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Comentarios Wheeling

1 message

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Comments on Revised Wheeling Regulations

Case No/NEPR-MI-2018-0010

Date- September 2, 2019

I. Section 6.03-Metering and Billing

"The Transmission and Distribution Provider (TDP) shall have the responsibility to meter the usage of all Wheeling customers and send Bills, irrespective of whether a Wheeling customer is served by the Provider of Last Resort or a Competitive Electric Power Service Company (ESPC)."

Comment

The proposed regulation appears to grant the TDP exclusive billing rights to all customers connected to the GRID. This policy is viewed as an "unreasonable barrier to entry" because of the following:

- a. New entrants, such as, EPSC's, Microgrid Operator, Energy Cooperatives, Municipal ventures and community solar (Energy Service Providers) will have to delegate the billing and collections function of their entire operation to the TDP. This means that these entities shall lose control a key component of their cash flow, namely, billing and collections.
- b. In addition, they will lose one of the key links to their customers because if they have a billing issue the proposed structure will force customers to contact the TDP, and not their service provider, because the TDP will have the updated billing and collections information of the customer's account unless billing and payments data are updated on a daily or real time basis. As a result, in the customer's mind, their business relationship will be with the TDP and not with their Energy Service Provider. This will reduce the business value of these entities which, in turn, will limit the amount of capital to be deployed in this sector.
- c. Finally, the Billing and Collections mechanism currently being proposed by the PREB appears to contradict the stated public policy goal of ensuring that there are no "unreasonable barriers to entry".

It is our view, that if the Billing and Collections mechanism is adopted as being currently proposed by the PREB, will limit new entrants in the Power Generation sector which in turn will lead to under investment and reduced innovation in the power sector in Puerto Rico.

II. Section 6.03-Metering and Billing

"The Transmission and Distribution Provider may enter into a different arrangement for billing and metering with a Competitive EPSC."

Comment

Although this language provides the TDP with the option of entering into different billing arrangements the option is granted to the TDP provider whom in essence is a monopoly service provider. As such, we recommend the following language:



...The TDP shall invoice its Wheeling customers and provide the required data exchange that will allow the Energy Provider to incorporate this data in their customer billing. However, the Energy Service Provider shall have the option to request that the TDP provide the billing and collections functions under non-discriminatory tariffs and terms that shall be subject to PREB approval...

III. Article 8 Operating Agreements

Section 8.01 B

(3) The agreements shall include requirements for the provision of an irrevocable letter of credit, a surety bond or cash Deposit, or other guarantee for the required energy collateral... The security provided shall cover a minimum period of 60 days and a maximum period of 90 days..."

Comment

The requirement of any type of Surety can only be justified if the Energy Service Provider is responsible for billing and collections of the Transmission and Distribution component. It would not be reasonable to require a Surety if the TDP is responsible for billing and collections. In fact, one could present a business case that would justify that the TDP provider post a surety to the Energy Service Provider to guarantee their performance as a billing and collections agent for the Energy Service Provider.

We are not suggesting that the Surety requirement be eliminated but rather that it only makes business sense to require a Surety if the Energy Service Providers are responsible for billing and collections of the Transmission and Distribution component. The billing mechanism proposed is similar to the one utilized in the telecommunications industry where the wireline Carrier charges other carriers, such as, cellular carriers, long distance carriers for interconnection to the network in order to deliver their phone calls to the final customers. This is exactly what is taking place in the electric network when an Energy Service provider purchases Wheeling service from the TDP, it is utilizing the TDP network to deliver electricity to the end customer.

(9) The terms for the Transmission and Distribution Provider reimbursing the Competitive Electric Power Service Company for amounts collected...

Comment

If our recommendation regarding billing and collections are adopted, this section should specify the # days after the billing cycle cutoff date, over which the TDP will provide the Energy Service Provider with its billing data and invoice so that it may conduct its own billing that will incorporate the TDP component , the generation component and any other ancillary services that the Energy Service Provider shall be offering its customers. In addition, this section should detail the terms for payment of TDP invoices in terms of when the invoice becomes due and payable. Finally, it should also specify the number days of account delinquency that constitute an Event of Default and the terms for enforcement of the Surety.

Moreover, the Section that deals with reimbursements to be made by the TDP to the Energy Service Providers and provision of information regarding the allocation of revenues allocated between the TDP and the Energy Service provider (in those instances where partial payments are received) would only apply in those instances where the Energy Service Provider elects to utilize the TDP for billing and collections services.

(11) "A discussion of how the Metering and Billing functions shall operate so that the TDP can provide the appropriate Metering data to the Competitive Electric Power Service Company..."

Comment

The TDP should be required to provide Metering and Billing data to the Competitive Electric Power Service Company and the Provider of Last Resort. However, the Energy Service Companies should only be required to provide the TDP with billing information on a timely basis necessary in those instances where the Energy Service Provider elects to utilize the TDP for billing and collections services.

Section 9.04 Codes of Conduct

M. A Monopoly Service Provider shall not share any office space... with the sole exception of... corporate support functions..."

Comment

The corporate support functions, such as legal and accounting may be shared, however, provisions should be taken to ensure that the Requirements under the Codes of Conduct are complied with. Additionally, the costs of these functions should be fairly allocated among all the Affiliates through an internal transfer pricing mechanism that will be subject to the recommended Audit.

Q. "These plans shall include an educational component for all employees that covers training and a handbook to ensure that all employees ... understand what conduct is and is not permissible."

Comment

The Employee Handbook regarding the Code of Conduct should include a provision that failure to comply with the Code of Conduct may lead to disciplinary actions that could include employee termination.

Comments on PREPA's Initial Comments on the Regulation on Wheeling

We would like to provide our Comments regarding the Initial Comments submitted by PREPA on August xx regarding the Proposed Wheeling Regulations.

I. The Proposed Wheeling Regulations are lawful since they are within the Scope of the approved Legislation

A rigorous review of Act 17-2019, Article 1.19 -Future Establishment of an Electricity Market which states : The Bureau "shall conduct a study on the viability and convenience of establishing a market governed by free competition in Puerto Rico and shall submit a report with the results of such study to the Legislative Assembly and the Governor on or before June 30, 2015".

A simple reading of the definition of free competition clearly demonstrates that the Proposed Wheeling Regulation do not result in the establishment of a freely competitive electricity market.

The Cambridge Business English Dictionary defines free competition as follows:" **a system in which supply and demand control prices, incomes, etc., freely and without government involvement**". ¹ If we examine the Proposed Wheeling Regulation, we may note the following market characteristics preclude one from

¹ <https://dictionary.cambridge.org/dictionary/english/free-competition> . Retrieved on 08/31/2019.

characterizing the proposed market structure as being freely competitive because the electricity market will be heavily regulated by the PREB as detailed below:

The Puerto Rico Energy Bureau (PREB) will have authority to regulate the following elements of the electricity market:

1. **Market Entry-** The PREB will regulate market entry since it must certify all companies that will provide services in the industry. (Article 10.01 -Certification).

Specifically, Electric Power Service Companies (EPSC) ² will have to obtain Certification³ from the PREB in order to obtain approval to render services. The range of services that must obtain said Certification is very broad since in addition to covering the traditional power services, such as, energy generation, transmission and distribution services, new services such as grid services, energy storage as well as any other electric power service as defined by the Energy Bureau.

Most economists ⁴ would agree that a freely competitive market is one characterized by open market entry and exit where only market demand and supply regulate market entry while under the proposed Wheeling Regulation, market entry shall be regulated by the PREB.

2. **Prices**

- a. **Wheeling Rates-** “The PREB will establish, through an Order, the rates (wheeling rates) that the Transmission and Distribution Provider would charge Wheeling customers for the use of the transmission and/or distribution system. (Article 11- Wheeling Rates).

“Likewise, the Bureau shall prescribe the rules that shall apply to the wheeling of such power

² **Electric Power Service Company (EPSC)** is defined as any Person, engaged in the rendering of energy generation, transmission and distribution services, billing, wheeling, grid services, energy storage, the resale of electric power, as well as any other electric power service as defined by the Energy Bureau. PREPA, the Provider of Last Resort, the Transmission Distribution Provider/System Operator, and the Third-Party Administrator shall be deemed to be Electric Power Service Companies” Proposed Wheeling Regulations-NEPR-MI-2018-0010, page 7”.

³ **Certification** is defined as “the process by which an Electric Power Service Company seeks approval by the Energy Bureau to operate or offer services in Puerto Rico “Proposed Wheeling Regulations-NEPR-MI-2018-0010, page 6”.

⁴ Freely competitive markets require that there exists perfect competition which is” a market structure characterized by a large number of buyers and sellers of essentially the same product. Each market participant is too small to influence market prices. Individual buyers and sellers are price takers (i.e. they must accept (take) the market prices as given because they have no influence on market prices) Free and complete demand and supply information is available in a perfectly competitive market, and there are no meaningful barriers to entry and exit. As a result, vigorous price competition prevails. Only a normal rate of return on investment is possible in the long run. Economic profits are possible only during periods of short-run equilibrium before rivals mount an effective competitive response.” Hirschey Mark, 2009. Managerial Economics 12th Edition. Mason, Ohio, South-Western Cengage Learning. Page 383.

through the Electrical System, and the rates applicable to consumers and independent power producers for such services. (Section 1.7 Electrical System Planning and Operation, p. 25)

b. **Power Purchase Agreements-** The Energy Bureau, subject to the provisions of this Act, pursuant to the planning parameters established in the Integrated Resource Plan, adopt the rules that shall govern the process through which large scale industrial and commercial consumers, energy cooperatives or demand aggregators structure into power purchase agreements directly with an independent power producers.(Section 1.7 Electrical System Planning and Operation, p. 25).

c. **Energy Service Pricing-** The Energy Bureau shall have primary and exclusive jurisdiction over the following affairs:

“The approval of rates and charges charged by energy companies or independent power producers in connection with any electric power service, in accordance with the provision of Section 6.25 of this Act, as well as in cases and disputes related to the rates that the energy companies (Note- that no specific reference is made to PREPA but rather an energy service company which could be all of the energy entities described in Act 17-2019).

3. Terms

a. **All Electric Services** – The PREB shall regulate the terms and conditions of **all Electric Services provided to Persons receiving Electric Service in Puerto Rico** (Article 2- Energy Bureau Authority, Section 2.1-(B)).

b. Oversee and take measures as appropriate to ensure that **all aspects of and all entities operating in the context of wheeling** are functioning in accordance with this Regulation and the laws of Puerto Rico.

A freely competitive market is one where supply and demand alone dictate prices, not one regulated by a government regulatory body.

c. **Competition-** The PREB shall monitor wheeling to ensure that no one entity exercised market power and to take whatever corrective actions are necessary. (Article 2- Energy Bureau Authority, Section 2.1-(B).

A freely competitive market is one characterized by fierce competition. However, in this market, the PREB shall regulate the behavior of competitors to limit their actions whenever an attempt is made to exercise market power⁵. Thus, to the extent that the PREB shall retain authority to control the competitive actions of Electric Power Service Companies, the market may not be characterized as being freely competitive.

⁵ **Market Power** is defined the OECD as: “the ability of a firm (or a group of firms) to raise and maintain price above the level that would prevail under competition. The exercise of market leads to reduced output and loss of economic welfare.” <https://stats.oecd.org/glossary/detail.asp?ID=3256>. Retrieved on 08/31/2019.

Therefore, one may conclude that **the Proposed Wheeling Regulations do not violate the legislative mandate as established in ACT 17-2019 that precludes the establishment of a freely competitive electricity market.**

However, there are other arguments presented by PREPA in its Reply comments that need to be addressed.

II. The Legislative Intent regarding the future development of the Electricity Market in Puerto Rico is not limited to Large C&I customers only as argued by the Puerto Rico Electric Power Authority (PREPA).

If one examines the three (3) Acts cited by PREPA its comments, namely, Act 57-2014, Act 120- 2018 and ACT 17-2019 there are numerous instances where the Legislature clearly states its desire to foster the competition in the electricity market , foster economic development of Puerto Rico and (in addition to supporting the manufacturing sector) support small , medium sized businesses and residential customers through lower energy prices.

ACT 57-2014

Puerto Rico Energy Transformation and Relief Act

In the Statement of Motives section, the Act specifically mentions the following:

“the high cost of energy limits our ability to stimulate the economy, strengthen small-and-medium sized business, as well as to attract private investors from abroad, develop commercial, industrial and manufacturing activities...” (page 2)

This measure amends the Electric Power Authority Act It does not include amendments that respond to vested interest, but rather in support of the socio-economic development. (page 4)

In the Energy Relief Now section (p. 11), the Act specifically mentions the following:

This Legislative Assembly recognized that the Energy Reform established herein Is the most effective manner to promote initiatives and measures ... to restructure the electric power system in the Island and to serve as a driving force to promote the economic and competitive development ... (page 12)

ACT 120-2018

Puerto Rico Electric Power System Transformation Act

In the Statement of Motives Section, on page 4, it states:

“In lieu of serving as the foundation for the development of Puerto Rico’s economy, as contemplated during the creation of the Authority (PREPA), our electric power generation has become an obstacle that has hindered our opportunities for economic development” ...

On Page 7 its further states:

“Finishing the transition process requires the approval of this regulatory framework, which provides a competitive model for the various energy sector participants. Thusly, provider and power generation source monopolies shall be avoided and diversification shall be promoted.”

On Page 9 it states:

"This transformation shall be our new engine for economic development, benefitting small-and-medium sized business owners... Likewise, this energy model shall make our Island more attractive to new industries and businesses that create jobs, increasing economic the activity and value to our society.

On Section 3- Legislative Intent and Declaration of Public Policy (Page13) regarding the establishment of Public-Private Partnerships it states:

The Partnership Committee shall also carefully consider the possibility ... selection of various proponents, for the purpose of providing consumers with more than one option, thus promoting a competitive environment.

On Page 22, section h it states:

"All of the PREPA Assets devoted to electric power generation may not be sold, or otherwise disposed of or assigned to a single Contractor under a Partnership or Sales Contract. Under no circumstances, may the transactions conducted under this Act be used to constitute or authorize an electric power generation monopoly"

ACT 17-2019

Puerto Rico Energy Public Policy Act

Statement of Motives

The electric power system should promote the economic development of the Island. Electric power services are inefficient, unreliable and provided at an unreasonable cost to residential, commercial and industrial customers. "(page1)

"Each of these factors contribute to unreasonable rates and a deficient and unreliable electric power service which makes Puerto Rico lose its competitive value as an investment destination, thus adversely affecting our economic development." (page 4)

On Page 7 it refers to the reasoning under Act No. 120-2018 for the need to develop a new regulatory framework (i.e. that was enacted under Act 17, 2019) in the following manner:

For such reason, the enacted legislation recognized the need to approve a new regulatory framework and a cutting-edge public policy on energy that encourages the use of new technology, alternative energy methods, distributed generation and renewable energy sources, the integration of microgrids and the flexibility of a competitive market." To achieve this, the Legislative Assembly was granted a term of one hundred and eighty days (180) days to develop the regulatory framework and the energy public policy (i.e. implemented under Act 17- 2019).

On Page 14 it states:

Section 1.3

The Puerto Rico Electrical System

“However, as of the approval of this Act, the Authority (i.e. PREPA) shall not have exclusive rights to generate, transmit, distribute and commercialize the electric power supply. The Puerto Rico electrical system shall operate openly rather than in a discriminatory manner and be subject to the regulations of the Puerto Rico Energy Bureau.

Section 1.4

v) “the impartiality principle requires that, under the same conditions, consumers are treated equally regardless of their social condition and purchasing power, or the technical conditions or characteristics of the service rendered;” ...

This principle of partiality precludes limiting Wheeling to large industrial and commercial customers only since it would result in undue discrimination for the small and medium sized commercial and industrial customers. For example, if Wheeling were to be limited to large commercial and industrial customers, smaller sized companies competing in the same markets would be at a competitive disadvantage since their large sized competitors would enjoy lower energy costs. This discriminatory treatment would lead to an unlevel playing field for these companies and would clearly violate the Legislature’s express intent of strengthening the small and medium sized business sector which is viewed as a key economic sector to re-ignite the economic growth of Puerto Rico.

Also, the residential customers represent the consumer market which is by far the largest component of the economy of Puerto Rico. Therefore, if the restructuring of the electricity markets is to have a significant impact on the economy, it must necessarily incorporate the residential sector.

Section 1.6

Initial Objectives

- 1) “To promote the fastest and most efficient... as well as provide consumers with alternatives in the energy sector” ...

Section 1.7 Electrical System Planning and Operation

On page 25 it states:

Likewise, the Energy Bureau shall prescribe the rules that shall apply to the wheeling of such power through the Electrical System, and the rates applicable to consumers and independent power producers for such services.”

On Chapter V-Amendments to Act No. 57-2014m (Section 1.2) Declaration of Public Policy on Electric Power (page 94) it states “The transformation and restructuring of our electric power system is essential to achieve the competitiveness and economic development of Puerto Rico.

From a reading of these legislative statements quoted above , one may conclude that the lawmakers want to promote competition within the industry (although not a fully competitive market at this stage), diversity of energy supply choices available to consumers, support of small, medium and large sized commercial and industrial entities as well as to foster the economic development of Puerto Rico.

As part of these efforts, the powers of the PREB were expanded under Act 17-2019.

Specifically, on page 9 the Act 17 states the following:

. this Act provides the means to establish an effective programming that allows for the setting of clear parameters and goals for energy efficient, the Renewable Portfolio Standard, the interconnections of distributed generators and microgrids, wheeling and the management of electricity demand. ...Furthermore, pertaining to the Puerto Rico Energy Bureau its powers and duties are broadened and its budget is increased."

In the case of the Wheeling, Act 17-2019 gave the PREB much leeway in implementing the wheeling mechanism as indicated by Section 6.30 discussed below:

"PREB shall establish the necessary rules for the implementation of a system that allows: exempt businesses (described in Section 2(d)(i)9H) of Article I of Act. 78-2008), as amended, as well as electric power service companies, microgrids, energy cooperatives, municipal ventures and community solar, to purchase electric power from other entities."

Section 6.30 Wheeling (page 142)

From a practical standpoint, if Wheeling were limited to large industrial and commercial customers as argued by PREPA, it would have the effect of severely limiting competition and diversity of choice in the industry. Based on our analysis of public data presented by PREPA there are only around 224 customers that would qualify as large industrial and commercial customer (i.e. 250KVA tariff). Considering that there are over 127,000 commercial and industrial accounts (in addition to approximately 1.35 million customers residential customers), such a narrow market for the provision of wheeling (224 account) would not be sufficient to support the emergence of competitive electric power service companies as mandated by Act 17-2019. If the PREB were to adopt PREPA's recommendations, it would promote the development of an oligopoly⁶ in the Generation sector since the only significant market opportunity available would be to purchase of Generation assets from PREPA and sell power to the Transmission and Distribution concessionaire through Power Purchase Agreements. An oligopoly is market structure is one where a few firms dominate the market, extract above normal profits, and typically limit consumer choice. From a reading of the legislative mandate previously described it does seem that this is the mandate that has been given to the PREB.

- III. Although it is clear that the PREB has the authority to implement Wheeling on a scale that goes beyond the largest 224 commercial and industrial customers with demand of 250KVA, adequate consideration must be afforded to the technical complexities associated with the implementation of Wheeling on a larger scale.

PREPA's arguments stating that the proposed Wheeling Regulations should consider the following factors, if they are to be implemented on a larger scale than large commercial and industrial customers, must be analyzed and given due weight in any determination to be made by the PREB:

- a. The present state of the electricity network

⁶ "Oligopoly markets are a can be characterized as follows: **Few Sellers**- A handful of firms produce the bulk of industry output. Competing firms typically recognize their interdependence in price-output decisions. **Homogeneous or unique produce**- Oligopoly output can be identical or distinctive. **Blockaded entry and/or exit**- Firms are heavily restricted from entering or leaving the industry. **Imperfect dissemination of information**-Cost, price, and product quality information is withheld from uninformed buyers. Opportunity for economics profits in long-run equilibrium- Competitive advantages keep prices above marginal costs. " Hirschey Mark, 2009. Managerial Economics 12th Edition. Mason, Ohio, South-Western Cengage Learning. Page 511"

- b. Potential impact on service reliability
- c. Potential impact on ultimate service costs to non-wheeling customers
- d. PREPA's ability to service its outstanding debts
- e. Experience of Other Jurisdictions

These arguments have merit and require analysis.

A. Present State of the Electricity Network

The present state of the electricity is obviously of great concern. However, PREPA has not presented any analysis supporting its contentions. They have merely argued that there may be limitations on the Transmission and Distribution network. This is a valid argument yet PREPA should incorporate into the IRP or another Planning Tool an analysis (or simulation) of the maximum Wheeling capacity available in the 8 Microgrid configurations that they are proposing in the IRP. One transmission constraint is identified, one solution may be initially limit Wheeling services within the existing 8 Microgrid configurations being proposed. However, the PREB should ensure that an aggressive Wheeling schedule is implemented since PREPA has proven its reluctance to implement Wheeling considering the fact that the Legislature directed PREPA to be implement Wheeling no later than January 2, 2010 through Act 73-2008⁷ and today 8 years later PREPA is requesting additional time to analyze the technical complexities of Wheeling.

B. Potential Impact on Service Reliability

Recognizing the technical challenges, we support PREPA's request of a technical workshops to identify the technical challenges. However, we recommend that the PREB approve a Wheeling Regulation that incorporates the following elements:

- a. Scope of market to be served by Wheeling. In other words, shall Wheeling be available for all customers, including residential customers, will it be limited to all commercial and industrial accounts, or will it be available to a smaller subset of customers in the commercial and industrial sectors
- b. Timeframe for development of technical specification, including the development by PREPA network simulations assuming different levels of Wheeling within the Network and within each of the 8 Mini Grids in order to better understand current capacities, and future system bottlenecks. (Note- This simulation should also include the potential revenue and capital expenditure impact of Wheeling under different penetration scenarios)
- c. Timeframe for development of a Wheeling Rate Proceeding.

Moreover, if the Technical Workshops to be implemented show that the proposed scope of Wheeling (i.e. market segments (Industrial, commercial, and/or residential) that will be served by Wheeling and the proposed implementation timeframe is unfeasible, the PREB always has the option to scale back on the project scope and/or schedule. However, we recommend that the PREB establish an aggressive Wheeling schedule since it has the mandate to provide the leadership in the transformation of the electricity sector since, historically, PREPA has proven its reluctance to implement Wheeling. Specifically, it should be noted that the Legislature directed PREPA to be implement Wheeling no later than January 2, 2010 through Act

⁷Act 73-2008. Economic Incentives for the Development of Puerto Rico, www.oslpr.org/DOWNLOAD/EN?2008/A-0073-2008.pdf. Retrieved on September 1, 2019.

73-2008⁸ and today 8 years later PREPA is requesting additional time to analyze the technical complexities of Wheeling.

C. Potential Impact on Non-Wheeling customers and PREPA's ability to service its debt

The potential impact on Non-Wheeling customers and PREPA's ability to service its debt are duties that the PREB must clearly comply with. These may be addressed in a Rate proceeding on Wheeling. Once the scope of the Wheeling market is validated by PREPA through its technical analysis of the Network and the revenue impact of Wheeling, a Rate Proceeding may be initiated. Said Rate proceeding should ensure that the Wheeling rates that are established do not entail cross subsidization of between wheeling and non-wheeling customers and that PREPA's ability to service its debt is not compromised. The key rate issue is that an undue debt service burden be placed on Wheeling rates because if it is set too high it will encourage customers to migrate out of the Grid and the transmission and distribution operating expenses and capital expenditures will have to be borne by a smaller customer base.

D. The Data Justifying the Proposed Rules Should be Examined

Some commentators, including PREPA have suggested that there exists data that demonstrates that the proposed Wheeling scheme (and/or the development of a Wholesale Power) market would be beneficial to Puerto Rico. We would like to present the following information from other jurisdictions that will shed light on this issue.

In the case of the United States, according to the Energy Information Administration, wholesale power prices declined by 23% from 1985 to 2000.⁹ The restructuring of the Electricity industry in England and Wales that began in 1990 "has brought significant benefits, at least in terms of prices, which have fallen by around 30% in real terms between 1990 and 2002."¹⁰

It is noteworthy to mention that in the case of the UK, "competition was only possible because the transmission and distribution networks were regulated in a way that required incumbents (in the case of Puerto Rico, the future Transmission and Distribution concessionaire) to allow other companies to use their networks".¹¹ Use of the network implies the capacity to access the Transmission and Distribution Network via Wheeling.

E. Experience of Other Jurisdictions

PREPA has also requested that experience from other jurisdictions should be examined. We submit the following information regarding the roll out of Wheeling in the UK:

"In 1990, roughly 5,000 customers with a maximum demand of more than 1 MW, representing 30% of electricity consumption, were allowed to choose their retailer. (Note – This necessitated a wheeling mechanism to transport the electricity from the Competitive Power Generating Company to the end user). In 1994, an additional 45,000 customers with maximum demands of over 100KW, representing

⁸Act 73-2008. Economic Incentives for the Development of Puerto Rico, www.oslpr.org/DOWNLOAD/EN?2008/A-0073-2008.pdf. Retrieved on September 1, 2019.

⁹ "James M. Griffin and Steven L. Puller, Electricity Deregulation, 2005, Chicago, Illinois, The University of Chicago Press, page 427".

¹⁰ Ibid, page 132

¹¹ Ibid, page 99

a further 20% of electricity sales.”¹² Thus, within a period of 4 years, approximately 50% of the electricity market was opened up to Wheeling in the UK. At the time, the UK market had approximately 26.3MM customers¹³, such that the top 5,000 customers represented approximately .19% of the total customer base while the next group of 45,000 customers afforded Wheeling services represented 1.71% of the customer base. Finally, the retail sector was opened to competition eight (8) years after the market restructuring began.¹⁴

If we compare this data with that of Puerto Rico, the largest 224 industrial and commercial accounts with demand in excess of 250KVA represent around .15% of the total customer base and 23% of total electricity consumption. If one were to expand this group, to commercial and industrial customers with demand in excess of 50KVA it would represent an additional 11,483 customers representing .79% of the total customer base and 23.9% of additional consumption that would entail opening the market for .80% of the customer base and 46.9% of total electricity consumption. These figures show that PREPA’s Proposal is very shy when compared with the UK experience since in the initial Phase the UK opened the market for Wheeling to 30% of total electricity consumption while PREPA is recommending that only 23% be allowed access to Wheeling and the competitive offerings from competing electricity providers. In the case of the UK, by the 4th year, 50% of the market (i.e. measured by total consumption) had access to Wheeling.

F. Retail Competition

Some commentators have argued that retail competition has provided no benefits to consumers. We submit the following information to the PREB regarding the experience of opening the residential market to competition. Generally speaking, “retail competition brings the following benefits to the consumer:

- a. Even if a residential customer does not switch to an ESP (Electricity Service Provider) they may benefit from reduction in regulated prices that have typically accompanied the restructuring process process...
- b. Consumers can benefit by receiving lower prices than the default service prices, from and ESP that has competed successfully for their business
- c. ESP’s may offer consumers a variety of value-added services, including price-risk management, demand management and energy efficiency services
- d. Competing ESP’s may be able to provide “retailing” services more efficiently than the incumbent.¹⁵

When evaluating the impact of retail competition in terms of price, “the relevant comparison is not between what retail prices are today and what they have been without retail competition, but rather, the difference between what they are with retail competition began and what they would have been without it. In the case of Texas, the Texas Public Utility Commission (PUC) estimated that default service or so-called price to beat (i.e. Incumbent tariffed service) for residential, commercial and industrial customers with peak demands below 1MW saved customers \$902 million in 2002.

In order to provide the PREB with some context in terms of what could be the expected magnitude of customer migration to the new industry entrants, in other jurisdictions (namely Texas), the highest levels

¹² Ibid. page 117.

¹³ Ibid. page 104.

¹⁴ Ibid. page 119.

¹⁵ Ibid. page 58

of switching have taken place been among the largest customers where 20% migrated to an ESP while 10%-15% of the commercial customers migrated to an ESP. In the case of residential customers, the switching levels have been much lower. For example, in Massachusetts which was the first state to implement retail competition in March 1998, five (5) years after opening up the retail market less than 3% of residential customers had switched to an ESP. In the case of Texas, switching levels were between 4-10% while in the case of New York they were around 5% within the first 12-24 months of opening up the retail market.¹⁶

The conclusion is that the switching levels should not be massive since customers will tend to switch if there is an attractive price differential, otherwise they tend to stay with the Incumbent

Final Recommendations

We do favor PREPA's call for a phased in approach, however, we disagree with their recommendation to initially limit Wheeling to the largest industrial and commercial accounts. According to tariff data furnished by PREPA, there appear to be around 225 customers that subscribe to power tariffs rates with demand of 250 KVA. This is a very small portion of the Power Market since PREPA has around 127,000 commercial and industrial customers and the market that it proposes to be served by Wheeling represents only 1.92% of the total commercial and industrial customers and 23% of total electricity consumption. If Wheeling were enacted in such a fashion it will severely limit the impact on the economy of Puerto Rico which has been in an economic depression for the past 10 years. Furthermore, it would not benefit the small and medium sized businesses which the Legislature has determined is a key economic sector that needs to be supported with lower energy price.

A more balanced approach would be to implement Wheeling in the following Phases:

- a. **Phase I**-Initially offer Wheeling to all customers with a demand of 50KVA which according to our estimates amounts to around 11,707 customers (equivalent to 9.2% of the commercial and industrial customer base, and 46.9% of the total electricity consumption). This would provide immediate benefits to the medium and large commercial and industrial sector of Puerto Rico. This Phase would commence 6 months after the technical specifications and Rate structure has been approved by the PREB.
- b. **Phase II**- All commercial and industrial customers with demand below 50KVA would be afforded access to Wheeling. This would open up an additional 15.35% of the market. This would entail having around 62% of the market accessible to Wheeling. This Phase would commence 24 months after the beginning of Phase I
- c. **Phase III**- Open up the Residential market which would open up the residential market which represents around 38% of the total market. Phase III would commence 36 months after the beginning of Phase I.

This phased in approach to Wheeling would seem to balance the objectives of promoting lower energy prices, diversity of choice, innovation and support of the small and medium sized business sectors while providing PREPA with sufficient time to rebuild the transmission and distribution network, harden the transmission network and reconfigure the network to ensure system reliability, resiliency and build a new mini grid based network.

¹⁶ Ibid. pages 62-65

Once the Wheeling regulations are approved, Technical workshops could be held, PREPA could incorporate Wheeling scenarios (technical and revenues) in the IRP in process and once the revenue impacts are better understood, a Wheeling Interconnection and a Wheeling Rate proceeding could be initiated by the PREB. The legislative mandate is that the PREB should lead this process and this may only be accomplished if the PREB is the entity that establishes aggressive objectives and deadlines with which PREPA either complies with or proves that is technically or financially unfeasible or undesirable.

We are confident that although aggressive, the proposed timeline is doable to the extent that Wheeling and restructurings of electricity markets have taken place in many jurisdictions, such as, California, Texas, New York, Massachusetts, Ohio, and the UK, to name a few. Therefore, there is an ample body of accumulated knowledge available to the PREB regarding regulatory best practices and pitfall to avoid.

Puerto Rico can no longer wait for a restructuring of its electricity sector because the stakes are too high. We urge the PREB to provide the industry with the leadership and vision required to transform our electricity market into a vibrant industry that will provide the foundation for sustainable economic growth for Puerto Rico.