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COMMONWEALTH OF PUERTO RICO PUERTO RICO ENERGY COMMISSION

No. CEPR-AP-2018-0001

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

Subject: Questions for Technical Conference

QUESTIONS THE FOR TECHNICAL CONFERENCE

TO THE HONORABLE ENERGY COMISSION:

COMES NOW, El Puente, Inc., Enlace Latino de Acción Climática and Comité Dialogo Ambiental, Inc., before the Puerto Rico Energy Commission through the undersigned legal representation and respectfully states and prays:

1. Enlace Latino de Acción Climática (ELAC) is a community-based group organized by El Puente Inc., composed of residents of Puerto Rico concerned about the impacts of climate change. ELAC's objectives of are to promote multisector discussion on the predictable effects of climate change in Puerto Rico; disseminate studies and information on climate change scenarios; generate discussion of mitigation and adaptation alternatives and their viability for Puerto Rico, and determine optimal parameters for planning for climate change, sea level rise, food security, water availability and impacts of power generation on climate change. Comite Dialogo Ambiental, Inc. (Dialogo), is a community environmental group composed of residents of the Municipality of Salinas and the Guayama Region and organized as a nonprofit corporation under the laws of the Commonwealth of Puerto Rico since 1997. The purposes of the organization are to promote the general welfare of the communities it

serves through education and capacity building of residents concerning the adverse impacts of human activities on the ecologic balance of natural systems and the importance of restoring the environment and promoting conditions under which human beings and the environment can exist in harmony to fulfill economic, social and other needs of present and future generations. ELAC and Dialogo (hereinafter jointly referred to as ELAC) were jointly granted intervenor status in the first Puerto Rico Electric Power Authority (PREPA) Integrated Resource Plan (IRP) proceeding.

- 2. ELAC promotes alternatives to central station, fossil fuel generation including the following:
 - -Energy demand management programs that incorporate time of use incentives to address the nighttime peak and other demand response options;
 - -Energy efficiency and conservation measures;
 - -Utility scale distributed renewable energy installations sited in previously contaminated areas such as closed landfills as recommended by the National Renewable Energy Laboratories;
 - -Energy storage for rooftop solar installations and at properly sited utility scale renewable energy generation installations;
 - -Solar installations at schools, water purification and treatment plants, parking lots and similar areas;
 - -Rooftop solar installations and solar communities as recommended in studies by faculty of the University of Puerto Rico at Mayaguez.

The advantages of rooftop solar are many, they include the use of existing sprawling housing development rooftops to avoid further impacts to open spaces, agricultural land and ecologically sensitive areas. Rooftop solar eliminates the need for large investments in transmission infrastructure. It avoids transmission losses. Grid maintenance costs are reduced and impacts to forest and vegetation as a result of tree cutting and pruning are minimized. The rooftop solar alternative doesn't require establishing extensive easements or servitudes on private property while helping to lower temperatures within the structures and providing protection to the buildings. Rooftop solar installations add value to the

structures and promotes local wealth. Distributed generation on rooftops creates greater reinvestment in the local economy. It enables ratepayers to become producers or 'prosumers' of energy not mere consumers and allows for participation by residents and local communities which is particularly important during outages of the main grid as was experienced after hurricane Maria. Rooftop solar enjoys broad support from civil society contrary to fossil fuel and utility scale installations that have been the subject of considerable opposition.

- 3. On July 2, 2018, the Honorable Commission issued an Order in the above-referenced administrative proceeding. In the Order, the Commission scheduled a Technical Conference for August 14, 2018.
- 4. ELAC and the undersigned attorney were not able to submit questions by the deadline set by the Honorable Commission in part because the undersigned attorney was out of the country from August 3-9, 2018, without effective internet access.
- 5. ELAC respectfully requests that the Honorable Commission accept the current filing with the questions listed below and allow ELAC to ask questions and participate as a stakeholder during the Technical Conference.
- 6. ELAC also requests that if the Technical Conference is conducted in English that interpretation in Spanish be provided and that all documents be available in both languages.

QUESTIONS

- 1. How does PREPA and/or Siemens plan to address the conflict of interest from Siemens other business operations related to the proposals in the IRP?
- 2. What is the vision for the new IRP?
- 3. What is the delineation of the actual borders of the proposed minigrids?
- 4. What is the role of the Palo Seco plant under the different scenarios in the IRP?
- 5. How do transmission costs compare for the minigrids as opposed to rooftop solar and generation at the place or close to the place of consumption or use?
- 6. Does the Levelized Cost of Energy include transmission costs and losses?
- 7. How do T&D costs vary with utility scale solar and rooftop solar?

- 8. What are the alleged PV reinforcement costs, where has that been done previously?
- 9. Will Aguirre, Costa Sur, EcoElectrica and/or AES transmit energy to the San Juan metro area and/or northern Puerto Rico in the Resilient Design Scenario?
- 10. Refer to PREPA Answer to Commission Question number 23; Explain the meaning of "transmission limitations between areas".
- 11. Refer to PREPA Answer to Commission Question number 30; How will the annual emissions prices be incorporated into the IRP? Explain the status of the PREPA plants and the plants with which PREPA has power purchase and operation agreements (PPOAs)with respect to the Mercury and Air Toxics Standards Final Rule (MATS), Sections 316 (a) and (b) of the Clean Water Act and other applicable environmental regulations.
- 12. Refer to PREPA Answer to Commission Question number 31; Who will be the expert to provide the view on the low, middle and high cases of natural gas distributions?
- 13. Refer to PREPA Answer to Commission Question number 32; Does Sensitivity 2 include termination of all PPOA's including AES?
- 14. Refer to PREPA Answer to Commission Question number 40; What externalities that are critical for implementation or execution of the IRP may not be fully considered?

Certificate of Service. I Hereby Certify that on this same date a true and accurate copy of this document was sent via email to: Autoridad de Energía Eléctrica de Puerto Rico, Lcda. Nélida Ayala, nayala@aeepr.com, Lcda. Nitza D. Vázquez Rodríguez, nvazquez@aeepr.com, j-morales@aeepr.com, Lcdo. Carlos M. Aquino Ramos, c-aquino@aeepr.com., Quiñones, Arbona & Candelario, P.S.C., Lcdo. Edwin Quiñones Rivera, equinones@qaclaw.com, Lcdo. Victor Candelario Vega, vcandelario@qaclaw.com, Lcda. Giselle Martínez Velázquez, gmartinez@qaclaw.com

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In Salinas, Puerto Rico, August 13, 2018.

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