March 29, 2019

Public Service Regulatory Board
Puerto Rico Energy Bureau
World Plaza Building
268 Muñoz Rivera Ave.
San Juan, PR 00918

Submitted via email to comentarios@energia.pr.gov
Re: Case Number CEPR-MI-2018-0010

Dear Chairman Avilés and Commissioners Rivera, Mateo, Palou and Ramos:


General Comments

We note that this proposed regulation goes far beyond the scope of Act 57-2014 in creating the structures for a wholesale electricity market and for retail competition in Puerto Rico, neither of which are necessary for the implementation of a wheeling mechanism. It is unclear under what legal jurisdiction the Bureau is developing regulations for these new market structures, and thus while we do not render a legal conclusion herein, we question whether the Bureau is acting outside of its authority. For example, Puerto Rico’s new energy policy and regulatory framework, P.S. 1121 (signed by the governor this week) does not require the Energy Bureau to conduct a study on the desirability and convenience of a wholesale electricity market until 2025².

Neither the Bureau’s February 28, 2019 order nor its previous order of August 7, 2018 has explained what problems – e.g., greater resilience and recovery, or larger percentage(s) of renewable generation – are meant to be solved by the implementation of retail choice and a wholesale energy market. While we are aware that emerging actors in Puerto Rico’s electricity system, including municipal electric systems and electric cooperatives, may seek to use PREPA’s transmission and/or distribution assets (as well as a desire on the part of some industrial

¹ We gratefully acknowledge the assistance of Anna Sommer and Chelsea Hotaling of Sommer Energy in drafting these comments.
² “El Negociado de Energía deberá realizar un estudio sobre la viabilidad y conveniencia de establecer en Puerto Rico un mercado eléctrico basado en la libre competencia y presentará un informe con los resultados de dicho estudio ante la Asamblea Legislativa y al Gobernador en o antes del 30 de junio de 2025.” (P.S. 1121, Artículo 1.19)
customers to implement wheeling), these needs can be met without wholesale market and retail choice mechanisms. Such mechanisms are solutions in search of a problem and by implementing this proposal the Bureau will create more problems, i.e., less transparency, more opportunities for gaming and corruption, and additional expense for a system (see wholesale market sidebar) that is already unsustainably expensive.\(^3\)

As the Bureau is well aware and has documented extensively in prior orders, Puerto Rico’s electrical system is expensive and barely functional. PREPA has historically been unable to present a well-supported budget to the Bureau\(^4\) and it has a history of entering into expensive and mismanaged contracts.\(^5\) Changes to the ownership structure of PREPA’s assets will not make its existing generators more flexible, less expensive, or less prone to forced outage. Given this situation, layering on additional bureaucracy and expense does not make sense at this time and probably not at any future time.

Our general comments are divided into three sections, related to the proposed regulation’s provisions on wheeling, wholesale energy markets and retail choice.

**Wheeling**

IEEFA supports implementation of wheeling, as required by Act 57-2014.\(^6\) However, we note that Act 57 requires that the Bureau “shall establish the rules and conditions to ensure that wheeling does not affect in any way whatsoever (including technical problems and rate increases) nonsubscribers of wheeling services, as well as the rules necessary for implementation of a system that allows exempt business described in Section 2(d)(1)(H) of Article 1 of Act No. 73-2008, as amended, known as the ‘Economic Incentives Act for the Development of Puerto Rico,’ or similar provisions in other incentive laws, to purchase electric power from other entities through wheeling services.”

Nonsubscribers of wheeling services are likely to be harmed by the loss of load from PREPA that wheeling would likely imply, absent significant study and measures designed to avert such harms. Loss of load from wheeling has not been factored into PREPA’s IRP nor have the implications of that loss of load on rates been fully thought through. The proposed wheeling regulation states


\(^6\) The Public Utility Law Project of New York (“PULP”) does not take a position on wheeling other than to note that it supports measures that demonstrably lower rates and prices for low-income/fixed-income consumers, and buttress reliability, resiliency, safety and adequacy of supply.
(Section 4.07) that “PREPA may propose non-bypassable charges [including stranded costs] to be collected from all retail Customers, regardless of whether these Customers take service from competitive suppliers.” If those stranded costs arise from a customer who exits the system due to wheeling, this would seem to be in direct contradiction to Act 57. And we are highly skeptical that small customers will become “subscribers” of wheeling services by participating in the wholesale market; the complexity of doing so is likely to be too high a bar as it is in other jurisdictions. Moreover, there is no evidence that small or large customers would benefit from such behavior. To the extent that the presence of a wholesale market compels parties not already doing so to construct and operate generation in Puerto Rico—a claim that we find to be highly dubious—those parties are likely to be large consumers and producers of energy. Furthermore, the imposition of non-bypassable charges could create an incentive for customers, particularly large industrial customers, to self-supply, i.e., completely exit out of PREPA’s system, in order to avoid such charges. Even if PREPA could properly assign the resulting stranded costs to retail customers that is no insurance against a death spiral of raising rates to cover stranded costs. Such a spiral would incentivize large consumers to exit PREPA’s system to self-supply, and then rates would need to be increased to cover stranded costs. This is critical because not only is it in contravention to Act 57, but it is expected that PREPA’s load will continue to decline meaning that there will already necessarily be stranded costs in the future and necessarily rate increases to cover those costs.

If the purpose of the wheeling regulation is to allow for industrial customers to use PREPA’s transmission and distribution infrastructure to facilitate developing their own power supplies, then this must be carefully planned for (and possibly capped) to minimize the problem of stranded costs as well as the overbuilding of generation by PREPA based on overstated load forecasts. In particular, we are concerned that PREPA’s February 19, 2019 Integrated Resource Plan filing did not take into consideration the implementation of wheeling, even as a sensitivity to its load forecast.

The proposed rules require PREPA to file an embedded cost of service study, a marginal cost of service study, and a total system long-run incremental cost (TSLRIC) study. This is putting the cart well before the horse, particularly when there is no clear, feasible consensus around how Puerto Rico’s electrical system will change (or not) even in the near future. We strongly recommend that rather than directing PREPA to perform these studies, PREPA be directed to perform a study of the process for and impact of establishing an open access transmission tariff as well as assess the appetite for wheeling by potential users, i.e., industrial, municipal and cooperative consumers of electricity. Further, because Act 57 is explicit about not harming nonsubscribers of wheeling services, PREPA should explore, in the IRP, how its preferred expansion plan changes with the exit of varying levels of load. Finally, since one of Puerto Rico’s overarching policy goals is to transition to 100% renewable generation, there must be a study of the existing and proposed systems’ hosting capacity for distributed energy resources.

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7 As written, the proposed regulation only applies to industrial customers. However, we recommend that PREPA be required to assess the appetite for wheeling by other customer classes, given the possibility that municipalities and energy cooperatives may also want to take advantage of a wheeling mechanism.
Wholesale energy market

The proposed regulation envisions the establishment of a wholesale energy market in Puerto Rico, in which a System Operator would oversee the rules of a market for the sale of electricity by private generators, similar to the wholesale electricity markets that exist in many U.S. jurisdictions.

In the mainland U.S., wholesale electricity markets were designed to take advantage of the economic efficiencies arising from integrating multiple utility generation systems into a single market, allowing for economic dispatch of generating units across a broader geographic region to lower costs. Obviously this geographical advantage is not available to Puerto Rico. Nor would Puerto Rico have the resources available to even the smallest single-market independent system operator in the mainland United States.

Puerto Rico’s wholesale energy market would be more than 10 times smaller than the smallest wholesale market in the mainland United States, the New England Independent System Operator, which manages 350 dispatchable generators. Additionally, wholesale electricity markets in the various States were supposed to incentivize the development of new generation facilities and lower energy supply costs, neither of which can objectively be proven to have occurred absent the influence of plunging natural gas prices due to hydrofracking – also largely unavailable to Puerto Rico as a mitigating factor. We are deeply skeptical that either of these outcomes – more efficient dispatch or the development of new resources – is likely to occur to any significant extent through the implementation of a wholesale electricity market in Puerto Rico.

To the contrary, there has been no articulation of why a wholesale market would lead to more efficient dispatch, or any evidence to support that reasoning. Current limitations on dispatch - including contractual provisions, minimum run times (see page 4-4 of the IRP), and excessive forced outage rates - are not cured by the presence of a wholesale energy market. To the extent those and other limitations continue to govern generator output, a wholesale market would not provide the system operator with any tools to optimize short term dispatch that are not already available to PREPA.

In addition, we note that the privatization mechanism enacted by Law 120 envisions not a wholesale electricity market but a series of long-term, bilateral contracts for new generation with such resources dispatched by an independent transmission and distribution concessionaire. This builds on the model currently in place in Puerto Rico, in which PREPA is responsible for the dispatch of privately owned generators under long-term contract, including the AES coal plant and EcoEléctrica natural gas plant. Efficient dispatch of a utility system can certainly be achieved through this model, a wholesale market is not a prerequisite.

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9 Law 120-2018 authorizes the Public-Private Partnership Authority to establish partnership contracts for new generation and other electrical system functions. The request for qualifications recently issued for the transmission and distribution concession (http://www.p3.pr.gov/assets/p3a-rfq-2018-2-td-system-project.pdf) specifies that the concessionaire will be responsible for power purchasing and for generation scheduling and dispatch (see Section 2.3.1).
There is no reason why PREPA or a subsequent entity cannot economically dispatch these units along as this is not precluded by contract terms (such as take-or-pay provisions). Indeed, given PREPA’s history of contracting irregularities, ensuring that PREPA and the Public-Private Partnership Authority get these contracts right is far more important for customer rates than any incremental benefits (if any) that might arise from the implementation of a wholesale market.

If, in the alternative, the premise of the proposed regulation is to promote long-run efficiency by providing an economic incentive for the addition of new generation and the retirement of existing generation such a presumption is highly dubious. First, land and fuel delivery constraints limit both the scope and scale of new generation — there are limited sites appropriate for the construction of new power plants and therefore limited parties who can build new generation. Second, as in other markets, purely merchant generation is unlikely to come online due to risk that the generator cannot achieve a reasonable return on investment (ROI) because of such factors as uncertain and volatile power prices, uncertain and volatile fuel prices, declining demand for electricity, and other factors that could change radically over the lifetime of the investment. Normally, new generation needs a long-term contract to secure financing for construction and given the uncertainties and volatilities in Puerto Rico’s energy markets there is no reason to think it would be any different. If it is a long-term contract that brings new generation online, then the question again becomes, what public good does a wholesale market convey on that transaction?

Further, the proposed regulation doesn’t adequately address small but impactful details of wholesale market operations. Wholesale markets have often capped energy prices even during times of scarcity because of the outsized impact high market prices, even for short periods, can have on customer rates. But doing so dampens the incentive for new generation to come online. Also, the proposed regulation doesn’t address how market power would be mitigated since just two of Puerto Rico’s existing generators, the AES coal plant and the EcoÉlectrica gas-fired power plant already make up about a third of the island’s generation, a percentage that will only grow as load continues to decline.

**Retail choice**

We strongly reiterate our concerns with the establishment of retail choice — another component of this proposed rule. States’ experiences with retail suppliers of electricity to residential customers overwhelmingly demonstrate that many energy service companies engage in predatory pricing, misleading offers and inadequate protections, especially when marketing to low-income customers. Analysis in New York, Massachusetts, Maryland, Illinois and Connecticut showed that residential customers were consistently overcharged by many energy service companies. There is also a record of these retailers transferring customers to themselves without informed consent. In particular, a briefing paper on this topic released by IEEFA reviews the experience of New York and other states with retail choice. The paper explains that retail choice

10 According to the American Public Power Association, only 7 percent of new capacity built in 2015 was built on a purely merchant basis. Myriad state level policy and regulatory actions and long-term contracting supported the remainder of capacity built in that year. [https://www.publicpower.org/blog/increase-merchant-generation-capacity-positive](https://www.publicpower.org/blog/increase-merchant-generation-capacity-positive)

11 See footnote 3 above.

has failed to provide savings to residential electricity customers. Instead, it has cost “residential customers billions in excess charges with many participants incurring these charges because of predatory and unfair practices.” The response to these concerns seems to be largely that because other states have made those mistakes Puerto Rico can somehow avoid them.13 This cavalier response ignores basic realities including the fact that other states that have encountered retail choice problems such as New York and Massachusetts have more financial resources to devote to energy regulation and a much lower proportion of residents living in poverty. In addition, the scope of this proposed rule greatly expands the workload on the Bureau by making it the regulator of energy service companies, the regulator of the wholesale market, and the wholesale market monitor. To claim that the history of other states cannot repeat itself in Puerto Rico is naïve at best.

Finally, we note that the proposed regulation does not support the long-term policy goals of Puerto Rico. Wholesale energy markets in the United States evolved to manage economic dispatch over large geographic regions for centralized generation systems. By contrast, the stated policy goals of the Puerto Rican government are to promote decentralized generation — including rooftop solar, microgrids, mini-grids, etc. Wholesale markets are not set up to incentivize distributed generation: the policies that have done the most to promote distributed solar in the mainland, such as net metering, power purchase agreements and renewable energy credit markets, operate independently of wholesale energy markets. And Hawaii — a state which has often been compared to Puerto Rico because of its isolated grid and ambitious transition from oil to renewable energy — has achieved an extremely high penetration of decentralized generation14 without the implementation of a wholesale energy market or retail choice.

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14 J. Fialka, “As Hawaii aims for 100% renewable energy, other states watching closely,” Scientific American, April 27, 2018.
Costs of Establishing a Wholesale Energy Market

In order to establish the wholesale electricity market, significant costs will be incurred for startup and for ongoing operations and administration. A GDS Associates, Inc. report found rising costs in administering Regional Transmission Organizations (RTO) in their analysis of the mainland RTOs: SPP, CAISO, ISO-NE, MISO, NYISO and PJM. The report calculated the costs passed on to participants for operational and administrative costs in 2005 and found the total cost across these RTOs to be $1 billion.\(^1\) In 2005, the total operational and administrative costs for SPP were $48 million (2005 was first year of operation), this before an imbalance or day-ahead energy market were even established; $273 million for MISO; and $124 million for ISO-NE.\(^2\) As a more recent example for costs, ERCOT has a budget of $222 million for 2018 and $228 million for 2019 to cover operating expenses, project spending, and debt service obligations in addition to a System Administration Fee of 55.5 cents per MWh.\(^3\) This is not to say that a wholesale market can’t produce benefits for customers given these costs, but the RTOs mentioned here are integrating the operation of tens of thousands of megawatts of generation with significant fuel diversity and diversity of ownership and economically dispatching those units in a way that would not have been possible absent the RTO. Puerto Rico’s peak demand is approximately 2200 MW and declining and its system generation is currently mostly coal and oil-based. PREPA attempts to economically dispatch its units now, but that dispatch is constrained by contractual limitations and by the poor condition of Puerto Rico’s generation and transmission system which causes PREPA to keep units like Aguirre, Palo Seco, and San Juan running for at least one month when turned on.\(^4\) These constraints are likely to exist regardless of whether a wholesale market exists or not.

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Responses to Bureau Questions

1. Are the proposed rules adequate to support non-discriminatory open access to the transmission network in support of wheeling transactions?

As described in the general comments above, the proposed rules are not the only or even best way in which Puerto Rico can offer open access to its transmission network.

2. Please comment on the overall industry structure outlined in Article 3 of the proposed rules. Are there key entities or elements missing? Are the roles and responsibilities of the proposed entities appropriate?

Section 3.04 on Energy Service Companies states that an Industrial Customer or Large Commercial Customer can be served by more than one Energy Service Company. This seems like an added layer of complexity with metering and the specification of contracts for firm generation and firm load in these instances.

Again, however, we would oppose the establishment of both retail choice and a wholesale energy market.

3. Is it appropriate that PREPA (or its successor(s)) continue to operate as the Default Service Provider? What responsibility should the Default Service Provider have to serve load in the event that an Energy Service Provider defaults?

We do not support the implementation of retail choice for the reasons outlined above and in the August 2018 IEEFA policy brief (see footnote 12 above). Yes, PREPA (or its successor(s)) should continue to operate as the Default Service Provider. In the event of a default by a large industrial customer, then as the default service provider, PREPA can provide power for that customer, assuming it is available.

4. What changes need to be made to the current transmission of information between PREPA and generators to support the SO’s functions?

No comment.

5. Prior to the development of an independent monitor and monitoring plan, what specific actions or oversight activities should the Energy Bureau undertake to ensure the reasonableness of the market structure to be set up under the SO Protocols?

The Energy Bureau should undertake multiple activities prior to setting up any aspect of the wholesale market structure. These activities include investigating the cost of creating a wholesale electricity market (startup and operating costs) versus the alleged benefits, investigate the feasibility of creating a wholesale market structure, investigate the feasibility and cost of alternative system operator models, and analyze the impact that a wholesale electricity market would have on all ratepayers. Indeed, a study on the desirability and convenience of establishing a wholesale market is required by P.S. 1121 (by 2025). As noted previously, the operational and
administrative costs of operating a RTO can be substantial and the implementation of a wholesale electricity market is unlikely to guarantee any cost savings for ratepayers.

6. What additional customer protection measures should be included in the proposed rules?

We do not support the implementation of retail choice for the reasons outlined above. While the proposed rules do include some protection measures for consumers, there is some vagueness within the measures that should be clarified. Additionally, despite comprehensive regulation and regulatory resources, few of the states with retail choice have found such consumer protections to meet the need of the citizenry to be shielded from higher prices and deceptive business practices. For instance, Section 13.06B allows Energy Service Companies, as a precondition to providing service, to require a “reasonable cash deposit” or alternative options to demonstrate creditworthiness that are “reasonable and nondiscriminatory.” These terms need to clarified with a specific limit on that deposit and a specific method in which creditworthiness can be determined. There is a real risk here that customers will simply be disconnected from the electrical system with no means for reconnection.

There are also concerns with Section 13.09 and the exceptions given for the disclosure of customer’s Social Security numbers without the customer’s consent. Given the sensitive nature of Social Security numbers, there should be no conditions where this is provided to anyone outside of the Energy Service Company without the consent of the customer, and the Bureau should give thought to forbidding the requirement of social security numbers as states like New York have done.

Section 13.10 specifies that an Energy Service Company only has to provide notification to the customers, the TDP, and the Default Service Provider, with a minimum of 14 calendar days prior to its default. This provision underscores how risky it would be for customers to choose an alternative supplier with no guarantee that the supplier will be in place for more than 14 days.

Section 13.11B requires information to be included in the contracts offered by an Energy Service Company. This list of items should also include the specific amount that an Energy Service Company charges as a fee if the customer exits their contract early. And, ideally, there should be no exit fee.

Section 13.14 allows the Energy Service Company to terminate a contract by providing at least 14 calendar days written notice if the customer fails to pay their bill. Clarification needs to be given on if this is 14 days after one missed payment or if the time frame for overdue bills is longer. If it is the case that Energy Service Companies can terminate service within 14 calendar days of a customer missing their bill, then a longer timeframe would be more appropriate and more consistent with normal disconnect practices. We advocate replicating New York’s statutory requirement that a bill not be “late” until twenty (20) days past the payment date, and that once a bill is late no less than fifteen (15) days notice is given to consumers, provided that elderly, blind and disabled customers also receive additional notice and process.
7. The Energy Bureau envisions integrated resource planning to evolve to focus on both wholesale-level resources as well as distribution-level distributed energy resources. This would occur through a collaborative effort between the TDP and SO, as described in Article 7.05 of the proposed regulations. Are there any good examples of this process from other jurisdictions that Puerto Rico should consider?

We would fully support an integrated IDP and IRP. And Hawaii’s last IRP and current integrated grid planning docket\(^{15}\) are probably the closest example of that. However, the establishment of a wholesale market and retail choice makes it very difficult to do meaningful IDP and IRP. It’s unclear who would ultimately hold responsibility for reliability and resource adequacy and therefore who ultimately needs to build generation. Even if both an IDP and IRP were optimized from a societal perspective, who then has responsibility to implement those plans? How, for example, would all cost-effective energy efficiency be leveraged?

8. It is possible that in the near-term, the SO will not be completely independent from other system components. This is especially true during the time that the SO is still embedded in PREPA, where it will have some affiliation with generation assets. Please comment on how the proposed rules address this issue.

We do not support the implementation of a wholesale electricity market as outlined in the comments above. A well-crafted Open Access Transmission Tariff (OATT) would seem to be the best way to address affiliate issues in which transmission and generation is owned by the same entity.

9. If the SO and TDP are the same entity, the proposed rules would require corporate or functional separation between the SO and any other part of the organization that has an interest in any generation facility or other resource on the grid. Please comment on how the proposed rules address this issue.

It is very much an open question as to whether meaningful separation can be achieved through corporate or functional separation. “Deregulation” in multiple states simply led to the transfer of generation assets to an affiliate of the same holding company, or to “merchant generators” that were able to re-amortize already paid for assets, with negative consequences upon rates. In other words, this has not addressed the incentive to maximize overall company revenues, as evidenced by various attempts to connect captive customers to “merchant” generation owned by an affiliate company through above-market contracts. Again, we don’t think a wholesale market makes any sense for Puerto Rico, but if it is established, corporate separation is not going to address affiliate concerns. Only strong regulation can do so.

10. The proposed rules require PREPA to file an embedded cost of service study, a marginal cost of service study, and a total system long-run incremental cost (TSLRIC) study. The purpose of the embedded cost of service study is to ensure that is historical costs are allocated across classes in an equitable manner. The purpose of the marginal cost of service study is to ensure that rate designs provide efficient price signals. The purpose of the TSLRIC study is to

ensure that services are priced competitively. Please comment on this proposal and the associated provisions of the proposed rules.

Again, we think this is jumping well ahead. Instead, studies should investigate the cost of creating a wholesale electricity market (startup and operating costs) versus the alleged benefits, investigate the feasibility of creating a wholesale market structure, investigate the feasibility and cost of alternative system operator models, and analyze the impact that a wholesale electricity market would have on all ratepayers.

Additionally, regarding the implementation of wheeling, PREPA should be required to assess the appetite for wheeling by potential users, i.e., industrial, municipal and cooperative consumers of electricity, and to integrate this analysis into its current integrated resource planning process to capture the potential for loss of load via wheeling.

11. Are the proposed sections regarding Terms and Conditions for Transmission Service and Initiating Transmission Service reasonable and comprehensive?

No comment.

12. Should the generation sources related to wheeling be limited to renewable sources?

In the absence of such a requirement, wheeling customers could enter into long-term contracts for new fossil fuel-based generation that could contradict the island’s renewable policy mandate (100% by 2050 in the recently passed P.S. 1121). Therefore, as a mechanism to support the implementation of the island’s renewable policy and to limit the exiting of existing customers from the system, we support this idea.

We appreciate the opportunity to submit comments.

Sincerely,

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Good afternoon,

Attached are comments of the Institute for Energy Economics and Financial Analysis, CAMBIO PR, El Puente and the Public Utility Law Project of NY regarding the Bureau's proposed "Regulation for Wheeling" in the above-referenced proceeding.

Please contact me if there are any questions regarding this filing.

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Comments in Case No. CEPR-MI-2018-0010
1 message

Cathy Kunkel <ckunkel@ieefa.org> Fri, Mar 29, 2019 at 1:52 PM
To: comentarios@energia.pr.gov
Cc: David Ortiz <dortiz@elpuente.us>, Richard Berkley <rberkley@utilityproject.org>, Cambio Puerto Rico <cambiopuertorico@gmail.com>

Attached are comments of the Institute for Energy Economics and Financial Analysis, CAMBIO PR, El Puente and the Public Utility Law Project of NY regarding the Bureau's proposed "Regulation for Wheeling" in the above-referenced proceeding.

Please contact me if there are any questions regarding this filing.

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