

**GOVERNMENT OF PUERTO RICO  
PUERTO RICO ENERGY BUREAU**

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

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**No.** CEPR-AP-2018-0001

**SUBJECT:** Direct Testimony of Executive  
Director and Chief Executive Officer  
José F. Ortiz Vázquez

Direct Testimony of

**JOSÉ F. ORTIZ VÁZQUEZ**

Executive Director and Chief Executive Officer  
Puerto Rico Electric Power Authority

June 14, 2019



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1 **I. INTRODUCTION**

2 **A. Witness Identification**


3 **Q. Please state your name, title, employer, and business address.**

4 A. My name is José F. Ortiz Vázquez. I am the Executive Director and Chief Executive  
5 Officer of the Puerto Rico Electric Power Authority ("PREPA" or the "Authority"). My  
6 business address is 1110 Ponce de Leon Avenue, San Juan, Puerto Rico 00907.

7 **Q. On whose behalf are you testifying before the Puerto Rico Energy Bureau in this**  
8 **proceeding?**

9 A. I am testifying on behalf of PREPA.

10 **Q. Have you previously provided testimony before the Energy Bureau or its**  
11 **predecessor, the Puerto Rico Energy Commission?**



12 A. I submitted prepared direct testimony in support of the original version of the 2019  
13 Integrated Resource Plan (the "February 13 IRP") which PREPA filed in this docket on  
14 February 13, 2019. Other than this, I have not submitted testimony to, or testified before,  
15 the Energy Bureau or its predecessor.

16 **B. Summary of Direct Testimony**

17 **Q. What are the purposes and subjects of your Direct Testimony?**

18 A. On behalf of PREPA, I am formally submitting and endorsing the "Puerto Rico Revised  
19 Integrated Resource Plan 2018-2019: Draft for the Review of the Puerto Rico Energy  
20 Bureau" (the "IRP") which PREPA filed in this docket, as PREPA Exhibit ("Ex.") 1.0  
21 (plus attachments), on June 7, 2019. I will briefly discuss the context in which this IRP

22 filing has been made. I will then summarize and support, at a high level, the Action Plan  
23 which has emerged from the IRP process, including the additional model runs and  
24 analyses which the Energy Bureau has required or recommended, as PREPA's Preferred  
25 Resource Plan. I also briefly summarize the testimony of the other witnesses appearing  
26 on PREPA's behalf. I close by requesting the Energy Bureau to approve the IRP, as it  
27 has been updated to reflect the Energy Bureau's requirements and recommendations, and  
28 to approve the Action Plan identified and described in Part 10 of the IRP as the Preferred  
29 Resource Plan, so that PREPA can proceed with the critically important work of  
30 implementing the Action Plan as promptly as possible.

31 Q. **What are your conclusions and recommendations?**

32 A. I have reviewed the IRP main Report which PREPA filed on June 7, 2019 (PREPA Ex.  
33 1.0). I have participated in discussions with PREPA Planning staff, consultants and  
34 advisors concerning the analyses and recommendations set forth in that report. I have  
35 also participated in discussions concerning the development of the Energy System  
36 Modernization ("ESM") Plan, which PREPA formulated having regard for the scenario  
37 and strategy which emerged from the IRP process as the least cost and most practicable.  
38 The IRP labels this latter approach as the "Scenario 4, Strategy 2" or "S4S2" Plan. On  
39 the basis of my review and my discussions with staff and PREPA's consultants and  
40 advisors, I have concluded that the ESM and S4S2 Plans described in the IRP offer a  
41 sound basis for guiding the rebuilding and further development of Puerto Rico's electric  
42 power grid and generation resources.

43 On February 11, 2019, PREPA's Governing Board adopted a Resolution (No.  
44 4676) approving PREPA's submission of the original version of the 2018-2019 IRP to  
45 the Energy Bureau. That Resolution also endorsed the selection of the Action Plan  
46 identified in the original version of the 2018-2019 IRP as PREPA's Preferred Resource  
47 Plan. Resolution No. 4676 sets forth the grounds supporting the Board's decision. A  
48 copy of the Resolution is attached to my testimony. The Action Plan addressed in that  
49 Resolution is not materially different from the Action Plan described in the IRP, and the  
50 IRP has not changed the basis for the Board's recommendation that the Action Plan be  
51 selected as the Preferred Resource Plan. Accordingly, the Board's February 11, 2019  
52 Resolution approving the original version of the 2019 IRP and the selection of the Action  
53 Plan identified in that document as the Preferred Resource Plan remains valid.

54 I conclude and recommend that, on the basis of the IRP filing, the testimony of  
55 PREPA's witnesses, and the PREPA Governing Board's Resolution, the Energy Bureau  
56 should accept the IRP. I also recommend that the Energy Bureau should find and  
57 conclude that the IRP is adequate, and that the Action Plan which it identifies (the ESM  
58 Plan) should be designated as the Preferred Resource Plan.

59 Q. **Are there any exhibits attached to your testimony?**

60 A. Yes. My testimony includes the following exhibits:

- 61 • PREPA Ex. 3.01 – my *curriculum vitae*
- 62 • PREPA Ex. 3.02 – PREPA Governing Board Resolution No. 4676 dated February  
63 11, 2019




64 **C. Qualifications and Professional Background**

65 **Q. What are your duties and responsibilities as Executive Director and Chief Executive**  
66 **Officer of PREPA?**

67 A. As Executive Director and CEO of PREPA, I am responsible for seeing that electricity  
68 customers in Puerto Rico have access to and actually receive electric service of the  
69 highest quality at the lowest possible cost, and in amounts adapted to their needs. I have  
70 been charged with the task of bringing about significant improvements in PREPA's  
71 operations and to help to achieve the transformation envisioned by Governor Ricardo  
72 Rosselló Nevarez and codified into by law by the Puerto Rico Legislature in Act No. 120-  
73 2018, as amended by Act No. 17-2019, the Puerto Rico Energy Public Policy Act.

74 **Q. Have you held other positions in the past that are relevant to your current work as**  
75 **PREPA CEO?**



76 A. Yes, I have. I was the Chairman of PREPA's Governing Board from 2011 to 2013. In  
77 this oversight role I became quite familiar with PREPA and the challenges it then faced,  
78 and continues to face. I was the Executive Director of Infrastructure for the Puerto Rico  
79 Aqueduct and Sewer Authority ("PRASA") from 2004 to 2007 and, in that role, I  
80 oversaw the development of PRASA's Capital Improvement Plan. From 2007 to 2013, I  
81 was the Chief Executive Officer of PRASA. In that role I led efforts to improve  
82 PRASA's credit rating and to negotiate three consent decrees with the U.S.  
83 Environmental Protection Agency. I also served as Chairman of the Board of Directors  
84 of the Puerto Rico Infrastructure Refinancing Authority from 2009 to 2012, as Chairman  
85 of the ARRA Inter-Agency Committee from 2009-2013, as a member of the Board of the  
86 Water Utility Council of the American Water Works Association from 2011 to 2013, and

87 as a Vice President for Strategic Development of Wyndham Worldwide from 2013 to  
88 2018. My experience is described in more detail in PREPA Ex. 3.01.

89 Q. **Do you hold any professional licenses?**


90 A. Yes. I hold Puerto Rico Professional Engineer License # 9707.

91 Q. **What is your educational background?**

92 A. I was awarded a Bachelor of Science degree in Electrical Engineering by the University  
93 of Puerto Rico in 1984. I earned a Master's degree in Business Administration (Finance)  
94 from the University of Turabo in 1991.

95 **II. THE INTEGRATED RESOURCE PLAN**

96 Q. **At a high level, what is the purpose of PREPA's IRP?**



97 A. The 2018-2019 IRP was developed to comply with the requirements of the Energy  
98 Bureau's Regulation No. 9021 and applicable Energy Bureau Resolutions and Orders,  
99 and to implement the PREPA Governing Board's Vision for the Future of Power in  
100 Puerto Rico, which was adopted on February 1, 2018. The Vision's contents are  
101 summarized in the IRP main Report (PREPA Ex. 1.0), in Part 2, Exhibit 2-2. The IRP  
102 filed on June 7, 2019 has been updated to respond to the Energy Bureau's identification  
103 of certain deficiencies in the original February 13 IRP filing and to incorporate the results  
104 of additional model runs and analyses which the Energy Bureau directed in its Resolution  
105 and Order in this proceeding dated March 14, 2019, and later orders.

106 Regulation No. 9021 states that an IRP is intended to serve as a "useful tool to  
107 guarantee the orderly and integrated development of Puerto Rico's electric power system,  
108 and to improve the system's reliability, resiliency, efficiency, and transparency, as well as

the provision of electric power services at reasonable prices.” Reg. No. 9021, § 1.03. The IRP which PREPA submitted on June 7, 2019 has served as just such a tool, and in my view the Action Plan that has emerged from it will promote the values of reliability, resiliency, efficiency and transparency as Puerto Rico’s electric system is transformed over the next few years.

I should note that, as Executive Director and Chief Executive Officer of PREPA, I serve in a management capacity and provide oversight for PREPA’s various activities. I did not personally prepare the IRP, although I am familiar with it and with the results of the IRP process, and specifically with PREPA’s Preferred Resource Plan, the Action Plan. The IRP was prepared by PREPA’s consultants from Siemens Power Technologies International (“Siemens”), working closely with PREPA personnel supported by advisors from Filsinger Energy Partners. These consultants and advisors ultimately are subject to supervision and direction by PREPA’s management, as reflected in the IRP itself and as described by PREPA witnesses Dr. Nelson Bacalao of Siemens and PREPA’s Director of Planning and Environmental Protection Directorate, Efran Paredes Maisonet, in testimony designated as PREPA Exs. 6.0 and 7.0.

### **III. PREPA’S OTHER WITNESSES**

**Q. What other witnesses provide Direct Testimony regarding PREPA’s IRP?**

**A.** In addition to myself, the following witnesses provide Direct Testimony in support of PREPA’s IRP:

<b>PREPA Ex. No.</b>	<b>Witness</b>	<b>Title</b>	<b>Subject of Testimony</b>
Ex. 4.0	Todd Filsinger	Chief Financial Advisor, PREPA (Filsinger	Chief Financial Advisor Filsinger generally explains the IRP, the Action Plan and the



PREPA Ex. No.	Witness	Title	Subject of Testimony
		Energy Partners)	reasons PREPA proposes it as the Preferred Resource Plan.
Ex. 5.0	Matthew Lee	Managing Consultant, Filsinger Energy Partners	Mr. Lee supports in more detail the Action Plan, describes its high level relationship to Scenarios considered in the IRP and explains the manner in which it incorporates elements of those Scenarios.
Ex. 6.0	Dr. Nelson Bacalao	Senior Consulting Manager, Siemens Power Technologies International	Dr. Bacalao supports the development (including the advance extensive stakeholder processes) and contents of the IRP, subject to the additional support provided by the other witnesses.
Ex. 7.0	Efran Paredes Maisonet	Director of Planning and Environmental Protection Directorate, PREPA	Mr. Paredes briefly discusses the “RFP” process used to select Siemens as the IRP consultant. He also supports data inputs provided by PREPA to Siemens that were used in the development of the IRP. He also generally addresses PREPA’s compliance with applicable Energy Bureau requirements, including PREPA’s posting of the public version of the IRP on its web site.

IV. **THE ACTION PLAN**

Q. **What is PREPA’s Action Plan?**

A. PREPA’s Action Plan is a plan describing in detail the actions PREPA plans to take in the five year period from 2019 to 2024, assuming the Energy Bureau approves, to transform Puerto Rico’s electric system. This Plan describes an ambitious program of investment and the restructuring of the system to better prepare Puerto Rico to withstand and recover from future weather and service disruption events and to position the Commonwealth to adapt smoothly and quickly to future changes in economic conditions and electric power requirements. It is consistent with the five pillars identified by PREPA’s Governing Board in its Vision for the Future of Power in Puerto Rico, in that it is customer-centric, financially viable, will yield an electric grid that will be both reliable and resilient and will be a model of sustainability, and will serve as an economic growth

141 engine for Puerto Rico. The Action Plan addresses the challenges presented by an aging  
142 and outmoded generation fleet, as well as the need to reduce fuel costs and air emissions  
143 by dramatically increasing the role of renewable sources of generation in Puerto Rico's  
144 energy mix. It does this by charting a course toward compliance with the Renewable  
145 Portfolio Standard recently made more ambitious by the Puerto Rico Energy Public  
146 Policy Act, Act No. 17-2019, and by shifting the emphasis in generation development  
147 from almost complete reliance on large centralized generating facilities located in the  
148 South to an emphasis on decentralized generation resources located around the Island.  
149 One of the Action Plan's central features is the reorganization of Puerto Rico's electric  
150 grid into eight "islands of resiliency" known as "MiniGrids." Each of these MiniGrids  
151 will be designed and configured so that they can be separated from the balance of the  
152 system and operated independently following a major damaging storm to facilitate  
153 recovery from the effects of the storm.

154 The principal features of the Action Plan are summarized in Part 10 of the IRP  
155 main Report, and are described in Dr. Nelson Bacalao's Direct Testimony (PREPA Ex.  
156 6.0). I understand that the Energy Bureau's Regulation No. 9021 requires PREPA to  
157 identify its Preferred Resource Plan and to propose to implement it through an Action  
158 Plan following completion of the IRP process. PREPA has done this in identifying the  
159 Action Plan as its Preferred Resource Plan.

160 Q. **How does the Action Plan relate to the various Scenarios and Strategies developed**  
161 **and evaluated in the IRP?**

162 A. The Action Plan reflects elements of the ESM and S4S2 Plans, which are in most respects  
163 quite similar in terms of the resource mixes they identify. Both the ESM and S4S2 Plans

164 are low cost, practical options that will support increased reliance on renewable  
165 generation resources, in line with Puerto Rico's energy public policy, while improving  
166 the reliability and resiliency of the electric system as a whole. PREPA staff and  
167 PREPA's advisors, including Siemens and Filsinger Energy Partners, have concluded that  
168 the ESM Resource Plan is somewhat more flexible than the S4S2 Plan and therefore  
169 better adapted to the need to address uncertainties relating to electric demand forecasts,  
170 the impacts of energy efficiency improvements, the costs of generation resources and  
171 battery storage systems and the timing of generating resource additions.

172 The Action Plan contemplates that PREPA will pursue the resource additions and  
173 system configuration changes identified in the ESM that were also selected in the  
174 optimization process reflected in the S4S2 Plan. Under the Action Plan, PREPA and  
175 resource developers will begin as soon as possible preliminary development activities for  
176 identified resources that will require long lead times for permitting, acquisition,  
177 procurement and construction. These include certain natural gas-fired combined cycle  
178 generating facilities in locations judged to be best suited to achieving needed  
179 improvements in system resiliency and reliability. But, under the Action Plan PREPA  
180 will re-evaluate the need for these resources on the basis of updated information relating  
181 to load growth, cost of renewables and the impact of energy efficiency improvements,  
182 before making any substantial commitments involving equipment purchase or  
183 construction. Having these "off ramps" will enable PREPA to hedge against  
184 uncertainties and maintain its ability to ensure that adequate generation resources are  
185 available as and where needed.



186 Q. **Regulation No. 9021 sets forth a variety of criteria that are to be used in selecting a**  
187 **Preferred Resource Plan. Did PREPA apply these criteria in selecting the Action**  
188 **Plan?**

189 A. Yes, it did. PREPA personnel have advised me that PREPA applied the Energy Bureau's  
190 criteria, as well as directives included in the Energy Bureau's March 14, 2019 Resolution  
191 and Order and later orders, in formulating the Action Plan and making it PREPA's  
192 Preferred Resource Plan. The manner in which this was done, and the ways in which the  
193 Action Plan satisfies the applicable criteria, are summarized in greater detail in Dr.  
194 Nelson Bacalao's Direct Testimony (PREPA Ex. 6.0). The Action Plan is further  
195 supported by Mr. Todd Filsinger's Direct Testimony (PREPA Ex. 4.0) and in his  
196 colleague Matthew Lee's Direct Testimony (PREPA Ex. 5.0).

197 PREPA's Governing Board has considered the Action Plan and has concluded  
198 that, of the available options for directing further investment in and development of  
199 Puerto Rico's electric utility system, the Action Plan is the best plan for the people of  
200 Puerto Rico. This is reflected in Governing Board Resolution No. 4676 dated February  
201 11, 2019 which accompanies my testimony as PREPA Ex. 3.02.

202 V. **CONCLUSION**


203 Q. **Do you have anything further to add at this time?**

204 A. No. This concludes my Direct Testimony.



ATTESTATION

Affiant, José F. Ortiz Vázquez, being first duly sworn, states the following: The prepared Pre-Filed Direct Testimony and the information, documents and workpapers attached thereto and the portions of the IRP filing I am sponsoring constitute the direct testimony of Affiant in the above-styled case. Affiant states that he would give the answers set forth in the Pre-Filed Direct Testimony if asked the questions propounded therein at the time of the filing. Affiant further states that, to the best of his knowledge, his statements made are true and correct.

  
\_\_\_\_\_  
José F. Ortiz VázquezAffidavit No. 1542

Acknowledged and subscribed before me by José F. Ortiz Vázquez, in his capacity as Executive Director and Chief Executive Officer, for the Puerto Rico Electric Power Authority, who is personally known to me or whom I have identified by means of his driver's license number \_\_\_\_\_, in San Juan, Puerto Rico, this 14 day of June, 2019.

  
\_\_\_\_\_  
Public Notary

EXENTO PAGO ARANCEL  
LEY 47  
4 DE JUNIO DE 1982

