

Testimony of David Svanda
Before the
House Committee on Natural Resources
Oversight Hearing: Management Crisis at the Puerto Rico Electric
Power Authority and Implications for Recovery
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Chairman Bishop, Ranking Member Grijalva and Members of the Committee, my name is David Svanda and I appreciate the opportunity to testify about regulatory aspects of the energy crisis facing Puerto Rico, and make some observations and suggestions that will help point the way to a more responsible, affordable and reliable power system for the U.S. citizens of Puerto Rico.

During the past 22 years, I have served in various roles within the utility regulatory profession. From 1996 to 2003, I served as a Commissioner at the Michigan Public Service Commission. During my tenure at the PSC, I served as Chairman of the Board and President of the National Association of Regulatory Utility Commissioners (NARUC). I also served on NARUC's executive committee and board of directors and was Chairman of NARUC's Finance and Technology Committee and its Mentoring and New Member Services Committee. I was a member of the Emerging Issues Policy Forum Board, past president of the 15-state Mid-American Regulatory Conference (MARC), and have served on the Keystone Energy Board and as trustee of the NARUC Education and Research Foundation. I was also a member of the Federal Communications Commission's (FCC) Local and State Government Advisory Committee.

Prior to my time as a Commissioner in Michigan, I served as Director of Administrative Services for Michigan Governor John Engler, and as Director of the Governor's Northern Michigan Office. Prior to that, I was a City Manager and have served on many national, state, regional and local boards.

I am presently a regulatory consultant, serving clients focused on energy, telecommunications and water issues at the state, regional and national levels. Since founding my regulatory and strategic consulting practice in 2003, I have successfully advised a broad list of clients from all segments of the public infrastructure sector, including numerous corporate, non-profit, financial, international, and association interests.

Like many Americans I sat in horror as I witnessed the devastation of Hurricane Maria as it moved across the Caribbean and her Category 4 winds bore down on Puerto Rico and delivered a devastating strike to the island's energy, telecommunications and other critical infrastructure which left the island cutoff from the outside world.

Also, this past May I spent 5 days in Puerto Rico, where I saw first hand the devastation that remained even eight months after Hurricane Maria. I saw impassable roads, mountains of debris and electrical lines literally nailed to trees. That is by no means a criticism of the hard-working people who were trying to restore electricity to the citizens of Puerto Rico as quickly as possible.

It is, however, evidence of the destruction wrought and the lack of execution on a comprehensive emergency response plan. In addition, it is clear there has been no independent voice requiring the utility to take appropriate actions to manage the utility's assets, or a guardian of the PREPA emergency restoration accounts that prior to the storm were reallocated by the Puerto Rico Government to pay for other services.

There has been a great deal of concern expressed in Puerto Rico about the possibility of exchanging the government-owned monopoly for a private sector monopoly. Unfortunately, this logic is missing a critical element – an effective, well-functioning regulator. It is understandable that Puerto Rico thinks 'monopolies are bad' since they have never seen one which is balanced by an appropriate regulator.

For most utility infrastructure assets, a monopoly makes sense. The capital investment required to provide power to a large area and many customers is extensive. By having a monopoly, redundant investment can be avoided – actually, in many situations, the lack of a monopoly, and therefore the lack of assurance that the investor will be confident in their investment, can result in no one making the investment in the first place.

In general, the role of a utility regulator is to stand in the place of 'competition'. The regulatory agency, over time, acquires a wealth of experience and knowledge to ensure stable, economically sound and efficient decision making. The regulator provides an appropriate balance between needs and service of the customer and the fair and predictable treatment of the utility. The confidence provided by the regulator to the utility is what incentivizes the long-term planning and significant capital investment required. This is also important to the customers as only a financially healthy utility is able to perform its critical function to serve the needs of their customers. A properly functioning regulatory agency ensures that neither the customer nor the utility is unduly advantaged nor harmed.

What our fellow Americans in Puerto Rico have been going through for nearly a year is unacceptable. By comparison, as Hurricane Irma moved north of Florida on September 11, 2017 it left approximately 6 million Floridians (2/3 of the State) without power. Within 11 days, power was restored to all but 13,337 Floridians (only 1% of the population). On September 20, 2017, Hurricane Maria made landfall on Puerto Rico. But three months later, as families prepared for Christmas, PREPA was unable to report on how many customers were without power. Instead, they reported on their peak load – only 65.4% after 3 months! In fact, in February of this year, news reports indicated that PREPA hoped to restore power to 90 to 95% of residents by the end of March. If we left this many mainland U.S. citizens without power for six months, companies would be fined and executives could face prosecution.

There is no doubt that Hurricane Maria was a devastating storm that would strain the resources of any of our 50 states. However, as those other states recovered from their natural disasters, it became clear that the havoc and destruction that Maria brought to Puerto Rico was different. The massive destruction that laid waste to Puerto Rico exposed the consequences of years of fiscal mismanagement, and disregard for the maintenance of the facilities. This dereliction of duty, and failed maintenance standards by the PREPA Board and elected officials of the island directly played a role in the destruction of their electric grid. By fiscally mismanaging PREPA

and driving the utility into Bankruptcy by acquiring more than \$9.2 Billion of debt, it left the utility without the proper resources to maintain and operate a 21st Century grid (or even a 20th Century grid). It is this failure of regulatory oversight and financial mismanagement that I would like to address today, and hopefully provide my expertise in creating a framework that will assist in the creation of a new entity that will be more efficient in its capabilities, resilient in sustaining the next natural disaster, and more consumer friendly in providing cleaner, low cost electricity to the island.

Early in my professional career in city and county management, I managed critical infrastructure utilities and understand effective management. In my 22 years of professional regulatory experience of working with regulated energy and telecommunication utilities, I have never seen a system as “unique” as PREPA. It is an example of a long-gone era where local governments manipulated their utility’s operations to benefit a few, at the cost of many. In no other state does the utility serve as the generator, transmitter and distributor of electricity with no regulatory oversight. In no other state does the utility give free power to municipalities – and leave the citizens to pay the cost. It’s a perfect example of the fox guarding the hen house. PREPA’s governing board and Executive Director are all appointed by the island’s Governor, and remain in their roles or are replaced in accordance with the whims of each new administration. Similarly, the members of the Puerto Rico Energy Commission (PREC) – newly-formed as of 2014, inexperienced and understaffed – are also Governor appointees and subject to removal and replacement with each new administration.

Unfortunately, it is my understanding the plan to privatize only exacerbates this problem by allowing local politicians and the PREPA board - hand-picked by the Governor - to determine customer rates and the sale of assets. For example, the plan states PREPA assets can be disposed of “without having to comply with any process, requirement, approval or revision of PREC or any other regulatory commission.” This is a recipe for disaster and will inflict continuing poverty, disadvantage and substandard living conditions on the people of Puerto Rico.

In no way do I believe anyone should suffer the tragedy and the magnitude of destruction as witnessed by Hurricane Maria. However, it is clear that there is a moral obligation to reset the management of the utility and the outdated culture of an unregulated monopoly. With this clean slate I would offer a few core principles that can be the foundation for an independent regulatory entity that can set fair and justifiable rates for all Puerto Rican consumers

I have freely used the word “independent” when describing what is needed on the island in the form of regulatory body. However, in the case of Puerto Rico it should be looked upon as depoliticizing the rate making process by removing the legislature and Governor’s interference in that process. Once the regulatory body has the confidence that it can exercise its responsibilities in a fair and professional manner it can move forward in the process of creating a robust and competent regulatory framework that will benefit all consumers on the island. These steps include: depoliticization, planning and approval, cost controls, fair rates, and recovery of non-bypassable costs.

Depoliticization. In a challenging environment, the regulator's key duty should be to appropriately balance the interests of all stakeholders. Unfortunately, this is not the case

in Puerto Rico. For most of PREPA's 70-year existence it has operated as an unregulated monopoly overseeing its own operations, management and rates. Equally unfortunate, when the PREC was finally established to regulate and monitor PREPA's operations in 2014, it was made toothless by the territory's legislative bodies. It is this political infighting that must be rooted out, if the utility can be expected to truly serve its citizen customers and to attract the necessary financial investments. Amazingly, the last time PREPA raised rates (notwithstanding fuel charges) was 1989, which is part of the reason why they still use bunker oil, and have inefficient generation and dilapidated infrastructure. Who would want to invest into this type of organization?

In fact, in its recent rate review order, PREC put its finger on the problems when it stated:

“The quadrennial turnover of managers with each new political administration, the political pressures from elected officials to avoid necessary rate increases, the failure of government agencies to pay their electric bills on time, the irresponsible initiation and termination of expensive capital projects, the high levels of electricity theft, the work rules that prevent efficient use of well-paid employees, the poor record keeping and antiquated administrative procedure, the compensation schemes that keep PREPA from recruiting and retaining qualified and experienced personnel – all this must come to a halt, to be replaced by universal commitment to the good of the Commonwealth.” (Rate Review Order, pp. 23-24)

A typical utility regulator has Commissioners with various, but appropriate backgrounds. Most importantly, they are supported by experienced staff with decades of cumulative institutional knowledge in how the regulatory structure and process functions, the long-term needs of the system and how to balance the needs of both utility customers and the utility(s) themselves and decisions are made based on a documented public record. As many Congressional members might admit, particularly in the first few years of their tenure – having an experienced staff supporting their efforts is the difference between being effective or not.

PREC was only established four years ago. The Commissioners were not experienced in regulating an electric utility, nor did they have staff with sufficient experience and background to support them. Through no fault of their own, the PREC is woefully ill-equipped to serve its assigned role and responsibilities. Puerto Rico, and more importantly, Puerto Ricans, need a regulator that can immediately serve these critical roles. It is possible to achieve this by leveraging regulators and staff from the mainland while simultaneously providing an opportunity for Puerto Rico based Commissions and staff to be trained and developed to take-over those responsibilities when they are ready. I have laid-out one potential approach to doing so at the end of this written testimony.

Planning and Approval. Had PREPA had regulator-required disaster recovery plans in place, the Whitefish scandal would have been avoided, mutual assistance agreements would have been in place, and recovery would have begun in earnest at least a month sooner, and progressed in a more organized manner. A well developed disaster recovery plan would have ensured that PREPA had a materials management process in place to assist its procurement of materials and services immediately after the Hurricanes. Due to

lack of regulator-required planning, what took 11 days in Florida took 8 months in Puerto Rico.

Cost Controls. As a regulator and as President of NARUC I saw many variations of strong independent regulatory bodies and how they can drive efficiencies and benefits for customers. Nowhere does this structure work better than in the electric utility industry. Ratemaking is not simply an exercise in applying mechanical formulas and "crunching numbers" to calculate the lowest possible level of rates for the short-term. Rather, regulators must set policies that will operate in the long-term interest of consumers, utilities and ultimately the state or territory in which they are employed. Maintaining a financially healthy electric utility benefits customers over the long term by maintaining credit ratings, lowering financing costs, and providing access to the capital necessary to finance current and future infrastructure and environmental investments timely and efficiently. Ratemaking is not a zero-sum game where maintaining financially healthy utilities can only come at the expense of ratepayers over the long run.

Fair Rate Setting. The regulator is the voice for the citizens on the island in this process. The regulator protects them from rate shocks, and ensures that the price they pay is as fair as possible and equitable for today's citizens and future generations of citizens.

Recovery of Non-Bypassable Costs. The regulator should have the authority to determine whether to impose non-bypassable charges on customers who elect to "disconnect" from the T&D system in order to socialize system benefit costs among all island residents.

A Foundation for Renewables

Integrating renewable resources is an important planning consideration, however, given the current state of the grid, providing a solid foundation of grid-scale generation and strong, reliable transmission and distribution will be the most effective means to cost-effectively leveraging renewables. It will also be the quickest path to the resiliency so critical to the people and businesses on the Island to minimize disruption from future weather events.

Increasing the use of renewable power is a laudable goal, and in some parts of the island it will play a key role in providing electricity to customers. But, renewable power, micro grids, and other forms of distributed generation have severe limitations when it comes to meeting the immediate electricity demands of the island. The first limitation being it is extremely cost prohibitive to most of the island's residents where the average median income is less than \$22,000 per year. In addition, each individual that leaves the "grid" by either utilizing roof-top solar or individual power sources means that other residents that can't afford solar panels, or whose roof is still held together by a blue tarp does not have the flexibility to utilize these resources.

Lastly, the physical size of Puerto Rico and its topography limits the potential for resource allocation methods that you may find in a larger geographic area, such as a Regional Transmission Organization (RTO) in the Midwest. The island just isn't large enough to sustain

major wind farms or solar arrays which take up hundreds of acres for a minimal amount of generation.

A Credible Path Forward

Unfortunately, the current privatization proposal, and recently passed territorial statute do not follow this accepted and time-tested formula. Their plans are an extension of the past that keep the territory's government in charge of an unregulated monopoly by providing rate making authority, and the approval or denial process of any sales of assets and equipment. This is proven recipe for disaster, and will only be exacerbated by some form of massive waste of federal dollars that props up this state-owned monopoly. Simply throwing billions of federal dollars at this problem and into the hands of the under-regulated PREPA Board will only produce the same untenable situation that the island currently suffers. It will only perpetuate the bankruptcy of this failed entity, and every time there is a natural disaster the federal government will once again be called on to bailout PREPA and its political controllers.

For Puerto Rico to recover, and once again become the "Jewel of the Caribbean," Congress must act to provide a reliable, resilient and efficient electric grid system for our fellow citizens on the island. It must break PREPA free from the political forces that have driven it into the ground, and can do so by creating a strong independent board, free from the restrictions of the political class of San Juan. As with all mainland states, an impartial regulator will fairly and deliberately evaluate the generation and transmission needs of the island. While this has long been the goal of many on the island, it will take the firm hand of Congress to effectuate this change. Only through federal legislation will Puerto Rico be able to change its regulatory course, and set out on a new path that will bring needed investment, management expertise and technological advancements that can drive efficiencies and lower the cost of power for all consumers.

An experienced, well-functioning commission could be developed in a relatively short time while simultaneously providing a strong training ground for incoming commissioners and staff. In the U.S., individual states have been creating commissions and developing utility regulatory agencies since 1861. Thus, there is ample knowledge and experience from these 50 laboratories of democracy regarding how these agencies can be organized and function. These are tried and tested functioning models, each with their own nuances. The lessons learned by the mainland states can be readily applied to create a well-functioning, independent, and sustaining regulator for the people of Puerto Rico.

Organizations such as NARUC can be utilized to identify human, educational and other resources which can be used to comprehensively empower the new regulatory agency. Such an agency would likely include five commissioners and capable staff which would provide for continuity and both breadth and depth of purview to the commission dynamic. Mainland organizations could also assist a Federal Administrator with establishing minimum criteria and qualifications for appointing Commissioners and hiring fulltime staff.

Areas of needed staff specializations include: economists, accountants, financial analysts, engineers, and attorneys. Building upon those areas of technical expertise, there is extensive

training available to help these professionals apply their skills specifically to utility regulation. That training is available through NARUC, EEL, and other reputable industry organizations.

To ensure the optimal effectiveness of the agency (Commissioners and staff), it is critical to provide a sufficient budget to attract and develop staff quickly. Commissioners and staff will need to process large amounts of multi-disciplinary information to render solid, credible decisions for the people of PR. The precedents established by this initial set of Commissioners will build the foundation on which trust and confidence in the agency will rest. It is critically important that the foundation is as strong as in the mainland states. The sooner such a structure can be put in-place, the sooner there will be development of institutional knowledge for future generations of Commissioners and staff.

Financial Considerations

In addition to establishing an independent and qualified regulatory body, Congress should take action to make the island “investable”.

When PREPA emerges from its Title III bankruptcy proceeding, its credit rating, and that of the island, will likely be below an investment grade rating. Furthermore, if the exodus of Puerto Rico’s residents continues, there will not be a stable rate base from which to recover the costs of service and system improvements. Until the electric system and the service it provides to Puerto Rico improves significantly, the rate base will likely continue to decline. Any entity that would look to invest in Puerto Rico will require a certain amount of financing of its investment. However, lending institutions’ willingness to extend credit at reasonable rates requires confidence that borrowers will be able to generate revenues necessary to repay their debt. For that reason, the federal government should provide some means to assure financing institutions that the island’s electricity providers will be able to recover their costs and pay the expenses incurred in providing service to PREPA’s customers. A federal financial “backstop,” in the form of a fund, guarantee or other financial vehicle, would provide such assurance.

Simply put, there is a role the Federal Government can play -- not as a utility owner-operator, but -- as a provider of financial assurance to “backstop” the billions of dollars of private capital that will be required to modernize Puerto Rico’s electric grid.

A time-limited financial assurance would bolster investor confidence as the state-owned utility is unwound from its political past while Puerto Rico also rebuilds its basic credit capacity. Such a program would not be a loan guarantee, but could be structured as “risk sharing” between the Federal Government and private investors. The objectives would be to smooth privatization and ensure regulatory independence takes hold and population flight from the island is staunch.

Investment and development would occur on a phased schedule over a period of years. Properly structured, the Government would never be exposed to the full value of the private capital investment required to rebuild the electric system, but the assurance would make Puerto Rico investable again.

Once the regulator is in place, and investors have confidence they will be treated fairly and impartially, Puerto Rico will begin to regain its footing in the financial markets. Let us not forget that Puerto Rico is still in bankruptcy and its short-term economic situation is bleak at best. For the island to move away from “vulture-funds,” and other greedy investors only looking to turn a dollar – the federal government should commit a limited amount of resources to ensure the financial viability of the island. We saw the Treasury Department offer assistance to NYC after the September 11th terrorist attacks, and again after super-storm Sandy savaged the East Coast. These backstops, and having strong state regulators provided the confidence needed for institutional investors to rebuild NYC and the surrounding area.

A New Stewardship

One critical perspective is that when a modern, efficient, affordable, and resilient power system is stood up on Puerto Rico, we must not hand the shovel back to those who dug this hole. PREPA must be replaced. There must be sustained and fundamental change in culture, behavior, and results that this entity has proven chronically incapable of delivering.

It is time to start anew, with a privatized system wherein electricity customers are paramount. Puerto Rican households and businesses deserve transparent, accountable, reliable, and affordable electric service. I believe the geography and logistics of the island would best be served by a comprehensive power system capable of delivering economies of scale and that a competent, apolitical, independent regulatory authority can ensure that stakeholder interests are protected.

In summary, the key ingredients for rebuilding the efficient, affordable power grid of the future on Puerto Rico are:

1. An independent and experienced regulator, who will protect consumers while overseeing the transition to affordable baseload fuel source and modern efficient generation, and a resilient, effective transmission and distribution system, and
2. Due to the financial situation of the island, federal assurance for rate protection and investment will likely be required.

Members of the Committee, we have all seen how Maria and an unchecked, uncontrolled monopoly unleashed a perfect storm on the people of Puerto Rico. Going forward, none of us can control the forces of nature, but Congress can correct the past abuses of the monopoly, and enable the construction of a 21st century power system for a brighter future.

Thank you for listening, I look forward to your questions.