCONNECTION

Seller shall provide the following information to PREPA within ninety (90) days following the Effective Date. Data submitted in a preliminary or estimated form shall be updated within thirty (30) days after final equipment arrangements and specifications are established.

1. Electrical one-line diagram of the Facility.

2. Explanation of proposed equipment protection and control scheme (may be shown functionally on the one-line diagram).

3. Site plan showing plant layout, property lines, access roads and switchyard boundaries.

4. Preliminary equipment layout and arrangement for switchyard and PV Facility step-up transformers (GSU).

5. Reactive Power Capacity curve of PV Facility.

6. Station auxiliary load.

7. Station auxiliary transformer data – impedance, connection winding, load loss and no load tap changer.

8. PV Facility step-up transformer impedance, load loss, no load taps changer, connection and winding.

9. PV Facility Short Circuit Ratio.

10. PV Facility kilowatt rating.

11. PV Facility kilovar rating.

12. Equivalent PV Facility modeling for Short Circuit Studies.

13. Seller's requirements for power supplied by PREPA during construction and start-up.

14. Project schedule (I-J or bar chart format) including but not limited to the following milestones:

    - QF status obtained
    - Engineering 30% complete
    - One-line diagram approved
    - Financial Closing Date

- Major licenses/permits
- Major material procurement
- Start Construction
- Engineering 70% complete
- Utility technical submittals complete
- Operating procedures finalized
- Field Test Protocols Finalized
- Start test and start-up
- On-site Field Tests Completed
- Complete Compliance with Minimum Technical Requirements
- Initial synchronizing date
- Commercial operation

15. PSSE Mathematical Model (Parameters and Data Requirements)

The Contractor shall submit to PREPA a PSS/E mathematical model and data related to the proposed PV Facility. When referred to the PV Facility model, this shall include but is not limited to PV converter, transformers, collector systems, plant controllers, control systems and any other equipment necessary to properly model the PV Facility for both steady-state and dynamic simulation modules. It is required that the Contractor submits both an aggregate and detailed model of the PV Facility. The aggregate and detailed model of the PV Facility shall not be submitted in preliminary form.

The Contractor shall be required to submit user manuals for both the PV converter and PV Facility models. The mathematical models shall be fully compatible with the latest and future versions of PSS/E. It is preferred that the models are PSS/E standard models. In the case that the Contractor submits user written models, the Contractor shall be required to keep these models, as well as its corresponding user manual, current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. On-site field tests to demonstrate compliance with PREPA's Minimum Technical Requirements for Interconnection of Photovoltaic Facilities (MTRs) shall be performed by the contractor. The data and PSS/E model shall also be validated, updated and officially certified according to PREPA requirements when final field adjustments and parameters measurements are completed during the on-site field tests to be performed to the facility by the contractor. The on-site field tests shall be witnessed and coordinated with PREPA's personnel.

The Contractor shall be responsible to submit PSSE mathematical models of any kind of compensation devices (ie. SVC, STATCOMs, DSTATCOMs, BESS, etc.) used on the PV Facility. It is preferred that the models are standard

models provided with PSS/E. In the case that the Contractor submits user written models, the PV Facility Contractor shall be required to keep these models current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. In its final form, the mathematical model shall be able to simulate each of the required control and operational modes available for the compensation device and shall be compatible with the latest and future versions of PSSE. Final adjustments and parameters settings related with the control system commissioning process shall be incorporated to the PSSE mathematical model and tested accordingly by the PV Facility Contractor and PREPA system study groups. .

PV Facility Owners that provide user written model(s) shall provide compiled code of the model and are responsible to maintain the user written model compatible with current and new releases of PSS/E until such time a standard model is provided. PREPA must be permitted by the PV Facility Owner to make available PV models if required to external consultants with an NDA in place.

16. Additional data necessary for dynamic modeling - At a minimum, any necessary control system model (inverter, compensator and excitation limiter models), including the time constants, gains, limits, description, block diagrams and configuration.

17. Transient Mathematical Model

The contractor shall provide a detailed transient mathematical model of the PV Facility with a compliance report that shows the level of compliance of the facility's design with PREPA's Minimum Technical Requirements for Interconnection of Photovoltaic Facilities (MTRs). The contractor shall submit the compliance report for evaluation by PREPA before the on-site field tests. PREPA and the contractor must agree on the compliance report results before the on-site field tests for verifying compliance of the Facility with the MTRs are performed.

Appendix C - AMENDED ENERGY AND GREEN CREDITS PURCHASE PRICE

Agreement Year	Energy Purchase Price $/kWh*	Green Credits Purchase Price $kWh
1	0.1500	.0150
2	0.1515	.0150
3	0.1530	.0150
4	0.1545	.0150
5	0.1561	.0150
6	0.1577	.0150
7	0.1592	.0150
8	0.1608	.0150
9	0.1624	.0150
10	0.1641	.0150
11	0.1657	.0150
12	0.1674	.0150
13	0.1690	.0150
14	0.1707	.0150
15	0.1724	.0150
16	0.1741	.0150
17	0.1759	.0150
18	0.1776	.0150
19	0.1794	.0150
20	0.1812	.0150
21	0.1812	.0150
22	0.1812	.0150
23	0.1812	.0150
24	0.1812	.0150
25	0.1812	.0150

*The Energy Purchase Price for Agreement Years 2 to 20 shall be escalated in an amount equal to one percent (1.0%). For Agreement Years 21 to 25 the Energy Purchase Price shall be equal to the Energy Purchase Price of the 20th Agreement Year. The Green Credit Purchase Price, for the first Agreement Year and each Agreement Year throughout the Term of the Agreement shall be equal to $0.015 per kWh of NEO. The Green Credit Purchase Price shall not be subject to escalation.

Appendix E

MINIMUM TECHNICAL REQUIREMENTS FOR INTERCONNECTION OF PHOTOVOLTAIC (PV) FACILITIES

The proponent shall comply with the following minimum technical requirements:

1. VOLTAGE RIDE-THROUGH:

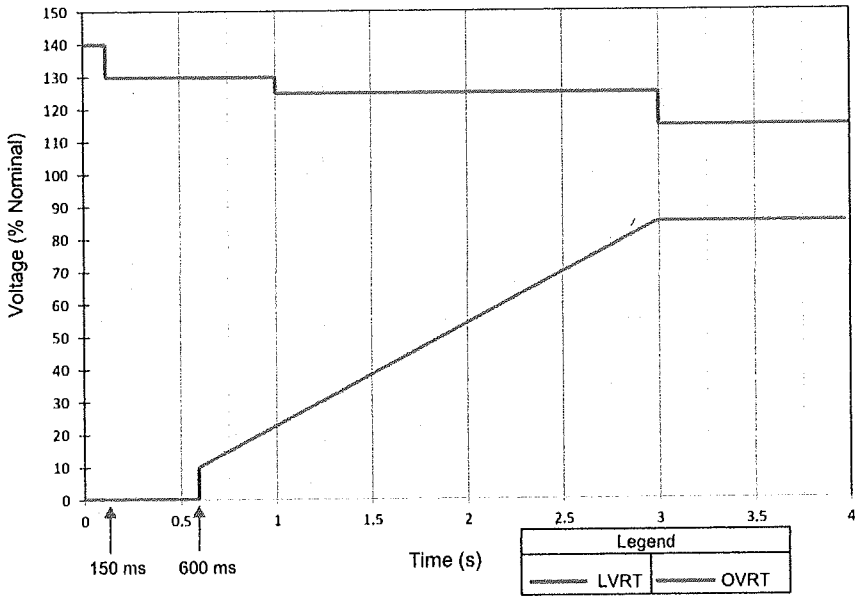


Figure 1 Voltage Ride-Through Requirements

a. PREPA's Low Voltage Ride-Through (LVRT) Requirements:

   i. From Figure 1, PREPA requires all generation to remain online and be able to ride-through three phase and single phase faults down to 0.0 per-unit (measured at the point of interconnection), for up to 600 ms.

   ii. All generation remains online and operating during and after normally cleared faults on the point of interconnection.

iii. All generation remains online and operating during backup-cleared faults on the point of interconnection.

iv. During the low voltage fault conditions, the PV facility shall operate on reactive current injection mode. This mode of operation shall be implemented with a reactive current droop characteristic which shall have an adjustable slope from 1 to 5%. A dead band of 15 % is required.

b. PREPA's Overvoltage Ride-Through (OVRT) Requirements:

i. PREPA requires all generation to remain online and able to ride-through symmetrical and asymmetrical overvoltage conditions specified by the following values illustrated in Figure 1:

Overvoltage (pu)	Minimum time to remain online
1.4 – 1.3	150 ms
1.3 – 1.25	1 s
1.25 – 1.15	3 s
1.15 or lower	indefinitely

2. VOLTAGE REGULATION SYSTEM (VRS)

Constant voltage control shall be required. Photovoltaic System technologies in combination with Static Var Controls, such as Static Var Compensators (SVCs), STATCOMs and DSTATCOMs are acceptable options to comply with this requirement. A complete and detailed description of the VRS control strategy shall be submitted for evaluation.

a) Photovoltaic Facilities (PVF) must have a continuously-variable, continuously-acting, closed loop control VRS; i.e. an equivalent to the Automatic Voltage Regulator in conventional machines.

b) The VRS set-point shall be adjustable between 95% to 105% of rated voltage at the POI. The VRS set-point must also be adjustable by PREPA's Energy Control Center via SCADA.

c) The VRS shall operate only in a voltage set point control mode. Controllers such as Power Factor or constant VAR are not permitted.

d) The VRS controller regulation strategy shall be based on proportional plus integral (PI) control actions with parallel reactive droop compensation. The VRS Droop shall be adjustable from 0 to 10%.

e) At zero percent (0%) droop, the VRS shall achieve a steady-state voltage regulation accuracy of +/- 0.5% of the controlled voltage at the POI.

f) The VRS shall be calibrated such that a change in reactive power will achieve 95% of its final value no later than 1 second following a step change in voltage. The change in reactive power should not cause excessive voltage excursions or overshoot.

g) The generator facility VRS must be in service at any time the PVF is electrically connected to the grid regardless of MW output from the PVF.

h) The VRS dead band shall not exceed 0.1%.

3. Reactive Power Capability and Minimum Power Factor Requirements

The total power factor range shall be from 0.85 lagging to 0.85 leading at the point of interconnection (POI). The reactive power requirements provide flexibility for many types of technologies at the Renewable Energy Facility. The intent is that a PVF can ramp the reactive power from 0.85 lagging to 0.85 leading in a smooth continuous fashion at the POI.

The +/- 0.90 power factor range should be dynamic and continuous at the point of interconnection (POI). This means that the PVF has to be able to respond to power system voltage fluctuations by continuously varying the reactive output of the plant within the specified limits. The previously established power factor dynamic range could be expanded if studies indicate that additional continuous, dynamic compensation is required. It is required that the PVF reactive capability meets +/- 0.85 Power Factor (PF) range based on the PVF Aggregated MW Output, which is the maximum MVAr capability corresponding to maximum MW Output. It is understood that positive (+) PF is where the PVF is producing MVAr and negative (-) PF is where the PVF is absorbing MVAr.

This requirement of MVAr capability at maximum output shall be sustained throughout the complete range of operation of the PVF as established by Figure 2.

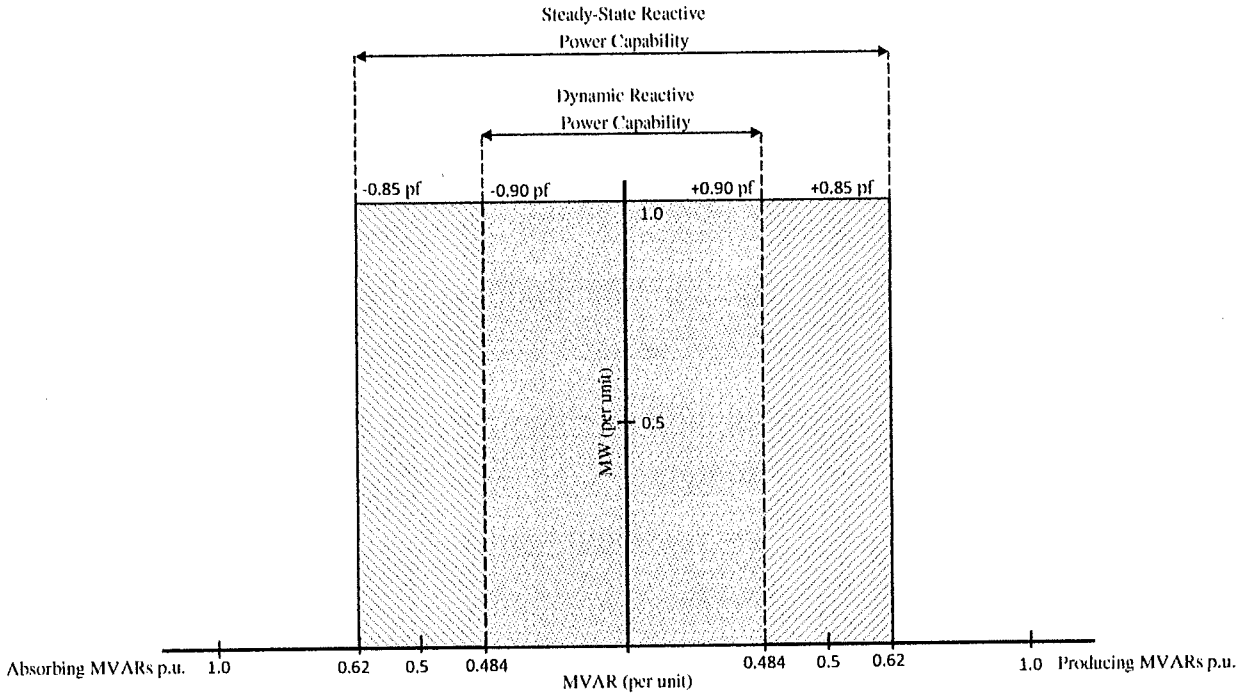


Figure 2 Reactive Power Capability Curve

4. SHORT CIRCUIT RATIO (SCR) REQUIREMENTS:

Short Circuit Ratio values (System Short Circuit MVA at POI/PV Facility MVA Capacity) under 5 shall not be permitted. The constructor shall be responsible for the installation of additional equipment, such as synchronous condensers, and controls necessary to comply with PREPA's minimum short circuit requirements.

5. FREQUENCY RIDE THROUGH (FRT):

- 57.5 - 61.5 Hz — No tripping (continuous)
- 61.5 - 62.5 Hz — 30 sec
- 56.5 - 57.5 Hz — 10 sec
- < 56.5 or > 62.5 Hz — Instantaneous trip

6. FREQUENCY RESPONSE/REGULATION:

PV facility shall provide an immediate real power primary frequency response, proportional to frequency deviations from scheduled frequency, similar to governor response. The rate of real power response to frequency deviations shall be similar to or more responsive than the droop characteristic of 5% used by conventional generators. PV facility shall have controls that provide both for down-regulation and up-regulation. PV technologies, in combination with energy storage systems such as, but not limited to BESS, flywheels and hybrid systems are acceptable options to comply with PREPA's frequency response and regulation requirements.

For small frequency deviations (for example less than 0.3 Hz), the PV facility response shall be proportional to the frequency deviation, based on the specified 5% droop characteristic. The frequency response dead band shall not exceed 0.02%. For large frequency deviations (for example in excess of 0.3 Hz), the PV facility shall provide an immediate real power primary frequency response of at least 10% of the maximum AC active power capacity (established in the contract). The time response (full 10% frequency response) shall be less than 1 second.

If energy storage systems are utilized to comply with the frequency regulation requirements, and during a disturbance the system frequency stays below 59.7 Hz, the facility frequency response shall be maintained for at least 9 minutes. After the ninth minute the real power primary frequency response shall not decrease at a ramp rate higher than 10% of the maximum AC active power capacity per minute.

The operational range of the frequency response and regulation system shall be from 10% to 100% of the maximum AC active power capacity (established in the contract). The PV facility power output at the POI shall never exceed the maximum AC active power (established in the contract).

7. RAMP RATE CONTROL:

Ramp Rate Control is required to smoothly transition from one output level to another. The PV facility shall be able to control the rate of change of power output during some circumstances, including but not limited to: (1) rate of increase of power, (2) rate of decrease of power, (3) rate of increase of power when a curtailment of power output is released; (4) rate of decrease in power when curtailment limit is engaged. A 10 % per minute rate (based on AC contracted capacity) limitation shall be enforced. This ramp rate limit applies both to the increase and decrease of power output and is independent of meteorological conditions. The ramp rate control tolerance shall be +10%.

8. POWER QUALITY REQUIREMENTS:

The developer shall address, in the design of their facilities potential sources and mitigation of power quality degradation prior to interconnection. Design considerations should include applicable standards including, but not limited to IEEE Standards 142, 519, 1100, 1159, and ANSI C84.1. Typical forms of power quality degradation include, but are not limited to voltage regulation, voltage unbalance, harmonic distortion, flicker, voltage sags/interruptions and transients.

9. SPECIAL PROTECTION SCHEMES:

PV facility shall provide adequate technology and implement special protection schemes as established by PREPA in coordination with power management requirements.

10. GENERAL INTERCONNECTION SUBSTATION CONFIGURATION:

An interconnecting generation producer must interconnect at an existing PREPA switchyard. The configuration requirements of the interconnection depend on where the physical interconnection is to occur and the performance of the system with the proposed interconnection. The interconnection must conform, at a minimum, to the original designed configuration of the switchyard. PREPA, at its sole discretion, may consider different configurations due to physical limitations at the site.

11. MODELING AND VALIDATION

The Contractor shall submit to PREPA a Siemens - PTI certified PSS/E mathematical model and data related to the proposed PV facility. When referred to the PV facility model, this shall include but is not limited to PV inverters, transformers, collector systems, plant controllers, control systems and any other equipment necessary to properly model the PV facility for both steady-state and dynamic simulation modules. It is required that the Contractor submits both an aggregate and detailed version of the PV facility model. At a later stage in the process, it is also required that the Contractor submits as-built PSS/E mathematical models of the PV Facility.

The Contractor shall be required to submit user manuals for both the PV inverter and the PV facility models including a complete and detailed description of the voltage regulation system (VRS) and frequency regulation system model implementation. The mathematical models shall be fully compatible with the latest and future versions of PSS/E. It is preferred that the models are PSS/E standard models. In the case that the Contractor submits user written models, the Contractor shall be required to keep these models current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. The Contractor shall submit to PREPA an official report from Siemens - PTI that validates and certifies the required mathematical models, including subsequent revisions. The data and PSS/E model shall also be updated and officially certified according to PREPA requirements when final field adjustments and parameters measurements and field tests are performed to the facility by the contractor. The mathematical model (either PSS/E standard or user written model) of the PV facility shall be officially certified by Siemens - PTI before a specific and validated PSS/E mathematical model of the complete PV facility be submitted to PREPA. The Contractor shall be responsible of submitting the official reports and certifications from Siemens – PTI, otherwise the mathematical model shall not be considered valid.

The Contractor shall be responsible to submit Siemens – PTI certified PSSE mathematical models of any kind of compensation devices (ie. SVC, STATCOMs, DSTATCOMs, BESS, etc.) used on the PV facility. It is preferred that the models are standard models provided with PSS/E. In the case that the Contractor submits user written models, the PV facility Contractor shall be required to keep these models current with the future versions of the PSS/E program until such time that PSS/E has implemented a standard model. In its final form, the mathematical model shall be able to simulate each of the required control and

operational modes available for the compensation device and shall be compatible with the latest and future versions of PSSE. Final adjustments and parameters settings related with the control system commissioning process shall be incorporated to the PSSE mathematical model and tested accordingly by the PV facility Contractor and PREPA system study groups. The Contractor shall also perform on-site field tests for the identification, development, and validation of the dynamic mathematical models and parameters required by PREPA for any kind of compensation devices used at the PV facility. The mathematical models of the PV facility and its required compensation devices shall be officially certified by Siemens - PTI before a specific and validated PSS/E mathematical model of the complete PV facility be submitted to PREPA. The Contractor shall be responsible of submitting the official reports and certifications from Siemens – PTI, otherwise the mathematical models shall not be considered valid.

PV facility Owners that provide user written model(s) shall provide compiled code of the model and are responsible to maintain the user written model compatible with current and new releases of PSS/E until such time a standard model is provided. PREPA must be permitted by the PV facility Owner to make available PV Facility models if required to external consultants with an NDA in place.

12. TRANSIENT MATHEMATICAL MODEL

The Contractor shall be responsible of providing a detailed transient model of the PV facility and to show that it is capable of complying with PREPA's transient Minimum Technical Requirements.

13. DYNAMIC SYSTEM MONITORING EQUIPMENT

The developer of the PV facility shall be required to provide and install a dynamic system monitoring equipment that conforms to PREPA's specifications.

Exhibit F

FINANCIAL OVERSIGHT AND MANAGEMENT BOARD
FOR PUERTO RICO

José B. Carrión III
Chair

BY ELECTRONIC MAIL

August 17, 2020

Ralph A. Kreil Rivera

Chairman
Governing Board
Puerto Rico Electric Power Authority

Dear Chairman Kreil Rivera:

We write in response to the Puerto Rico Electric Power Authority's ("PREPA") July 1, 2020 submission of 16 renegotiated non-operational renewable energy power purchase and operating agreements ("PPOAs") (together, the "Proposed Contracts"), as required by the Oversight Board's Contract Review Policy, established pursuant to Section 204(b) of PROMESA.[1] Since then, we have worked with PREPA and its advisors to assess the alignment of these Proposed Contracts with the objectives set forth in PREPA's 2020 Certified Fiscal Plan (the "2020 Certified Fiscal Plan"), which highlights the need for a full transformation of Puerto Rico's energy system to deliver clean, reliable, and affordable electric service to customers. A key tenet of this transformation is the expedient deployment of renewable generation at overall affordable pricing levels, which requires PREPA to renegotiate both operational and non-operational renewable energy PPOAs to reduce their energy prices to levels **consistent with the 2020 Certified Fiscal Plan projections**.

As explained in detail below, the Oversight Board concludes that the Proposed Contracts are **inconsistent** with the requirements of the 2020 Fiscal Plan which pertain to the **overall reduction of retail energy prices**. Specifically, we note that for non-operational renewable energy PPOAs, the intent of the 2020 Certified Fiscal Plan is to increase Puerto Rico's share of renewable resources on an accelerated timeline, while simultaneously achieving **the lowest possible cost to PREPA's customers**. Doing so would require PREPA to achieve a balance between the (i) the orderly, yet expedient, deployment and integration of renewable capacity and (ii) the prices at

[1] As supplemented by PREPA's July 27, 2020 responses to requests for information.

which it acquired said resources, to allow PREPA and its customers to benefit from new, clean, and reliable energy resources without significantly impacting retail energy prices.

Despite achieving improved prices (when compared to original prices) and more favorable contracts terms to PREPA, the approval and development of **all 16 Proposed Contracts** (representing a total renewable energy capacity of **593 MW**), would result in overall retail energy rates that are **higher** than the average retail energy rates projected in the 2020 Certified Fiscal Plan. Specifically, the 2020 Certified Fiscal Plan assumes new utility scale solar generation prices of **8 c/kWh** in FY2023, increasing to **9.7 c/kWh in FY2049**, while the Proposed Contracts, on average, **start at 9.9 c/kWh,** increasing to **14.1 c/kWh by FY2042**. Consequently, if PREPA were to integrate all of the proposed 593MW solar capacity at the renegotiated price, **projected energy rates in FY2035 would be 33.6 c/kWh, 0.5 c/kWh higher than the energy price forecasts in the 2020 Certified Fiscal Plan**.[2] On the other hand, integrating half of the Proposed Contracts capacity (~300 MW) reduces this differences by 0.3 c/kWh by FY2035, while integrating a quarter (~150MW) of the Proposed Contracts' capacity produces this differences by 0.4 c/kWh by FY2035 (Exhibit 1), providing ~$20-30M in annual fuel and purchased power savings over the next 25 years.[3]

Notwithstanding, the Oversight Board acknowledges that the renegotiated prices for the Proposed Contracts achieved by PREPA represent a considerable improvement from the pricing terms in the original contracts. According to PREPA, when compared to the original pricing, the Proposed Contracts are expected to allow PREPA to avoid ~$1 billion in costs over the lifetime of the projects when compared to what PREPA would have otherwise paid under the original terms of the contracts.[4] Furthermore, the Proposed Contracts reflect improvements in the terms and conditions of the agreements, including stipulations that the developer must pay for costs incurred to meet PREPA's Minimum Technical Requirements (MTR), as well as meet requirements for a Guaranteed Full Notice to Proceed date within 6-12 months from the date the agreements are approved by the Title III court. However, this does not offset the fact that, taken together, the potential net impact of integrating all of the 593MW of renewable energy capacity contemplated in the Proposed Contracts results in retail energy rates that are **0.5c/kWh higher than the rate projections outlined in the 2020 Certified Fiscal Plan**.

As previously indicated, a structured development approach, whereby no more than 150MW of renewable energy capacity is developed at the Proposed Contract prices, would result in retail

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[2] The gap between the proposed PPOA pricing and the 2020 Fiscal Plan base case grows year over year as a result of the 2% escalation clause in each of the proposed PPOA contracts.

[3] This assumes that any remaining renewable energy capacity is procured at prices that are consistent with the price projections reflected in the 2020 Certified Fiscal Plan.

[4] Projected savings represent avoided costs to PREPA, not actual reductions in existing energy rates since none of the contracts are operational or reflected in PREPA's existing retail energy rates. The Oversight Board has not validated PREPA's cost reduction calculations. Prior estimates made by the Oversight Board suggest renegotiated prices may yield $200M+ in savings (compared to original prices) over 25 years.

energy prices that are **no more than 0.1c/kWh above retail energy prices projected in the 2020 Certified Fiscal Plan**. This adjustment is deemed acceptable by the "shovel-ready" nature of the Proposed Contracts, which allows for a faster development timeline, and therefore, a faster integration of new renewable resources, than what would otherwise be possible if PREPA were to conduct a new competitive procurement process.

Therefore, the Oversight Board concludes that, to ensure consistency with the retail energy rate projections included in the 2020 Certified Fiscal Plan, the total renewable energy capacity developed through the Proposed Contracts should be **no more than 150MW**. In determining how to proceed, the Oversight Board recommends PREPA pursue an objective assessment of each proponents' technical and financial qualifications (Exhibit 2), alongside any additional qualifications PREPA deems relevant, in order to qualify those proponents with the highest degree of technical and financial capabilities. [5]

We reiterate that the acceptance of those Proposed Contracts is predicated **exclusively** upon the 2020 Certified Fiscal Plan's requirement to achieve an accelerated deployment of renewable energy capacity in Puerto Rico. **A determination based solely on the prices of the Proposed Contracts would entail the rejection of all such Proposed Contracts for inconsistency with the prices contemplated in the 2020 Certified Fiscal Plan. However, such a blanket rejection would be detrimental to PREPA's progress towards being able to deliver clean, reliable, and affordable electric service to customers**.

Another area of concern to the Oversight Board relates to the possibility that the completion of the Proposed Contracts may be delayed or impeded by the contractual ability of the proponents to, in certain circumstances, sell the facility and/or transfer a majority of their equity interest in the project to a third-party. As is customary in competitive procurement processes, the Oversight Board believes PREPA should aim to ensure that the party with which PREPA enters into a Proposed Contract has an interest in (i) fulfilling its obligations under the agreement and (ii) remaining a party to the agreement for a sufficient amount of time to fulfill such obligations.

In light of the above, before approving the Proposed Contracts, the Oversight Board requires the following changes:

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[5] The Oversight Board is concerned that the lack of a formal process to assess the capabilities of each proponent—as ordinarily done in a competitive procurement processes—means that PREPA is unable to prioritize those projects that are more likely to be developed successfully and allocate its limited resources to support such projects, thereby increasing the uncertainty around the ability to successfully complete each project. This concern is based on the fact that, on June 4, 2020, in response to PREPA's public statement announcing the renegotiation of the Proposed Contracts, the Oversight Board sent a letter requiring PREPA to provide the rationale for agreeing to approve all 16 Proposed Contracts and how such determination was consistent with PREPA's Certified Fiscal Plan. However, in a letter dated June 11, 2020, PREPA stated it "would not be surprised if the majority of these projects did not reach completion" and, therefore, "it would be far more prudent to execute contracts with all of the advanced development projects that were willing to proceed on the new economic terms to ensure the highest likelihood of seeing new generation actually constructed. See "PREPA June 11 Response", Annex A, page 2.

- Transferability of the projects undertaken pursuant to the Proposed Contract shall only be permitted upon **substantial completion** of such projects by the original proponent, as defined by applicable law.

- Part (c) of Section 6.5 of the Proposed Contracts shall be amended to **require PREPA's prior expressed written consent, regardless of the new owner's compliance with any of the requirements set forth therein**. Moreover, net worth requirements should be uniform across all Proposed Contracts and should be set at **$25 million for the new owner and/or $75 million for the new owner's parent entity**.

- To the extent not already reflected in the Proposed Contract, Section 20.3 of the Proposed Contracts shall be amended to provide that any transfer of rights and responsibilities of Seller to an Affiliate of the Seller shall require PREPA's **prior expressed written approval**, if such transfer will result in **51% or more of Seller's equity control** in the project being transferred to a third-party other than the Seller.

- To the extent not already reflected in the Proposed Contract, Section 20.4 of the Proposed Contracts shall be amended so that it is consistent with the amendments required to Part (c) of Section 6.5 and Section 20.3 of the Proposed Contracts. Specifically, the amendment shall reflect the requirement to obtain PREPA's **prior expressed written approval for any transfer of Seller's equity** in the project, as provided in Part (c) of Section 6.5 and Section 20.3 of the Proposed Contract. Moreover, PREPA's lack of response shall not be deemed or construed as an acceptance or consent to a proposed transfer.

- Moving forward, PREPA should aim to take advantage of decreasing solar equipment prices to procure solar energy capacity (at pricing levels that are aligned with the 2020 Fiscal Plan.[6] PREPA's eventual exit from Title III may provide additional opportunities to achieve lower solar generation prices, as reflected in the assessment conducted by New Energy Partners and commissioned by PREPA's Governing Board.[7]

PREPA should report on the status of the implementation of these observations on a weekly basis, with the first update to be provided to the Board within **seven days from the issuance of this letter**.

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[6] Average cost for solar equipment in the US is projected to decline by ~40% over the next five years. The Wood Mackenzie Q2 2020 Solar Executive Briefing projects average costs for 10 MW bifacial tracker system equipment (modules and inverters only) to decline from from $0.49/Wdc in 2019 to $0.30/Wdc in 2024.

[7] The report issued by New Energy Partners on November 2019 concluded that PREPA could benefit from post-bankruptcy prices for new, utility-scale solar starting at 7.5 c/kWh.

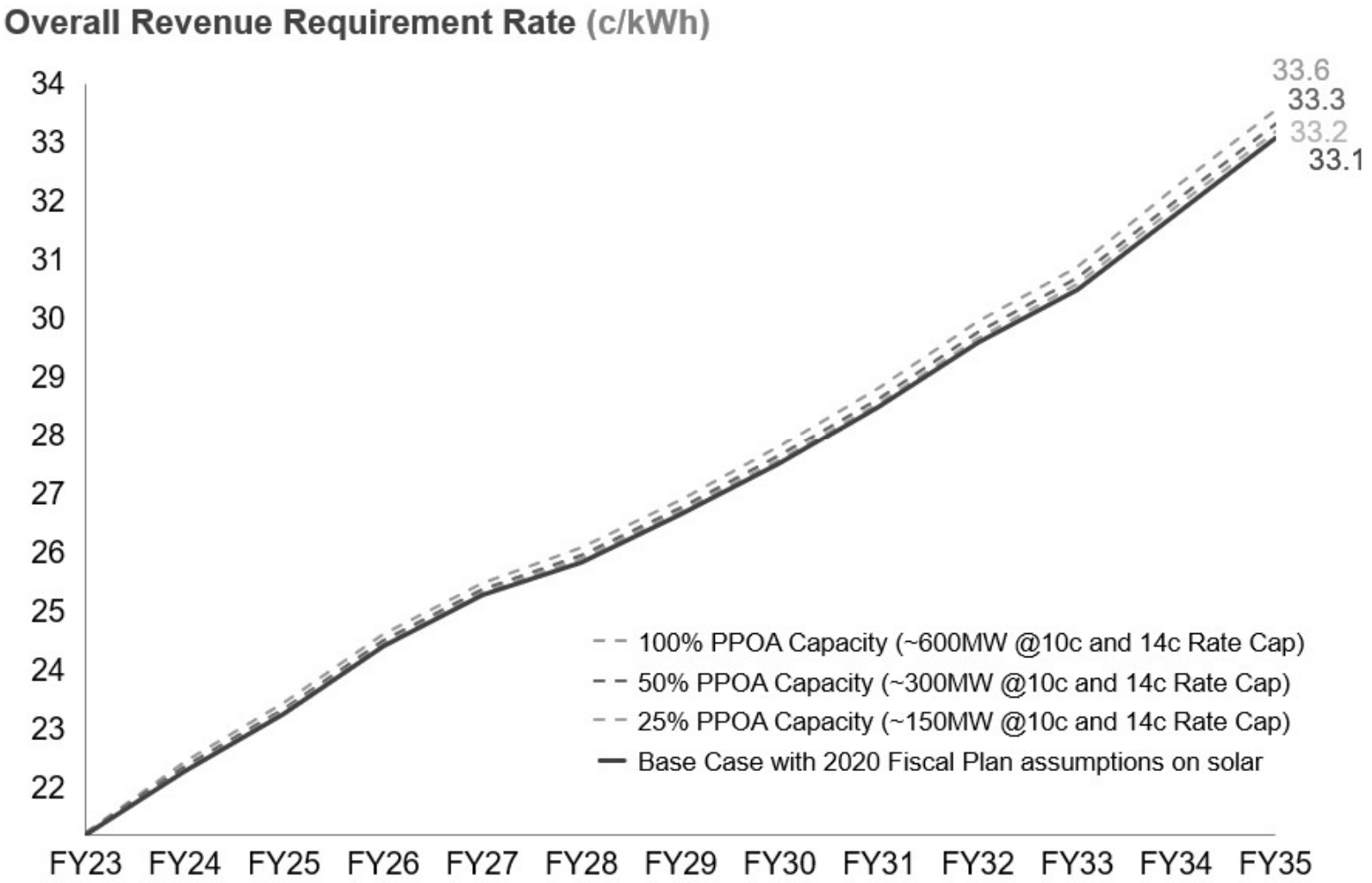
We look forward to working with you for the benefit of the people of Puerto Rico.

Sincerely,

Natalie A. Jaresko

CC: Mr. Omar J. Marrero Díaz
Mr. Efran Paredes Maisonet
Mr. David K. Owens
Mr. Charles E. Bayless
Mr. Robert G. Poe
Ms. María Palou-Abasolo
Mr. Gerardo Lorán-Butrón
Mr. Tomás J. Torres-Placa
Mr. Joel Pizá-Batiz
Mr. Eduardo Arosemena-Muñoz

EXHIBIT 1. LONG-TERM REVENUE REQUIREMENT RATE AT VARYING LEVELS OF APPROVED SHOVEL-READY PPOA CAPACITY.



Note: Assumes FY23 as Year 0 for all the renewables PPOA contracts. All contracts are subject to a 2% price escalation until reaching the rate cap of 14.1 c/kWh

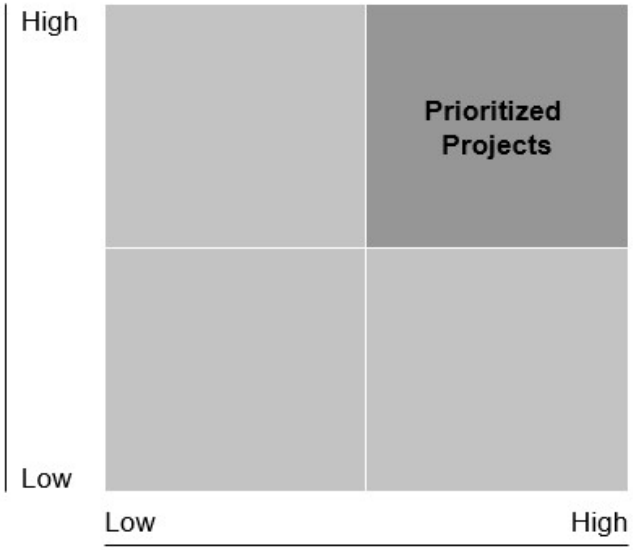
EXHIBIT 2. TECHNICAL AND FINANCIAL CRITERIA FOR PERIODIZATION OF NON-OPERATIONAL PPOA CONTRACTS

Projects

Morovis
Solar Project San Juan
Vega Baja
REA Vega Baja
Ciro One
Solaner
Xzerta-Tec
Blue Beetle
ReSun
Montalva Solar Farm
SolarBlue
Atenas
REA Hatillo (North)
Caracol
Sierra
Guayama Solar Energy

Prioritization Matrix

Technical Qualifications
- Scale and footprint
- International solar experience
- Puerto Rico solar experience
- Ability to meet PREPA's Minimum Technical Requirements



Financial Strength
- Robust financial statements, or
- Financial backing from reputable investors, or
- Access to financing
- Solvency
- Proof of credit worthiness

Exhibit B

GOVERNMENT OF PUERTO RICO

Puerto Rico Electric Power Authority

CONFIDENTIAL

September 2, 2020

VIA EMAIL

RE: NEXT STEPS IN RENEGOTIATION OF POWER PURCHASE AND OPERATING AGREEMENT ("PPOA")

Dear Project Sponsor:

As you know, following the approval of your PPOA by the Governing Board of the Puerto Rico Electric Power Authority ("**PREPA**") in May 2020, PREPA submitted your PPOA, together with 15 others representing an aggregate 593 MW of new photovoltaic solar power generation (collectively, the "**Non-Operating PPOAs**"), to the Financial Oversight and Management Board ("**FOMB**") and the Puerto Rico Energy Bureau ("**PREB**") for approval pursuant to the Puerto Rico Oversight, Management, and Economic Stability Act ("**PROMESA**") and the Puerto Rico Energy Public Policy Act ("**Act 17**"), respectively. These stakeholders have each recently issued decisions establishing approval requirements (summarized below) that impact all of the Non-Operating PPOAs, including the FOMB placing a limit of 150 MW on the aggregate capacity that it will approve at the current pricing. Moving forward, PREPA will need all of the Non-Operating PPOA developers to provide, within 30 days of the date of this letter, written confirmation of (1) willingness to proceed with your project under these new approval requirements, and (2) the status of your project, including updates regarding certain criteria established by the FOMB, which PREPA will use in any evaluation process for meeting the 150 MW or other final capacity acceptable to the FOMB. If we do not receive anything from you within the 30 day timeframe, we will interpret that as a sign that you no longer wish to proceed.

While PREPA has repeatedly emphasized to you the necessity of these approvals before any binding commitments could be made, we are very disappointed with these recent developments. PREPA collaborated with the FOMB and PREB, keeping them updated since negotiations began in early 2019, to increase the likelihood of gaining approval and ensure they had sufficient information early on to offer guidance. We were under the impression that everyone was onboard, and were quite surprised with the letter that we received from the FOMB on August 17, 2020 (the "**FOMB Letter**"), which we have attached as Annex A.

FOMB Approval Requirements

The FOMB Letter did not identify any projects for approval. Instead, it stated, as more specifically set out in the FOMB Letter, that the FOMB would only approve:

1. 150 MW of new solar projects at the currently renegotiated pricing; and

2. Non-Operating PPOAs that included restrictions on the ability of project sponsors to transfer project assets and/or equity in project companies (i) prior to "substantial

Exhibit G

REVIEW OF LEGACY SOLAR PV PPOAS AND RECOMMENDATIONS FOR RANKING AND NEGOTIATIONS

FINAL REPORT
Amended Per FOMB 1/26/21

JANUARY 26, 2021

FOR PUERTO RICO ELECTRIC POWER AUTHORITY
WORKED PERFORMED UNDER CONTRACT 2021-P0060

SUBMITTED BY:
NEW ENERGY PARTNERS, INC.

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Table of Contents

PREPA SOLAR PPOA RANKING:

Executive Summary

The PREPA Board must make a decision as to which of the 16 remaining legacy solar power purchase and operating agreements ("PPOAs") that agreed to the conditions of the PREB and FOMB[1] should be approved for negotiation. The FOMB limited PREPA to 150 MW of solar PPOAs that can be approved and FOMB along with PREB provided certain contractual conditions that the solar proponents must accept. The FOMB provided conceptual criteria for ranking, which formed the basis of this analysis.

Our recommendations of which solar PPOAs to advance for negotiation now and the rank order in which to negotiate are based on objective and independent analysis using a series of tests and criteria discussed in this report. We caveat that we relied on existing PREPA reports, Sargent &Lundy ("S&L") interconnection and development assessment, King and Spalding ("K&S") legal compliance, One Conexus ("Conexus") for assurance of financial strength and developer submitted data in performing these analyses.

We applied a two-stage evaluation process to all of the projects. In Stage One, we applied a series of pass/fail tests to determine each project's eligibility to move to stage two. To be considered in Stage Two, projects had to pass all six pass/fail tests. In Stage Two, we performed an analysis of the net financial benefit to PREPA ratepayers to rank order the projects, with secondary criteria in the event of a tie.

In Stage One, six pass/fail "gates" were used to determine which Solar PPOAs should be candidates to be approved for negotiation ranking order. These gates included: 1) Is the project in legal compliance with FOMB, PREB, and PREPA requirements? 2) Does the project have adequate financial strength, 3) Does the project fail PREPA's interconnection criteria on its own, based on the S&L report, 4) Does the project provide net financial benefits of greater than zero to ratepayers, 5) Is the project is late or mid stage development, and 6) Does the developer or developer group have experience equal to 10x the project scale?

Findings

Stage One: Six Projects Eliminated from contention due to stage one pass/fail criteria

Gate 1: King and Spalding has certified that all projects will be willing to proceed with negotiation of an updated PPOA that is compliant with the FOMB and PREB conditions and that K&S has a new master PPOA that can be used to update the preferred developer PPOAs immediately after the Board decision. No projects were eliminated by this gate.

[1] These conditions and the original FOMB letter of 8/17/20 were sent to solar developers by PREPA on 9/2/20

Gate 2: NEP makes no representation about the adequacy of financial strength of any of the developers, but instead relied on the analysis PREPA commissioned with Conexus. An initial review of financial strength for the top five projects was performed at PREPA's direction by the consulting firm Conexus based on the FOMB criteria. While Conexus found that some information necessary to complete the analysis was missing, the report indicates that they did find information substantiating that all of the top five developers had adequate financial backing and access to financing to proceed to the negotiations stage. Since Conexus did not find sufficient information to conclude that any of the developers met *all* of the FOMB tests, PREPA will need to obtain the missing information during the negotiation phase of the process, and make their own conclusions regarding financial strength, as discussed in the "Negotiation Approach" section.

Gate 3: Two projects failed the interconnection criteria. Montalva and Fonroche San Juan. These were removed from consideration in this round after confirmation of concerns from PREPA operations, as discussed in Section III.

Gate 4: All projects passed the public benefit test. The amount of public benefit per MW, which is ranked in stage two of the process, varied by an order of magnitude. Therefore, no projects were eliminated by this gate.

Gate 5: S&L evaluated all the projects that submitted the actual documentation in determining project stage. In addition, S&L evaluated those that submitted letters representing they had the relevant permits, site control, etc. One project, Atenas, submitted no documentation or reference table and was eliminated for contention. Another project, Morovis, submitted their interest in participating too late to be accepted, and never submitted the required documentation to show the current status of their project. Therefore, Morovis was eliminated.

Gate 6: Two projects from the same developer, Sierra and Caracol, failed the developer experience test, as the developer group did not have sufficient solar development experience at utility scale equal 10x the size of either project.

Stage 2: Rank Order remaining projects based on Public Benefits and secondary criteria

Ten projects remained after applying the criteria in stage one. For those nine, we analyzed and ranked the present value energy cost savings net of interconnection costs. The results of this analysis are shown in Exhibit 1. Since FOMB constrained the amount of MW PREPA can contract for, the maximum public ratepayer benefit will be allocated for the most beneficial projects that successfully are in contention (pass all the project gates). In the event that the top projects are within 5% of each other, there are other criteria explained in Section I Methodology that would be used to rank between close projects. Given the wide differences in ratepayer value per MW, it was not necessary to address the secondary criteria.

Recommendations on Ranking Negotiation Order of PPOAs:

Understanding Ratepayer Value Ranking

NEP's November 2019 report assessed the lifetime benefit of the PPOA cost vs. the avoided energy cost in PREPA's base case IRP submission, netted against the cost of the interconnection that PREPA must pay for, to determine whether ratepayers would be better off. NEP used a blended discount rate to reflect PREPA current situation and the expectation of future credit improvement, consistent with the first analysis. In November 2019, several projects failed the public benefit test because the rate of 10.5¢/kwh was too high to generate any benefits to ratepayers, and the interconnection costs were often quite high. NEP recommended that any PPA rate be at or below 10¢/kwh *as a ceiling*, *not a target*, since this PPOA rate *just barely provides enough benefits to pay for interconnection.*

Unfortunately, most of the projects proposed this exact rate, given the Minimum Technical Requirement condition, and therefore have nearly identical net benefits to ratepayers. Only a few projects bid lower, which immediately provide significantly more ratepayer benefits, which lead to their higher ranking.

Per FOMB request, NEP discounted all the projects to the starting date of 2020. NEP also compared the value of these projects with the values in the Certified Fiscal Plan, also discounted to the start of 2020. The values shown are a relative not an absolute ranking. The value to the system of MTR compliance was not included in the relative ranking, as all projects complied with the MTR.

We recommend two projects be negotiated now: (1) Xzerta-Tec: 60 MW and (2) Ciro One: 90 MW. Since these total 150 MW, we discuss the nuances of negotiation given the responses in the next section.

If either of these fail upon finalization of diligence or refusal to honor the representations in their September 2nd final proposal letter, then the negotiations should proceed in the following contingent order: (3) Resun. If possible, ReSun and Blue Beetle should be negotiated together since the synergies in sharing the interconnection line provide benefits to ratepayers. ResSun would be the 3rd project even if Blue Beetle negotiations failed. 4) REA Hatillo. The remaining contingent order is shown below and described in greater detail in the section entitled " Negotiation Approach".

Exhibit 1
Recommendations on PPOA Ranking

Recommended Negotiation Ranking	PPOA NPV Value to Ratepayers ($/MW) (000s)	Adequate Financial Strength [3]	Significant Development Experience?	Development Stage: could achieve construction in 8 months?
1. Xzerta Tec 60 MW	$5,057	Backing/ Access	Yes	Late
2. Ciro One 90MW	$1,692	Backing/ Access/	Yes	Late
(4) ReSun 35 MW	$1,603[1]/ $1553	Backing/ Access	Yes	Late
(4) Blue Beetle 30 MW	$1261[1]/ $1,157	Backing/ Access Solvency	Yes	Late
4. REA Hatillo 25MW	$1.088	Backing/ Access/ Solvency	Yes	Mid[(2)]
(5) Guayama 25 MW	$1,052	N/R	Yes	Late
(5). Solar Blue 25 MW	$1,015	N/R	Yes	Late
(5). REA Vega Baja 25 MW	$1,026	N/R	Yes	Late
7. Solaner 35 MW	$966	N/R	Yes	Late
8. Fonroche Vega Baja 15 MW	$861	N/R	Yes	Mid

Green indicates top proponent, **Yellow** indicates similar value band.
1. Resun and Blue Beetle can share interconnection costs when selected together. Therefore, the first stated value is contingent on both projects being accepted. The second value is the stand alone.
2. Documentation not provided. S&L assessment is mid stage at best.
3. FOMB criteria meet by the developers listed below. N/R means not rated.

The Conexus review of the top projects makes it clear each of them has reputable financial backers and access to financing: Xzerta-Tec (joint venture with Orgis Energy) and CIRO One (GCL/Putnam Bridge), REA (MasTec), ReSun (Orgis Energy), and Blue Beetle (OPD Energy).

Negotiation Approach

Xzerta-Tec's letter submission on 9/2/20 offered a lower rate of $99/Mwh escalated at 1% with cap at 12.6¢/Mwh. Xzerta-Tec, along with 6 other companies, submitted a list of its development accomplishments, instead of submitting all the actual documents. In initial negotiations, we recommend that PREPA request and review all documentation as well as present the updated PPOA with the new pricing.

To complete the financial review, the following information should be validated. For all of the top 5, PREPA should request a commercial credit worthiness report to ensure the financial backers are investment grade (e.g. , S&P BBB or better, or D&B composite credit appraisal rating of 2 or better).

For Xzerta-Tec, PREPA should obtain and review the joint venture agreement with Orgis, as well as a financial statement from Orgis (which is also the backer of ReSun). The Orgis financial statements can then be used to confirm financial solvency.

If upon review, it is revealed that the developer made a misrepresentation on some other material fact, then the ranking should be executed to negotiate with the next project. This approach will be valid for all developers that submitted letters as opposed to the actual documents.

Many, if not all proponents, have a legitimate technical issue with the PREB order of 8 months after the PPOA signing vs. 8 months after "Assumption Order" of "Effective date", as defined in the PPOA itself. The developers have a valid concern about their ability to lock in financing or give a true full notice to proceed before their PPOA gets assumed. This is due to the risk that until the court issues the Assumption Order the PPOA itself could be rejected. Neither Ciro One nor Xzerta raised an objection to this. The K&S letter describing the issue suggests that this may need to be a point requiring clarification with the PREB. If PREB doesn't agree with the clarification, and PREPA can't reach final agreement with a preferred developer on the required term, then

PREPA can move down the list to the next most attractive developer. For more detail, please see the letter from King and Spalding regarding this issue and how to resolve it.

I. Methodology

NEP used a transparent and fact-based approach to ranking these projects that is compliant with the FOMB criteria in its August 17, 2020 letter and PREB Order. NEP worked in partnership with PREPA (financial strength) and its advisors, Sargent and Lundy (interconnection and readiness) and King & Spaulding (PPOA Compliance).

We then applied a two-stage evaluation process to all of the projects. First, we applied a series of pass/fail tests to determine each project's eligibility to move to stage two. Each step is a "gate". The gates are not sequential. We conducted parallel analysis on responsive developers across all gates. Projects that fail any gate are removed from consideration for this negotiation and may apply for the upcoming RFP. Next, we performed an analysis of the net financial benefit to PREPA ratepayers to rank order the projects.

Stage 1 Pass/Fail Gates

Gate 1: Legal Contractual Compliance: All projects must be willing to sign the updated PPOA that is entirely consistent with the FOMB criteria listed on page 4 of the August 17, 2020 letter related to transferability, and changes to Section 6.5(c), Section 20.3 and Section 20.4., as well as the PREB additional conditions. All projects must meet PREPAs MTRs. It should be noted that multiple projects used batteries to meet the MTRs. All of these conditions were explained in the letter from PREPA to the project proponents on September 2, 2020. NEP is relying on the written statement from King and Spalding that the updated master PPOA is compliant with all the FOMB mandated changes and they have written acceptance of these changes from the developers (see attached letter). Any project not certified by K&S will be removed from consideration for 2020.

Gate 2: Financial Compliance and Due Diligence on Financial Strength: The FOMB has set the net worth requirements at $25 MM for any new owners and $75 MM for any new parent entity. In addition to these requirements, the standard financial due diligence to ensure the developer has adequate equity secured to fund its share of the proposed project, has secured financing, has robust financial statements or financial backing from reputable investors and that there are no financial red flags in solvency and proof of credit worthiness. PREPA has specific objective tests to be compliant with the FOMB letter directive which the PREPA financial analyst team and its consultant is evaluating based on the documentation provided by the developers. Project that fail these objective tests will be removed from consideration. As stated above, we recommend that PREPA require developers to submit additional documentation during the negotiation stage to permit it to complete the financial analysis required by FOMB.

Gate 3: Interconnection Concerns: Sargent and Lundy reevaluated and redesigned the interconnection for these projects (Report CS-0034). If a project, operating on its own,

would be curtailed based on violations of the PREPA N-1, N-2 or N-1-1 contingency test, then it will be placed in the provisional category unless S&L can provide a number of expect hours per year of curtailment for the projects, which will then be added to the costs in Gate 4. S&L has informed NEP that it did not do a system evaluation, only an interconnection evaluation, so it can not determine the frequency of curtailment. Since upgrades to the PREPA system will now be governed by Luma's System Remediation Plan, which is still in development, PREPA must prudently determine that the selected projects in 2020 will indeed operate and contribute to the PREB Order RPS requirements in 2021. Given these circumstances, it is prudent for PREPA to remove these projects from consideration, though they can apply for the RFPs that Luma will be overseeing. NEP has completed work with S&L to confirm the reports findings.

Gate 4 Public Benefits Test: NEP will financially re-evaluate whether the projects with the new PPOA prices and updated interconnection costs in S&L Report CS-0034 would provide benefits to ratepayers based on the average base case IRP avoided costs submitted and implicitly approved by the PREB IRP order, REC Price and blended discount rate used in the NEP December 2019 evaluation of the PPOAs. Any projects that fail the NPV test will not be considered for 2020 negotiations.

Gate 5 Development Stage: Ability to Start Construction in 8 months: Any project that is early stage development or where remaining development items could not be addressed by September 2021 (9 months), will be excluded from this evaluation. NEP will rely on the S&L evaluation currently underway.

Gate 6 Solar Development Experience: All developers must show that they have experience in developing solar projects that are cumulative 10x the scale of their proposed project and have developed at least one project of the same scale, whether in Puerto Rico or elsewhere.

Stage 2: Ranking of Remaining Projects

The remaining projects are rank ordered based on the following hierarchy of criteria. Since the scarce resource on the system is 150 MW of capacity, which was limited by FOMB, and the PREB is clearly interested in ensuring projects are built in 2021, NEP applied the criteria and data from Stage 1 in the following way.

The projects are first ranked by their value to PREPA ratepayers on an NPV $/MW basis. This ensures a "pareto" optimization of ratepayer value, in essence maximizing the ratepayer value of the 150 MW of allowable contracts.

If any two projects have a ratepayer value within 5% of each other, then secondary criteria are applied. The next most important subsequent criteria is time: if a project is in a later stage of development, then it is given negotiation order preference.

If both projects have are in the same stage of development, then then if one project has Puerto Rican development experience, it is given negotiation order preference. The logic is that companies with prior experience would have a time advantage over those that do not.

II. Ranking of Potential Projects

The ranking of potential projects is provided in the executive summary.

As noted above, projects that were eliminated were not forced ranked. However, to be complete, NEP did perform the same analysis on all projects, whether they were eliminated or not.

For the remaining projects, the primary criteria is the value to ratepayers per MW. As a reminder, this is due to FOMB limiting the number of MW that can be procured, and therefore, PREPA's desire to ensure that the maximum benefit is provided to ratepayers. This calculation is based on the net present value of lifetime energy savings compared with avoided cost, at the blended discount rate used in the NEP 2019 study, since PREPA has still not yet emerged from bankruptcy. We then subtract the interconnection costs from this value to arrive at "Net benefit to ratepayers". We divide the "Net benefit to ratepayers" by the project output capacity in MW to arrive at a net benefit to ratepayers per MW. The projects are then forced ranked by this criteria.

While the top projects clearly were significantly more valuable to ratepayers, there were one case where projects were essentially "tied": Solar Blue, REA Vega Baja and Guayama. All of these projects are considered late stage by S&L. Whether any project, irrespective of stage could credibly meet the PREB condition of construction within 8 months of signing a PPOA, without the contract assumption is unknown given the financing contingency. None of these proponents are particularly distinguished by Puerto Rican development experience.

Since the top two projects represent 150 MW, the issue of further ranking may be moot. However, for the avoidance of doubt, we recommend the following algorithm in the event that negotiations with either of the top two fail:

1) The next project to be considered is ReSun. If the claims of ability to obtain permits and/or pricing proves to be misrepresentations upon final diligence, then this project would be eliminated.

2). If CIRO One negotiations fail, then Blue Beetle and ReSun should be negotiated together to obtain the savings to ratepayers of the shared interconnection line. REA Hatillo would also be negotiated at this time. This would fully replace the 90 MW lost from CIRO One.

3). If Xzerta Tec fails, then Blue Beetle and ReSun should be negotiated together to obtain the savings to ratepayers of the shared interconnection line. PREPA should petition FOMB to allow it to go over the cap of 150 MW by 5 MW based on the "common sense" test that all regulators should support the goals of increasing renewable energy with clear benefits to ratepayers. As independent projects these are both still viable, so if only one goes forward, then PREPA would have to go the next project band for the remaining capacity. If the joint negotiation can not be accomplished, the ReSun and REA Hatillo would be the next projects.

4) If either Blue Beetle or ReSun both fail, then next project to be considered is REA Hatillo. If the claims of ability to obtain permits and/or pricing proves to be misrepresentations upon final diligence, then this project would be eliminated.

We do not expect that the negotiations would reach into the next group of projects, but if they did, the same logic would apply.

III. Basis for Elimination of Projects that Failed Tests

Six projects were eliminated in Stage 1. This section provides a brief discussion of them.

Inadequate Solar Development Experience

Two projects, Sierra (25MW) and Caracol (30MW), has the same parent company and development team from Aleron RE, a subsidiary of the Hartz Group (THGI). THGI is a real estate developer that has cumulatively developed 50MW. Of this, one was utility scale wind project (34 MW), the other a small community wind/solar project. THGI has no experience developing even a 20 MW utility scale PV project. This is not even a 1:1 cumulative experience level at utility scale. While the Hartz Group's EPC contractor (DEPCOM) has significant experience in building and construction solar projects, the intention of the criteria was the experience of the development team (inclusive of its financial consortium). This lack of experience is the basis for elimination of what otherwise would have been a low cost, later stage pair of projects.

Inadequate Documentation of Financial Strength, Project Stage, and Utility Scale Experience

One developer, National Energy Partners, Atenas, provided no documentation of financial strength. Further, this company reduced its scale from 40 to 20 MW in its response letter to PREPA, despite the efforts by S&L to negotiate with them on the interconnection of 40 MW. This considerably reduces their ratepayer value ranking. The company provided no evidence of utility scale solar experience, and their web sites provides only residential and commercial projects. The company did list four approvals (Department of Agriculture, Environmental Quality Board, Planning Authority and Solid Waste Authority) but offered no evidence that it had maintained site control. For these reasons, this project was eliminated from contention.

Another developer, X-Elio for the Morovis project, submitted too late after the deadline to be fairly considered. Its response indicated it would be submitting further documentation which it did not provide. For these reasons, it was eliminated from contention.

Interconnection Test Contingency Violations

The interconnection test criteria applied is that if a project, solely on its own, violates PREPA interconnection criteria, such that if such a contingent event occurred (e.g., N-1 or N-1-1), then the project would be curtailed. The interconnection assessment was performed by S&L in report CS-0034, Final Rev 1 June 19, 2020 Project 13741.017. Even though two projects failed the interconnection tests, these projects were submitted as part of the May 2020 board approval package and subsequently approved. Therefore, the basis for NEP's recommendation of elimination based on these same criteria and evidence requires explanation.

At the time of the Board's approval, PREPA was still in charge of its grid and future upgrades. Therefore, PREPA could prioritize T&D line improvements that could address the N-1 or N-1-1 situation, which is typically caused by a weak transmission line as the initial contingency. Further, PREPA had at that time the ability to assess the likelihood of line failure and the additional costs in both expected curtailment payments and additional generation reserves necessary to accept the risk of these contracts. Given the new PPOAs have a low threshold for outages and are take or pay (e.g. PREPA must pay developer if curtailment exceeds the contractual minimum threshold), it is important to factor in these costs into the present value to ratepayers.

As of November 2020, PREPA no longer has control over future grid improvements, these are to be done by Luma in the System Remediation Plan. This in the case of Montalva, the initial contingency is Line 37100, which " is considered a weak line and frequently trips, particularly in the section between Acacias TC and San German". The reason given is that the "115/38kV step down transformer in the Guanica TC is currently not in service". Therefore, S&L modeled this weak line as an N-1-0 outage for the N-1-1, i.e., this expected outage is combined with other contingency cases. S&L stated in communication with NEP that the interconnection itself does not alleviate the situation. S&L notes that at 73 MW Montalva alone does not trigger any contingency. However, at 80 MW it does if the second contingency is the loss of the line east of the Montalva sectionalizer. Under the Montalva PPOA Appendix B, Montalva is required to implement a protection scheme that will automatically curtail the total generation of the facility, if necessary, when an N-1-1 contingency in transmission line L-37100." While this approach will mitigate overloading of the San German TC and associated 38kV grid, these failures would be "grid events" within the PPOA.

There are two costs to PREPA ratepayers if such an event occurs. First, if the hours of curtailment are greater than the contract minimum, specified at 40 hours/year for grid events, then PREPA must pay the developer for the electricity it would otherwise have delivered. Second, generation in the form of spinning reserves must be available on the system to address such an outage to avoid load shedding. For a project of this scale, this second criteria can be problematic. Although PREPA keeps ~400-450 MW of spinning reserve available, when a generation outage, such as the recent event of Costa Sur outage due to earthquake occurs, or depending on the amount of planned generation maintenance, there would simply have been no reserves left on the system to cover a solar contingency of this magnitude.

For these reasons, NEP advises that projects that fail the PREPA contingencies be eliminated from the round, without prejudice for future RFPs unless PREPA receives direct confirmation from Luma that, in the case of Montalva, Line 37100 issues would be fixed in the SRP before Montalva comes on line. Similarly, in the case of Project San Juan, the issues are in Line 9300 and there is a particular segment which is out of services within the PSS/E model. We recognize that this a conservative position taken from an abundance of caution given the continued weakness of the PREPA T&D grid and generation situation.

IV. Recommendations

We recommend two projects be negotiated now: (1) Xzerta-Tec: 60 MW and (2) Ciro One: 90 MW.

If either of these fail upon finalization of diligence or refusal to honor the representations in their September 2nd final proposal letter, then the negotiations should proceed in the following contingent order: (3) REA Hatillo, (4) If Hatillo fails, then ReSun and Blue Beetle should be negotiated together since the synergies in sharing the interconnection line provide benefits to ratepayers.

We strongly urge PREPA to move forward expeditiously. We recommend informing the regulators, FOMB and the PREB of PREPA's decision and the underlying rationale. We would recommend requesting PREB to clarify that the requirement related to commencement of construction is intended to be 8 months after "assumption" when PREPA refiles the two preferred agreements with them (see King and Spalding letter). Similarly, it would be helpful to secure any pre-approvals from FOMB regarding possible contingent exceedance of the 150 MW cap in order to benefit ratepayers, should negotiation with the two recommended proponents fail.

Exhibit H

GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority

February 23, 2021

BY ELECTRONIC MAIL

Mr. Fausto J. Hernández Quiñones
Infrastructure Senior Associate
Financial Oversight and Management
Board of Puerto Rico
PO Box 192018
San Juan, Puerto Rico 00919-2018

Dear Mr. Fausto:

Re: Financial Strength of Finalists

We refer to your email to PREPA dated February 5th, 2021. In that email, you essentially requested (i) additional documentation to support the financial strength of the backers of the 90 MW CIRO One Salinas ("**CIRO**") and 60 MW Xzerta-Tec ("**Xzerta**") solar projects, and (ii) a clearer confirmation that CIRO and Xzerta have sufficient financial backing from reputable investors and access to financing and that PREPA sees these two factors as reasonable and sufficient at this stage to enter into power purchase and operating agreements ("**PPOAs**") with Ciro and Xzerta. Through this letter, we confirm our continued agreement with the statements in point (ii) above, and submit for your review (1) documents obtained from CIRO and Xzerta to support PREPA's conclusions as to their financial strength, and (2) revised PPOAs, which include asset transfer, equity transfer and assignment restrictions in line with our understanding of the FOMB's requirements. We request that the FOMB please approve the PPOAs for signing as soon as possible.

As described in the New Energy Partners ("**NEP**") Amendment on Financial Strength of Finalists, attached as **Annex A** to this letter, the fundamental determination of financial strength seeks to answer the question of **whether the projects can raise the requisite capital required for construction and operation**. PREPA believes that the core criteria in answering this question are whether the project has (1) financial backing from reputable investors and (2) access to capital. Other criteria that can provide additional supporting evidence are (3) financial statements (showing whether the backers are indeed large enough and reputable), (4) solvency (whether there is adequate liquidity to make required payments) and (5) creditworthiness (whether there is a history of credit issues, unpaid debt, *etc*., that would lead to a low credit rating, typically addressed by rating agencies for public companies (*e.g.*, Moodys, Fitch) or private ones (*e.g.*, Dun and Bradstreet).

There are, of course, different methods of, and timing issues around, raising capital, and each item on a prescriptive list of criteria created in advance of reviewing the latest financing and funding plans of a project may not ultimately apply, particularly before a project has a signed PPOA.

The table set out in **Annex B** to this letter, also prepared by NEP, summarizes the updated information PREPA has received from CIRO and Xzerta, using the original FOMB criteria. Based on this information, **it is self-evident that all core criteria have been satisfied**, and all but the creditworthiness ratings from third parties have been completed. Importantly, a significant portion of the funding of these projects will come in the form of equity, making credit ratings less relevant than they might otherwise be.[1] There is also an obvious distinction that CIRO investors have already invested around $55 million into the PP&E for this project, and the Xzerta backers are confirming their interest. PREPA views the documentation provided as reasonable and sufficient for this stage of project development and given the type of funding being obtained.

PREPA further believes, in line with NEP's assessment, that CIRO and Xzerta have shown enough at this stage to pass the financial strength test. Further delays will return diminishing value. We would, however, be willing to commit to pull Dun & Bradstreet reports on the projects post-FOMB approval if the FOMB still requires this for projects funded in the manner described.

Please let us know if you have any additional questions. We respectfully request the FOMB to approve these projects to proceed as soon as possible.

Should you have any questions or need additional information, please contact us at fernando.padilla@prepa.com

Sincerely,

Fernando M. Padilla Padilla
Deputy Executive Director of Operations

Annexes & Attachments

[1] Note that, in a prior report provided to the FOMB, One Connexus mentioned that they obtained Dun & Bradstreet reports, including for companies related to Xzerta, and that those reports showed "positive sales."

REVIEW OF LEGACY SOLAR PV PPOAS AND RECOMMENDATIONS FOR RANKING AND NEGOTIATIONS

Annex A: Amendment on Financial Strength of Finalists

FEBRUARY 22, 2021

FOR PUERTO RICO ELECTRIC POWER AUTHORITY
WORKED PERFORMED UNDER CONTRACT 2021-P0060

SUBMITTED BY:
NEW ENERGY PARTNERS, INC.

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Application of FOMB Criteria in Determination of Financial Strength

The fundamental determination of financial strength seeks to answer the question of whether the project can raise the requisite capital required for construction and operation. Therefore, the core criteria are 1). Financial backing from reputable investors and 2) Access to capital. Criteria that provide additional supporting evidence are 3) financial statements (show whether the backers indeed large enough balance sheets and reputable) 4) solvency (whether there adequate liquidity to have cash to make the required payments) and 5) creditworthiness, (whether there a history of credit issues, unpaid debt, or similar issues that would lead to a low credit rating.) This credit worthiness criteria is typically addressed by rating agencies for public companies (e.g. Moodys, Fitch) or private ones (e.g., Dun and Bradstreet). It is New Energy Partners understanding that PREPA may need to hire a third party to undertake the credit worthiness check.

The table below summarizes the updated information PREPA has received from the top two proposers, using the FOMB criteria. Based on this information, it is self-evident from the evidence that all core criteria have been satisfied, and all but the creditworthiness ratings from third parties have been completed (which PREPA can commit to doing after FOMB approval). There is an obvious distinction that CIRO One investors have already invested ~$55 million into the PP&E for this project, while the Xzerta Tec backers are confirming their interest. Given the stage of this project, it is reasonable that all investors will do due diligence on the final PPA before their direct investment, as there are still nuances between the FOMB and PREB that should be resolved in terms of timing. Therefore, PREPA should proceed with the next steps in the negotiating process to complete the signed PPA as described by NEP in its final report of January 26, 2021.

ANNEX B: FINANCIAL STRENGTH DOCUMENTATION

	Xzerta Tec 60 MW			Ciro One 90 MW		
FOMB Criteria	**Yes/ No**	**Comments**	**Reference**	**Yes/ No**	**Comments**	**Reference**
1) Financial Backing from Reputable Investors	Yes	Funding will be available through Auriga Capital, Delaware Solar who are in turn backed by Generate and KKR. Origis commitment -Auriga Capital Management commitment letter of 2/20/21 to provide or arrange $100 MM in capital for Xzerta-Tec Solar 1. Combines with Delaware River Solar affiliate. Xzerta Tec is a is a joint venture between Origis and New Steps Solar. Origis Capital Letter of 2/18/20 confirming interest in investment in Xzerta Tec Solar. -Origis: has capital investments from Global Atlantic Financial Group	pg.5-6 2/20/21 Auriga Capital Manage-ment letter	Yes	Putnam Bridge (private equity fund) funding letter of 2/8/21 has available liquid assets of $175m available to be deployed and committed immediately funding to the project. GCL and CIRO One have already invested $55 MM.	

	Xzerta Tec 60 MW			Ciro One 90 MW		
FOMB Criteria	**Yes/ No**	**Comments**	**Reference**	**Yes/ No**	**Comments**	**Reference**
Financial Backing (cont.)		-Next Stage Solar: local investments and pre-developed financing.				
2) Access to Financing	Yes	Auriga and Origis both have letters stating interest to invest. Generate Capital letter stating it has committed available funds for investment via partnership with Delaware River Solar.	pg. 7 2/18/21 and 2/20/21 letters	Yes	Putnam Bridge letter of 2.8.21 that referenced available funds are intended to be used to invest in construction and operations of CIRO 1	Exhibit A: Statement of Qualifications Brief pg. 10
3) Financial Statements	Yes	KKR Annual Report Global Atlantic Financial Statements 2020		Yes	Unaudited reviewed comparative FS 2019-18 (18 is audited) in RMB & IFRS for GCL-Poly Energy Holdings Limited.	Exhibit B: Financial Capabilities pg.26-27
4) Solvency	Yes	Origis commitment that it can meet financial covenant requirements based on Global Atlantic and KKR Financial Statements Generate Capital statement of adequate funds	(see above) 2/18/21 letter	Yes	Financial statements of GCL Energy Holdings net assets of 26,661,744 RMB'000 = $4.075 Billion Current Ratio: 0.53 Quick Ratio: 0.51 Net debt to equity attributable to owners of the company 211%. Putnam Bridge	pg.78 2/5/21 and

					states all investment based on direct cash equity investments and has brokerage letter confirming the liquidity of the $175 MM.	2.12.21 letters
5) Proof of Creditworth-iness	No	PREPA can commit to completing this step with third parties creditworthiness verification.	n/a	No	PREPA can commit to completing this step with third parties creditworthiness verification.	n/a

Xzerta valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA Start Date Per FOMB		**2020**		
PPOA Price $Mwh		**99**		
PPOA Escalator		**1%**		
PPOA Cap $/Mwh	**$**	**126**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
Xzerta PPOA $/Mwh				99
Net Savings/Cost v Avoid Cost $/Mwh				$48.4
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$118.70		$48.4
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
Xzerta PPOA $/Mwh			99
Net Savings/Cost v Avoid Cost $/Mwh			$48.4
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$136.80		$48.4

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012	147.4
NPV AVOIDED COST CFP	$1,023	147.4
DIFFERENCE IN NPV $/MWH	$11	
DIFFERENCE IN NPV $/MWH		

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024			
8%	10%	11%	12%			

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO	ST-HFO	ST-HFO	GAS CC	GAS CC	GAS CC
	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0				
121	70	$919.5				

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
100.0	101.0	102.0	103.0	104.0	105.1	106.1
$46.7	$49.4	$51.9	$54.2	($14.5)	($12.9)	($12.7)

		$8.76				
$46.7	$58.13					

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
100.0	101.0	102.0	103.0	104.0	105.1	106.1
$46.7	($8.6)	$16.8	$35.2	$40.0	$46.6	$14.4
		$93.19				
$46.7	$84.60					
146.7	150.4	$1,104.48				
146.7	92.4	$1,188.92				
	$26.47					
	260,933	282,550	237,284	172,938	89,960	
	30,278	30,811	26,317	21,553	10,966	
	230,656	251,739	210,967	151,385	78,994	
	3,311,734	2,717,107	1,949,662	1,285,433	634,566	
	69.6	92.6	108.2	117.8	124.5	
						78,877
						10,966
						67,911
						712,003
						95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	107.2	108.3	109.4	110.5	111.6	112.7
	($12.0)	($12.9)	($12.5)	($12.8)	($11.4)	($11.0)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
107.2	108.3	109.4	110.5	111.6	112.7
($8.3)	($8.0)	($7.2)	($6.3)	($5.6)	($4.8)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

	2034	2035	2036	2037	2038	2039
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
GAS CC	GAS CC	GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	
	78	80	81	82	83	84
	83	84	85	84.0	85.0	86.1
	5	4	4	2	2	2
	83	84	85	84	85	86
	20.2	20.6	21.0	21.4	21.9	22.3
	6.2	6.4	6.5	6.6	6.6	6.7
	104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
	104.1	106.5	108.2	110.3	111.6	112.9
	113.8	114.9	116.1	117.2	118.4	119.6
	($9.7)	($8.5)	($7.8)	($7.0)	($6.8)	($6.7)
	20.2	20.6	21.0	21.4	21.9	22.3
	6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
113.8	114.9	116.1	117.2	118.4	119.6
($4.2)	($4.0)	($3.1)	($5.1)	($4.8)	($4.3)

112,556	111,451	57,269			
34,680	35,333	17,979			
77,876	76,117	39,290			
940,981	909,681	461,293			
83	84	85			
			438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
120.8	121.6	121.6	121.6	121.6	121.6
($6.5)	($5.9)	($4.6)	($3.1)	($1.7)	($0.3)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
120.8	121.6	121.6	121.6	121.6	121.6
($3.2)	($1.7)	$0.7	$3.2	$5.7	$8.2

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CIRO valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA Start Date Per FOMB		**2020**		
PPOA Price $Mwh		**98.9**		
PPOA Escalator		**2%**		
PPOA Cap $/Mwh	**$**	**141**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
Ciro PPOA $/Mwh				98.9
Net Savings/Cost v Avoid Cost $/Mwh				$48.5
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$39.09		$48.5
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
CIRO PPOA $/Mwh			98.9
Net Savings/Cost v Avoid Cost $/Mwh			$48.5
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$57.20		$48.5

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012		147.4
NPV AVOIDED COST CFP	$1,023		147.4
DIFFERENCE IN NPV $/MWH	$11		
DIFFERENCE IN NPV $/MWH			

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024			
8%	10%	11%	12%			

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO	ST-HFO	ST-HFO	GAS CC	GAS CC	GAS CC
	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0
121	70	$919.5

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
100.9	102.9	105.0	107.1	109.2	111.4	113.6
$45.8	$47.5	$49.0	$50.2	($19.6)	($19.2)	($20.2)

		($104.86)
$45.8	($57.39)	

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
100.9	102.9	105.0	107.1	109.2	111.4	113.6
$45.8	($10.5)	$13.9	$31.1	$34.9	$40.3	$7.0
		($20.42)				
$45.8	($30.91)					

146.7	150.4	$1,104.48
146.7	92.4	$1,188.92
	$26.47	

260,933	282,550	237,284	172,938	89,960	
30,278	30,811	26,317	21,553	10,966	
230,656	251,739	210,967	151,385	78,994	
3,311,734	2,717,107	1,949,662	1,285,433	634,566	
69.6	92.6	108.2	117.8	124.5	

78,877
10,966
67,911
712,003
95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	115.9	118.2	120.6	123.0	125.4	127.9
	($20.7)	($22.8)	($23.7)	($25.3)	($25.3)	($26.3)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
115.9	118.2	120.6	123.0	125.4	127.9
($16.9)	($18.0)	($18.4)	($18.9)	($19.4)	($20.0)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

	2034	2035	2036	2037	2038	2039
	GAS CC GAS CC	GAS CC GAS CC	GAS CC GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC
	78	80	81	82	83	84
	83	84	85	84.0	85.0	86.1
	5	4	4	2	2	2
	83	84	85	84	85	86
	20.2	20.6	21.0	21.4	21.9	22.3
	6.2	6.4	6.5	6.6	6.6	6.7
	104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
	104.1	106.5	108.2	110.3	111.6	112.9
	130.5	133.1	135.8	138.5	141.0	141.0
	($26.4)	($26.6)	($27.5)	($28.2)	($29.4)	($28.1)
	20.2	20.6	21.0	21.4	21.9	22.3
	6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
130.5	133.1	135.8	138.5	141.0	141.0
($20.9)	($22.1)	($22.8)	($26.4)	($27.3)	($25.7)

112,556	111,451	57,269
34,680	35,333	17,979
77,876	76,117	39,290
940,981	909,681	461,293
83	84	85

438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
141.0	141.0	141.0	141.0	141.0	141.0
($26.7)	($25.3)	($24.0)	($22.5)	($21.1)	($19.7)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
141.0	141.0	141.0	141.0	141.0	141.0
($23.4)	($21.1)	($18.7)	($16.2)	($13.7)	($11.2)

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PPOA 99-100/Mwh valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA Start Date Per FOMB		**2020**		
PPOA Price $Mwh		**100**		
PPOA Escalator		**2%**		
PPOA Cap $/Mwh	**$**	**141**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
$100/Mwh PPOA $/Mwh				100
Net Savings/Cost v Avoid Cost $/Mwh				$47.4
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$29.05		$47.4
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
$/100 Mwh PPOA $/Mwh			100
Net Savings/Cost v Avoid Cost $/Mwh			$47.4
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$47.15		$47.4

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012	147.4
NPV AVOIDED COST CFP	$1,023	147.4
DIFFERENCE IN NPV $/MWH	$11	
DIFFERENCE IN NPV $/MWH		

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024				
8%	10%	11%	12%				

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO ST-HFO	ST-HFO ST-HFO	ST-HFO ST-HFO	GAS CC ST-HFO	GAS CC ST-HFO	GAS CC ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0
121	70	$919.5

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
102.0	104.0	106.1	108.2	110.4	112.6	114.9
$44.7	$46.3	$47.8	$49.0	($20.8)	($20.4)	($21.4)

		($115.71)
$44.7	($69.38)	

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
102.0	104.0	106.1	108.2	110.4	112.6	114.9
$44.7	($11.6)	$12.7	$30.0	$33.7	$39.1	$5.7
		($31.27)				
$44.7	($42.91)					

146.7	150.4	$1,104.48
146.7	92.4	$1,188.92
	$26.47	

260,933	282,550	237,284	172,938	89,960	
30,278	30,811	26,317	21,553	10,966	
230,656	251,739	210,967	151,385	78,994	
3,311,734	2,717,107	1,949,662	1,285,433	634,566	
69.6	92.6	108.2	117.8	124.5	

78,877
10,966
67,911
712,003
95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	117.2	119.5	121.9	124.3	126.8	129.4
	($22.0)	($24.1)	($25.1)	($26.7)	($26.7)	($27.7)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
117.2	119.5	121.9	124.3	126.8	129.4
($18.2)	($19.3)	($19.7)	($20.2)	($20.8)	($21.5)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

2034	2035	2036	2037	2038	2039
GAS CC GAS CC	GAS CC GAS CC	GAS CC GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC
78	80	81	82	83	84
83	84	85	84.0	85.0	86.1
5	4	4	2	2	2
83	84	85	84	85	86
20.2	20.6	21.0	21.4	21.9	22.3
6.2	6.4	6.5	6.6	6.6	6.7
104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
104.1	106.5	108.2	110.3	111.6	112.9
131.9	134.6	137.3	140.0	141.0	141.0
($27.8)	($28.1)	($29.0)	($29.8)	($29.4)	($28.1)
20.2	20.6	21.0	21.4	21.9	22.3
6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
131.9	134.6	137.3	140.0	141.0	141.0
($22.4)	($23.6)	($24.3)	($27.9)	($27.3)	($25.7)

112,556	111,451	57,269			
34,680	35,333	17,979			
77,876	76,117	39,290			
940,981	909,681	461,293			
83	84	85			
			438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
141.0	141.0	141.0	141.0	141.0	141.0
($26.7)	($25.3)	($24.0)	($22.5)	($21.1)	($19.7)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
141.0	141.0	141.0	141.0	141.0	141.0
($23.4)	($21.1)	($18.7)	($16.2)	($13.7)	($11.2)

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CIRO valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA start for Comparison to NEP 2019 rpt		**2019**		
PPOA Price $Mwh		**98.9**		
PPOA Escalator		**2%**		
PPOA Cap $/Mwh	**$**	**141**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
Ciro PPOA $/Mwh			98.9	100.878
Net Savings/Cost v Avoid Cost $/Mwh				$46.6
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$21.08		$46.6
Note minor difference vs original NEP sheet				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
CIRO PPOA $/Mwh		98.9	100.878
Net Savings/Cost v Avoid Cost $/Mwh			$46.6
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$39.19		$46.6

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012		147.4
NPV AVOIDED COST CFP	$1,023		147.4
DIFFERENCE IN NPV $/MWH	$11		
DIFFERENCE IN NPV $/MWH			

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024				
8%	10%	11%	12%				

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO	ST-HFO	ST-HFO	GAS CC	GAS CC	GAS CC
	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0
121	70	$919.5

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
102.9	105.0	107.1	109.2	111.4	113.6	115.9
$43.8	$45.4	$46.9	$48.0	($21.8)	($21.4)	($22.4)

		($124.29)
$43.8	($78.88)	

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
102.896	104.953471	107.052541	109.193591	111.3774633	113.6050125	115.8771128
$43.8	($12.6)	$11.8	$29.0	$32.7	$38.1	$4.7
		($39.86)				
$43.8	($52.41)					

146.7	150.4	$1,104.48
146.7	92.4	$1,188.92
	$26.47	

260,933	282,550	237,284	172,938	89,960	
30,278	30,811	26,317	21,553	10,966	
230,656	251,739	210,967	151,385	78,994	
3,311,734	2,717,107	1,949,662	1,285,433	634,566	
69.6	92.6	108.2	117.8	124.5	

78,877
10,966
67,911
712,003
95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	118.2	120.6	123.0	125.4	127.9	130.5
	($23.0)	($25.2)	($26.1)	($27.8)	($27.8)	($28.8)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
118.194655	120.5585481	122.9697191	125.4291135	127.9376958	130.4964497
($19.2)	($20.3)	($20.8)	($21.3)	($21.9)	($22.6)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

	2034	2035	2036	2037	2038	2039
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	
	78	80	81	82	83	84
	83	84	85	84.0	85.0	86.1
	5	4	4	2	2	2
	83	84	85	84	85	86
	20.2	20.6	21.0	21.4	21.9	22.3
	6.2	6.4	6.5	6.6	6.6	6.7
	104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
	104.1	106.5	108.2	110.3	111.6	112.9
	133.1	135.8	138.5	141.0	141.0	141.0
	($29.0)	($29.3)	($30.2)	($30.7)	($29.4)	($28.1)
	20.2	20.6	21.0	21.4	21.9	22.3
	6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
133.1063787	135.7685062	138.4838764	141	141	141
($23.5)	($24.8)	($25.5)	($28.9)	($27.3)	($25.7)

112,556	111,451	57,269			
34,680	35,333	17,979			
77,876	76,117	39,290			
940,981	909,681	461,293			
83	84	85			
			438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
141.0	141.0	141.0	141.0	141.0	141.0
($26.7)	($25.3)	($24.0)	($22.5)	($21.1)	($19.7)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
141	141	141	141	141	141
($23.4)	($21.1)	($18.7)	($16.2)	($13.7)	($11.2)

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PPOA at ~99-100/Mwh valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA start for Comparison to NEP 2019 rpt		**2019**		
PPOA Price $Mwh		**100**		
PPOA Escalator		**2%**		
PPOA Cap $/Mwh	**$**	**141**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
$100/Mwh PPOA $/Mwh			100	102
Net Savings/Cost v Avoid Cost $/Mwh				$45.4
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$11.15		$45.4
Note minor difference vs original NEP sheet				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
$/100 Mwh PPOA $/Mwh		100	102
Net Savings/Cost v Avoid Cost $/Mwh			$45.4
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$29.26		$45.4

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012		147.4
NPV AVOIDED COST CFP	$1,023		147.4
DIFFERENCE IN NPV $/MWH	$11		
DIFFERENCE IN NPV $/MWH			

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024				
8%	10%	11%	12%				

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO ST-HFO	ST-HFO ST-HFO	ST-HFO ST-HFO	GAS CC ST-HFO	GAS CC ST-HFO	GAS CC ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0
121	70	$919.5

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
104.0	106.1	108.2	110.4	112.6	114.9	117.2
$42.7	$44.2	$45.7	$46.8	($23.1)	($22.7)	($23.7)

		($134.90)
$42.7	($90.65)	

15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
104.0	106.1	108.2	110.4	112.6	114.9	117.2
$42.7	($13.7)	$10.6	$27.8	$31.5	$36.8	$3.4
		($50.46)				
$42.7	($64.18)					

146.7	150.4	$1,104.48
146.7	92.4	$1,188.92
	$26.47	

260,933	282,550	237,284	172,938	89,960	
30,278	30,811	26,317	21,553	10,966	
230,656	251,739	210,967	151,385	78,994	
3,311,734	2,717,107	1,949,662	1,285,433	634,566	
69.6	92.6	108.2	117.8	124.5	

78,877
10,966
67,911
712,003
95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	119.5	121.9	124.3	126.8	129.4	131.9
	($24.3)	($26.5)	($27.5)	($29.2)	($29.2)	($30.3)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
119.5	121.9	124.3	126.8	129.4	131.9
($20.6)	($21.7)	($22.1)	($22.7)	($23.4)	($24.0)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

	2034	2035	2036	2037	2038	2039
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	
	78	80	81	82	83	84
	83	84	85	84.0	85.0	86.1
	5	4	4	2	2	2
	83	84	85	84	85	86
	20.2	20.6	21.0	21.4	21.9	22.3
	6.2	6.4	6.5	6.6	6.6	6.7
	104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
	104.1	106.5	108.2	110.3	111.6	112.9
	134.6	137.3	140.0	141.0	141.0	141.0
	($30.4)	($30.8)	($31.8)	($30.7)	($29.4)	($28.1)
	20.2	20.6	21.0	21.4	21.9	22.3
	6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
134.6	137.3	140.0	141.0	141.0	141.0
($25.0)	($26.3)	($27.0)	($28.9)	($27.3)	($25.7)

112,556	111,451	57,269			
34,680	35,333	17,979			
77,876	76,117	39,290			
940,981	909,681	461,293			
83	84	85			
			438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC
LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
141.0	141.0	141.0	141.0	141.0	141.0
($26.7)	($25.3)	($24.0)	($22.5)	($21.1)	($19.7)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
141.0	141.0	141.0	141.0	141.0	141.0
($23.4)	($21.1)	($18.7)	($16.2)	($13.7)	($11.2)

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Xzerta valuation COMPARISON ESM IRP AND CERTIFIED FISCAL PLAN				
PPOA start for Comparison to NEP 2019 rpt		**2019**		
PPOA Price $Mwh		**99**		
PPOA Escalator		**1%**		
PPOA Cap $/Mwh	**$**	**126**		
Inflation		2%		
Discount rate 2023-2045		8.5%		
Discount Rate 2019-2022		13.5%		
Hedge Premium 2025-2045		8%		
				2020
CME Forward Hedge Premium v 2019 Forecast 10/14/19				6%
MARGINAL UNIT			2019	2020
ESM IRP BASE CASE			ST-HFO	ST-HFO
CFP 2020 SUBMITTED				
MARGINAL FUEL AND VARIABLE O&M ($/Mwh)				
MARGINAL GEN COST ESM IRP			118	124
MARGINAL GEN COST CFP				
DIFFERENTIAL				
MARGIN GEN COST CFP + NEAR TERM			118	124
Certfied Fiscal plan is unhedged variable costs are slight more expensive than ESM IRP.				
NPV UNHEDGED VARIABLE COST ONLY				
NPV ESM IRP UNHEDGED VARIABLE COST ONLY		$794		124
NPV CFP UNHEDGED VARIABLE COST ONLY		$805		124
FULL AVOIDED COSTS				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR ESM IRP			0.0	8.0
AVOIDED COST ESM IRP			**133.0**	**147.4**
Combined Avoided Cost $/Mwh			133.0	147.4
Xzerta PPOA $/Mwh			99	99.99
Net Savings/Cost v Avoid Cost $/Mwh				$47.4
2023-2045 NPV @ 8.5%				
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045		$109.68		$47.4
Note: higher value vs NEP Dec report due to inflation term spreadsheet error on avoided cost, nor				
Add Environmental REC Credit			15.0	15.3
ADD: HEDGE VALUE FOR CFP IRP				8.0

AVOIDED COST CFP		**133.0**	**147.4**
Xzerta PPOA $/Mwh		99	99.99
Net Savings/Cost v Avoid Cost $/Mwh			$47.4
2023-2045 NPV @ 8.5%			
NPV 13.5% of 2020-2022+ NPV 13.5%of NPV2023-2045	$127.79		$47.4

CFP shows more value under same methodology

CFP starts in 2022 so 2020,2021 ESM data used to allow same discount comparison

In General, CFP hedge costs are more expensive NPV than ESM IRP

NPV AVOIDED COST ESM IRP	$1,012		147.4
NPV AVOIDED COST CFP	$1,023		147.4
DIFFERENCE IN NPV $/MWH	$11		
DIFFERENCE IN NPV $/MWH			

CALCULATION OF MARGIN GEN COST IN CERTIFIED FISCAL PLAN

ST SFO TOTAL COST
ST SFO FIXED COST
NET ST SFO COST
ST SFO GENERATION MWH
NET ST SFO COST/MWH

ST GASTOTAL COST
ST GAS FIXED COST
NET ST GAS COST
ST GAS GENERATION MWH
NET ST GAS COST/MWH

NG CC TOTAL COST
NG CC FIXED COST
NET NG CC COST
NG CC GENERATION MWH
NET NG CC COST/MWH

LARGE NG CC TOTAL COST

LARGE NG CC FIXED COST
NET LARGE NG CC COST
LARGE NG CC GENERATION MWH
NET LARGE NG CC COST/MWH

2021	2022	2023	2024				
8%	10%	11%	12%				

2021	2022	2023	2024	2025	2026	2027
ST-HFO	ST-HFO	ST-HFO	ST-HFO	GAS CC	GAS CC	GAS CC
	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-HFO	ST-GAS
121	122	124	125	67	69	70
	70	93	108	118	124	95
	-53	-32	-17	50	55	25
121	70	93	108	118	124	95

121	122	$840.0				
121	70	$919.5				
15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	12.0	13.3	15.5	5.4	5.6	5.6
146.7	**150.4**	**153.9**	**157.2**	**89.6**	**92.2**	**93.4**
146.7	150.4	153.9	157.2	89.6	92.2	93.4
101.0	102.0	103.0	104.0	105.1	106.1	107.2
$45.7	$48.4	$50.9	$53.2	($15.5)	($14.0)	($13.8)
		($1.00)				
$45.7	$47.36					
corrected						
15.6	15.9	16.2	16.6	16.9	17.2	17.6
9.7	6.8	9.9	13.4	9.4	10.0	7.6

146.7	**92.4**	**118.8**	**138.2**	**144.1**	**151.7**	**120.6**
101.0	102.0	103.0	104.0	105.1	106.1	107.2
$45.7	($9.6)	$15.8	$34.1	$39.0	$45.5	$13.4
		$83.43				
$45.7	$73.83					
146.7	150.4	$1,104.48				
146.7	92.4	$1,188.92				
	$26.47					
	260,933	282,550	237,284	172,938	89,960	
	30,278	30,811	26,317	21,553	10,966	
	230,656	251,739	210,967	151,385	78,994	
	3,311,734	2,717,107	1,949,662	1,285,433	634,566	
	69.6	92.6	108.2	117.8	124.5	
						78,877
						10,966
						67,911
						712,003
						95.4

	2028	2029	2030	2031	2032	2033
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
	72	71	72	73	75	76
	75	76	77	79	80	82
	3	4	5	6	5	6
	75	76	77	79	80	82
	17.9	18.3	18.7	19.0	19.4	19.8
	5.7	5.7	5.8	5.8	6.0	6.1
	95.2	**95.4**	**96.8**	**97.6**	**100.1**	**101.7**
	95.2	95.4	96.8	97.6	100.1	101.7
	108.3	109.4	110.5	111.6	112.7	113.8
	($13.1)	($14.0)	($13.6)	($13.9)	($12.5)	($12.1)
	17.9	18.3	18.7	19.0	19.4	19.8
	6.0	6.1	6.2	6.3	6.4	6.5

98.9	**100.2**	**102.2**	**104.1**	**106.0**	**107.9**
108.3	109.4	110.5	111.6	112.7	113.8
($9.3)	($9.1)	($8.2)	($7.4)	($6.7)	($5.9)

71,923	93,073	89,907	85,595	80,914	109,240
31,081	31,573	32,171	32,780	33,486	34,031
40,841	61,500	57,737	52,815	47,427	75,208
544,408	810,413	746,313	670,327	591,539	921,825
75	76	77	79	80	82

	2034	2035	2036	2037	2038	2039
GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	GAS CC	
GAS CC	GAS CC	GAS CC	LARGE GAS CC	LARGE GAS CC	LARGE GAS CC	
	78	80	81	82	83	84
	83	84	85	84.0	85.0	86.1
	5	4	4	2	2	2
	83	84	85	84	85	86
	20.2	20.6	21.0	21.4	21.9	22.3
	6.2	6.4	6.5	6.6	6.6	6.7
	104.1	**106.5**	**108.2**	**110.3**	**111.6**	**112.9**
	104.1	106.5	108.2	110.3	111.6	112.9
	114.9	116.1	117.2	118.4	119.6	120.8
	($10.8)	($9.6)	($9.0)	($8.2)	($8.0)	($7.9)
	20.2	20.6	21.0	21.4	21.9	22.3
	6.6	6.7	6.8	6.7	6.8	6.9

109.6	**111.0**	**113.0**	**112.1**	**113.7**	**115.3**
114.9	116.1	117.2	118.4	119.6	120.8
($5.4)	($5.1)	($4.3)	($6.3)	($5.9)	($5.5)

112,556	111,451	57,269			
34,680	35,333	17,979			
77,876	76,117	39,290			
940,981	909,681	461,293			
83	84	85			
			438,592	434,773	430,250

148,698	149,053	149,418
289,895	285,720	280,833
3,452,707	3,360,965	3,261,489
84.0	85.0	86.1

2040	2041	2042	2043	2044	2045
GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC	GAS CC LARGE GAS CC
85	86	86	87	88	89
88	90	91	93	95	97
3	4	5	6	7	8
88	90	91	93	95	97
22.7	23.2	23.7	24.1	24.6	25.1
6.8	6.8	6.9	7.0	7.1	7.1
114.3	**115.7**	**117.0**	**118.5**	**119.9**	**121.3**
114.3	115.7	117.0	118.5	119.9	121.3
121.6	121.6	121.6	121.6	121.6	121.6
($7.3)	($5.9)	($4.6)	($3.1)	($1.7)	($0.3)
22.7	23.2	23.7	24.1	24.6	25.1
7.0	7.2	7.3	7.5	7.6	7.8

117.6	**119.9**	**122.3**	**124.8**	**127.3**	**129.8**
121.6	121.6	121.6	121.6	121.6	121.6
($4.0)	($1.7)	$0.7	$3.2	$5.7	$8.2

1 2

3 4

PREPA LEGACY PPOA RANKING SCORECARD

VERSION Rev 3_Jan FOMB

DATE 27-Jan

FOMB Request to compare vs CFP, Projects all start in 2020, discounted to 2020

Updated 2019 Start

Analysis Algorithm

a) Lifetime mwh calculated by project based on submitted capacity factor and degradation rate x MW capacity summed over lifetime. Projects without this data were assigned standard Siemens Capa

b). NPV of output is lifetime MWH x NPV/Mwh depending on price offered as defined by table below. See NEP 2019 Report for derivation

c). Cost of interconnect derived from S&L Report CS-0034, Final Rev 1, June 19 2020

d). Public Benefit = (b)-'c'

e). Public Value/MW = (d)/MW capacity

			FOMB Request			
		ESM	ESM	CFP		
		Start 2019	Start 2020	Start 2020		
Value to Ratepayer Based on Price/Cap/Escalation	PPA	$/Mwh	$/Mwh	$/Mwh		
NPV Value/Mwh @ Blended discount rate: Lower Cost	10¢/12.6¢,1%	109.7	118.7	136.8	Xzerta	ESM 2019 fixes inflation error on earlier reportec
Basecase NPV Value/Mwh @ Blended discount rate	9.75¢/14.1¢,2%	37.7	51	69		
Basecase NPV Value/Mwh @ Blended discount rate	9.8¢/14.1¢,2%	32.6	47	65		
Basecase NPV Value/Mwh @ Blended discount rate	9.85/14.1¢,2%	27.9	42	60.9		
Basecase NPV Value/Mwh @ Blended discount rate	9.9/14.1¢,2%	20	39	57.2	CIRO 1 Value is $21/Mwh for 2019 ESM start	
Basecase NPV Value/Mwh @ Blended discount rate	10¢/14.1¢,2%	**11**	29	47	**See NEP Report, p 29 NPV Savings per MWh no MATS Compliance fi**	

				Public Benefit Test				
	SIZE	PPOA	Lifetime MWh (a)	NPV of output (b)	Cost of Interconnection 'c'	NPV Public Benefit (d)	Public benefit?	Public Value €
PROJECT	(MW)	$/Mwh	(Mwh)	$	$		Y/N	$/MW
Xzerta-Tec* price is 99, 1% escalator, cap at 12.6	60	99	2,583,574	306,670,234	3,210,000	303,460,234	Y	$ 5,057,671
Caracol	30	97.5	1,291,787	65,881,137	1,030,000	64,851,137	Y	$ 2,161,705
Sierra	25	97.5	1,076,489	54,900,939	3,405,000	51,495,939	Y	$ 2,059,838
Montalva Solar Farm	80	98.5	4,035,188	169,477,896	15,740,000	153,737,896	Y	$ 1,921,724
CIRO One	90	98.9	4,112,930	160,404,270	8,100,000	152,304,270	Y	$ 1,692,270
ReSun w/ Blue Beetle	35	99	1,507,085	57,269,230	2,640,000	54,629,230	Y	$ 1,560,835
Aetnas (Based on Developer letter 20 MW)	20	98	845,984	39,761,248	9,300,000	30,461,248	Y	$ 1,523,062
ReSun w/o Blue Beetle	35	99	1,507,085	57,269,230	4,420,000	52,849,230	Y	$ 1,509,978
Blue Beetle w Re Sun	30	99.9	1,359,900	39,437,100	2,940,000	36,497,100	Y	$ 1,216,570
Blue Beetle w/o Re Sun	30	99.9	1,359,900	39,437,100	4,720,000	34,717,100	Y	$ 1,157,237
REA Hatillo N (1)	25	99.99	1,076,489	31,218,181	4,000,000	27,218,181	Y	$ 1,088,727
Solaner	35	100	1,343,714	38,967,706	4,100,000	34,867,706	Y	$ 996,220
Guayama Solar Energy	25	99.5	1,076,489	31,218,181	4,910,000	26,308,181	Y	$ 1,052,327
Solar Blue	25	99.5	1,076,489	31,218,181	5,840,000	25,378,181	Y	$ 1,015,127
REA Vega Baja	25	100	1,164,183	33,761,307	8,100,000	25,661,307	Y	$ 1,026,452
Solar Project San Juan	20	100	863,287	25,035,323	7,800,000	17,235,323	Y	$ 861,766
Fonroche Vega Baja	15	100	647,350	18,773,150	4,510,000	14,263,150	Y	950,877
Standard Capacity Factor 22%								
Morovis not shown, DQ due to late response								
(1). Corrected speadsheet error on Mwh produced								

PREPA LEGACY PPOA RANKING SCORECARD

VERSION Rev 3_Jan FOMB

DATE 27-Jan

FOMB Request to compare vs CFP, Projects all start in 2020, discounted to 2020

Updated 2019 Start

Analysis Algorithm

a) Lifetime mwh calculated by project based on submitted capacity factor and degradation rate x MW capacity summed over lifetime. Projects without this data were assigned standard Siemens Capa

b). NPV of output is lifetime MWH x NPV/Mwh depending on price offered as defined by table below. See NEP 2019 Report for derivation

c). Cost of interconnect derived from S&L Report CS-0034, Final Rev 1, June 19 2020

d). Public Benefit = (b)-'c'

e). Public Value/MW = (d)/MW capacity

		ESM Start 2019	FOMB Request ESM Start 2020	CFP Start 2020		
Value to Ratepayer Based on Price/Cap/Escalation	PPA	$/Mwh	$/Mwh	$/Mwh		
NPV Value/Mwh @ Blended discount rate: Lower Cost	10¢/12.6¢,1%	109.7	118.7	136.8	Xzerta	ESM 2019 fixes inflation error on earlier reportec
Basecase NPV Value/Mwh @ Blended discount rate	9.75¢/14.1¢,2%	37.7	51	69		
Basecase NPV Value/Mwh @ Blended discount rate	9.8¢/14.1¢,2%	32.6	47	65		
Basecase NPV Value/Mwh @ Blended discount rate	9.85/14.1¢,2%	27.9	42	60.9		
Basecase NPV Value/Mwh @ Blended discount rate	9.9/14.1¢,2%	20	39	57.2	CIRO 1 Value is $21/Mwh for 2019 ESM start	
Basecase NPV Value/Mwh @ Blended discount rate	10¢/14.1¢,2%	**11**	29	47	**See NEP Report, p 29 NPV Savings per MWh no MATS Compliance fi**	

			Public Benefit Test					
	SIZE	PPOA	Lifetime MWh (a)	NPV of output (b)	Cost of Interconnection 'c'	NPV Public Benefit (d)	Public benefit?	Public Value €
PROJECT	(MW)	$/Mwh	(Mwh)	$	$		Y/N	$/MW
Xzerta-Tec* price is 99, 1% escalator, cap at 12.6	60	99	2,583,574	353,432,923	3,210,000	350,222,923	Y	$ 5,837,049
Caracol	30	97.5	1,291,787	89,133,303	1,030,000	88,103,303	Y	$ 2,936,777
Sierra	25	97.5	1,076,489	74,277,741	3,405,000	70,872,741	Y	$ 2,834,910
Montalva Solar Farm	80	98.5	4,035,188	245,742,949	15,740,000	230,002,949	Y	$ 2,875,037
CIRO One	90	98.9	4,112,930	235,259,596	8,100,000	227,159,596	Y	$ 2,523,996
ReSun w/ Blue Beetle	35	99	1,507,085	84,698,177	2,640,000	82,058,177	Y	$ 2,344,519
Aetnas (Based on Developer letter 20 MW)	20	98	845,984	54,988,960	9,300,000	45,688,960	Y	$ 2,284,448
ReSun w/o Blue Beetle	35	99	1,507,085	84,698,177	4,420,000	80,278,177	Y	$ 2,293,662
Blue Beetle w Re Sun	30	99.9	1,359,900	63,915,300	2,940,000	60,975,300	Y	$ 2,032,510
Blue Beetle w/o Re Sun	30	99.9	1,359,900	63,915,300	4,720,000	59,195,300	Y	$ 1,973,177
REA Hatillo N (1)	25	99.99	1,076,489	50,594,983	4,000,000	46,594,983	Y	$ 1,863,799
Solaner	35	100	1,343,714	63,154,558	4,100,000	59,054,558	Y	$ 1,687,273
Guayama Solar Energy	25	99.5	1,076,489	50,594,983	4,910,000	45,684,983	Y	$ 1,827,399
Solar Blue	25	99.5	1,076,489	50,594,983	5,840,000	44,754,983	Y	$ 1,790,199
REA Vega Baja	25	100	1,164,183	54,716,601	8,100,000	46,616,601	Y	$ 1,864,664
Solar Project San Juan	20	100	863,287	40,574,489	7,800,000	32,774,489	Y	$ 1,638,724
Fonroche Vega Baja	15	100	647,350	30,425,450	4,510,000	25,915,450	Y	1,727,697
Standard Capacity Factor 22%								
Morovis not shown, DQ due to late response								
(1). Corrected speadsheet error on Mwh produced								

Exhibit I

BY ELECTRONIC MAIL

March 1, 2021

Ms. Astrid Rodríguez Cruz
General Counsel
Puerto Rico Electric Power Authority

Dear Ms. Rodríguez Cruz

In accordance with the contract review policy of the Financial Oversight and Management Board for Puerto Rico ("FOMB") established pursuant to Section 204(b)(2) of PROMESA (the "Policy"), we have reviewed the proposed amendments to the Power Purchase and Operating Agreements between the Puerto Rico Electric Power Authority and (i) CIRO One Salinas, LLC and (ii) Xzerta Tec Solar 1 LLC (the "Proposed Amendments").

After reviewing the Proposed Amendments, the FOMB concludes "Approved with Observations". Observations related to the Proposed Amendments are set forth in Appendix A attached hereto.

Our review is solely limited to the compliance of the Proposed Amendments with the applicable fiscal plan and no other matters. For the avoidance of doubt, the review performed by the FOMB does not cover a legal review of the contractual documentation or the contracting process, including without limitation: (i) compliance with contracting requirements under applicable laws, rules, and regulations, both federal and local and (ii) compliance with applicable laws, rules, and regulations governing procurement activities, both federal and local. In addition, the FOMB has not engaged in any due diligence or background check with respect to the contracting parties nor whether the contracting parties comply with the requirements under the applicable contract. Any material changes to the Proposed Amendments or the original contracts must be submitted to the FOMB for review and approval **prior to execution**.

This letter is delivered as of the date hereof and we reserve the right to provide additional observations and modify this letter based on information not available when the review was conducted. In addition, during the course of our review, we may receive information which we may refer to the relevant authorities.

This letter is issued only to PREPA and solely with respect to the Proposed Amendments.

Sincerely,

Jaime A. El Koury
General Counsel

PUERTO RICO ELECTRIC POWER AUTHORITY - CIRO ONE SALINAS, LLC; XZERTA TEC SOLAR 1 LLC

This review covers the proposed amendments to the Power Purchase and Operating Agreements between the Puerto Rico Electric Power Authority and (i) CIRO One Salinas, LLC and (ii) Xzerta Tec Solar 1 LLC (the "Proposed Amendments").

Background

The Proposed Amendments originate from PREPA's July 1, 2020 submission of 16 renegotiated non-operational renewable energy power purchase and operating agreements ("PPOA's"). As we have previously stated, a key tenet of this transformation is the expedient deployment of renewable generation at overall affordable pricing levels, which requires PREPA to renegotiate both operational and non-operational renewable energy PPOAs to reduce their energy prices to levels consistent with Fiscal Plan projections.

On August 17, 2020, after careful consideration of the proposed PPOAs and their impact on customers, the FOMB determined to reject the 16 PPOAs originally proposed by PREPA given their negative impact on the cost of electricity on the Island. Specifically, if all 16 projects were to be developed, PREPA's customers would end up paying up an additional $460M in energy costs over the next 30 years. However, recognizing the importance of developing renewable resources, the Board determined to allow some amount of generation at these higher prices, and decided that developing up to 150MW would result in minimal increases to energy rates while allowing for the benefits derived from such projects being developed expeditiously. The Board, therefore directed PREPA to select the most qualified developers based on objective criteria.

The FOMB also made the following additional observations, which future PPOAs submitted for the Board's review would need to comply with:

1. Transferability of the projects undertaken pursuant to the PPOAs shall only be permitted upon substantial completion of such projects by the original proponent, as defined by applicable law.
2. Part (c) of Section 6.5 of the PPOAs shall be amended to require PREPA's prior expressed written consent, regardless of the new owner's compliance with any of the requirements set forth therein. Moreover, net worth requirements should be uniform across all PPOAs Contracts and should be set at $25 million for the new owner and/or $75 million for the new owner's parent entity.
3. To the extent not already reflected in the PPOAs, Section 20.3 of the PPOAs shall be amended to provide that any transfer of rights and responsibilities of Seller to an Affiliate of the Seller shall require PREPA's prior expressed written approval, if such transfer will result in 51% or more of Seller's equity control in the project being transferred to a third-party other than the Seller.
4. To the extent not already reflected in the PPOAs, Section 20.4 of the PPOAs shall be amended so that it is consistent with the amendments required to Part -(c) of Section 6.5 and Section 20.3 of the PPOAs. Specifically, the amendment shall reflect the requirement to obtain PREPA's prior expressed written approval for any transfer of Seller's equity in

the project, as provided in Part (c) of Section 6.5 and Section 20.3 of the PPOAs. Moreover, PREPA's lack of response shall not be deemed or construed as an acceptance or consent to a proposed transfer.

Finally, the FOMB stated that, moving forward, PREPA should aim to take advantage of decreasing solar equipment prices to procure solar energy capacity through competitive and transparent procurement processes at the lowest possible price.

Fiscal Plan Alignment

The Proposed Amendment for CIRO One Salinas contemplates the development of a 90 MW and has a maximum payable amount of **$606,500,000** throughout its 25-year contract term. The Xzerta Tec Solar 1 LLC Contract, on the other hand, involves a 60 MW facility and a cost of **$360,300,000** throughout its 25-year term. Both contracts shall be charged to PREPA's budget account No. 01-2321- 23235-000-000. No funds will be drawn during Fiscal Year 21; instead, charges will be made once the projects reach their respective Commercial Operation Date.

Regarding the Proposed Amendments' alignment with the Fiscal Plan and our previous requirements, we note that both contracts total **150 MW** in renewable energy generation and where selected, according to PREPA, based on objective criteria. Furthermore, both Proposed Amendments comply with all other requirements regarding transferability and prior PREPA approval for such transfers. In sum, the Proposed Amendments are consistent with the FOMB's previous directives to PREPA regarding (i) the procurement of up to 150MW of renewable generation capacity, (ii) the application of an objective process for the selection of these projects and (iii) the inclusion of revised language aimed at addressing risks associated to project transferability.

Insofar as the Proposed Amendments will be funded with future Certified Budgets, PREPA must ensure that such budgets incorporate all costs related to the Proposed Amendments.

PREPA is expected to inform the FOMB of any budgetary differences other than those specified in Appendix A (Contract Submissions Questionnaire) and to request a re-review of this contract should any changes occur.

This contract review was conducted on the basis of information submitted by PREPA. The FOMB has not independently verified the information included in the submission. Should the FOMB become aware of any inaccuracies or misrepresentations – whether intentional or not – it would re-evaluate its assessment.

Exhibit J

[*Este documento ha sido radicado sellado.*]

Exhibit K

REVIEW OF LEGACY SOLAR PV PPOAS AND RECOMMENDATIONS FOR RANKING AND NEGOTIATIONS

FINAL REPORT

DECEMBER 30, 2020

FOR PUERTO RICO ELECTRIC POWER AUTHORITY
WORKED PERFORMED UNDER CONTRACT 2021-P0060

SUBMITTED BY:
NEW ENERGY PARTNERS, INC.

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New Energy Partners, Inc relied exclusively on information provided by the Puerto Rico Electric Power Authority, its consultants, or its attorneys in providing the factual basis for inputs to the analyses conducted in the report. New Energy Partners Inc. does not verify that these inputs are accurate. Therefore, the analyses and conclusions are subject to the veracity of the inputs provided to the consultant.

Table of Contents

PREPA SOLAR PPOA RANKING:

Executive Summary

The PREPA Board must make a decision as to which of the 16 remaining legacy solar power purchase and operating agreements ("PPOAs") that agreed to the conditions of the PREB and FOMB[1] should be approved for negotiation. The FOMB limited PREPA to 150 MW of solar PPOAs that can be approved and FOMB along with PREB provided certain contractual conditions that the solar proponents must accept. The FOMB provided conceptual criteria for ranking, which formed the basis of this analysis.

Our recommendations of which solar PPOAs to advance for negotiation now and the rank order in which to negotiate are based on objective and independent analysis using a series of tests and criteria discussed in this report. We caveat that we relied on existing PREPA reports, Sargent &Lundy ("S&L") interconnection and development assessment, King and Spalding ("K&S") legal compliance, One Conexus ("Conexus") for assurance of financial strength and developer submitted data in performing these analyses.

We applied a two-stage evaluation process to all of the projects. In Stage One, we applied a series of pass/fail tests to determine each project's eligibility to move to stage two. To be considered in Stage Two, projects had to pass all six pass/fail tests. In Stage Two, we performed an analysis of the net financial benefit to PREPA ratepayers to rank order the projects, with secondary criteria in the event of a tie.

In Stage One, six pass/fail "gates" were used to determine which Solar PPOAs should be candidates to be approved for negotiation ranking order. These gates included: 1) Is the project in legal compliance with FOMB, PREB, and PREPA requirements? 2) Does the project have adequate financial strength, 3) Does the project fail PREPA's interconnection criteria on its own, based on the S&L report, 4) Does the project provide net financial benefits of greater than zero to ratepayers, 5) Is the project is late or mid stage development, and 6) Does the developer or developer group have experience equal to 10x the project scale?

Findings

Stage One: Six Projects Eliminated from contention due to stage one pass/fail criteria

Gate 1: King and Spalding has certified that all projects will be willing to proceed with negotiation of an updated PPOA that is compliant with the FOMB and PREB conditions and that K&S has a new master PPOA that can be used to update the preferred developer PPOAs immediately after the Board decision. No projects were eliminated by this gate.

[1] These conditions and the original FOMB letter of 8/17/20 were sent to solar developers by PREPA on 9/2/20

Gate 2: NEP makes no representation about the adequacy of financial strength of any of the developers, but instead relied on the analysis PREPA commissioned with Conexus. An initial review of financial strength for the top five projects was performed at PREPA's direction by the consulting firm Conexus based on the FOMB criteria. While Conexus found that some information necessary to complete the analysis was missing, the report indicates that they did find information substantiating that all of the top five developers had adequate financial backing and access to financing to proceed to the negotiations stage. Since Conexus did not find sufficient information to conclude that any of the developers met *all* of the FOMB tests, PREPA will need to obtain the missing information during the negotiation phase of the process, and make their own conclusions regarding financial strength, as discussed in the "Negotiation Approach" section.

Gate 3: Two projects failed the interconnection criteria. Montalva and Fonroche San Juan. These were removed from consideration in this round after confirmation of concerns from PREPA operations, as discussed in Section III.

Gate 4: All projects passed the public benefit test. The amount of public benefit per MW, which is ranked in stage two of the process, varied by an order of magnitude. Therefore, no projects were eliminated by this gate.

Gate 5: S&L evaluated all the projects that submitted the actual documentation in determining project stage. In addition, S&L evaluated those that submitted letters representing they had the relevant permits, site control, etc. One project, Atenas, submitted no documentation or reference table and was eliminated for contention. Another project, Morovis, submitted their interest in participating too late to be accepted, and never submitted the required documentation to show the current status of their project. Therefore, Morovis was eliminated.

Gate 6: Two projects from the same developer, Sierra and Caracol, failed the developer experience test, as the developer group did not have sufficient solar development experience at utility scale equal 10x the size of either project.

Stage 2: Rank Order remaining projects based on Public Benefits and secondary criteria

Ten projects remained after applying the criteria in stage one. For those nine, we analyzed and ranked the present value energy cost savings net of interconnection costs. The results of this analysis are shown in Exhibit 1. Since FOMB constrained the amount of MW PREPA can contract for, the maximum public ratepayer benefit will be allocated for the most beneficial projects that successfully are in contention (pass all the project gates). In the event that the top projects are within 5% of each other, there are other criteria explained in Section I Methodology that would be used to rank between close projects. Given the wide differences in ratepayer value per MW, it was not necessary to address the secondary criteria.

Recommendations on Ranking Negotiation Order of PPOAs:

Understanding Ratepayer Value Ranking

NEP's November 2019 report assessed the lifetime benefit of the PPOA cost vs. the avoided energy cost in PREPA's base case IRP submission, netted against the cost of the interconnection that PREPA must pay for, to determine whether ratepayers would be better off. NEP used a blended discount rate to reflect PREPA current situation and the expectation of future credit improvement, consistent with the first analysis. In November 2019, several projects failed the public benefit test because the rate of 10.5¢/kwh was too high to generate any benefits to ratepayers, and the interconnection costs were often quite high. NEP recommended that any PPA rate be at or below 10¢/kwh *as a ceiling*, *not a target*, since this PPOA rate *just barely provides enough benefits to pay for interconnection.*

Unfortunately, most of the projects proposed this exact rate, given the Minimum Technical Requirement condition, and therefore have nearly identical net benefits to ratepayers. Only a few projects bid lower, which immediately provide significantly more ratepayer benefits, which lead to their higher ranking.

We recommend two projects be negotiated now: (1) Xzerta-Tec: 60 MW and (2) Ciro One: 90 MW. Since these total 150 MW, we discuss the nuances of negotiation given the responses in the next section.

If either of these fail upon finalization of diligence or refusal to honor the representations in their September 2nd final proposal letter, then the negotiations should proceed in the following contingent order: (3) REA Hatillo, (4) If Hatillo fails, then ReSun and Blue Beetle should be negotiated together since the synergies in sharing the interconnection line provide benefits to ratepayers. The remaining contingent order is shown below and described in greater detail in the section entitled " Negotiation Approach".

Exhibit 1
Recommendations on PPOA Ranking

Recommended Negotiation Ranking	PPOA NPV Value to Ratepayers ($/MW) (000s)	Adequate Financial Strength [3]	Significant Development Experience?	Development Stage: could achieve construction in 8 months?
1. Xzerta Tec 60 MW	$3,645	Backing/ Access	Yes	Late
2. Ciro One 90MW	$961	Backing/ Access/	Yes	Late
3. REA Hatillo 25MW	$719	Backing/ Access/ Solvency	Yes	Mid[(2)]
(4) ReSun 35 MW	$914[1]/$429	Backing/ Access	Yes	Late
(4) Blue Beetle 30 MW	$491[1]/$431	Backing/ Access Solvency	Yes	Late
(5) Solaner 35 MW	$381	N/R	Yes	Late
(5) Guayama 25 MW	$363	N/R	Yes	Late
6. Solar Blue 25 MW	$326	N/R	Yes	Late
7. REA Vega Baja 25 MW	$281	N/R	Yes	Late
8. Fonroche Vega Baja 15 MW	$260	N/R	Yes	Mid

Green indicates top proponent, **Yellow** indicates similar value band.
1. Resun and Blue Beetle can share interconnection costs when selected together. Therefore, the first stated value is contingent on both projects being accepted. The second value is the stand alone.
2. Documentation not provided. S&L assessment is mid stage at best.
3. FOMB criteria meet by the developers listed below. N/R means not rated.

The Conexus review of the top projects makes it clear each of them has reputable financial backers and access to financing: Xzerta-Tec (joint venture with Orgis Energy)

and CIRO One (GCL/Putnam Bridge), REA (MasTec), ReSun (Orgis Energy), and Blue Beetle (OPD Energy).

Negotiation Approach

Xzerta-Tec's letter submission on 9/2/20 offered a lower rate of $99/Mwh escalated at 1% with cap at 12.6¢/Mwh. Xzerta-Tec, along with 6 other companies, submitted a list of its development accomplishments, instead of submitting all the actual documents. In initial negotiations, we recommend that PREPA request and review all documentation as well as present the updated PPOA with the new pricing.

To complete the financial review, the following information should be validated. For all of the top 5, PREPA should request a commercial credit worthiness report to ensure the financial backers are investment grade (e.g. , S&P BBB or better, or D&B composite credit appraisal rating of 2 or better).

For Xzerta-Tec, PREPA should obtain and review the joint venture agreement with Orgis, as well as a financial statement from Orgis (which is also the backer of ReSun). The Orgis financial statements can then be used to confirm financial solvency.

If upon review, it is revealed that the developer made a misrepresentation on some other material fact, then the ranking should be executed to negotiate with the next project. This approach will be valid for all developers that submitted letters as opposed to the actual documents.

Many, if not all proponents, have a legitimate technical issue with the PREB order of 8 months after the PPOA signing vs. 8 months after "Assumption Order" of "Effective date", as defined in the PPOA itself. The developers have a valid concern about their ability to lock in financing or give a true full notice to proceed before their PPOA gets assumed. This is due to the risk that until the court issues the Assumption Order the PPOA itself could be rejected. Neither Ciro One nor Xzerta raised an objection to this. The K&S letter describing the issue suggests that this may need to be a point requiring clarification with the PREB. If PREB doesn't agree with the clarification, and PREPA can't reach final agreement with a preferred developer on the required term, then PREPA can move down the list to the next most attractive developer. For more detail, please see the letter from King and Spalding regarding this issue and how to resolve it.

I. Methodology

NEP used a transparent and fact-based approach to ranking these projects that is compliant with the FOMB criteria in its August 17, 2020 letter and PREB Order. NEP worked in partnership with PREPA (financial strength) and its advisors, Sargent and Lundy (interconnection and readiness) and King & Spaulding (PPOA Compliance).

We then applied a two-stage evaluation process to all of the projects. First, we applied a series of pass/fail tests to determine each project's eligibility to move to stage two. Each step is a "gate". The gates are not sequential. We conducted parallel analysis on responsive developers across all gates. Projects that fail any gate are removed from consideration for this negotiation and may apply for the upcoming RFP. Next, we performed an analysis of the net financial benefit to PREPA ratepayers to rank order the projects.

Stage 1 Pass/Fail Gates

Gate 1: Legal Contractual Compliance: All projects must be willing to sign the updated PPOA that is entirely consistent with the FOMB criteria listed on page 4 of the August 17 2020 letter related to transferability, and changes to Section 6.5(c), Section 20.3 and Section 20.4., as well as the PREB additional conditions. All projects must meet PREPAs MTRs. It should be noted that multiple projects used batteries to meet the MTRs. All of these conditions were explained in the letter from PREPA to the project proponents on September 2, 2020. NEP is relying on the written statement from King and Spalding that the updated master PPOA is compliant with all the FOMB mandated changes and they have written acceptance of these changes from the developers (see attached letter). Any project not certified by K&S will be removed from consideration for 2020.

Gate 2: Financial Compliance and Due Diligence on Financial Strength: The FOMB has set the net worth requirements at $25 MM for any new owners and $75 MM for any new parent entity. In addition to these requirements, the standard financial due diligence to ensure the developer has adequate equity secured to fund its share of the proposed project, has secured financing, has robust financial statements or financial backing from reputable investors and that there are no financial red flags in solvency and proof of credit worthiness. PREPA has specific objective tests to be compliant with the FOMB letter directive which the PREPA financial analyst team and its consultant is evaluating based on the documentation provided by the developers. Project that fail these objective tests will be removed from consideration. As stated above, we recommend that PREPA require developers to submit additional documentation during the negotiation stage to permit it to complete the financial analysis required by FOMB.

Gate 3: Interconnection Concerns: Sargent and Lundy reevaluated and redesigned the interconnection for these projects (Report CS-0034). If a project, operating on its own,

would be curtailed based on violations of the PREPA N-1, N-2 or N-1-1 contingency test, then it will be placed in the provisional category unless S&L can provide a number of expect hours per year of curtailment for the projects, which will then be added to the costs in Gate 4. S&L has informed NEP that it did not do a system evaluation, only an interconnection evaluation, so it can not determine the frequency of curtailment. Since upgrades to the PREPA system will now be governed by Luma's System Remediation Plan, which is still in development, PREPA must prudently determine that the selected projects in 2020 will indeed operate and contribute to the PREB Order RPS requirements in 2021. Given these circumstances, it is prudent for PREPA to remove these projects from consideration, though they can apply for the RFPs that Luma will be overseeing. NEP has completed work with S&L to confirm the reports findings.

Gate 4 Public Benefits Test: NEP will financially re-evaluate whether the projects with the new PPOA prices and updated interconnection costs in S&L Report CS-0034 would provide benefits to ratepayers based on the average base case IRP avoided costs submitted and implicitly approved by the PREB IRP order, REC Price and blended discount rate used in the NEP December 2019 evaluation of the PPOAs. Any projects that fail the NPV test will not be considered for 2020 negotiations.

Gate 5 Development Stage: Ability to Start Construction in 8 months: Any project that is early stage development or where remaining development items could not be addressed by September 2021 (9 months), will be excluded from this evaluation. NEP will rely on the S&L evaluation currently underway.

Gate 6 Solar Development Experience: All developers must show that they have experience in developing solar projects that are cumulative 10x the scale of their proposed project and have developed at least one project of the same scale, whether in Puerto Rico or elsewhere.

Stage 2: Ranking of Remaining Projects

The remaining projects are rank ordered based on the following hierarchy of criteria. Since the scarce resource on the system is 150 MW of capacity, which was limited by FOMB, and the PREB is clearly interested in ensuring projects are built in 2021, NEP applied the criteria and data from Stage 1 in the following way.

The projects are first ranked by their value to PREPA ratepayers on an NPV $/MW basis. This ensures a "pareto" optimization of ratepayer value, in essence maximizing the ratepayer value of the 150 MW of allowable contracts.

If any two projects have a ratepayer value within 5% of each other, then secondary criteria are applied. The next most important subsequent criteria is time: if a project is in a later stage of development, then it is given negotiation order preference.

If both projects have are in the same stage of development, then then if one project has Puerto Rican development experience, it is given negotiation order preference. The logic is that companies with prior experience would have a time advantage over those that do not.

II. Ranking of Potential Projects

The ranking of potential projects is provided in the executive summary. In the final report, when all the data has been provided by PREPA, we will update the ranking table if needed.

As noted above, projects that were eliminated were not forced ranked. However, to be complete, NEP did perform the same analysis on all projects, whether they were eliminated or not.

For the remaining projects, the primary criteria is the value to ratepayers per MW. As a reminder, this is due to FOMB limiting the number of MW that can be procured, and therefore, PREPA's desire to ensure that the maximum benefit is provided to ratepayers. This calculation is based on the net present value of lifetime energy savings compared with avoided cost, at the blended discount rate used in the NEP 2019 study, since PREPA has still not yet emerged from bankruptcy. We then subtract the interconnection costs from this value to arrive at "Net benefit to ratepayers". We divide the "Net benefit to ratepayers" by the project output capacity in MW to arrive at a net benefit to ratepayers per MW. The projects are then forced ranked by this criteria.

While the top projects clearly were significantly more valuable to ratepayers, there were two cases where projects were essentially "tied": Case 1: Blue Beetle and Resun, and Case 2: Solaner and Guayama. All of these projects are considered late stage by S&L. Whether any project, irrespective of stage could credibly meet the PREB condition of construction within 8 months of signing a PPOA, without the contract assumption is unknown given the financing contingency. None of these proponents are particularly distinguished by Puerto Rican development experience.

Since the top two projects represent 150 MW, the issue of further ranking may be moot. However, for the avoidance of doubt, we recommend the following algorithm in the event that negotiations with either of the top two fail:

1) The next project to be considered is REA Hatillo. If the claims of ability to obtain permits and/or pricing proves to be misrepresentations upon final diligence, then this project would be eliminated.

2). If CIRO One negotiations fail, and REA Hatillo negotiations are successful, then Blue Beetle and ReSun should be negotiated together to obtain the savings to ratepayers of the shared interconnection line.

3). If Xzerta Tec and REA Hatillo negotiations fail, then Blue Beetle and ReSun should be negotiated together to obtain the savings to ratepayers of the shared interconnection line. PREPA should petition FOMB to allow it to go over the cap of 150 MW by 5 MW based on the "common sense" test that all regulators should support the goals of increasing renewable energy with clear benefits to ratepayers. As independent projects these are both still viable, so if only one goes forward, then PREPA would have to go the next project band for the remaining capacity.

4) If Xzerta Tec negotiations failed and REA Hatillo negotiations are successful, then PREPA has a conundrum since both Blue Beetle and ReSun are tied based on legitimate criteria. In this contingency, we recommend one of two approaches. PREPA should petition FOMB to allow it to go over the 150 MW cap by 25 MW based on the "common sense" test that all regulators should support the goals of increasing renewable energy with clear benefits to ratepayers. If successful, PREPA can secure both contracts, and ratepayers will be better off. Should FOMB be inflexible, PREPA can request each proponent give a best and final offer and take the lowest one, even if the differences are slight.

We do not expect that the negotiations would reach into the next group of projects, but if they did, the same logic would apply.

III. Basis for Elimination of Projects that Failed Tests

Six projects were eliminated in Stage 1. This section provides a brief discussion of them.

Inadequate Solar Development Experience

Two projects, Sierra (25MW) and Caracol (30MW), has the same parent company and development team from Aleron RE, a subsidiary of the Hartz Group (THGI). THGI is a real estate developer that has cumulatively developed 50MW. Of this, one was utility scale wind project (34 MW), the other a small community wind/solar project. THGI has no experience developing even a 20 MW utility scale PV project. This is not even a 1:1 cumulative experience level at utility scale. While the Hartz Group's EPC contractor (DEPCOM) has significant experience in building and construction solar projects, the intention of the criteria was the experience of the development team (inclusive of its financial consortium). This lack of experience is the basis for elimination of what otherwise would have been a low cost, later stage pair of projects.

Inadequate Documentation of Financial Strength, Project Stage, and Utility Scale Experience

One developer, National Energy Partners, Atenas, provided no documentation of financial strength. Further, this company reduced its scale from 40 to 20 MW in its response letter to PREPA, despite the efforts by S&L to negotiate with them on the

interconnection of 40 MW. This considerably reduces their ratepayer value ranking. The company provided no evidence of utility scale solar experience, and their web sites provides only residential and commercial projects. The company did list four approvals (Department of Agriculture, Environmental Quality Board, Planning Authority and Solid Waste Authority) but offered no evidence that it had maintained site control. For these reasons, this project was eliminated from contention.

Another developer, X-Elio for the Morovis project, submitted too late after the deadline to be fairly considered. Its response indicated it would be submitting further documentation which it did not provide. For these reasons, it was eliminated from contention.

Interconnection Test Contingency Violations

The interconnection test criteria applied is that if a project, solely on its own, violates PREPA interconnection criteria, such that if such a contingent event occurred (e.g., N-1 or N-1-1), then the project would be curtailed. The interconnection assessment was performed by S&L in report CS-0034, Final Rev 1 June 19, 2020 Project 13741.017. Even though two projects failed the interconnection tests, these projects were submitted as part of the May 2020 board approval package and subsequently approved. Therefore, the basis for NEP's recommendation of elimination based on these same criteria and evidence requires explanation.

At the time of the Board's approval, PREPA was still in charge of its grid and future upgrades. Therefore, PREPA could prioritize T&D line improvements that could address the N-1 or N-1-1 situation, which is typically caused by a weak transmission line as the initial contingency. Further, PREPA had at that time the ability to assess the likelihood of line failure and the additional costs in both expected curtailment payments and additional generation reserves necessary to accept the risk of these contracts. Given the new PPOAs have a low threshold for outages and are take or pay (e.g. PREPA must pay developer if curtailment exceeds the contractual minimum threshold), it is important to factor in these costs into the present value to ratepayers.

As of November 2020, PREPA no longer has control over future grid improvements, these are to be done by Luma in the System Remediation Plan. This in the case of Montalva, the initial contingency is Line 37100, which " is considered a weak line and frequently trips, particularly in the section between Acacias TC and San German". The reason given is that the "115/38kV step down transformer in the Guanica TC is currently not in service". Therefore, S&L modeled this weak line as an N-1-0 outage for the N-1-1, i.e., this expected outage is combined with other contingency cases. S&L stated in communication with NEP that the interconnection itself does not alleviate the situation. S&L notes that at 73 MW Montalva alone does not trigger any contingency. However, at 80 MW it does if the second contingency is the loss of the line east of the

Montalva sectionalizer. Under the Montalva PPOA Appendix B, Montalva is required to implement a protection scheme that will automatically curtail the total generation of the facility, if necessary, when an N-1-1 contingency in transmission line L-37100." While this approach will mitigate overloading of the San German TC and associated 38kV grid, these failures would be "grid events" within the PPOA.

There are two costs to PREPA ratepayers if such an event occurs. First, if the hours of curtailment are greater than the contract minimum, specified at 40 hours/year for grid events, then PREPA must pay the developer for the electricity it would otherwise have delivered. Second, generation in the form of spinning reserves must be available on the system to address such an outage to avoid load shedding. For a project of this scale, this second criteria can be problematic. Although PREPA keeps ~400-450 MW of spinning reserve available, when a generation outage, such as the recent event of Costa Sur outage due to earthquake occurs, or depending on the amount of planned generation maintenance, there would simply have been no reserves left on the system to cover a solar contingency of this magnitude.

For these reasons, NEP advises that projects that fail the PREPA contingencies be eliminated from the round, without prejudice for future RFPs unless PREPA receives direct confirmation from Luma that, in the case of Montalva, Line 37100 issues would be fixed in the SRP before Montalva comes on line. Similarly, in the case of Project San Juan, the issues are in Line 9300 and there is a particular segment which is out of services within the PSS/E model. We recognize that this a conservative position taken from an abundance of caution given the continued weakness of the PREPA T&D grid and generation situation.

IV. Recommendations

We recommend two projects be negotiated now: (1) Xzerta-Tec: 60 MW and (2) Ciro One: 90 MW.

If either of these fail upon finalization of diligence or refusal to honor the representations in their September 2nd final proposal letter, then the negotiations should proceed in the following contingent order: (3) REA Hatillo, (4) If Hatillo fails, then ReSun and Blue Beetle should be negotiated together since the synergies in sharing the interconnection line provide benefits to ratepayers.

We strongly urge PREPA to move forward expeditiously. We recommend informing the regulators, FOMB and the PREB of PREPA's decision and the underlying rationale. We would recommend requesting PREB to clarify that the requirement related to commencement of construction is intended to be 8 months after “assumption” when PREPA refiles the two preferred agreements with them (see King and Spalding letter).

Similarly, it would be helpful to secure any pre-approvals from FOMB regarding possible contingent exceedance of the 150 MW cap in order to benefit ratepayers, should negotiation with the two recommended proponents fail.