

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

NEPR

Received:

Mar 31, 2023

8:31 PM

IN RE: ENMIENDAS A CONTRATO DE
COMPRAVENTA DE ENERGÍA:
PROYECTO NO-OPERACIONAL
(XZERTA-TEC SOLAR I, LLC)

CASO NÚM.: NEPR-AP-2021-0002

ASUNTO: Moción para Presentar Informe
de Progreso Mensual Correspondiente a
Febrero de 2023

**MOCIÓN PARA PRESENTAR INFORME DE PROGRESO
MENSUAL CORRESPONDIENTE A FEBRERO DE 2023**

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

1. El 11 de mayo de 2021, el Negociado de Energía de la Junta Reglamentadora de Servicio Público (el “Negociado” o “Negociado de Energía”) notificó *Resolución Final y Orden* (la “Resolución Final”) mediante la cual aprobó, sujeto a algunas condiciones, la *Petición de Aprobación de Enmienda a Contrato de Compraventa de Energía Renovable con Xzerta-Tec Solar I, LLC* radicada por la Autoridad el 17 de marzo de 2021 para que el Negociado le impartiera su aprobación al Acuerdo Enmendado¹. La Resolución Final ordena a que, entre otras cosas, la Autoridad y Xzerta-Tec Solar I, LLC (“Xzerta”) presenten ante el Negociado de Energía informes mensuales de progreso sobre el estatus del proyecto (el “Informe de Progreso Mensual”).

2. El 9 de febrero de 2022, el Negociado emitió una *Resolución y Orden* mediante la cual, entre otras cosas, ordenó que la Autoridad y Xzerta debían presentar cada Informe de Progreso Mensual firmado por oficiales de cada entidad e informar la fecha de su preparación.

¹ *Amended and Restated Renewable Power Purchase and Operating Agreement between the Puerto Rico Electric Power Authority and Xzerta Tec Solar LLC* con fecha del 4 de junio de 2021 (2013-P00042E).

3. El 10 de noviembre de 2022, el Negociado notificó la Resolución y Orden con el título *Moción para presentar Informe de Progreso Mensual; Solicitud de Acumulación* mediante la cual incluyó a LUMA Energy ServCo, LLC y LUMA Energy, LLC (“LUMA”) como parte en el caso de epígrafe y le ordenó designar un representante que comparezca y participe de la certificación de los informes.

4. En cumplimiento con la Resolución Final y las órdenes del 9 de febrero y 10 de noviembre de 2022, la Autoridad presenta:

- El Informe de Progreso Mensual correspondiente a febrero 2023 preparado por Xzerta y revisado por la Autoridad (Anejo A) y
- la Declaración de LUMA en relación con el Informe de Progreso Mensual de febrero 2023 (Anejo B).

POR TODO LO CUAL, la Autoridad solicita respetuosamente al Negociado de Energía que tome conocimiento de lo aquí informado y acepte el Informe Mensual de febrero 2023.

RESPETUOSAMENTE SOMETIDO.

En San Juan, Puerto Rico, este 31 de marzo de 2023.

/f Joannely Marrero Cruz
Joannely Marrero Cruz
jmarrero@diazvaz.law
TSPR 20014

DÍAZ & VÁZQUEZ LAW FIRM, P.S.C.
290 Jesús T. Piñero Ave.
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Tel. (787) 395-7133
Fax. (787) 497-9664

CERTIFICADO DE NOTIFICACIÓN

Certifico que este escrito ha sido presentado a la Secretaria del Negociado de Energía a través del sistema electrónico de radicación <https://radicacion.energia.pr.gov/> y, además, copia del mismo ha sido notificado a LUMA Energy ServCo, LLC y LUMA Energy, LLC por conducto de la Licenciada Laura T. Rozas Laura.rozas@us.dlapiper.com.

En San Juan, Puerto Rico, hoy 31 de marzo de 2023.

f/ Joannely Marrero Cruz
Joannely Marrero Cruz

Anejo A



**XZERTA-TEC
SOLAR**

VIA EMAIL: kfutch@KSLAW.com

March 5, 2023

Mr. Josué Colón
Executive Director
Puerto Rico Electric Power Authority

RE: Xzerta-Tec Solar I, LLC February Progress Report

Dear Executive Director:

Herewith, we are providing our monthly progress and status report including project activities required for the project completion. In the upcoming months, our team will continue sustaining meetings with both PREPA and LUMA to refine the engineering design and the facility's interconnection to the grid. The following table will be used to identify the project activities, and any other issues with their respective status and progression for the proper implementation of this project.

#	Activity	Description	Status	Comments
1	Design			
	A. Power Design - Drawings	On February 21, 2023, PREPA provided Xzerta the Sargent & Lundy's Interconnection and facility Studies and also, LUMA's executive summary of the interconnection study. Both documentations states that Xzerta's proposed Solar facility's preliminary design with the dynamic studies are in compliance with the MTR's. A meeting was coordinated to occur on March 1 st to discuss the proposed S&L and LUMA design. Xzerta is waiting to have a separate meeting with PREPA to discuss any commercial issues related to LUMA's proposed estimates, POI design and the changes made by LUMA to re-defined the new POI and what will become the PIF (PREPA Interconnection Facilities)	Facility and interconnection study completed and preliminary design is in compliance with MTRs	S&L completed review of Xzerta preliminary design and provided their facility and interconnection studies. S&L and LUMA determined that Xzerta PSCAD and PSSE studies and other documentation complies with MTRs. Xzerta is waiting for the outcomes of the requested meetings.

Disclosure: This report is provided for informational purposes only. By accepting this information, the recipient agrees that it will, and it will cause its employees, agents, and representatives, to treat the information as such. Any reference made herein to terms or conditions should be subject to the language of the power purchase and operation agreement. The Information supersedes all information contained in any prior report or presentation for this project and is subject to change.

	B. Energy Yield Assessment and Relay Study	Relay Study was submitted on Sept 21, 2022, and the Energy Yield Assessment was submitted for approval on Sept 30 th , 2022.	Approved	S&L completed review of Xzerta preliminary design and provided their facility and interconnection studies. S&L and LUMA determined that Xzerta PSCAD and PSSE studies and other documentation complies with MTRs. Xzerta is waiting for the outcomes of the requested meetings.
	C. Products	<p>Proposed products and Models for the interconnection have been submitted to LUMA for approval.</p> <p>Documentation for the inverters, batteries, Transformer, Protective relays, GCBs, BESS and MV switchgear were transmitted for approval, but LUMA stated that they will not approve any Products related to the solar farm or facility but only the interconnection.</p> <p>The interconnection study and facility study were completed and both LUMA and S&L stated that Xzerta preliminary design is in compliance with the MTRs. Based on the outcome of the interconnection study, Xzerta understand that all suggested products have been approved.</p>	in compliance with the MTRs.	<p>At this point and based on the conclusion of S&L and LUMA's interconnection and facility reports, XZERTA is in the understanding that products have been approved.</p> <p>Nevertheless, Xzerta is waiting for further clarification and resolutions related to commercial and contractual issues before proceeding with the final design or ordering any equipment due to the high risk of not having proper approval of products. Equipment manufacturing lead times can affect proposed schedule</p>
	D. SCADA list	Our team is in receipt of current SCADA list sample shared by LUMA. Based on this sample, our team will develop the preliminary SCADA Point list and will add all available alarms and events based on the final design. The list is pending on the completion of LUMA's analysis and study of our design to determine if additional protections, alarms or	In progress	Under development while waiting for S&L's interconnection study and facility study results

		other necessary points are required to be included in our design.		
	E. Other Design	Preliminary design for the transmission lines was submitted on 11/23/2022.	In compliance	Current proposed route was approved and LUMAs provided a draft of a conditional permit. Xzerta provided comments related to this letter as the legal terms are not acceptable for Xzerta.
	F. Dynamic Study	S&L confirmed that the PSSE and PSCAD or Dynamic Studies reports are in compliance with the MTR's	In compliance MTR's	Interconnection and facility studies were release to Xzerta in Feb 21, 2023. Further clarifications on proposed changes are required since those are commercial issues.
	G. Winds Conditions requirement	LUMA/PREPA winds conditions requirement of 160 MPH has become an issue. Several vendors have responded that they will be unable to meet this requirement. Currently, products meet 140 MPH. ASCE allows the 140 MPH criteria on the location that the farm will be built. It was requested an exemption and LUMA responded that the requirement is only applicable to equipment that will handled or owned by PREPA or them. Furthermore, LUMA will not provide any technical inputs to any equipment or products that are not within the interconnection.	Closed	LUMA stated that this particular requirement is not applicable, and they will not provide any technical input of products used outside of the interconnection. GCB which meets 140 Mph has been approved. 140 MPH meets ASCE requirements
	H. Transmission line design and Easement Usage / Permit	It was requested the usage of a PREPA ROW or Easement adjacent to the lands of the project to minimize the environmental impacts and shorten the path to the Hatillo POI substation via an RFI. LUMA responded that it will be required to be addressed through their department of Land management and development instead. All documentation has been submitted to the LUMA's Land Department for certification, and endorsement.	Closed via RFI 015 but after receiving the draft letter for the conditional permit from the Land dept of LUMA, this item is considered open	Preliminary Transmission line design defining the route has been released on 11/23/2022 to LUMA's department of Land and permits. On 01/23/2023, LUMA responded via RFI 015 that the permit was approved with the condition of providing steel or concrete

		<p>LUMA responded in a 2nd letter that it will require more information of the transmission line design in order to approve the usage.</p> <p>Preliminary Transmission line design establishing the route as per appendix b of the PPOA was released on 11/23/2022 and another letter to requesting the use of the easement was sent to LUMA's Land Dept on the same date.</p> <p>LUMA's provided a draft of the conditional permit and Xzerta responded with our comments regarding many of the terms established by LUMA. The current terms of usage are not completely acceptable specially the ones related to liabilities.</p>		<p>monopoles with the configuration of dual lines for future installations.</p> <p>Additional conditions presented by LUMA under their draft letter for the conditional permit are not acceptable by Xzerta. Comments were provided back to LUMA. Item has not been resolved as of today.</p>
2	Commercial			
	A. Certifications	filed with the Puerto Rico Energy Bureau for Xzerta Tec's Electric Service Company Certification as required under Rule 8701	Completed	Approved
	B. Loans	Term Sheet was received	In Progress	<p>Modifications received. Discussions are undergoing awaiting new IRS rules regarding ITC's after latest amendments to the inflation reduction Act.</p> <p>As of December 15, 2022 an evaluation on the percentage applicable to the project was being evaluated as location of the project and the use of made in USA equipment could increase the ITC's from 30% up to 50%.</p>
	C. Leases	Executed the extensions on the leases of the properties that required such extensions. Xzerta continue to maintain land control over all the proposed parcels, plus some additional lots have been added and surveyed to guarantee the necessary space for the increased capacity.	Completed	

	D. Mars CPA Report	Commissioned a report from our accounting firm Mars CPA regarding the possible incentives available to the project under the Puerto Rico Incentives Code, to review the prior decree granted to the project by the Department of Economic Development and to establish the final structure regarding the tax equity of the project.	Completed	
	E. LUMA request for payment for interconnection Study	LUMA transmitted a request for payment letter regarding of the study and evaluation of the project interconnection. Total amount to be paid as per LUMA letter is \$341k. As agreed with PREPA, Sargent & Lundy will perform the interconnection study.	Resolved Completed	S&L has completed this item as of Feb 21, 2023
3	Contracting			
	A. Land Survey and Topographic Survey	Geomatic Solutions and Surveying, PSC	Completed	
	B. Plant Design	CSA Architects and Engineers, LLP	In progress	
	C. Archaeological Study	Fernando Alvarado	In progress	
	D. Environmental Site Assessment Phase I-A Phase I-B	Tycroes group	Completed Delivered	Phase B received and under review
	E. Habitat Study	Alejandro Cubiña	Completed	
	F. Foundation Design	Carlos Rivera, P.E.	Completed	
	G. Anchoring	RBI Solar, Solar Mounts and / or Schletter	In progress	
	H. Electrical Design	Miguel Ortiz, P.E. Lisaidyn Perez Enerzinx Ing Ronald Hpgood	Completed	
	I. SCADA Systems Design	Lisaidyn Perez	Completed	
	J. Modeling and Simulations	Enerzinx	Completed	Submitted on 07/2022 and a 2 nd revision on 12/22/22. S&L confirmed on 01/24/2023 that the PSSE complies with the MTRs. S&L is reviewing the PSCAD files and completing the interconnection

				study and facility study as per Article 4.2. Results are pending LUMA / PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.
	K. Relay Study	Enerzinx	Completed	resubmitted to Luma incorporating comments on 10/28/2022. Under S&L review and pending completion of the interconnection study and facility study as per Article 4.2. Results are pending LUMA / PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.
	L. Transmission Lines	Xzerta have contracted Eng. Ronald Hopgood as the local engineer of record in our team.	Completed	
3	Construction			
	A. Permits	<p>Completed the following:</p> <ol style="list-style-type: none"> 1. Location 2. Environmental 3. Endorsements by <ul style="list-style-type: none"> - Highway and Transportation Authority - Puerto Rico Energy Bureau - Cultural Institute - Puerto Rico Telecommunications Bureau - Puerto Rico Aqueduct and Sewer Authority - Department of Agriculture <p>Pending</p> <ol style="list-style-type: none"> 1. NWP-14 2. NPDES General Permit 3. Permits Management Office (OGPe) - Calculations for construction square footage were completed to finalize permit. Permit will be updated with the new data. 	In progress	Still waiting for LUMA / PREPA approval for usage of ROW/ Easement

		4. PREPA ROW / Easement Permit of usage		
	B. Land Acquisition		Completed	
	C. Contractors	<p>No major changes, waiting for final drawings with Luma comments to be completed.</p> <p>Preliminary Scope of work was distributed to potential EPC, waiting for their updates of the quotes</p>	In progress	General Contractor (GC), subcontractors and consultants' agreements are in process.
4	Procurement			
	A. Material List	The material list has been generated but many long lead times products are waiting for proper approval.	Waiting for approvals	Refer to Material List Annex 1 found below for further information. S&L and LUMA's interconnection and facility studies have determine that Xzerta proposed design is in compliance with the MTR's. It is Xzerta understanding that all products have been approved.
	B. Orders	Waiting for LUMA's or PREPA's approval of proposed products.	In progress	lead time of equipment could impact final implementation of project
5	Implementation			
	A. Installation	<p>Preliminary definition of scope of works have been created and shared with proponents.</p> <p>Contractors (BLDM and Aireko) visited in December once again the premises in order to update their quotes, but final prices and contract are pending on the final approvals.</p>	In progress	Waiting for S&L review of design documents and pending completion of the interconnection study and facility study as per Article 4.2. Results are pending LUMA / PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.
	B. Testing	Master Plan to be generated after approval of the design and upon receiving PREPA's approved testing protocols. Master plan and test procedures will be generated in accordance with PREPA/LUMA approved testing protocols and operations.	Not started	LUMA submitted their test protocols. The master plan will be based on this information and the final approval of design

The following table shows the status of RFIs:

#	Number	Description	Status	Date Submitted	Comments
1	RFI-001	Transformer specs and interconnection requirements (Y-D, D-Y or D-D)	Closed	4/26/2022	1 item remained open but followed by RFI-002. Transformer should be YG to Delta on the side of interconnection of 115 KV with PREPA with an internal shift of 30
2	RFI-002	Transformer specs (Not responded under RFI-001)	Closed	5/23/2022	Specifications received. Issues with Wind Conditions requirement. It will be followed through RFI-006
3	RFI-003	SCADA Communication Protocol and Sample of Points	Closed	5/23/2022	Received List. TBR
4	RFI-004	Amount of demand Energy of PR	Closed	5/23/2022	Calculated at 0.0003% or 0.001 %
5	RFI-005	Request of Permit to usage of PREPAs ROW	Closed	5/23/2022	RFI was closed but Item is still open. LUMA requested to submit request for usage of easement via another form since it is managed by their Dept of Land and Permits
6	RFI-006	Request for exemption to Wind Conditions requirements. Vendors unable to meet criteria of 160 MPH. Current design meets 120 to 140 MPH	Closed	6/2/2022	LUMA stated that the cited specification details the requirements for equipment to be owned, operated, and maintained by PREPA/LUMA. Knowing that this equipment will remain under the care, custody, and control of the proponent, LUMA will not provide technical input on alternate wind load criteria for transformer components, since it is not an evaluation factor to determine the Facility's capability to be interconnected to the grid. Current design meets ASCE req. Refer to PPOA sections 9.4(a) & (b).
7	RFI-007	Request for approval of GCB proposed product	Closed	6/2/2022	Hitachi GCB Breaker for 115 KV. It has been conditionally approved. LUMA requested to increase CC of GCB1 based on their current design, 145 KV @ 2000 A CC
8	RFI-008	Request for approval of MV Switchgear proposed product	Closed	6/30/2022	LUMA stated that the MV switchgear approval is not within responsibilities. This will remain under contractor decisions regarding the solar farm or facility design.

9	RFI-009	Request for approval of Protective Relays, Network Switch, Controller	Closed	2/21/2023	S&L and LUMA's completed the Interconnection and Facility Studies. Preliminary design is in compliance with MTRs. Xzerta considers this item closed and approved.
10	RFI-010	Request for approval of Dynamic Studies	Closed	2/21/2023	S&L and LUMA's completed the Interconnection and Facility Studies. Preliminary design is in compliance with MTRs. Xzerta considers this item approved.
11	RFI-011	Request for approval of 3P Main Step-Up Oil Transformer 34/115KV	Closed	7/11/2022	LUMA stated that is pending on interconnection study performed by S&L
12	RFI-012	Request for Testing Protocols and operating procedures	Closed	8/1/2022	Delivered
13	RFI-013	Request for LUMA/ PREPA to confirm if the Seismic Design Category can remain in A instead D because there is no historical data that requires to consider inertial loads associated with earthquakes within the area	Closed	10/13/2022	LUMA will not evaluate the civil design aspects for the medium voltage switchgear, since this equip is located upstream from the Main Power Transformer, and thus lies beyond LUMA's evaluation responsibilities for privately-owned Renewables projects.
14	RFI-014	Request PLS-CADD files for Transmission line detailed design	Closed	12/6/2022	LUMA provided the requested information and files
15	RFI-015	Response to Letter for Request of Permit to usage of PREPAs ROW	Closed	1/24/2023	Xzerta submitted to LUMA's Lands & Permits team on Nov 23, 2022, a 2nd request for the usage of existing easement/right-of-way that was reserved for future work on previously existing 115kV transmission line 39100 spanning westbound from Hatillo TC to Mora TC, in Isabela. It has been approved with the condition of been prepared for dual lines.

The following table shows the status of Transmittals:

#	Number	Description	Status	Date Submitted	Comments
1	XTA-TRA-0001	Relay Study and Updated Preliminary design	Closed	9/21/2022	Interconnection and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all

					preliminary design is approved and can proceed with the detail design
2	XTA-TRA-0002	Energy Yield Assessment	Closed	9/30/2022	Interconnection and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all preliminary design is approved and can proceed with the detail design
3	XTA-TRA-0003	Relay Study and Updated Preliminary design based on LUMA's Comments of 10/3/2022	Closed	10/28/2022	Interconnection and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all preliminary design is approved and can proceed with the detail design
4	XTA-TRA-0004	Xzerta Ltr 2nd Request of Permit Use of ROW and Rev 14 SLD Preliminary Design	Open	02/21/2023	LUMA's team released a draft letter for a conditional permit for usage of the ROW but Xzerta provided their comments to many of the terms. It is currently under evaluation by LUMA's

We continue committed to providing PREPA and the people of Puerto Rico clean and efficient energy and to assist in achieving the targets established in the Integrated Resources Plan (IRP) and the Public Policy aimed by the Government of Puerto Rico.

Sincerely,



Fernando Molini-Vizcarrondo

xc: francisco.santos@prepa.com
mcadavid@kslaw.com
kbolanos@diazvaz.law
daniel.Hernandezm@lumapr.com

Attachments

Revised by PREPA
Representative:

F. Santos
F. Santos (Mar 31, 2023 11:21 EDT)

Francisco Santos, Esq.
Manager Business Strategy
and Operations, PREPA
March 31, 2023

Equipment and Components – Materials Status List

Equipment	Company/Brand	Status	Comments
PV Modules	RFPs Submitted to vendors	Proposal Received from Talesun and Trina Solar.	Interconnection Study completed and compliance with MTRs
Inverters	Ingeteam	Refresh of Proposal Received from Ingeteam to proceed with PO	Interconnection Study completed and compliance with MTRs
Battery Equipment	Ingeteam	Refresh of Proposal Received from Ingeteam to proceed with PO	Interconnection Study completed and compliance with MTRs
Racks and Anchoring	Schletter/Solar Mounts	Provided latest preliminary design to prospects to have them Revised Proposal	Waiting for design approval
Main Switchgear	Eaton	Received proposal from Eaton and Submitted for approval	LUMA stated that Main Switchgear will remain under the contractor prerogative. No approval necessary
GIS/GCB	Hitachi	Submitted for approval	LUMA approved it with comments. Changes incorporated to proceed with POs
Transformer 34.5/115K	Hitachi	Submitted for approval	Interconnection Study completed and compliance with MTRs
Meters	Eaton	Waiting to receive meters information from Eaton to submit product for approval	Interconnection Study completed and compliance with MTRs
Protective Relays	SEL	Submitted for approval	Interconnection Study completed and compliance with MTRs
Foundations	Pending Completion of design		
Posts & Towers	Generic	Preliminary Design submitted	
Cables & Miscellaneous	Caribe Sales	Revised proposal received. Final proposal will be delivered upon completing design	

Anejo B



STATEMENT REGARDING XZERTA TEC SOLAR I, LLC MONTHLY STATUS PROGRESS REPORT FOR February 2023

For purposes of compliance with the Puerto Rico Energy Bureau's ("PREB") Resolution and Order of November 10, 2022, in Case NEPR-AP-2021-0002 (*Enmiendas a Contrato de Compraventa de Energía: Proyecto No-Operacional (Xzerta-Tec Solar I, LLC)*), LUMA Energy ServCo, LLC ("LUMA") hereby informs that LUMA:

- has reviewed the referenced monthly progress report prepared by Xzerta Tec Solar I, LLC dated March 5, 2023 (for the month of February 2023) and submitted to the Puerto Rico Electric Power Authority (the "Xzerta Report"), which report is to be filed with the Puerto Rico Energy Bureau ("PREB") as per PREB's Final Determination and Order of May 11, 2021 in the same case; and
- does not have reason to disagree with the information in the Xzerta Report, **except as otherwise indicated in or subject to**, LUMA's comments included in the attached document which replicates the tables of activities and status thereof in the Xzerta Report and includes a column added by LUMA to include LUMA's comments for purposes of clarifying, updating or correcting the information in the report.

LUMA Representative:

A handwritten signature in black ink, appearing to read "Daniel Hernandez", is written over a horizontal line.

Name: Daniel Hernandez

Title: Director

Date: 03/31/23



LUMA Comments to XZERTA Monthly Report

February 2023

#	Activity	Description	Status	Comments	
1	Design				
	A. Power Design - Drawings	On February 21, 2023, PREPA provided Xzerta the Sargent & Lundy's interconnection and facility Studies and also, LUMA's executive summary of the interconnection study. Both documentations states that Xzerta's proposed Solar facility's preliminary design with the dynamic studies are in compliance with the MTR's. A meeting was coordinated to occur on March 1st to discuss the proposed S&L and LUMA design. Xzerta is waiting to have a separate meeting with PREPA to discuss any commercial issues related to LUMA's proposed estimates, POI design and the changes made by LUMA to re-defined the new POI and what will become the PIF (PREPA Interconnection Facilities)	Facility and interconnection study completed and preliminary design is in compliance with MTRs	S&L completed review of Xzerta preliminary design and provided their facility and interconnection studies. S&L and LUMA determined that Xzerta PSCAD and PSSE studies and other documentation complies with MTRs. Xzerta is waiting for the outcomes of the requested meetings.	No action pending from LUMA.
	B. Energy Yield Assessment and Relay Study	Relay Study was submitted on Sept 21, 2022, and the Energy Yield Assessment was submitted for approval on Sept 30th, 2022.	Approved	S&L completed review of Xzerta preliminary design and provided their facility and interconnection studies. S&L and LUMA determined that Xzerta PSCAD and PSSE studies and other documentation complies with MTRs. Xzerta is waiting for the outcomes of the requested meetings.	No action pending from LUMA.

LUMA Comments

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	C. Products	<p>Proposed products and Models for the interconnection have been submitted to LUMA for approval. Documentation for the inverters, batteries, Transformer, Protective relays, GCBs, BESS and MV switchgear were transmitted for approval, but LUMA stated that they will not approve any Products related to the solar farm or facility but only the interconnection. The interconnection study and facility study were completed and both LUMA and S&L stated that Xzerta preliminary design is in compliance with the MTRs. Based on the outcome of the interconnection study, Xzerta understand that all suggested products have been approved.</p>	in compliance with the MTRs.	<p>At this point and based on the conclusion of S&L and LUMA's interconnection and facility reports, XZERTA is in the understanding that products have been approved. Nevertheless, Xzerta is waiting for further clarification and resolutions related to commercial and contractual issues before proceeding with the final design or ordering any equipment due to the high risk of not having proper approval of products. Equipment manufacturing lead times can affect proposed schedule</p>	<p>With the Facility and Interconnection Studies completed, Xzerta has all the necessary data to proceed with Final Design and proceed with detailed product selection. However, compliance with MTRs is not a blanket approval of all products.</p>
	D. SCADA list	<p>Our team is in receipt of current SCADA list sample shared by LUMA. Based on this sample, our team will develop the preliminary SCADA Point list and will add all available alarms and events based on the final design. The list is pending on the completion of LUMA's analysis and study of our design to determine if additional protections, alarms, or other necessary points are required to be included in our design.</p>	In progress	<p>Under development while waiting for LUMA's study results</p>	<p>Evaluation in progress.</p>

LUMA Comments

#	Activity	Description	Status	Comments	
	E. Other Design	Preliminary design for the transmission lines was submitted on 11/23/2022.	In compliance	Current proposed route was approved and LUMAs provided a draft of a conditional permit. Xzerta provided comments related to this letter as the legal terms are not acceptable for Xzerta.	Negotiations in progress. The conditioned Permit draft document is under review by both LUMA and Xzerta.
	F. Dynamic Study	S&L confirmed that the PSSE and PSCAD or Dynamic Studies reports are in compliance with the MTR's	In compliance MTR's	Interconnection and facility studies were release to Xzerta in Feb 21, 2023. Further clarifications on proposed changes are required since those are commercial issues	No action pending from LUMA.
	G. Winds Conditions requirement	LUMA/PREPA winds conditions requirement of 160 MPH has become an issue. Several vendors have responded that they will be unable to meet this requirement. Currently, products meet 140 MPH. ASCE allows the 140 MPH criteria on the location that the farm will be built. It was requested an exemption and LUMA responded that the requirement is only applicable to equipment that will handled or owned by PREPA or them. Furthermore, LUMA will not provide any technical inputs to any equipment or products that are not within the interconnection	Closed	LUMA stated that this particular requirement is not applicable, and they will not provide any technical input of products used outside of the interconnection. GCB which meets 140 Mph has been approved. 140 MPH meets ASCE requirements.	

LUMA Comments

#	Activity	Description	Status	Comments	
	H. Transmission line design and Easement Usage/ Permit	It was requested the usage of a PREPA ROW or Easement near to the lands of the project to minimize the environmental impacts and shorten the path to the Hatillo POI substation via an RFI. LUMA responded that it will be required to be address through their department of Land management and development instead. All documentation has been submitted to the LUMA's Land Department for certification, and endorsement. LUMA responded in a 2 nd letter that it will require more information of the transmission line design in order to approve the usage. Preliminary Transmission line design defining the route as per appendix b of the PPOA was released by 11/23/2022 and another letter to request the permit of usage of the easement was sent to LUMA Land Dept on the same date. LUMA's provided a draft of the conditional permit and Xzerta responded with our comments regarding	Closed via RFI 015 but after receiving the draft letter for the conditional permit from the Land dept of LUMA, this item is considered open.	Preliminary Transmission line design defining the route has been released on 11/23/2022 to LUMA's department of Land and permits. On 01/23/2023, LUMA responded via RFI 015 that the permit was approved with the condition of providing steel or concrete monopoles with the configuration of dual lines for future installations. Additional conditions presented by LUMA under their draft letter for the conditional permit are not acceptable by Xzerta. Comments were provided back to LUMA. Item has not been resolved as of today.	Negotiations in progress. The Conditioned Permit draft document is under review by both LUMA and Xzerta.

LUMA Comments

#	Activity	Description	Status	Comments	
		many of the terms established by LUMA. The current terms of usage are not completely acceptable specially the ones related to liabilities.			
2	Commercial				
	A. Certifications	filed with the Puerto Rico Energy Bureau for Xzerta Tec's Electric Service Company Certification as required under Rule 8701	Completed	Approved	
	B. Loans	Term Sheet was received	In Progress	Modifications received. Discussions are undergoing awaiting new IRS rules regarding ITC's after latest amendments to The inflation reduction Act. As of December 15, 2022 an evaluation on the percentage applicable to the project was being evaluated as location of the project and the use of made in USA equipment could increase the ITC's from 30% up	

LUMA Comments

#	Activity	Description	Status	Comments	
				to 50%.	
	C. Leases	Executed the extensions on the leases of the properties that required such extensions. Xzerta continue to maintain land control over all the proposed parcels, plus some additional lots have been added and surveyed to guarantee the necessary space for the increased capacity.	Completed		
	D. Mars CPA Report	Commissioned a report from our accounting firm Mars CPA regarding the possible incentives available to the project under the Puerto Rico Incentives Code, to review the prior decree granted to the project by the Department of Economic Development and to establish the final structure regarding the tax equity of the project.	Completed		
	E. LUMA request for payment for interconnection Study	LUMA transmitted a request for payment letter regarding of the study and evaluation of the project interconnection. Total amount to be paid as per LUMA letter is \$341k. As agreed with PREPA, Sargent & Lundy will perform	Resolved Completed	S&L has completed this item as of Feb 21, 2023	

LUMA Comments

#	Activity	Description	Status	Comments	
		the interconnection study.			
3	Contracting				
	A. Land Survey and Topographic Survey	Geomatic Solutions and Surveying, PSC	Completed		
	B. Plant Design	CSA Architects and Engineers, LLP	In progress		
	C. Archaeological Study	Fernando Alvarado	In progress		
	D.Environmental Site Assessment Phase I-A Phase I-B	Tycroes group	Completed Delivered	Phase B received and under review	
	E.Habitat Study	Alejandro Cubiña	Completed		
	F. Foundation Design	Carlos Rivera, P.E.	Completed		
	G. Anchoring	RBI Solar, Solar Mounts and/or Schletter	In progress		
	H. Electrical Design	Miguel Ortiz, P.E. Lisaidyn Perez Enerzinx Ing Ronald Hopgood	Completed		
	I. SCADA Systems Design	Lisaidyn Perez	Completed		
	J. Modeling and Simulations	Enerzinx	Completed	Submitted on 07/2022 and a 2nd revision on 12/22/22 Design Documents Under S&L review and pending completion of the interconnection study and facility study as per Article	No pending action from LUMA.

LUMA Comments

#	Activity	Description	Status	Comments	
				4.2. Results are pending LUMA/PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.	
	K. Relay Study	Enerzinx	Completed	Resubmitted to Luma incorporating comments on 10/28/2022. Under S&L review and pending completion of the interconnection study and facility study as per Article 4.2. Results are pending LUMA / PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.	No pending action from LUMA.
	L. Transmission Lines	Xzerta have contracted Eng. Ronald Hopgood as the local engineer of record in our team.	Completed		
3	Construction				
	A. Permits	Puerto Rico Aqueduct and Sewer Authority Department of Agriculture Pending	In progress	Still waiting for LUMA/PREP A approval for usage of ROW/ Easement	See item 1.H – Transmission Line design and Easement Usage/Permit.

LUMA Comments

#	Activity	Description	Status	Comments	
		<ol style="list-style-type: none"> 1. NWP-14 2. NPDES General Permit 3. Permits Management Office (OGPe) - Calculations for construction square footage were completed to finalize permit. Permit will be updated with the new data. <p>PREPA ROW / Easement Permit of usage</p>			
	B. Land Acquisition		Completed		
	C. Contractors	<p>No major changes, waiting for final drawings with Luma comments to be completed.</p> <p>Preliminary Scope of work was distributed to potential EPC, waiting for their updates of the quotes</p>	In progress	General Contractor (EPC), subcontractors and consultants' agreements are in process.	
4	Procurement				
	A. Material List	The material list has been generated but many long lead times products are waiting for proper approval.	Waiting for approvals	Refer to Material List Annex 1 found below for further information. S&L and LUMA's interconnection and facility	LUMA's review of materials on the developer's facilities up to the high side of the step-up transformer are not required. It is the developer's responsibility

LUMA Comments

#	Activity	Description	Status	Comments	
				studies have determine that Xzerta proposed design is in compliance with the MTR's. It is Xzerta understanding that all products have been approved.	to comply with the MTRs and applicable codes and regulations. The MTR compliance is an output of the interconnection studies. (No change from Nov. 2022 report)
	B. Orders	Waiting for LUMA's or PREPA's approval of proposed products.	In progress	Lead time of equipment could impact final implementation of project	LUMA's approval of the orders of materials on the developer's facilities up to the high side of the step-up transformer are not required. It is the developer's responsibility to comply with the MTRs and applicable codes and regulations. The MTR compliance is an output of the interconnection studies. (No change from Nov. 2022 report)
5	Implementation				
	A. Installation	Preliminary definition of scope of works have been created and shared with proponents. Contractors (BLDM and Aireko)	In progress	Waiting for S&L review of design documents and pending completion of the	No pending action from LUMA.

LUMA Comments

#	Activity	Description	Status	Comments	
		visited in December once again the premises in order to update their quotes, but final prices and contract are pending on the final approvals.		interconnection study and facility study as per Article 4.2. Results are pending LUMA/PREPA approval as per Article 4.2 and 9.4 for release to Xzerta for completion of final design.	
	B. Testing	Master Plan to be generated after approval of the design and upon receiving PREPA's approved testing protocols. Master plan and test procedures will be generated in accordance with PREPA/LUMA approved testing protocols and operations.	Not started	LUMA submitted their test protocols. The master plan will be based on this inf and the final approval of design.	

The following table shows the status of RFIs:

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
1	RFI-001	Transformer specs and interconnection requirements (Y-D, D-Y or D-D)	Closed	4/26/2022	1 item remained open. Transformer should be YG to Delta on the side of interconnection of 115 KV with PREPA with an internal shift of 30	No open items. Refer to RFI 001 response.
2	RFI-002	Transformer specs (Not responded under RFI-001)	Closed	5/23/2022	Specifications received. Issues with Wind Conditions	Response to RFI was delivered by LUMA and wind conditions

LUMA Comments

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
					requirement. It will be followed through RFI-006	question clarified.
3	RFI-003	SCADA Communication Protocol and Sample of Points	Closed	5/23/2022	Received List. TBR	
4	RFI-004	Amount of demand Energy of PR	Closed	5/23/2022	Calculated at 0.0003% or 0.001 %	
5	RFI-005	Request of Permit to usage of PREPAs ROW	Closed	5/23/2022	RFI was closed but Item is still open. LUMA requested to submit request for usage of easement via another form since it is managed by their Dept of Land and Permits	Negotiations in progress. The Conditioned Permit draft document is under review by both LUMA and Xzerta
6	RFI-006	Request for exemption to Wind Conditions requirements. Vendors unable to meet criteria of 160 MPH. Current design meets 120 to 140 MPH	Closed	6/2/2022	LUMA stated that the cited specification details the requirements for equipment to be owned, operated, and maintained by PREPA/LUMA. Knowing that this equipment will remain under the care, custody, and control of the proponent, LUMA will not provide technical input on alternate wind load criteria for transformer components, since it is not an evaluation factor to determine the Facility's capability to be interconnected	

LUMA Comments

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
					to the grid. Refer to PPOA sections 9.4(a) and (b).	
7	RFI-007	Request for approval of GCB proposed product	Closed	6/2/2022	Hitachi GCB Breaker for 115 KV. It has been conditionally approved. LUMA requested to increase CC of GCB1 based on their current design, 145 KV @ 2000 A CC	To be reviewed upon submittal of Final Design.
8	RFI-008	Request for approval of MV Switchgear proposed product	Closed	6/2/2022	LUMA stated that the MV switchgear approval is not within responsibilities. This will remain under contractor decisions regarding the solar farm design.	
9	RFI-009	Request for approval of Protective Relays, Network Switch, Controller	Closed	2/21/2023	S&L and LUMA's completed the Interconnection and Facility Studies. Preliminary design is in compliance with MTRs. Xzerta considers this item closed and approved.	**Item is still open. New comments on the protection scheme were issued on 03/08/2023
10	RFI-0010	Request for approval of Dynamic Studies	Closed	2/21/2023	S&L and LUMA's completed the Interconnection and Facility Studies. Preliminary design is in compliance with MTRs. Xzerta considers this item approved.	
11	RFI-0011	Request for approval of 3P Main Step-Up Oil Transformer 34/115 KV	Closed	7/11/2022	LUMA stated that is pending on interconnection study performed by S&L	

LUMA Comments

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
12	RFI-0012	Request for Testing Protocols and operating procedures	Closed	8/1/2022	Delivered	
13	RFI-0013	Request for LUMA/PREPA to confirm if the Seismic Design Category can remain in A instead D because there is no historical data that requires to consider inertial loads associated with earthquakes within the area	Closed	10/13/2022	LUMA will not evaluate the civil design aspects for the medium voltage switchgear, since this equip is located upstream from the Main Power Transformer, and thus lies beyond LUMA's evaluation responsibilities for privately-owned Renewables projects	
14	RFI-014	Request PLS-CADD files for Transmission line detailed design	Closed	12/6/2022	LUMA provided the requested information and files	
15	RFI-015	Response to Letter for Request of Permit to usage of PREPAs ROW	Closed	1/24/2023	Xzerta submitted to LUMA's Lands & Permits team on Nov 23, 2022, a 2nd request for the usage of existing easement/right-of-way that was reserved for future work on previously existing 115kV transmission line 39100 spanning westbound from Hatillo TC to Mora TC, in Isabela. It has been approved with the condition of been prepared for dual lines.	

LUMA Comments

The following table shows the status of Transmittals:

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
1	XTA-TRA-0001	Relay Study and Updated Preliminary design	Closed	9/21/2022	Interconnecti on and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all preliminary design is approved and can proceed with the detail design	
2	XTA-TRA-0002	Energy Yield Assessment	Closed	9/30/2022	Interconnecti on and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all preliminary design is approved and can proceed with the detail design	**LUMA issued a notification on 03/13/2023 to revise and resubmit the Energy Yield Assessment, since it was lacking detailed monthly data. Refer to PPOA definition of Energy Yield Assessment.

LUMA Comments

#	Number	Description	Status	Date Submitted	Comments	LUMA Comments
3	XTA-TRA-0003	Relay Study and Updated Preliminary design based on LUMA's Comments of 10/3/2022	Closed	10/28/2022	Interconnecti on and facility study completed by S&L and LUMA on Feb 21, 2023. It determined that Xzerta proposed design is in compliance with all MTR's. Xzerta assumes that all preliminary design is approved and can proceed with the detail design	See comments in RFI 009.
4	XTA-TRA-0004	Xzerta Ltr 2nd Request of Permit Use of ROW and Rev 14 SLD Preliminary Design	Open	11/23/2022	LUMA's team released a draft letter for a conditional permit for usage of the ROW but Xzerta provided their comments to many of the terms. It is currently under evaluation by LUMA's	See item 1.H – Transmission Line design and Easement Usage/Permit.