Testimony before the Subcommittee of Natural Resources, US House of Representatives

Honorable Raul Grijalva Presiding

Good morning Honorable Chairman and members of the Committee. My name is Cecilio Ortiz Garcia and I appear in front of you today as Senior RISE Fellow at the National Council for Science and the Environment in Washington DC. I am currently in residence at the Institutes for Energy and the Environment at Penn State University. I hold a PhD in Public Policy and Administration from The Arizona State University and for the last 15 years I have been involved in numerous research projects, programs and policy making activities related to the sustainable transition of Puerto Rico's electrical system. Also, since my arrival at NCSE, I have been involved in the design, construction and operation of the RISE Network.

My remarks today will circumscribe to the issue of the proposed Monitor for the reconstruction of PREPA and will lead to the formation of a Technical Advisory Committee to those ends. We believe that the amendment to introduce the proposed Revitalization Coordinator (RC) for the Puerto Rico Electric Power Authority (PREPA) is warranted. However, because of the extreme complexity of Puerto Rico's post Maria recovery and reconstruction process, extreme care should be given to determine: a) what will frame the interactions of the RC with internal actors inside PREPA?; b) what would frame the RC interactions with stakeholders outside of PREPA?; and c) what role would the RC play in the overall planning of the electric system from here on after?. These questions are important because recovery processes are complex, not only about speed but also about the quality of the decision-making process. Although speed is necessary (if agencies do not act quickly, many victims will begin to rebuild where they have access to and how they can afford), it is also vital to take the time to plan post-disaster reconstruction. The amendment, as currently written only visualizes an RC to supervise, control and oversee PREPA operations, but doesn't contemplate the RC having a role in opening up what has up until now being considered PREPA's black box. We would argue that integrating the RC figure in a framework of conflict will only exacerbate the climate of acrimonious fighting and could in fact lengthen the recovery and reconstruction process of the island electric system.

Due to the time constraints, I will concentrate on the following three main points:

- 1. The current extreme operating environment in Puerto Rico after hurricane Maria is extremely complex and the proposed monitor will have to face and embrace that complexity
- 2. His or her success will require, more than technological innovation, governance innovation.

3. And ultimately, I would like to offer the committee a glimpse or a vision of the possible opportunities these amendments to PROMESA could bring both to the people of Puerto Rico and to the rest of the nation.

1. The current extreme operating environment in Puerto Rico after hurricane Maria is extremely complex and the proposed monitor will have to face and embrace that complexity -

Platt (2017) has recently studied the factors affecting the speed and quality of post disaster recovery and resilience. Interestingly, the most important factors that influence the speed and quality of the recovery are endogenous like the characteristics of decision-making processes. Exogenous factors like the size of impact, population demographics and economic factors seem to have little or no impact. He argues that "The relationship between post-disaster decision-making and the quality of recovery in terms of whether crucial aspects of the society and economy are 'built back better' is striking." Among the experiences presented by Platt the case of Chile after the Maule Earthquake in 2010, provides us with few lessons. The Chilean government appointed a national coordinator to develop a reconstruction plan. The plan was based on the premise that "the State is unable to reconstruct everything or even control de process of recovery centrally from Santiago. With the support of the State it is the responsibility of each region, town council and community, to develop its own plan.". The distinctive aspect about the Chilean example is the quality of the participation process that involved the communities in decision-making and kept them informed about the progress. The client of the RC is the people of PR, not PREPA, not the PR Government. This example shows that framing the RC in the context of deconcentration of power and decentralization of energy decision-making is crucial to its success in PR.

Several decision-making bodies continue to fight over PREPA's future and that of the electric system. Moreover, due to the now admitted shortcomings by FEMA and other federal agencies in the handling of Puerto Rico's post Maria recovery process, we are now looking at a ten to fifteen-year window for reconstruction. Lastly, we stand now in front of an ill designed *"two-teared electrical system"* that promises to become an energy planning nightmare at multiple levels. Let me explain. According to the solar map of Puerto Rico, and anecdotal evidence from NGOs that are actively engaged in the installation of these types of systems, there are about 200 renegade decentralized renewable systems, including micro grids and individual installations.

2. His or her success will require, more than technological innovation, governance innovation –

Puerto Rico's energy governance remains extremely concentrated, extremely hierarchical, extremely centralized and completely devoid of spaces for active participation of all energy stakeholders in the archipelago. This is so, despite a) the enactment of executive orders declaring energy emergencies in the island, two in the past two decades, b) the passage of Law 57 in 2014, c) the actions of Alix Partners to restructure PREPA's debts after the

bankruptcy, and d) the emergence of an incipient yet promising renewable energy industry and market in Puerto Rico. If Hurricane Maria showed us anything, it was that the lack of effective participation of communities, mayors, civic organizations, professional associations and even the University of Puerto Rico, became our Achilles' heel at a time of crises. Therefore, while we support the intervention of the RC, we believe it must go beyond just monitoring, receiving or generally inspecting PREPA. There is a need for this figure to become a boundary spanning agent between the needs of these stakeholders and the future shape that PREPAs organization takes. In other words, this figure needs to be an agent of Puertorrican society to educate the way PREPA is transformed to be able to transition Puerto Rico into a sustainable energy future.

Currently, the internal organizational environment of PREPA is toxic. There are three main reasons for this assessment. The first one is that the political capture of every single aspect of PREPA's decision making and operational structure continues even after the resignation of Governor Rossello. Secondly, the current board of governors of PREPA is an insult to the people of Puerto Rico. For the sake of professionalizing PREPA's board we have now open its door to energy speculators and marketing agents of outside fossil fuel interests with little or no knowledge of the geographical, cultural, socio-economic and political realities of the archipelago. I want to give you one example: Robert G. Poe. A well-known figure in Alaskan politics having run for governor in past elections and well connected in the US Senate, he now figures as one of PREPA board members, having barely arrived to the Island of Vieques after the hurricane. While this has happened, the number of representatives on behalf of costumer on PREPA's Board has been cut to 50%, going down to one. As recent accounts in Puerto Rico's media, this representative has been consistently blocked to effectively represent PREPA's costumers in deliberations dealing with electricity rates and subcontracting. In other words, we cannot sacrifice representation for professionalization. This is an incorrect dichotomy that furthers alienates PREPA from the current realities of energy insecurity, high energy burden and low levels of energy democracy existent today. The third reason is that internal voices inside of PREPA's organizational structure still do not talk to each other and operate in an environment of conflict and very little collaboration towards a common goal, whatever it is. PREPA continues to achieve its mission and goals despite of its most valuable assets and not with their collaboration.

The innovation necessary to tackle these governance shortcoming is the formation of a Technical Advisory Committee (TAC) composed by local expertise. The TAC is absolutely necessary as a boundary spanning tool to assist the RC in 1) effectively engaging with different sectors with Puerto Rican society; 2) capturing and internalizing the values, perceptions and attitudes not only of PREPA's costumers but all electricity users in PR; and 3) effectively co-producing the knowledge necessary to transform not only the agency but the electric system in general. There is a proposal by the National Institute for Energy and Island Sustainability to assist this committee in the formation of the TAC. Furthermore, the National Council for Science and the Environment, a non-partisan, non-governmental organization with the affiliation of more than 700 universities and colleges nationwide, is involved in the creation of the RISE Network in collaboration with the National Institute for Energy and Island Sustainability. The RISE Network would provide support to the TAC in areas that might go beyond the existing capabilities of Puerto Rico's technical,

scientific and non-scientific expertise. Regarding the role that institutions of higher education can play in recovery and reconstruction processes, Platt (2017) argues that "Universities are uniquely positioned to provide opportunities to lower not only the speed of recovery, but as a consequence the levels of deaths, ecosystem damage and economic disruption, in other words Sustainable Recovery and Reconstruction."

More than 90% of the reconstruction contracts so far have been awarded to external contractors and consultants. Sadly, these contractors, come back to Puerto Rican experts under the guise of collegiality further colonizing the knowledge and expertise already existent in our scientific community. Therefore, we feel that the composition of the technical advisory committee needs to be specifically composed by local Puerto Rican experts in all areas of the social and natural sciences, engineering, public health, arts and the humanities, etc. Furthermore, the technical advisory committee will be structured as an inter and transdisciplinary platform to open the way for contributions by communities and other non-academic sectors that bring sector to our energy decision making processes. Ultimately the TAC will engage in collaborative partnerships by means of a network-of-networks, to fill the knowledge gaps and fulfill its responsibilities to the new proposed figure.

3. A glimpse or a vision of the possible opportunities these amendments to PROMESA could bring -

Now, imagine with me an electrical system for Puerto Rico that is resilient, prosperous, just, equitable, democratic, sustainable, and that becomes the instrument to achieve happiness in our society; that maximizes the use of free, renewable and local energy sources; it is innovative and adaptive to social, climatic, consumption needs and economic changes; and its decision-making processes are transparent, participatory, inclusive, integrative, ample and effective regarding all societal sectors. Imagine an electric system that can integrate the knowledge that Minnesotan and Alaskan communities have on electric coops. Imagine an electric system that learns from the experiences of Sonoma county and its wildfires, Arizona and its integration of renewable solar energy, as well as from the myriad of experiences across the nation and the world. Imagine a Puerto Rico electric system that can serve as a learning platform for other islands. We don't come to you with the hubris of complete knowledge and expertise about electric systems or Puerto Rico's. But we most recognized that Puerto Rican local expertise is central to a better understanding of our island condition ad that this understanding can then serve the rest of the world in the co-production of new knowledge that can serve others as well.

Let me finish Mr. Chairman by saying that Puerto Rico is right now the quintessential "canary in the mine", not only because of its island condition and geographical location in the path of possible more frequent and stronger extreme weather events, but also because its current colonial condition. This makes Puerto Rico an unequal partner in perhaps the greatest experiment in democracy. Let's end the governance aberration known as PROMESA by collaboratively enabling processes that guarantee equity and justice not only in energy decisions but all aspects of Puerto Rican life. The people of Puerto Rico have a

right to it, and the world is looking at us and the way we handle this delicate issue. Thank you and I remain available to your questions.