# TESTIMONY BEFORE THE UNITED STATES HOUSE COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

# EXPLORING ENERGY CHALLENGES AND OPPORTUNITIES FACING PUERTO RICO

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Thank you for holding this hearing and the opportunity to testify and work constructively to address one of Puerto Rico's principal challenges.

\*Views, opinions and discussions presented on this document are those of the author, and do not necessarily reflect the views of Ferraiuoli, LLC.

The following provides some context into the Island's energy issues and challenges, discuss some of the root causes for such challenges, and some suggestions as to what is needed going forward from local leaders, and from Washington, D.C. in a supportive role. I trust this information will provide additional color on our situation and help guide and execute solutions that are well known and urgently needed.

Puerto Rico's energy crisis has a solution and must be resolved now. Energy, after all, *is* the backbone of our economy and the basis of our future. As we will discuss, most of the remaining actions required are local. Yet, given the historic juncture, the risks involved and our poor track record, it is my view that Congress should consider providing certain structured leadership and reform oversight.

#### Introduction

The Puerto Rico Electric Power Authority ("PREPA") is a public corporation that was created through Act 83-1941. One of its main objectives was:

"... the purpose of conserving, developing and utilizing, and aiding in the conservation, development and utilization of water and energy resources of Puerto Rico, for the purpose of making available to the inhabitants of the Commonwealth, in the widest economic manner, the benefits thereof, and by this means to promote the general welfare and increase commerce and prosperity; and the Authority is granted and shall have and may exercise all rights and powers necessary or convenient to carry out the aforesaid purposes, ..."

Unlike the mainland U.S., PREPA is Puerto Rico's single, government-owned, electric power provider.<sup>2</sup> Since its beginnings, PREPA essentially operated as a vertically-integrated self-regulated monopoly.<sup>3</sup> At that time Puerto Rico was predominantly rural and private capital was limited for infrastructure projects. Therefore, PREPA's monopoly may have been perceived as necessary to push Puerto Rico's economic growth.<sup>4</sup> Yet, the historic lack of multiple electric power service providers (i.e., competition) has put the residential, commercial and industrial consumers at the mercy of one single energy provider in Puerto Rico.<sup>5</sup> As a result, this has deprived the public (*i.e.*, residential, commercial and industrial consumers) of the ability to choose from various providers, creating healthy market competition.<sup>6</sup>

In 1941, with prices of oil at \$1.147 per barrel, it may have made sense to operate a self-regulated monopoly to ensure the construction of generation and transmission infrastructure. Today it does not make sense for many reasons. As a self-regulated government controlled monopoly, PREPA has failed. The original statutory infrastructure objectives have been achieved. However, the price of oil has changed dramatically and, more so, the variances/volatility of such prices<sup>8</sup>. Today there is electric service throughout the Island, and there are new technologies, fuels and other disruptive forces that have impacted PREPA's original

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<sup>&</sup>lt;sup>1</sup> Article 6 of Act 83-1941, as amended, known as PREPA's Enabling Act, 22 L.P.R.A. § 196. (Emphasis added).

<sup>&</sup>lt;sup>2</sup> Until 1979 PREPA was known as the Puerto Rico Water Sources Authority (*Autoridad de Fuentes Fluviales*). The original name reflected the prevalent use of hydroelectric power at the time. <a href="http://www.aeepr.com/Aeees/historia.asp">http://www.aeepr.com/Aeees/historia.asp</a>.

<sup>&</sup>lt;sup>3</sup> PREPA owns and operates Puerto Rico's power generation plants and transmission and distribution infrastructure, except for two co-generators (*i.e.*, Ecoeléctrica L.P. and AES-Puerto Rico) and a few utility scale renewable energy projects that sell their energy to PREPA under Power Purchase Agreements (PPAs). During its first decade, PREPA acquired and consolidated under a single company the main generation and infrastructure owned by private parties. Sergio M. Marxuach, *Restructuring the Puerto Rico Electricity Sector*, Center for the New Economy, August 22, 2005, pages 3-5, <a href="http://grupocne.org/2005/08/22/restructuring-the-puerto-rico-electricity-sector/">http://grupocne.org/2005/08/22/restructuring-the-puerto-rico-electricity-sector/</a>. See also, Statement of Motives, Act 57-2014, as amended.

<sup>&</sup>lt;sup>5</sup> There are consumers, however, that own and operate distributed generation systems. Yet, the majority are connected to the PREPA grid.

<sup>&</sup>lt;sup>6</sup> Interestingly, PREPA's first bond issuance took place in 1945 to enable PREPA's acquisition of the main electric power companies in Puerto Rico. In 1981, with the acquisition of the electric power system owned by the Municipality of Cayey, PREPA completed the consolidation of all Puerto Rico electric power systems under a single entity. *See*, <a href="http://www.aeepr.com/Aeees/historia.asp">http://www.aeepr.com/Aeees/historia.asp</a>.

<sup>&</sup>lt;sup>7</sup> https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=F000000 3&f=A.

<sup>&</sup>lt;sup>8</sup> See, Attachment A.

business model. The energy industry has evolved but PREPA's model has remained stuck. As a result, PREPA's structure has inflicted serious damage on our economy and the people Puerto Rico. It is widely agreed that the single most important impediment to economic growth in Puerto Rico is the price/Kwh, its variability, the power quality and the social cost inflicted as a result of environmental impacts. Without economic growth, there is no recovery, and without recovery, no real opportunity for the island's residents.

PREPA cannot pretend to obtain different results by doing the same thing - or essentially the same thing. That would constitute insanity as defined by Albert Einstein. Real and effective change at PREPA is long overdue. The Enactment of Act 57-20149, began to put an end to PREPA's self-regulated monopoly and enabled the Puerto Rico Energy Commission ("Energy Commission") to approve, among other things, PREPA's energy rates. This process is in its initial stages, however, and is only one of the multiple measures needed to effectively address Puerto Rico's energy crisis.

#### **CURRENT SITUATION AND CAUSES**

In 2015, the cost of energy per Kwh in Puerto Rico averaged 20.98 cents.<sup>10</sup> In contrast, the average energy cost in mainland United States for the same period was 10.47 cents.<sup>11</sup> During the last 5 year period, the average energy cost per Kwh in the mainland was 10.06 cents while in Puerto Rico it was 25.10 cents. 12

No one denies the energy crisis. PREPA residential customers frequently face the decision of paying the electric bill, buying food and/or medicines. Commercial and industrial clients must decide between increasing prices and/or services or closing operations based on unsustainable energy costs, price fluctuations or, worse yet, the power quality issues inflicted by a less than optimal energy grid. The private business sector (i.e., industrial, commercial and small business) has complained for years about the variability of prices, the inefficiencies that affect such prices and the quality of the electric service provided.<sup>13</sup> Puerto Rico's ability to attract new manufacturing investment is being affected by issues relating to power quality - voltage and frequency stability. Moreover, our existing manufacturing base is threatened by the same problem, thus putting at risk Puerto Rico's ability to protect and retain existing jobs.

It is evident that the energy crisis is not new. It has been diagnosed for years. 14 What seems new(er) is the magnitude and the opportunity cost (economic impact) of our current challenges. The consequences and implication of the energy crisis have been highlighted more recently because it coincides with the larger issue of fiscal and economic dilemmas that Puerto Rico is facing. In 2010, Puerto Rico formally recognized the energy crisis and initiated a path to address it. 15 Unfortunately, the measures taken to begin addressing the

12 See, Attachment D. Out of the 50 states, the only state with an energy cost higher than Puerto Rico's is Hawaii which averaged 33.04 c/Kwh in 2015. See, Attachment E. Hawaii's situation differs from Puerto Rico, among other things, in the complexity of its electric power grid system.

<sup>&</sup>lt;sup>9</sup> Act 57-2014, as amended, known as the Transformation and Energy Relief Act.

<sup>10</sup> See, Attachment B. These recent prices have been aided by the somewhat unexpected reduction in the price of oil in the world market. Prior to that, Puerto Rico was experiencing energy prices of up to .30c/Kwh.

<sup>13</sup> In the past, private sector representatives have complained about the cost, quality and reliability of PREPA's service. See, Sergio M. Marxuach, Restructuring the Puerto Rico Electricity Sector, Center for the New Economy, August 22, 2005, page 3, http://grupocne.org/2005/08/22/restructuring-the-puerto-rico-electricity-sector/.

<sup>14</sup> See, Sergio M. Marxuach, A new Look at Puerto Rico's Electricity Sector, Center for the New Economy, January 2009, http://grupocne.org/2009/01/22/a-new-look-at-puerto-ricos-electricity-sector-january-2009/; Sergio M. Marxuach, Restructuring the Puerto Rico Electricity Sector, Center for the New Economy, August 22, 2005, http://grupocne.org/2005/08/22/restructuring-thepuerto-rico-electricity-sector/; Intersectorial Committee on Environmental Compliance and Energy Alternatives, Report on the Necessary Measures to Comply with the New EPA Regulations, and the Conversion to, and Use of Natural Gas in, the Northern Power Plants, June 15, 2012, http://www.acepr.com/INVESTORS/DOCS/Financial%20Information/Budgets/Report%20on%20the%20necessart%20measures %20to%20comply%20with%20new%20EPA%20regulations.pdf.

<sup>15</sup> See, Executive Order No. OE-2010-034 of July 19, 2010 (http://estado.pr.gov/en/executive-orders/); Executive Order No. OE-2011-013 of April 12, 2011 (http://estado.pr.gov/en/executive-orders/); Executive Order No. OE-2011-047 of October 6, 2011 (http://estado.pr.gov/en/executive-orders/); Executive OE-2012-019 2012 Order No. of April (http://estado.pr.gov/en/executive-orders/); Executive Order No. OE-2012-052 of October 2012

crisis were hindered and/or discontinued by a change in government and by PREPA's political, internal and operational obstacles.

Puerto Rico's high energy costs and the related variability are the result of, among other things, the pervasive challenges listed below:

PREPA's Dependency on Oil

: After PREPA relegated the use of hydroelectric power, it began

relying heavily in the use of liquid fossil fuels.<sup>16</sup>

PREPA's Obsolete Infrastructure

PREPA's generation fleet is very old and inefficient. PREPA's median generating plant age is 44 years compared to an industry average of 18 years.<sup>17</sup>

Intrusion of politics in PREPA

Currently, the PREPA board has two seats of *ex officio* members from the Secretary of the Department of Economic Development and Commerce and the Secretary of the Department of Transportation and Public Works and four members appointed by the Governor with the advice and consent of the Senate. Additionally, there are three members who are representatives of the Public Interest (one for residential customers, one for commercial customers, and one for industrial customers). Management is transferred or moved at least with every electoral cycle, if not more frequently. Hiring is influenced in many instances not by qualifications of the candidate but by political influences. Many decisions are made contemplating potential political costs rather than sound business judgement and practices. <sup>19</sup>

PREPA's Operational Inefficiencies

For a long time PREPA has had significant operational issues, including but not limited to employee performance, energy theft, energy losses, lack of adequate fuel inventory controls, deficient collection efforts<sup>20</sup> and inadequate procurement processes.<sup>21</sup>

(http://estado.pr.gov/en/executive-orders/); and Executive Order No. OE-2013-038 of May 14, 2013 (http://estado.pr.gov/en/executive-orders/).

<sup>&</sup>lt;sup>16</sup> See Attachment F. Intersectorial Committee on Environmental Compliance and Energy Alternatives, Report on the Newessary Measures to Comply with the New EPA Regulations, and the Conversion to, and Use of Natural Gas in, the Northern Power Plants, June 15, 2012, <a href="http://www.aeepr.com/INVESTORS/DOCS/Financial%20Information/Budgets/Report%20on%20the%20necessary%20measures%20to%20comply%20with%20new%20EPA%20regulations.pdf">http://www.aeepr.com/INVESTORS/DOCS/Financial%20Information/Budgets/Report%20on%20the%20necessary%20measures%20to%20comply%20with%20new%20EPA%20regulations.pdf</a>; and Sergio M. Marxuach, Restructuring the Puerto Rico Electricity Sector, Center for the New Economy, August 22, 2005, page 3, <a href="http://grupocne.org/2005/08/22/restructuring-the-puerto-rico-electricity-sector/">http://grupocne.org/2005/08/22/restructuring-the-puerto-rico-electricity-sector/</a>.

<sup>&</sup>lt;sup>17</sup> See, PREPA's Transformation, A path to Sustainability, June 1, 2015. http://www.aeepr.com/Docs/RecoveryPlan.pdf

<sup>&</sup>lt;sup>18</sup> The Board of Directors selects its Chair and Vice-Chair and the Executive Director. The Board of Directors has a key role in the company's administration since it is charged with the responsibility of leading the strategic management of PREPA and the delegating to the Executive Director and/or other PREPA officials the administrative duties and works of the public corporation. Section 4 of Act 83-1941, as amended.

<sup>&</sup>lt;sup>19</sup> Based on information available, upon the designation of a Chief Restructuring Officer, AlixPartners (Lisa Donahue), measures to address these and other operational inefficiencies at PREPA have been put in place and the operational improvements are beginning to take root and are projected to generate annual savings of \$245-\$390 million in addition to one time savings. <a href="http://www.aeepr.com/Docs/RecoveryPlan.pdf">http://www.aeepr.com/Docs/RecoveryPlan.pdf</a>

<sup>&</sup>lt;sup>20</sup> FTI Capital Advisors prepared a report on November 15, 2014 regarding PREPA's Accounts Receivable and CILT Report which highlighted that, as of September 30, 2014, PREPA had a total of \$1.75 billion in accounts receivable. Out of the \$1.75 billion, \$931,578,000 were uncollected payments from general clients and \$757,690,000 from the government. See, Accounts Receivable and CILT Report of November 14, 2014.

http://www.aeepr.com/Docs/restructuracion/PREPA%20AR%20and%20CILT%20Report%20Final.pdf.

PREPA's Historic Monopoly

Having a self-regulated – government controlled - monopoly did not provide any incentive for PREPA's adequate management and operational efficiencies since it was allowed to pass all its costs directly to the clients and had no competition.<sup>22</sup>

PREPA's Obsolete Rate Structure

: The rate structure has not contemplated and adequately captured PREPA's operational costs.<sup>23</sup>

PREPA's Lack of Planning

PREPA lacked strategic infrastructure and environmental compliance planning and implementation. Priorities on infrastructure planning and investments are shifted with management changes that more than often coincide with electoral cycles.<sup>24</sup> Among other things, this lack of planning, has caused compliance issues and the aging of its infrastructure to coincide with the lack of funds to replace it.

Subsidies

: PREPA has been forced by legislative provisions to provide services at subsidized rates to a significant amount of customers and to make certain contributions *in lieu* of municipal taxes with municipalities.<sup>25</sup>

Corruption

: Lack of Transparency of PREPA's internal procedures has resulted in allegations of corruption in areas such as the purchase of fuel.<sup>26</sup>

According to CRO Lisa Donahue, "PREPA has made great strides in its accounts receivable and collections processes with respect to government and private customers alike. PREPA has directly engaged with Hacienda and other agencies regarding the setting of appropriate Fiscal Year 2016 budgets and has implemented payment plans for past due government accounts." Lisa Donahue Statement Testimony before House of Representatives November 11, 2015.

See, http://www.aeepr.com/Docs/Donahue%20Testimony%20to%20House%20of%20Reps%20-%20Leg%20Reform%20(Final%208am).pdf

<sup>&</sup>lt;sup>21</sup> Lisa Donahue Statement Testimony before House of Representatives November 11, 2015. *See* <a href="http://www.aeepr.com/Docs/Donahue%20Testimony%20to%20House%20of%20Reps%20-%20Leg%20Reform%20(Final%208am).pdf">http://www.aeepr.com/Docs/Donahue%20Testimony%20to%20House%20of%20Reps%20-%20Leg%20Reform%20(Final%208am).pdf</a>

<sup>&</sup>lt;sup>22</sup> See, Sergio M. Marxuach, A new Look at Puerto Rico's Electricity Sector, Center for the New Economy, January 2009, <a href="http://grupocne.org/2009/01/22/a-new-look-at-puerto-ricos-electricity-sector-january-2009/">http://grupocne.org/2009/01/22/a-new-look-at-puerto-ricos-electricity-sector-january-2009/</a>. See also, Statement of Motives, Act 57-2014, as amended.

<sup>&</sup>lt;sup>23</sup> This should be addressed in the evaluation and approval of the new rate to be proposed by PREPA in the application it is required to file with Energy Commission as per the provisions of Act 57-2014. *See* also, PREPA's Transformation, A path to Sustainability, June 1, 2015.

<sup>&</sup>lt;sup>24</sup> PREPA's deficient environmental compliance record has resulted in complex litigation against it by the U.S. Department of Justice, after the persistent intervention of community groups and the U.S. Environmental Protection Agency. The efforts to bring PREPA into compliance began in 1992. Thereafter, "[i]n 1999, the U.S. Department of Justice and PREPA entered into a consent decree under which PREPA agreed to take certain actions to come into compliance with multiple environmental laws at a cost of approximately \$200 million; pay a \$1.5 million penalty; implement additional projects to benefit the environment, costing approximately \$3.5 million; and spending \$1 million to hire an environmental contractor to oversee compliance with the consent decree." In 2004, after EPA identified PREPA violations to the 1999 Consent Decree, the parties negotiated modifications to the original consent decree to bring PREPA plants into compliance with certain air emissions standards and added a supplemental project the benefit the communities around certain **PREPA** generating plants. http://www.justice.gov/archive/opa/pr/2004/June/04 enrd 433.htm

<sup>&</sup>lt;sup>25</sup> See, PREPA's Transformation, A path to Sustainability, June 1, 2015. Under the Contributions in lieu of Taxes, PREPA provides a municipality electric service in exchange of an exemption from municipal taxes. <a href="http://www.aeepr.com/Docs/RecoveryPlan.pdf">http://www.aeepr.com/Docs/RecoveryPlan.pdf</a>
<sup>26</sup> See, Marrero Rolón et al v. Autoridad de Energía Eléctrica (Case No. 3:15-cv-01167) <a href="https://ecf.prd.uscourts.gov/cgi-bin/iqquerymenu.pl?115501">https://ecf.prd.uscourts.gov/cgi-bin/iqquerymenu.pl?115501</a>. The lawsuit, filed on Feb. 24, 2015 in the U.S. District Court for the District of Puerto Rico names 20 defendants (including PREPA, Vitol, Petrobras, among others) for allegedly receiving kickbacks and payments for colluding to raise fuel oil prices that were directly passed on to users of electricity, by agreeing to use non-complaint fuel oil and falsifying lab tests. <a href="http://www.businesswire.com/news/home/20150224005237/en/Hagens-Berman-Puerto-Rico-Residents-Businesses-File">http://www.businesswire.com/news/home/20150224005237/en/Hagens-Berman-Puerto-Rico-Residents-Businesses-File;</a> PREPA

The convergence of these factors throughout the past decades have resulted in a state run/controlled utility that, as a monopoly, has succeeded in becoming highly politicized, bureaucratic, inefficient, aged, expensive and accumulating nearly \$9 billion in outstanding debt. This eventually added to the pressure of other external challenges, like the island's deepening recession and migration uptick. No less important is the availability today, of disruptive technologies and practices that affect PREPA's historic and narrow business model. All this, with the anticipated and foreseeable result of contracting sales and revenues.

Public opinion on the Island today is overwhelmingly in favor of wholesale restructuring of this public utility.

#### MOVING PUERTO RICO'S ENERGY INFRASTRUCTURE FORWARD

The key to any serious restructuring effort is understanding the current state of affairs and its root causes, in order to design the path towards sustainable reform. The goal here is to implement reforms that take root, cannot be reversed, modified or watered down, so that we do not fall into the same pitfalls in years to come.

PREPA needs a new focus. It must shift attention to the Transmission & Distribution business, divorce itself from the energy generation component, and leverage private sector expertise and capital to construct and efficiently operate new generation facilities. Reforms must be quick and clear to achieve: (i) price reductions and stability; (ii) modernization; (iii) environmental protection; and (iv) economic development and growth.

Transparency and credibility will be key ingredients in any restructuring effort. PREPA today appears to be achieving levels of internal transparency not seen before, although much more is needed. Operational efficiencies are taking hold.

In the case at hand, time is of the essence given the many other variables and developments of the central government, the local economy and the alternatives available to the public beyond the traditional centrally supplied electricity.

#### **Privatization of Generation**

As many other jurisdictions have done, and particularly given the fiscal and operational challenges of PREPA, it must aggressively consider and use a privatization model. The models that seems most suitable to implement them are:

Model Characteristics Benefits

Long-Term Concession. 27 • PREPA retains • No need for PREPA to have

v. Vitol, Inc. et al (Case No. 3:2009cv02242). This case was filed on December 14, 2009. <a href="https://ecf.prd.uscourts.gov/cgi-bin/iqquerymenu.pl?77028">https://ecf.prd.uscourts.gov/cgi-bin/iqquerymenu.pl?77028</a>.

<sup>&</sup>lt;sup>27</sup> Act <sup>29-2009</sup>, as amended, known as the *Public Partnership Act*. Act <sup>20-2009</sup> establishes as public policy of the Commonwealth of Puerto Rico "to favor and promote the establishment of public-private partnerships for the creation of priority projects, and among other things, to further the development and maintenance of infrastructure facilities, to apportion between the Commonwealth and the contractor the risk involved in the development, operation or maintenance of such projects, to improve the services rendered and the functions of the Government, to foster the creation of jobs, and to promote the socio-economic development and the competitiveness of Puerto Rico. Pursuant to the public policy set forth above, the...following projects...[can] be subject to a partnership contract:

<sup>(3)</sup> The construction, operation or maintenance of existing or new plants for the production of energy that use alternate fuels other than oil or that use renewable energy sources, such as wind, solar and oceanic-thermal energy, among others, as well as the transmission of energy of any kind..." See, Act-29-2009, Section 3.

<u>Model</u>

Power Purchase Agreement

(PPA)

### Characteristics

**Benefits** 

ownership.

- Long-term contract for the construction and management of the generation of power.
- A third party would be under better conditions than PREPA to obtain the necessary financing.
- The third party would bring its expertise.
- The contract can be terminated under certain pre-established terms and conditions.
- Assets are owned by the third party.
- Contract for the purchase of power generated by the third party.
- Ability for the third party to obtain financing.
- Expertise from third party.
- Ability to terminate agreement under certain terms and conditions.

- access to financing.
- Would allow PREPA to replace its fleet in a shorter term.
- Ability for the third party to obtain financing.
- Expertise from third party.
- Ability to terminate agreement under certain terms and conditions.
- Examples of successful projects:
  - o Highway PR-22
  - O Highway PR-5
  - Luis Muñoz Marin Intl. Airport
- No need for PREPA to have access to financing.
- Would allow PREPA to replace its fleet in a shorter term.
- Ability for the party to obtain financing.
- Expertise from third party.
- Ability to terminate agreement under certain terms and conditions
- Examples of successful PPAs:
  - o EcoElectrica<sup>28</sup>
  - o AES-Puerto Rico<sup>29</sup>
  - Pattern Santa Isabel<sup>30</sup>
  - o Punta Lima (GoGreen)<sup>31</sup>

# Professionalization and De-politization of PREPA

<sup>&</sup>lt;sup>28</sup> EcoEléctrica, is a privately operated independent power producer and the only private energy generation facility in Puerto Rico that currently generates electric power using natural gas. The facility is located in southern Puerto Rico, has its own marine LNG terminal and has been operating successfully since the year 2000. It has a generation capacity of 507 MW, combined cycle unit. The natural gas used by EcoEléctrica is imported from Trinidad and Tobago. EcoEléctrica has storage capacity of 1,000,000 barrels of LNG, and it is the only facility on the island with the capability to import, store, regasify, and export natural gas. All of the electric power generated by EcoEléctrica is sold to the PREPA.

http://www.aeepr.com/Documentos/Ley57/EcoElectrica/EcoElectrica1.htm and http://ecoelectrica.com/

<sup>&</sup>lt;sup>29</sup> AES Puerto Rico LP has a coal-fired co-generation plant located in Guayama, Pueto Rico. Since 2002, AES sells its energy to PREPA under a 25 year PPA. AES Corp. commenced the development of this plant in Puerto Rico in 1993. <a href="http://www.aeepr.com/Documentos/Ley57/AES/Contratos%20AES1.htm">http://www.aeepr.com/Documentos/Ley57/AES/Contratos%20AES1.htm</a> and <a href="http://www.aeepuertorico.com/">http://www.aeepuertorico.com/</a>.

<sup>&</sup>lt;sup>30</sup> Pattern Santa Isabel is a 101 MW project located on the south coast of Puerto Rico. The project commenced commercial operations in 2012 and sells its energy to PREPA under a 25 year PPOA. This was Puerto Rico's first commercial wind power project. <a href="http://www.aeepr.com/Documentos/Ley57/CONTRATOS/Contrato%20Pattern%20Santa%20Isabel%20LLC%202010-P00047.pdf">http://www.aeepr.com/Documentos/Ley57/CONTRATOS/Contrato%20Pattern%20Santa%20Isabel%20LLC%202010-P00047.pdf</a> and <a href="http://patternenergy.com/en/operations/facilities/santa\_isabel/">http://patternenergy.com/en/operations/facilities/santa\_isabel/</a>.

<sup>&</sup>lt;sup>31</sup> Punta Lima is a 23 MW wind farm located in the east coast of Puerto Rico. Punta Lima commenced commercial operation in 2013 and sells its energy to PREPA under a 25 year PPOA <a href="http://www.aeepr.com/Documentos/Ley57/CONTRATOS/Contrato%20Punta%20Lima%20(Go%20Green)%202010-AI0001.pdf">http://www.aeepr.com/Documentos/Ley57/CONTRATOS/Contrato%20Punta%20Lima%20(Go%20Green)%202010-AI0001.pdf</a> and <a href="http://www.gestampren.com/en/node/2916">http://www.gestampren.com/en/node/2916</a>.

PREPA is not a for-profit entity. However, since it provides an essential public service to the people of Puerto Rico, it must be administered based on sound business judgment and practices. It is critical that PREPA decisions be free of political influences. The Authority needs to be administered and led by individuals with qualified management/business experience in order to ensure that decisions are not biased or influenced by political issues<sup>32</sup>.

#### <u>Local Permitting + Energy Crisis = Fast Track</u>

Permitting issues

Permitting processes in Puerto Rico have been identified as a significant challenge for the Island's economic development due to the multiplicity of permits required and the time it takes to complete a permitting process.<sup>33</sup> In Puerto Rico, obtaining the approvals for the development of a large infrastructure projects (e.g., utility scale energy generation) may take between eight to ten years, excluding potential litigation.<sup>34</sup> Some of the permitting improvements introduced by the 2009 permitting reforms<sup>35</sup> were eliminated by amendments to the permit law approved by the current administration.<sup>36</sup> This has been without doubt a step back in the advancements made to improve Puerto Rico's position to jumpstart economic development and improve its global competitiveness.

#### Executive Orders - Declaration of Emergency

The Governor of Puerto Rico can utilize existing statutory tools to declare and energy emergency and enable the relevant agencies to activate expedited permitting processes in order to jumpstart the replacement of PREPA's old generation fleet and improve/replace transmission and distribution infrastructure. In 2010, the Governor issued an Executive Order (EO) declaring a state of emergency in connection with the infrastructure of the electric power utility in Puerto Rico. The EO's effective date was extended on multiple occasions until 2012, as per the provisions of Act 76-2000, as amended ("Act 76"). Pursuant to those EOs, expedited permitting proceedings were activated to approve multiple projects related to the generation of energy using alternate sources of fuel to those traditionally used (e.g., petroleum derived sources). Act 76 was enacted to address certain emergencies, provide expedited processes for the application and granting of permits, endorsements, consultations and/or certifications related to the solution of emergencies so declared.<sup>37</sup>

Act 76 grants the Governor the authority to issue an EO declaring an emergency covered under its provisions. Under the Act, an emergency shall be deemed to exist if, among others, there is an event or grave problem of deterioration in the physical infrastructure for the rendering of essential services to the people.<sup>38</sup>

 $<sup>^{32}</sup>$  See generally, PREPA's Transformation, A path to Sustainability, June 1, 2015.

<sup>&</sup>lt;sup>33</sup> Puerto Rico was classified by the World Bank Group on the Ease of Doing Business as 41 of 189 countries in 2014, 47 of 189 countries in 2015 and 57 of 189 countries in 2016. In other words, during the last three years, Puerto Rico has lost 16 positions in this classification. See, Doing Business Report. Retrieved from <a href="http://www.doingbusiness.org/reports/global-reports/">http://www.doingbusiness.org/reports/global-reports/</a>.

<sup>&</sup>lt;sup>34</sup> Unlike the U.S. mainland, in Puerto Rico environmental activism has a selective agenda. While certain groups oppose projects that would replace old, polluting and noncompliant infrastructure, those same opponents are conveniently silent to the environmental impacts and pollution about maintaining the "status quo" – that is, maintaining the existing/old infrastructure. Adequate and good faith public participation improves the discussion and evaluation of projects. When abused (e.g., litigation without merits), however, it can certainly result in a very effective delay mechanism with detrimental impacts on economic development and additional environmental and health degradation.

<sup>&</sup>lt;sup>35</sup> The 2009 permitting reform was focused on streamlining the local complex permitting system that had placed Puerto Rico in a disadvantaged global competitiveness position. For example, as part of the reforms, a determination on an environmental document was deemed a component of the development or construction approval/permit, and as such it could be challenged together with the determination on the approval/permit. This ensured public participation while consolidating potential challenges to a project, to minimize the historical use of inefficient and delay tactics. *See*, Act 161-2009.

<sup>&</sup>lt;sup>36</sup> The amendments to Act 161-2009, among other things, returned the challenges to environmental documents and location approvals/permits to the pre-2009 bifurcated path. See, Act 151-2013.

<sup>&</sup>lt;sup>37</sup> It is important to note that the provisions of Act 76 must be interpreted in the broadest sense possible in order to achieve the effective interpretation of the public policy contained therein. Also, the provisions of Act 76 will prevail over any general or special provision of law or regulation that is inconsistent therewith. See, 3 L.P.R.A. Sections 1944 and 1945.

<sup>&</sup>lt;sup>38</sup>Section 15 of Act 76 defines the term "emergency" as: "...[a]ny serious abnormality such as a hurricane, tidal wave, earthquake, volcanic eruption, drought, fire, explosion, or any other kind of catastrophe, or any serious disruption of the public law and order, or

Upon the issuance of an EO declaring a state of emergency under Act 76, and for the duration of the emergency, the Governor activates: (a) an expedited permitting process under which certain permitting agencies<sup>39</sup> can fast track permit applications, related to works that may provide an immediate solution to the situation created by the emergency, which entail the issuing of a permit, endorsement, consultation and/or certification, and approval of an environmental document; (b) the specific and non-deferrable period during which other agencies can file their endorsements or opposition to permit applications; (c) the period for the relevant evaluation of environmental documents; and (d) the period for the evaluation of location consultations by the Planning Board. Although it establishes an expedited permitting procedure, the provisions of Act 76 include public notification mechanism which ensure public participation and establishes the remedies available to a party adversely affected by any resolution or order issued by any agency under the provisions of Act 76.

This legal mechanism helped significantly in the development of multiple renewable projects that today are selling energy to PREPA.<sup>40</sup> Nevertheless the emergency declaration was discontinued by the current administration.<sup>41</sup>

#### Federal Permitting

Regarding a Federal Role, as in any other state, infrastructure projects will require federal approvals. The typical agencies include the USEPA, USCOE, USDA (Rural Development), USDOE and the FERC. Yet (federal) interagency action can also take considerable time to complete.

Congress could consider a structure – like a *temporary Emergency Permitting and Oversight Task Force or Control Board* – to dovetail with a local enhanced permitting structure. This Board could be tasked with expediting the joint review and approval of permits, in addition to grants, loans and loan guarantees from existing programs. It could also ensure, with Congressional authority, that PREPA is in fact reformed - for good.

Program Considerations to Support Puerto Rico Energy Sector Development

- 1. Maximize the use of existing loan, loan guarantee and grant programs, such as those provided by the Department of Energy and the USDA Rural Utilities Service.<sup>42</sup> These programs are intended specifically to assist public and private sector energy infrastructure expansion and improvement initiatives and the fund allocations to implement these assistance programs has already been approved and issued.
- 2. Expedite the required NEPA Review Program by:
  - a. Prioritizing NEPA reviews associated with Puerto Rico project reviews.
  - b. Streamlining the procurement process to obtain additional internal/external support needed to implement these review programs in a timely manner.

an attack by enemy forces through sabotage or through the use of bombs, artillery or explosives of any nature, or by atonic, radiological, chemical, or bacteriological means, or by any other means that the enemy may use in any part of the territory of the Commonwealth of Puerto Rico, that merits the mobilization and extraordinary use of the damages caused of that could be caused. Likewise, the term "emergency" covers any event or grave problems of deterioration in the physical infrastructure for the rendering of essential services to the people, or that endangers the life, public health, or safety of the population or of a sensitive ecosystem. See, 3 L.P.R.A. Section 1931(a). (Emphasis added.)

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<sup>&</sup>lt;sup>39</sup> The definition of the term "agency" included in Act 76 includes both central government governmental entities and municipalities. *See*, 3 L.P.R.A. Section 1931(b).

<sup>&</sup>lt;sup>40</sup> Projects include Pattern Santa Isabel, Punta Lima, AES Illumina and others. Some projects which obtained approvals under the expedited procedure were latter affected by the internal protracted PREPA reviews and approvals (e.g., issuance of final Minimum Technical Requirements, interconnection evaluations and other PREPA technical evaluations). By the time PREPA completed its internal processes, the Authority's fiscal situation had a detrimental impact on the ability of project developers to obtain financing.

<sup>41</sup> See, Executive Order No. OE-2013-038 of May 14, 2013 (http://estado.pr.gov/en/executive-orders/).

<sup>42</sup> http://www.rd.usda.gov/

- c. Coordinate local and federal permitting review programs such that, if they cannot be consolidated and conducted jointly, they are at least conducted simultaneously and not sequentially.
- d. Realizing that time is of the essence in these programs, streamline the federal legal challenge process by:
  - i. Prioritizing the review of Puerto Rico project proceedings, and
  - ii. Ensuring any opposing petitioners have true standing and are pursuing legitimate concerns, not simply employing delaying tactics to oppose change.
- 3. Implement the temporary *Oversight Task Force/Control Board* to help ensure that:
  - a. Comprehensive planning is implemented to help minimize the occurrence of additional unanticipated expenses.
  - b. Program implementation is achieved and not unnecessarily delayed or diverted by political influence or other external pressures placed on the process.
  - c. Funds are used efficiently and for the intended purpose.

# Strategic Planning - Integrated Resource Plan

The PREPA Integrated Resource Plan ("IRP"), currently under evaluation by the Energy Commission, should be the footprint and guide for any budget and business plans to be developed by PREPA in order to ensure timely and adequate availability of funds for required investments and to avoid falling back into the existing crisis. The IRP identifies the preferred strategy for satisfying PREPA's electric power requirements over a 20-year planning horizon (fiscal years 2016 to 2035, July 1, 2015 – June 30, 2035).<sup>43</sup> It also provides to PREPA a projection of its long-term electricity needs in a reliable, flexible and cost effective manner under a variety of market, regulatory and economic conditions/scenarios.<sup>44</sup> The IRP also aims to prepare PREPA for the achievement of compliance with the Mercury and Air Toxics Standards, known as MATS<sup>45</sup>, and the Clean Power Plan<sup>46</sup>, two set of regulations for which the generation fleet is unprepared.<sup>47</sup>

# Energy Commission - Rate Procedure

Given the advance status of the negotiations between PREPA and its creditors, the Energy Commission and PREPA should, with all their corresponding ministerial powers, work together to initiate

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http://www.aeepr.com/Aeees/ley57.asp and http://www.aeepr.com/Docs/Ley57/Presentación%20IRP%20-%20AEE%2020151106.pdf

<sup>&</sup>lt;sup>44</sup> Note that there are a multiplicity of interveners in the IRP approval process before the Energy Commission. http://energia.pr.gov/plan-integrado-de-recursos/. The participation of the interveners should enable and foster an ample discussion of the IRP's compliance with applicable requirements established in Act-57-2014.

<sup>&</sup>lt;sup>45</sup> On June 2015, the U.S. Supreme Court, in Michigan v. EPA, ruled that the EPA erred by failing to consider costs when deciding whether it was "appropriate and necessary" to regulate emissions of mercury and other hazardous air pollutants from power plants like those owned by PREPA. The Court, however, did not invalidate the MATS rule, it simply returned the MATS rule to the lower court for it to determine whether the rule should be simply remanded to EPA to correct the deficiencies outlined by the Supreme Court or invalidate the rule completely. Therefore, the MATS rule is in suspense until the lower court makes its final determination. Notwithstanding the foregoing, PREPA has stated that it will continue to work to modernize its power system and achieve permanent, consistent compliance with the Clean Air Act. To comply with emission requirements set by the new federal regulations, it is estimated that PREPA must burn a minimum of 80% natural gas. For purposes of the IRP, PREPA is considering the MATS to still he in effect and be applicable. See, IRP Volume IV http://www.aeepr.com/Docs/Lev57/PREPA%20IRP%20Volume %20PREC%20review%20-%20%20Air%20Quality.PDF.

<sup>&</sup>lt;sup>46</sup> Although the Clean Power Plan is not applicable to Puerto Rico at the moment, it is reasonable to anticipate that its applicability will be extended to Puerto Rico in the future and that PREPA must take it into consideration when replacing its fleet in order to ensure it can achieve compliance with it without significant additional capital investments. *Id.* 

<sup>47</sup> See, IRP Volume IV, <a href="http://www.aeepr.com/Docs/Ley57/PREPA%20IRP%20Volume%20IV%20">http://www.aeepr.com/Docs/Ley57/PREPA%20IRP%20Volume%20IV%20">http://www.aeepr.com/Docs/Ley57/PREPA%20IRP%20Volume%20IV%20">http://www.noticel.com/noticia/165741/epa-anticipa-incumplimiento-ambiental-de-aee-busar-reunion-con-donahue.html;</a> and

and promptly approve a new rate.<sup>48</sup> The Energy Commission should move expeditiously, within the applicable legal framework, to evaluate PREPA's application for such new rate.

The Energy Commission should use all of its available powers to take the necessary temporary rate measures while the application is adjudicated, as per clear and express provisions of Act 57-2014.<sup>49</sup> The Commission has a key role in the transformation of PREPA. As an independent regulatory entity, it needs to bring an unprecedented transparency and accountability to the PREPA rate setting procedure. The result of this rate setting process should be the establishment of a rate that is fair and reasonable, which in fact must take into consideration PREPA's costs to ensure the quality and reliability of the service.

#### **Implementation**

Given the importance of resolving the Puerto Rico energy crisis, the implementation of the IRP and of the solutions proposed by PREPA should be subject to short and mid-term oversight and supervision by a qualified and professional (e.g., a designation similar to the Chief Restructuring Officer) or federal agency such as the Department of Energy.

#### **CLOSING**

✓ The federal government's time and efforts, as well as that of the local government, is best used by focusing on the few action items that remain, in order to finalize a PREPA structural and financial reform. In fact, federal support may be conditioned upon the prompt completion of such actions on the part of Puerto Rico.

<sup>&</sup>lt;sup>48</sup> Act 57-2014 gave the Energy Commission primary and exclusive jurisdiction to approve rates and charges established by PREPA and established an initial review process in which PREPA files a request to modify its rates to the Energy Commission. This review process should have begun on or before November 28, 2014 and be completed by May 28, 2015, as per the provisions of Act 57-2014. On February 12, 2015, the Energy Commission initiated an investigation to obtain the operations and performance of PREPA, including technical, administrative, financial, accounting, and tax related information to evaluate the existing rates of PREPA. During the investigation, which is still ongoing, the Energy Commission issued data requirements from PREPA to which the Energy Commission has stated that PREPA has responded to the most part. All the information provided by PREPA is confidential and thus, not available to the general public. Notwithstanding the foregoing, on May 29, 2015, the Energy Commission initiated the first review preceding by issuing an order which described the procedural steps the Energy Commission will take to manage the rate case and directed PREPA to file a request for new rates consistent with the requirements therein and the rate filing regulation enacted on July 24, 2015. On December 3, 2015, the Energy Commission issued an order stating that PREPA's rates review process would begin once PREPA files its formal request before the Energy Commission and the latter determines that the request is complete. As of December 31, 2015, PREPA has not filed a request for the review of its rates. On September 17, 2015, National Public Finance Guarantee Corporation ("National"), successor in interest MBIA Insurance Corporation and the insurance payment of principal and interest of about \$ 1.4 billion of bonds issued by the PREPA filed a request for a revision of PREPA's rates and the establishment of a temporary rate. In its request, National requested that the Rico Energy Commission (i) show cause requiring PREPA to respond to this Petition within fourteen (14) days of service; (ii) consolidating this proceeding for all purposes with the existing rate case initiated by the Energy Commission on May 29, 2015; (iii) requiring that the consolidated rate review proceeding be completed no later than four (4) months after the filing of this Petition and establishing appropriate interim deadlines and procedures therefor; and (iv) establishing a temporary increase in the base electricity rate of at least 4.2 cents per kWh over existing rates while the Energy Commission's rate review is pending. The Energy Commission denied the request on September 30, 2015. With regards to the temporary rate, the Energy Commission held that the request did not meet the standards and requirements of Regulation No. 8620 which established the procedures and information requirements that must be filed before the Energy Commission when requesting a revision of the PREPA current rates and did not provide sufficient evidence to support such request. Regarding the request that the tariff review process be completed within four (4) months from the filing of the request, the Energy Commission held that it could not responsibly establish a specific date for completion of the rate review process because, as established in Order No. 2015-0001-AP-CEPR, once the request from PREPA is received by the Energy Commission and the latter determines that it is complete, the Energy Commission will establish a procedural schedule with dates for technical and public hearings, where all persons or entities wishing to participate in the process can submit a requests to intervene. The Energy Commission urged National to use this mechanism, as intervening party, in order to have active participation in the PREPA rate review process. http://energia.pr.gov/revision-tarifaria/. <sup>49</sup> As per the Energy Commission's own interpretation of Act 57-2014, as amended, under Article 6.3 thereof, the regulatory entity has the authority to establish emergency and/or temporary rates. See, Testimony of the President of the Energy Commission before the Puerto Rico Senate, November 10, 2015. http://www.oslpr.org/2013-2016/ponencias/A3BBMBI3.pdf.

- ✓ The revival of the local economy is a pre-requisite for long-term debt re-payment. As such, an electric demand elasticity trend correction is a "sine qua non" ingredient for debt restructuring to succeed in the shortest possible time.
- ✓ Talk of default and bankruptcy only distracts from the realizable objectives that Puerto Rico and PREPA have within reach and may otherwise have detrimental long-term effects in Puerto Rico's ability to obtain future financing.
- ✓ Most of the actions required to complete a reform of the utility and the energy infrastructure of the island are local. The federal government can provide leadership, structure and oversight but Puerto Rico has the tools needed to finish the job at PREPA.
- ✓ Most of the proposals demanded of, or coming from, Congress do little to address the underlying structural and policy issues that gave rise to our current energy crisis.
- ✓ Real legislative help for Puerto Rico should take account of the bigger picture spurring economic growth and job creation. Only then will we progress towards economic opportunity for residents, a lower cost of living and better quality of life, with higher productivity and job growth. Although most of the responsibility for better energy policy lies with the local government, Congress can help as generally outlined above.

**END**