



**COMMONWEALTH OF PUERTO RICO
PUERTO RICO ENERGY COMMISSION**

**IN RE: THE PERFORMANCE OF THE
PUERTO RICO ELECTRIC POWER
AUTHORITY**

CASE NO.: CEPR-IN-2016-0002

SUBJECT: Notice of Investigation.

**NOTICE OF INVESTIGATION
TO IDENTIFY OPPORTUNITIES TO IMPROVE PERFORMANCE OF
THE PUERTO RICO ELECTRIC POWER AUTHORITY**



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I. INTRODUCTION AND BACKGROUND

In enacting Act 57-2014¹, the Legislative Assembly of the Commonwealth of Puerto Rico made clear that its intent was to eradicate the many deficiencies and inefficiencies in the operation of the Puerto Rico Electric Power Authority (“PREPA”). The Legislative Assembly noted that the problems at PREPA had resulted in high rates which harmed the people of Puerto Rico and stifled economic development, and lack of compliance with environmental regulations.² The Legislative Assembly stated in pertinent part:

After more than seventy (70) years of its creation, and more than three decades of having achieved the total electrification of the Island, PREPA has become a monopoly that regulates itself; sets its own rates without actual oversight; incurs operational, managerial, and administrative deficiencies whose actual cost, at the end of the day, is borne directly by customers; and whose governance lacks transparency and citizen participation. All of the above contributes to Puerto Rico being among the top U.S. jurisdictions with the highest energy cost.³

The Legislature further stated that:

PREPA requires a thorough reform in its governance, mission and the manner in which it operates and maintains the electricity infrastructure of Puerto Rico. Short-, medium-, and long-term actions are required to achieve this significant change; this includes maintaining the operational and financial viability of the public corporation throughout its transformation process.⁴

Among the many sweeping reforms set forth in Act 57-2014 was the establishment of an integrated resource plan (“IRP”). Included within the statutory requirements for the IRP was a provision for performing measurements and calculating parameters describing PREPA’s performance. Specifically, Act 57-2014 sets out detailed parameters which include: revenue per kilowatt-hour (“kWh”); operating and maintenance expenses per kWh; operating and maintenance expenses of the distribution system per customer; customer service expenses per customer; general and administrative expenses per customer; energy sustainability; emissions; total amount of energy used annually in Puerto Rico; total amount of energy used annually per capita, for Puerto Rico as a whole and separately for urban and non-urban areas; and total energy cost per capita, for Puerto Rico as a whole and separately for urban and non-urban areas.⁵

¹ Puerto Rico Energy Transformation and RELIEF Act, as amended.

² Act 57-2014, Statement of Motives.

³ *Id.* p. 4.

⁴ *Id.* p.6.

⁵ Act 83 of May 2, 1941, §6C(h)(iv), as amended by Article 2.9 of Act 57-2014.

Further, Act 57-2014 requires that performance metrics include those which are “typical ... of the electric power industry”⁶ and also notes that “measurements shall also measure PREPA’s performance in complying with the mandates of this Act, particularly with all that pertains to its effectiveness in complying with its electric power company duties.”⁷ This requirement acknowledges the broad authority for the Puerto Rico Energy Commission (“Commission”) to establish a framework for comprehensively evaluating PREPA’s performance as an electric utility.

In keeping with that mandate, the Commission established performance metrics and targets as part of Regulation 8594.⁸ These performance metrics address such issues as: reliability; customer satisfaction (residential and business); plant performance; system costs; system efficiency and operations; customer empowerment; network support systems; and environmental goals.⁹

In accordance with Regulation 8594, issued on May 22, 2015, the Commission is required to commence a proceeding on performance metrics, targets, and incentives for PREPA within sixty days of the approval of PREPA’s first Integrated Resource Plan.¹⁰ The Commission’s Final Resolution and Order in docket CEPR-AP-2015-0002, approving a Modified IRP, was issued on September 23, 2016. Thus the issuance of this Notice of Investigation (“NOI”) is within the time frame contemplated by Regulation 8594.

The Commission has determined that given the importance of this process and the need to have in-depth independent audits, it shall create a two-track approach that may run in parallel. The first track shall consist of an investigation process and shall include several independent audits in which the auditors will report to the Commission. Once these audits are completed, a final audit report shall be made public and subject to comment from stakeholders. The second track will be a rulemaking process under which the Commission will prepare proposed rules on performance regulation that will be open to comment by stakeholders. As this process progresses, the Commission will provide more information on the nature of and opportunities for public input. The Commission views public input as very important throughout the process.

The sequence of major milestones contemplated for this proceeding includes:

- Issuance of this NOI;
- Initiation of Investigation:
 - Interested Stakeholders provide comments on the questions set forth in Section IV of this NOI;

⁶ *Id.*

⁷ *Id.*

⁸ Regulation No. 8594, Regulation on Integrated Resource Plan for the Puerto Rico Electric Power Authority, Article V.

⁹ *Id.* at §5.01(B).

¹⁰ *Id.* t § 5.01(A).



- Independent auditors conduct authorized audits;
- Independent auditors release reports on their findings;
- Technical conference on audit report results; and,
- Incorporation on audit recommendations into the proposed rules as appropriate.
- Initiation of Rulemaking Process:¹¹
 - Stakeholders file comments based on directives to be provided by the Commission;
 - Issuance of an order with the draft performance regulations for comment;
 - Comments by interested parties on the draft performance regulations;
 - Public hearings on the draft performance regulations; and
 - Issuance of an order with final performance regulations.

II. THE COMMISSION'S VISION ON PERFORMANCE

There is no question that Puerto Rico's electricity industry will operate differently in the future than it has in the past. With the changes triggered by Act 57-2014 and Act 4-2016,¹² the establishment of this Commission, the recently negotiated role of PREPA's debtors, periodic rate cases and integrated resource planning cases before this Commission, we are creating a pathway with the expectation that PREPA's performance will improve considerably. The Commission's overall goal in this proceeding, combined with other initiatives, is to transform the electricity industry into one that is more efficient, reliable, and transparent; includes market actors and market mechanisms; addresses environmental concerns; and, ultimately is more responsive to the needs and interests of all electricity customers.

In addition to improving upon past performance, the Puerto Rico electricity industry must keep up with and take advantage of on-going improvements in other jurisdictions. This may include, for example, empowering customers to improve their consumption patterns through distributed energy resources, facilitating the development of clean energy technologies, and adopting innovative grid modernization technologies and practices as they become cost-effective. The Commission's long-term goal is to transform the electricity industry on this island to be comparable to the most-efficient, most successful electricity utilities in other jurisdictions – not just by today's standards, but by the standards of the electricity industry as it continues to evolve and progress.

¹¹ Note that given the multifaceted nature of the performance regulations, it is possible that there may be more than one rulemaking on different time tracks.

¹² Puerto Rico Electric Power Authority Revitalization Act.

Improving PREPA's overall performance in a wide range of operations and management will be one of the first steps toward this long-term goal. Given the suboptimal performance of PREPA in recent years, we expect that all aspects of PREPA's business and operations may need to be improved.

The Commission envisions a future where PREPA's corporate structure and managerial team is optimized to ensure highly efficient decision-making, including internal and external operations. At the same time, we expect PREPA to take advantage of independent third-party providers and market-based initiatives wherever this will lead to improved efficiencies, reduced costs, and improved performance of the overall electricity system. These actions, which can lead to lower cost electric service, can play a vital role in assisting in the economic recovery of the Island.

We envision a future where PREPA is much more transparent and open to the Commission, legislators, electricity industry stakeholders, and the public in general. PREPA must not only provide the Commission and others with all the information that is frequently provided to state regulators as standard industry practice, but must also provide periodic reports that describe how well PREPA is meeting the Commission's performance goals, and the actions that PREPA is taking to meet and exceed those goals.

Likewise, we envision a future where PREPA plays a proactive role as one of the stewards of Puerto Rico's environmental resources and well-being, and strives to build an ever-cleaner and more environmentally just electric system. This includes not only complying in a timely way with federal, state, and local environmental requirements, but also promoting those actions and resources that can reduce environmental impacts beyond the standards required by existing laws.

In sum, the Commission expects PREPA to provide high-quality, reliable, safe, low-cost electricity services to all of its customers, at just and reasonable prices. While PREPA's past performance has been unsatisfactory, we expect that the Performance Regulations that will be crafted as a result of this proceeding will help guide PREPA from the unsustainable practices of the past to the future we envision here. While we expect that some amount of performance improvement can, and must, be achieved immediately, we also expect that the process for reaching the Commission's ultimate goals will require many years of effort, and will require ongoing review and oversight by the Commission.

III. AREAS OF INVESTIGATION

A. Performance Areas Warranting Investigation

This performance investigation will be as broad as is necessary to address all the areas of PREPA's performance that need improvement. Similarly, this investigation can be used to address any particular performance concern in as much detail as is necessary to fully understand the source of the concern and the actions available to address them.

The Commission plans to investigate at least the six performance areas discussed below. However, one of the first tasks of this performance investigation will be to ensure that we have properly included and characterized all of the relevant performance areas to investigate. Based on that assessment, other areas may be added in the future.

1. PREPA's Organization: PREPA must have an organizational structure and culture that leads to effective decision-making, fosters rigor and accountability, recognizes talent, and rewards innovation. Specific areas for investigation include roles and responsibilities of departments; roles and responsibilities of managers; management and employee compensation and rewards for performance; employee education and training; employee turn-over and recruitment; succession planning; and labor and overhead costs.
2. Planning: PREPA must conduct rigorous and competent planning over both the near- and long-term futures. PREPA must have a sound understanding of its actual needs and obligations, a thorough knowledge of its options and the constraints thereon, and must approach its planning with a spirit that incorporates both accountability and ingenuity. Specific areas for investigation include the methodology and frequency of forecasting of key variables; the use of support studies; the diversity of resources included in planning; and the overall planning methodology and approach.
3. Operations: PREPA must run an efficient, reliable, resilient, and clean electric system that adequately serves its customers. Specific areas for investigation include system reliability; resilience; customer service; customer empowerment; employee safety; customer safety; protocols for addressing outages once they occur; cybersecurity; response and resilience concerning extreme weather and climate-related events; and the environmental implications of PREPA's operations.
4. Resource acquisition: PREPA must transact with third-party entities for resources in a way that is efficient, competitive, and cost-effective. Specific areas for investigation include the cost-effectiveness of acquired resources; the quality of acquired resources; the competitiveness of bid processes; and the terms and conditions of the agreements for resource acquisition.
5. Visibility and transparency: PREPA must maintain, process, and report all data that is necessary for efficient internal operations as well as transparent, successful oversight by the Commission and other stakeholders. Specific areas for investigation include the quality and completeness of data collection, the accessibility of data, and PREPA's communications with the public and the Commission.
6. Use of external experts: PREPA must ensure that its external experts are properly motivated, properly overseen and managed, understand the performance requirements of the Commission, and understand PREPA's responsibilities to customers and the public in general. Specific areas for investigations include the costs, qualifications, and performance of external consultants, and the terms and conditions of agreements with external consultants.

B. Potential Actions to Improve Performance

This proceeding will include an in-depth investigation of potential actions that can be undertaken for PREPA to improve performance. The Commission will then craft regulations that will ensure that desirable actions will be undertaken and PREPA's performance will be improved.

The Commission expects to investigate at least the following seven actions to improve PREPA's performance. One of the first tasks of this proceeding will be to ensure that we have properly included and characterized all of the relevant actions to investigate; if deemed necessary and appropriate at the conclusion of this task, others may be added.

1. Inducement. This includes a variety of inducements that the Commission could establish to encourage improved performance. Such mechanisms could include some form of performance-based ratemaking, cost caps or budget constraints, or targeted performance inducement mechanisms for achieving specific Commission goals. Financial incentives are the most common mechanism used by state regulators to improve the performance of investor-owned utilities. However, given the status of PREPA as a public entity, the Commission may have to consider modifications or alternatives to financial incentives to achieve similar goals. The Commission expects to conduct an in-depth investigation of ways in which inducements or budget constraints could be used to improve the performance of a publicly-owned utility such as PREPA.
2. Tracking and Reporting of Information. This includes monitoring PREPA's operations and performance using a set of metrics to track and report PREPA's performance over time. The Commission expects to develop such metrics for each of the performance areas described above. Such metrics may take a variety of forms, including specific (numeric) standards for measurable outcomes as well as directives that PREPA follow specific best practices.
3. Organizational Management. This includes a range of options for improving the internal management and operations of PREPA. The Commission expects to investigate, for example, organizational restructuring, hiring practices, and, management and non-management compensation and incentives.
4. Independent Audits. This includes the use of independent auditors to report and provide recommendations on PREPA's internal practices and activities. Audits could be used for a variety of different activities and services, and could be used after this performance proceeding, as well as during it. Audit results can be used to determine what practices PREPA is currently employing, recommend changes to those practices to improve performance, and ascertain what standards are realistically achievable by PREPA and in what time frame. The Commission expects to take advantage of at least one performance audit during this performance proceeding, and to investigate the role such audits should play after this proceeding.

5. Training. This includes the use of external experts to train PREPA management and employees on some of the key elements of utility management. The experts could be drawn from consulting firms in this field, or they could be drawn from efficiently-run electric utilities elsewhere.
6. Overseers. Other jurisdictions sometimes employ independent overseers to monitor the progress of specific projects which have been demonstrably problematic in terms of cost and schedule overruns. We expect to investigate the option of retaining on-site overseers to monitor the construction of specific large projects, or to perform spot-checks of the engineering competency of PREPA's system operations in general.
7. Outsourcing of Operational Services. The Commission anticipates using a third-party administrator to implement energy efficiency and demand response programs in Puerto Rico. We expect to investigate whether a similar approach could be used to provide other types of services to PREPA.

The Commission recognizes that there may be challenges in implementing some of these actions to improve performance at this time. Nonetheless, the Commission intends to investigate all potential actions in this performance proceeding, in order to identify and discuss all available options and opportunities for overcoming such challenges in the mid- to long-term future.

C. Independent Performance Audits

The Commission expects that independent performance audits will be a useful tool for understanding and improving PREPA's performance in many different areas. We expect to utilize one or more audits during this proceeding, not only to review and verify the books and records of PREPA, but also to examine the underlying practices and procedures at PREPA that have led to the current performance levels.

We expect independent audits to analyze what is working well and why; what is not working well and why; what is the best level of performance that is within PREPA's capabilities at the current time; what steps and mechanisms are necessary (and on whose part) to prompt PREPA to achieve that level of performance; and what changes will be required to obtain future levels of performance higher than are currently achievable by PREPA. The audit will also enable the Commission to assess a baseline from which to measure improvement.

Audit reports will identify areas in which performance is lacking, and include recommendations for how performance can be improved. The reports will also identify areas of good performance, with the assessment of effective strategies and how they may be applied elsewhere.

The independent audit(s) undertaken as a part of this proceeding could take the form of one or more of the following types:



- A performance audit that will investigate PREPA's internal operations, including management and staff performance, training, and retention.
- A financial audit that will investigate PREPA's management of its budget including revenues and expenditures.
- An engineering audit that will investigate the operation and maintenance of PREPA's generation, transmission, and distribution infrastructure.

PREPA will bear the cost of the audit(s), but will be allowed by the Commission to recover any auditing costs from ratepayers. PREPA will be required to cooperate with the auditors and provide full access to its employees, facilities, records, and documents, among other things.

IV. PUBLIC COMMENTS

The Commission is seeking comments from interested stakeholders which shall be due on December 15, 2016. The purpose of these initial questions is to seek information that will be helpful to the Commission in the establishment of the scope of work for the investigation. Interested stakeholders should respond to the following questions:

1. With regard to the areas of performance described in Section III(A) above, do they adequately characterize the areas that the Commission should investigate in this proceeding? Are there areas of performance that should be added to or removed from this list?
2. For each performance area that you recommend the Commission investigate in this proceeding:
 - a. Please describe in detail why the performance area should be investigated in this proceeding.
 - b. Please identify any specific performance areas that you believe an independent auditor should investigate.
 - c. Of the performance areas that you recommend be investigated, how would you prioritize them?
3. With regard to the potential actions to improve performance described above in Section III(B), do they adequately characterize the types of actions the Commission should investigate in this proceeding? Are there actions that should be added to or removed from this list?
4. For each potential action that you recommend the Commission investigate in this proceeding:

- a. Please describe in detail why the action should be investigated in this proceeding.
 - b. Of the actions that you recommend be investigated, how would you prioritize them?
5. What role should the independent auditor(s) play in the performance proceeding ?

Based on the foregoing the Commission, by this Notice of Investigation, commences this performance evaluation proceeding and rulemaking process.

For the benefit of all the parties involved, the Commission issues this Notice of Investigation in English and Spanish. Should any discrepancy between each version arise, the English version shall prevail.

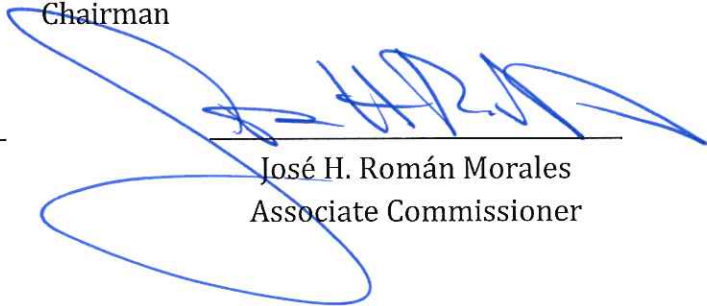
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Agustín F. Carbó Lugo
Chairman



Ángel R. Rivera de la Cruz
Associate Commissioner



José H. Román Morales
Associate Commissioner



CERTIFICATION

I hereby certify that the Puerto Rico Energy Commission has so agreed on November 15, 2016. I also certify that a copy of this Notice of Investigation was notified by electronic mail to the following: n-ayala@aeep.com, c-aquino@aeep.com. I further certify that on November 15, 2016, I have proceeded with the filing of this Notice of Investigation and I have sent a copy thereof to:

Autoridad de Energía Eléctrica de Puerto Rico

Attn.: Nélida Ayala Jiménez

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