

ENERGY FOR VIEQUES: Q & A

Question: What are our basic options for powering Vieques through electricity?

Answer:

1. **PREPA - BAU** (Business as Usual) or some other public centralized entity that would continue to operate much like PREPA in Vieques with the same management, dependence on the main island, and vulnerability;
2. **PREPA - New**, an enlightened organization that would create and operate Vieques power utilizing solutions dedicated to our island and independent from the main island;
3. **Privatization** (centralized or decentralized) with an energy control board or utility commission;
4. **Co-operative** composed of all energy payers to contract for both generation and distribution; or
5. Some combination of the above.

Question: What are the advantages and disadvantages of remaining with a PREPA – BAU based system?

Answer: The major advantage to continuing with the existing system in one form or another is that it is easy. We all just go home, and our existing service will become perpetual without us having to think or protest or be involved. Trust the systemic perpetrators of the last several decades to change their ways and begin a new day.

The disadvantages are that nothing changes and history will repeat itself:

- Total lack of maintenance
- Antiquated and substandard equipment
- Decades old technology
- Poor service and reliability
- Graft and corruption at multiple levels
- High energy costs
- Dependency on the main island and maritime support
- Missing a fortuitous open window of opportunity for upgrading
- Lack of citizen input and participation in the decision-making process and goal setting
- Long-term (4 to 5 years) dependency on backup power

Question: What are the advantages and disadvantages of a PREPA – New system?

Answer: The potential advantages of a transition to a new PREPA are:

- Continuity of and familiarity with the existing system
- Customer cost savings through creating an independent microgrid network with alternative energy generation such as solar and a related billing structure
- Resiliency of both generation and distribution systems
- Government grants to build a new system
- Rapid implementation
- No reliance on or requirement for undersea cables

The disadvantages are that PREPA might:

- Not really become enlightened and resort to the “Business as Usual” model with the next or future administrations and be subject to political dealing
- Put in some improvements but generally remain much the same
- Create a desirable and effective local system, but charge its Vieques customers the standard fees it charges throughout PR
- Exclude customers from input in making short and long-term decisions and plans

Question: What are the advantages and disadvantages of privatization?

Answer: Privatization is neither good nor bad: the devil is in the details. If properly established, a commercial partner can provide the best product and the best service through the terms and conditions of a controlling contract. In cases such as Puerto Rico, the effort to privatize is considered as a means to extract the government from a losing situation and raise some cash at the same time. While this is understandable for a bankrupt government, the PREPA physical assets are not worth much, yet getting the monkey off of their backs might be huge to them. The real disadvantage to our energy program under privatization in this specific case is that **we would lose eligibility for federal and many private source funding opportunities for infrastructure improvements.**

Question: What are the advantages and disadvantages of a co-operative?

Answer: The philosophical and practical advantage is control. As a co-op for energy users, we become independent public operators. While neither our local government nor our energy users have the critical expertise to run an island microgrid by ourselves (nor do we want to), we definitely have the intelligence to work with experts to specify what we want and put it out to the world to bid. Once established, managing the contract (compliance,

amendments, enforcement, etc.) is performed by a Board of Directors (or a Public Utility Commission) selected and elected by the residents and energy users. The disadvantages are that this is a different concept for the community, and initial funds may need to be raised to get the co-op started.

Question: What resources do we have to assist us in both forming and running an energy co-op?

Answer: According to Wikipedia: *“The National Rural Electric Co-operative Association (NRECA) is the organization that represents the interests of over 900 electric co-operatives in the United States, to various legislatures. Independent electric utilities are not-for-profit and are owned by their members. The Association, which was founded in 1942, unites the country's generation, transmission and distribution co-operatives which are found in 47 states and serve over 40 million people.”*

The official website is: <https://www.electric.co-op/> The NRECA can be extremely useful in the formation of a Vieques energy co-op – from organization to design to finance and operation. Mutual aid during emergencies with other co-ops can be very productive and reassuring.

Other government and professional organizations experienced in both co-ops and sustainable energy solutions are ready, willing, and able to assist us.

Question: How do we qualify to join and/or receive assistance from these sources?

Answer: Almost any benefit can be purchased, but some require organizational and system minimums or standards. Since we do not have a co-op yet, we can structure it to comply with any legal or institutional rules and regulations. The equipment standards are definitely an issue in Vieques. The existing grid is truly like something out of the 50's and not served in contemporary supply chains – especially during emergencies. Additionally, mutual aid workers are accustomed to working with today's technology and not skilled at antique restoration. Our grid must be brought up to today's standards before we would become a full member of the NRECA. That will cost millions but would be a huge plus for our security and reliability. It appears funding is available to do this now.

Question: What are the initial fund requirements, and how do we raise them?

Answer: Our start-up funding requirements include:

- Legal and administrative
- Microgrid design & construction

- Solar generation & storage installation
- Backup generation and system integration

While the cost of this could be in the \$50,000,000 range, it is financeable. Even with the bankruptcy of PREPA, we would qualify for infrastructure loans/bonds as an independent energy entity and be able to pledge monthly amounts for repayment based on our collections. BUT, with a little help from our friends, the major source of funding could actually be FEMA. There are also many additional grant programs for which we qualify.

Question: How much would our rates go up to pay back the loans?

Answer: Our rates would NOT go up, they would actually go down. Typically, solar contracts are for \$0.10 to \$0.13/KWH, which is about half of what we have been paying PREPA. The exact figures would be influenced by how much we borrow versus how much we receive in grants.

There are many, many grant opportunities available to us as a citizen owned co-op, and we are fortunate to have several experienced grant writers full and part time among us. As the creation of a co-op would progress, we would begin mobilizing the funding activities.