



Puerto Rico Energy Week 2023

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Introduction



- ▶ Electricity is the PRASA's second higher cost;
- ▶ Frequent failures in power supply undermine PRASA quality of service;
- ▶ Complex system: over 2,000 power-consuming facilities;
 - ▶ Most of them are aged and designed with low-efficiency standards;
 - ▶ PRASA is working on more efficient types of equipment (VFD, intelligent valves);
 - ▶ Highly vulnerable to the elements;
- ▶ Most of the generated power comes from imported fossil sources.
- ▶ PRASA is preparing, for the first time an **Energy Optimization Master Plan** to integrate all initiatives and set a baseline with metrics to measure the improvement of efficiency.



What's the key issue regarding this topic?



- ▶ Significant number of facilities scattered all over the Island;
- ▶ Wide range of power consumption;
- ▶ Dependency on the third party - Wheeling;
 - ▶ Weeling will not address the reliability issue completely;
 - ▶ Some local alternatives (at the site level) will be evaluated (ej, Solar Panels);
- ▶ Lack of Standards to set PRASA's expectations.



What are the obstacles to overcome in addressing this issue in the next 12 months?



- ▶ Many technologies are now available to provide Renewable Power Supply;
 - ▶ PRASA is setting the proper standards to cover current and future needs;
 - ▶ APP is the right tool, but it should be used wisely;
 - ▶ Identify opportunities to provide local redundancy;
 - ▶ Timeframe to:
 - ▶ Construct required infrastructure;
 - ▶ Obtain permits;
- ▶ Some solutions could require legislation.



What are the benefits / consequences of addressing or not addressing this obstacle?



- ▶ Maintaining the status quo is no longer an option;
- ▶ Reliable water service at a lower cost will boost the PR economy;
- ▶ Strengthen the power industry and will create opportunities to mimic PRASA's experience to small firms;
- ▶ Lower Carbon footprint.



Final Statement



Regarding the nexus of energy and water, the focus should be on:

- ▶ Develop a strategy to clearly identify win-win alternatives among Clients, PRASA, PREPA, and Investors;
- ▶ Develop a road map to evaluate lessons learned and propose strategy to define the road ahead from current APPs;
 - ▶ **The Energy Optimization Master Plan is the key.**

There are no individual solutions!

