

GOVERNMENT OF PUERTO RICO
PUERTO RICO ENERGY BUREAU

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IN RE: REVIEW OF THE PUERTO
RICO ELECTRIC POWER
AUTHORITY INTEGRATED
RESOURCE PLAN

No. CEPR-AP-2018-0001

SUBJECT: PREPA's Cover Filing for
Accompanying Compliance IRP Filing
Due June 7, 2019

**PREPA's Cover Filing for Accompanying
Compliance IRP Filing Due June 7, 2019**

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COMES NOW the Puerto Rico Electric Power Authority ("PREPA") and respectfully submits to the Puerto Rico Energy Bureau (the "Energy Bureau")¹ PREPA's Cover Filing for Compliance IRP [Integrated Resource Plan] Filing Due June 7, 2019. PREPA's accompanying IRP filing replaces PREPA's IRP filed on February 13, 2019. All references to the IRP filing in the remainder of this Cover Filing refer to the accompanying IRP filing, unless expressly indicated otherwise.

This Cover Filing primarily serves as a brief overview and a table of contents of the accompanying IRP filing. PREPA submits the accompanying IRP filing in compliance with the Energy Bureau's Regulation ("Reg.") No. 9021 and the Energy Bureau's applicable orders in this docket, subject to PREPA's separate Motion for limited waivers of filing requirements in Reg. No. 9021.

This Cover Filing does not address PREPA's related Direct Testimony. Under the Energy Bureau's Resolution and Order dated June 5, 2019, PREPA's related Direct Testimony is due on June 14, 2019.

¹ References in this Petition to the Energy Bureau include the former Puerto Rico Energy Commission.

I. INTRODUCTION

In brief, the goals of the IRP filing, within the governing law, are to help develop and support a cost-effective modernized Puerto Rico electric system that reflects PREPA's Governing Board's vision:

1. **Customer-centric:** The IRP includes costumer participation via energy efficiency, customer side energy resources and demand response with a predominant role in the supply and consumption matrix of Puerto Rico, and empowering customers to participate and take ownership on their energy security and affordability.
2. **Financial Viability:** Within the requirements of resiliency and reliability, the plan minimizes the cost of supply and drastically reduces the dependence on imported fuels and the associated volatility; thus, supporting affordable rates that promote financial viability at both sides of the meter.
3. **Reliable and Resilient:** The IRP is centered on the concept of "MiniGrids", which are defined as zones of resiliency into which the system can be segregated during and after a major storm or weather event ensuring that the load can be served using local resources and supporting the effective and timely recovery from the event.
4. **Model of Sustainability:** The IRP's implementation will transition the Puerto Rico electric system from one centered on fossil fuels to one in which the renewable resources play a central, if not, the predominant role. The IRP's implementation will drastically reduce emissions, increase the penetration of renewable generation, achieve compliance with all current regulations, and position Puerto Rico for future regulations.
5. **Economic Growth Engine:** The distributed nature of the new generation resources that will have to be developed, the high levels of customer participation on the energy production and the overall reduction in the system cost are expected to result in employment opportunities and economic growth for Puerto Rico. The IRP will support a reliable and economic system that will attract economic development in Puerto Rico.

Puerto Rico Revised Integrated Resource Plan 2018-2019: Draft for the Review of the Puerto Rico Energy Bureau (the IRP "main Report"), Part 1, Section 1.1, pp. 1-1 – 1-2.

In brief, the accompanying IRP filing consists of a Report presenting extensive analysis and a proposed Action Plan (developed in accordance with the Energy Bureau's

directives and after an extensive stakeholder process), other required documents, and Direct Testimony, provided that the Direct Testimony is to be filed by June 7, 2019.

More specifically, the IRP filing, at this time, consists of:

- the IRP main Report (a document with ten Parts), plus two Attachments (A and B) and Appendices 1-5 (see Reg. No. 9021, §§ 2.02(A) – (D));²
- the required work papers (due to their number and size, and regulatory requirements, provided in electronic form only on a “USB” drive) (see Reg. No. 9021, § 2.02(E) – (F));³ and
- two Motions, one to support the confidentiality designations, and one for limited waivers of filing requirements in Reg. No. 9021.

The IRP filing, as of June 7, 2019, also will include:

- the required Direct Testimony, including notarizations (see Reg. No. 9021, § 3.06); and
- a chart of the witnesses and of which portions of the IRP filing they support (see Reg. No. 9021, § 3.06(A)).

PREPA respectfully requests that the Energy Bureau approve the IRP, including the Action Plan. The Action Plan is the “Preferred Resource Plan” required by Reg. No. 9021.

II. BACKGROUND

In brief, the nature of an IRP is: (1) an economic / engineering analysis conducted within the framework of applicable objectives and constraints, such as public policy and

² Please note that Attachment B and Appendix 1 contain confidential information, including Confidential Energy Infrastructure Information (“CEII”) that is protected from public disclosure under federal and Puerto Rico law.

³ Please note that, due to number and size of these documents, and because Reg. No. 9021 requires working electronic versions in native form of some of these documents, these documents will be made available electronically (in electronic form only on a “USB” drive) rather than being printed out. Please also note that some of the work papers contain confidential information.

governing law; and (2) a proposed resource plan for the planning period, with special focus on the near term, in this case an Action Plan for the next five years.⁴

The instant docket is PREPA's second IRP case. PREPA first filed a proposed IRP in July 2015. The Energy Bureau, to address the 2015 IRP, opened docket no. CEPR-AP-2015-0002. As a result of an Energy Bureau order, PREPA filed a revised IRP in August and September 2015. That revised IRP commonly was referred to as the "Base IRP" in that prior docket. As a result of another Energy Bureau order, PREPA filed a series of materials culminating in a "Supplemental IRP" filed in final form in April 2016. The main difference between the Base IRP and the Supplemental IRP was that the Supplemental IRP used a significantly lower demand forecast directed by the Energy Bureau.

The Energy Bureau did not adopt PREPA's Base IRP or its Supplemental IRP and instead issued a final Resolution and Order establishing a "Modified IRP" on September 23, 2016, in that prior docket. PREPA filed a motion for reconsideration. The Bureau granted in part and denied in part PREPA's motion for reconsideration and thereby revised the Modified IRP in certain respects in a Resolution issued on February 10, 2017. The Modified IRP became effective on March 13, 2017, as discussed in the Bureau's March 14, 2018, Resolution and Order in the instant docket.

PREPA notes that the Modified IRP was incomplete in certain respects. In brief, the Modified IRP did not resolve the questions of whether to approve PREPA's

⁴ This IRP process also occurs within the context of PREPA's bankruptcy restructuring process and the ongoing efforts to transform PREPA and the Puerto Rico electric sector under the federal Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA") statute, 48 U.S.C. §§ 2101-2241, and the PROMESA Title III federal court case involving PREPA, No. 17-04780 (D. P.R.); and under Puerto Rico statutes, including but not limited to Act Nos. 2-2017 and 120-2018.

then-pending Aguirre Offshore Gasport ("AOGP") proposal and of what to build at the Aguirre site. Those questions were transferred to another docket, the Aguirre Economic Site Analysis case, docket no. CEPR-AP-2017-0001, but they were not resolved in that docket, either, because, after the devastation wrought by Hurricanes Irma and Maria in September 2017, the Energy Bureau ultimately dismissed that docket "without prejudice". The Modified IRP also was incomplete in certain other respects, *e.g.*, it provided for further discussions of what to build at the Palo Seco site, and it provided for further steps to be determined on some other subjects, such as energy efficiency and demand response programs.

On April 20, 2018, the Energy Bureau issued its Regulation No. 9021, entitled "Regulation in Integrated Resource Plan for the Puerto Rico Electric Power Authority." Reg. No. 9021 sets forth extremely detailed requirements, in terms both of form and substance.

In brief, Reg. No. 9021 provides for an IRP main Report having 10 Chapters or Parts (Reg. No. 9021, § 2.02(B)) and five or six Appendices (Reg. No. 9021, § 2.02(D)). The regulation also contains very detailed directives regarding the analysis and contents of the IRP. The regulation also requires, as specified in detail, provision of source materials or references (Reg. No. 9021, § 2.02(E)) and work papers (Reg. No. 9021, § 2.02(F)(1)). The regulation also requires notarized Direct Testimony that explains and supports the IRP (Reg. No. 9021, § 3.06) and a list or chart of which portions of the IRP filing are supported by which witness (Reg. No. 9021, § 3.06(A)).

The Energy Bureau's May 29, 2018, Order in the instant case directed PREPA to file an updated IRP citing the serious and widespread damage done to the Island and the electric system and services by Hurricanes Irma and Maria.

III. STRUCTURE OF THE IRP FILING

In this IRP filing:

- the IRP main Report and its two Attachments and five Appendices are being filed as PREPA Exhibit ("Ex.") 1.0;
- the work papers are being filed (due to their number and size, and regulatory requirements, provided in electronic form only on a "USB" drive) as PREPA Ex. 2.0; and,
- the Direct Testimony (with attachments, including notarizations) will be filed on June 14, 2019, as PREPA Exs. 3.0, 4.0, 5.0, 6.0, and 7.0.

Some attachments will have their own subsidiary exhibit numbers.

The IRP main Report is divided into ten Parts, in accordance with Reg. No. 9021, § 2.02(B):

- 1) Part One - Introduction and Summary of Conclusions
- 2) Part Two - Planning Environment
- 3) Part Three - Load Forecast
- 4) Part Four - Existing Resources
- 5) Part Five - Resource Needs Assessment
- 6) Part Six - New Resource Options
- 7) Part Seven - Assumptions and Forecasts
- 8) Part Eight - Resource Plan Development

9) Part Nine - Caveats and Limitations

10) Part Ten - Action Plan

The IRP also contains two Attachments, Attachment A one on a gas market model and Attachment B on certain transmission and distribution information (the latter of which is designated as confidential), plus five Appendices (the first of which is designated as confidential), in accordance with Reg. No. 9021, § 2.02(D):

- 1) Appendix 1 - Transmission and Distribution Planning
- 2) Appendix 2 - Prior Action Plan Implementation Status
- 3) Appendix 3 - Renewable Energy Project Status
- 4) Appendix 4 - Demand-Side Resources
- 5) Appendix 5 - New and Existing Supply-Side Resources Supplemental Data

PREPA separately is filing two Motions: (1) a motion for confidential treatment of limited portions of the IRP Filing and (2) a motion for limited waivers of filing requirements in Regulation No. 9021. Those motions set forth the factual and legal grounds for PREPA's requests to treat certain information in this filing as confidential and for limited waivers of certain filing requirements of Reg. No. 9021, respectively.

IV. OVERVIEW OF PREPA'S IRP AND OF THE ACTION PLAN

A. The IRP's Analysis

As shown in the IRP main Report and attachments and Appendices, PREPA Exs. 1.0 and 2.0, and as will be discussed primarily by Dr. Nelson Bacalao's forthcoming Direct Testimony, PREPA Ex. 6.0, the IRP, as directed by the Energy Bureau, evaluates a variety of combinations of strategies, scenarios, load forecasts, and other sensitivities.

Siemens and PREPA, with the assistance of the Smart Electric Power Alliance ("SEPA"), engaged in extensive stakeholder processes regarding what the IRP should consider, how, and with what data. There also were stakeholder processes between Siemens and PREPA and the Energy Bureau itself through filings, technical conferences, and Energy Bureau orders.

Based on input from stakeholders and directives from the Energy Bureau, the IRP evaluates a variety of scenarios, each of which lays out a combination of system requirements needed to serve load, commodity prices, capital costs, total system costs, and risks that influence the choice of resources to serve PREPA's future load. The IRP scenarios are those directed by the Energy Bureau plus the scenario of PREPA's Energy System Modernization Plan ("ESM"). The ESM was studied in the IRP in the same manner as the other scenarios.

Based on input from stakeholders and directives from the Energy Bureau, the IRP considers three strategies: (1) a traditional centralized energy program that is reliable and economic; (2) a highly distributed system of flexible generation and MiniGrids and hardening of infrastructure around the Island that is resilient and closer to the customer; and, (3) a mixture of the first two strategies that embodies a combination of the benefits of each strategy.

Please note that the term MiniGrids, as used in the IRP, basically means dividing up the PREPA grid into very large segments that can operate separately, mainly for resilience purposes, as explained in the IRP. Thus, the term MiniGrids, as used in the IRP, is not simply another term for microgrids.

The IRP evaluates and addresses the balance between low cost reliable operation under normal conditions and the ability to mitigate and timely recover from major disruptive events.

B. The Action Plan

The IRP main Report (PREPA Ex. 1.0), in Part 10, discusses the Action Plan, which is PREPA's Preferred Resource Plan. *See also* IRP main Report, Part 8, on Resource Plan Development.

The Action Plan will be supported by the forthcoming Direct Testimony of four witnesses, Dr. Bacalao, PREPA Executive Director and Chief Financial Officer José Ortiz Vázquez, PREPA Ex. 3.0, PREPA Chief Financial Advisor Todd Filsinger, PREPA Ex. 4.0, and Consultant Matthew Lee, PREPA Ex. 5.0. As the witnesses will explain and support, PREPA has concluded that, of the available options for directing further investment in and development of Puerto Rico's electric utility system, the Action Plan is the best plan for the people of Puerto Rico.

V. CONCLUSION

WHEREFORE, for the reasons stated above, and based on the IRP filing and the forthcoming Direct Testimony, the Puerto Rico Electric Power Authority respectfully requests that the honorable Puerto Rico Energy Bureau accept PREPA's Integrated Resource Plan and approve PREPA's Action Plan, and make such other findings, conclusions, and orders as are needed for purposes of this IRP docket and are supported by the record of this case and the applicable law.

RESPECTFULLY SUBMITTED,

IN SAN JUAN, PUERTO RICO, THIS 7th DAY OF JUNE, 2019

PUERTO RICO ELECTRIC POWER AUTHORITY

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CERTIFICATION OF FILING AND SERVICE

I HEREBY CERTIFY that, on May 31, 2019, the foregoing Cover Filing and the accompanying "IRP filing" as described in the Cover Filing, with and subject to PREPA's two separate Motions, were filed in person in hard copy format (with certain materials, due to their number and size, and regulatory requirements, provided in electronic form only on a "USB" device) at the office of the Clerk of the Puerto Rico Energy Bureau, at the Seaborne Building Plaza (old World Plaza Building), 268 Munoz Rivera Avenue, Plaza Level, Suite 202, San Juan, Puerto Rico, 00918; and, further, at approximately the same time, that courtesy copies of the Cover Filing (not including the IRP filing) and the two Motions were sent via email to the Puerto Rico Energy Bureau via email to secretaria@energia.pr.gov and mcintron@energia.pr.gov, to the office of the Energy Bureau's internal legal counsel via email to legal@energia.pr.gov and sugarte@energia.pr.gov, and, further, at approximately the same time, that a courtesy copy of the Petition (not including the IRP filing), was sent via email to: acasellas@amgprlaw.com; agraitfe@agraitlawpr.com; agraitfe@gmail.com; agraitfe@caribe.net; ana.rodriguez@oneillborges.com; carlos.reyes@ecoelectrica.com; carlos.valdeJuly@oneillborges.com; ccf@tcmrslaw.com; cfl@mcvpr.com; codiot@oipc.pr.gov; dortiz@elpuente.us; dperez@cabprlaw.com; edwin.quinones@aae.pr.gov; energiaverdepr@gmail.com; epo@amgprlaw.com; felipelozada1949@gmail.com; fermin.fontanes@oneillborges.com; fviejo@amgprlaw.com; hburgos@cabprlaw.com; icv@mcvpr.com; jose.maeso@aae.pr.gov; jperez@oipc.pr.gov; lga@elpuente.us; lionel.orama@upr.edu; lmateo@ferraiuoli.com; mgrpcorp@gmail.com; mrhernandez@fgrlaw.com; mgrpcorp@gmail.com; pnieves@fgrlaw.com; rstgo2@gmail.com; valvarados@gmail.com; victorluisgonzalez@yahoo.com.

Please note that PREPA also will post the IRP main Report and its Attachments and Appendices on its web site (subject to applicable redactions of confidential material).

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