



Aida Camacho-Welch
Secretary to the Board
New Jersey Board of Public Utilities
44 S. Clinton Ave, 9th Floor
Trenton NJ 08625-0350

Via Email

Re: Investigation No. EO20030203, Investigation of Resource Adequacy Alternatives

Dear Secretary Camacho-Welch:

Attached find comments of EDP Renewables North America LLC in the above referenced investigation. EDP Renewables is a major renewables developer, owner and operator in North America and welcomes the opportunity to comment in this investigation.

Please provide electronic confirmation of the receipt of these comments to john.brodbeck@edpr.com.

John F. Brodbeck

Sr. Manager Transmission



State of New Jersey
Board of Public Utilities

Investigation of Resource Adequacy Alternatives
Docket No. EO200030203

Comments of
EDP Renewables North America LLC

EDP Renewables North America LLC (EDPR) thanks the New Jersey Board of Public Utilities (Board or BPU) for the opportunity to comment on its Investigation of Resource Adequacy Alternatives, Docket No. EO20030203 (Investigation). The issues raised in this docket will be critical to the development of renewable generation in the State of New Jersey, to meeting the State's renewable energy goals and to the adequacy of energy supply the citizens of New Jersey will enjoy and the costs that they will have to bear for that supply.

EDPR is a global leader in the renewable energy sector and the world's fourth-largest wind energy producer and is committed to the principles and goals of the Paris Climate Agreement and to a mission of sustainability. Currently, EDPR owns and operates over 2,000 MW of wind generation inside the PJM Interconnection LLC (PJM) control area. In addition, we operate about 700 MW in New York as part of an overall 7,000 MW portfolio of renewable generation. In Federal Waters in the Northeast United States, EDPR is an owner of the Mayflower Wind project that has contracted for 804 MW of its first windfarm in a lease area that could deliver over 1,600 MW. EDPR has other investments in offshore wind in the United States as well as around the world.

EDPR does not currently operate a renewable generating facility in New Jersey, but contributes to New Jersey RPS goals through the sale of Class I RECs. We would like to bring our development, construction, ownership and operational expertise to opportunities in the state and help advance New Jersey's climate protection and economic development goals.

Introduction

New Jersey is one of the first State's in the nation to adopt Renewable Portfolio Standards (RPS) and to establish a Clean Energy Program with the intent to reduce greenhouse gases and to help spur the

transformation of electricity markets. Governor Murphy has advanced these programs and commitments by setting some of the most ambitious clean energy targets in the Nation including a goal of 50% Renewable Energy by 2030 and 100% Clean Energy by 2050. Policies and actions taken today will likely advance or deter New Jersey from meeting these targets.

In the 2019 Energy Master Plan (EMP), New Jersey decided to make significant changes to its generation resource mix. The EMP specifically calls for “adopting new market structures to embrace clean energy development and contain costs”.¹ Recently, however the Federal Energy Regulatory Commission (FERC or Commission) made rulings on the issue of PJM’s Minimum Offer Pricing Rule (MOPR).² Those rulings, and the significant expansion of the MOPR, has imposed new rules on the PJM capacity market that may well restrict the ability of the state to move forward on the goals of the Energy Master Plan.

The Board is right to worry about the impacts of these changes on New Jersey’s clean energy goals. The changes are likely to impede the development of new renewables in New Jersey, or at least they impose new risks on the development of such resources. This is especially true of the centerpiece of the Energy Master Plan, the procurement of 7,500 MW of offshore wind.³

In this Investigation, the Board focuses on the potential for a Fixed Resource Requirement (FRR) alternative to the PJM capacity market as a means of achieving the states resource adequacy needs while likewise achieving its clean energy goals.

Definitions

PJM Capacity Construct

The PJM capacity market, also known as the Reliability Pricing Model (RPM), is the means by which PJM procures generation that they believe will be sufficient to assure resource adequacy to the “1-in-10” standard. This standard means the likelihood of having one day’s insufficiency over 10 years – i.e. an expectation of one “blackout” a decade. The RPM has a long list of features to assure adequacy that have been developed over years and which give good confidence in achieving 1-in-10. The RPM also has features that result in the over-procurement of resources needed to achieve 1-in-10. In addition, since it is locational, prices can vary throughout the PJM footprint, and do. RPM is a very complex system.

¹ New Jersey Energy Master Plan (2020), Strategy 2: Accelerating the Deployment of Renewable Energy and Distributed Energy Resources (Pg.13, 94)

² See FERC ruling dated 19 Dec 2019 in Docket Nos. EL16-49 and EL18-178 (169 FERC PP 61,239) (MOPR Order)

³ The MOPR Order also raised issues in other areas important to New Jersey, such as the impact of the Basic Generation Services (BGS) auction on making resources subject to the MOPR. EDPR recognizes the importance of these issues but will limit its comments to the area of renewable resources and the MOPR.

Procuring resources for supply adequacy is a common utility undertaking. However, RPM stands alone as a means of solving the longer-term resource adequacy issue. New England has a similar system, and NYISO has a much simpler capacity system. Most of the rest of the country does not rely upon a capacity market of this type.

FRR

FRR is a system whereby a distribution utility zone otherwise within the PJM system opts not to be a part of the RPM. That utility (or group of utilities) agrees to meet the 1-in-10 standard with resources under their control. FRR also requires a series of other obligations – commitment of resources to dispatch and a means of accommodating retail access for example. FRR is a fairly standard way of judging resource adequacy, which is not to say it is not complex in itself.

Comments

EDPR applauds the Board for considering the FRR alternative and its implications for New Jersey ratepayers. This Investigation will help provide the information and the record needed to make a final decision about the best path forward for the State.

First, New Jersey should be confident that using the FRR option is not the same as “leaving PJM”. The New Jersey utilities would still participate in the PJM markets for energy and ancillary services. New Jersey would still accrue the benefits of system-wide dispatch. New Jersey consumers would still have the advantages of the LMP energy price transparency. The PJM transmission planning regime would still apply. This change would be limited to an alternative way of procuring the needed long-term resource adequacy.

The FRR alternative has been in use in PJM since the inception of RPM. FRR has been successful and has not imposed risks on the pool or to the utility that makes use of it. FRR is defined in PJM’s FERC tariff. The FRR alternative is replete with rules that govern the provision of capacity to retail providers. It has a provision to limit the sale of excess capacity to the rest of the pool. FRR is fully fledged and successful.

We encourage the Board to consider the following issues if New Jersey moves to the FRR methodology:

- Would the BPU order one of its utilities to become an FRR utility? Or, should it encourage all 4 of its investor owned utilities to move to the FRR protocol? What about municipal or customer-owned utilities? How are they to be included or do they come along as part of the decision? The question about who joins the FRR is critical.
- Does New Jersey have sufficient resources inside New Jersey or otherwise under the control of the utilities to meet the FRR requirements?



- Is the Board comfortable with the time periods required as notice before re-joining RPM (if that were to ever occur)?
- Are the FRR time periods workable in the context of the tenor of power procurement contracts?
- Does each utility procure its own capacity, or does some combine of utilities or some state agency need to be created?

This is only a short list. Other issues would have to be resolved. However, others have successfully navigated this area.

FRR would reduce many of the concerns that MOPR has imposed on New Jersey's energy goals in the EMP. It would eliminate the issue of double payment for capacity by customers. It would allow New Jersey to have a much greater degree of control on the resources that it wants to serve New Jersey load and the resources that New Jersey pays to support. It would allow New Jersey to adjust contract terms for resources to allow more confident development of the resources that are aligned with New Jersey's energy goals. For example, in an FRR different resources could have different contract terms.

The most important decisions that New Jersey has made in connection with the Energy Master Plan – to support the development of offshore wind and to extend the life of the aging New Jersey nuclear fleet – are clearly at the center of the MOPR target. MOPR will result in capacity price offers for nuclear and off-shore wind that will be well out-of-market. RPM and MOPR will clearly endanger these choices by New Jersey; they may require New Jersey ratepayers to procure their capacity needs twice. FRR would allow those decisions to be part of the normal decision-making for the resource procurement.

FRR may also provide New Jersey the opportunity to better understand and manage the interactions of clean energy resources in advance of PJM. How might offshore wind, solar, nuclear, demand response and storage interact on a daily, seasonal and yearly basis to meet New Jersey's capacity and reliability needs? These are key issues to be addressed in order to attain 100% Renewable by 2050. By adopting the FRR and working in collaboration with its utilities and market participants, New Jersey may help advance our understanding of a clean energy future.

An FRR plan is workable for New Jersey, but it also carries risks. EDPR notes that:

1. FRR is doable in New Jersey;
2. FRR will enhance the ability of New Jersey to meet its clean energy goals;
3. FRR could be managed to provide for the retail access that New Jersey has successfully had in-place for 20 years;
4. FRR would allow New Jersey to continue to have the advantages of the PJM energy market with its transparency;
5. FRR would allow New Jersey to continue to enjoy many of the other advantages of PJM membership, such as regional transmission planning;
6. FRR would likely allow New Jersey to procure less capacity to satisfy its needs;



renewables

7. FRR would force New Jersey or its utilities to manage the procurement of resources and hence the resource adequacy/reliability outcomes;
8. FRR requires some difficult decisions on the size of the FRR region and who will manage the resource procurement for that region;
9. FRR forces a commitment to the resources that New Jersey procures and arguably loses some of the market pressures that the RPM auction encourages; and
10. FRR may or may not result in lower prices for New Jersey consumers.

Conclusion

In conclusion, EDPR congratulates the Board on initiating this investigation. There is the real possibility of success by moving toward FRR, but it comes with attendant risks. EDPR hopes to continue participating in the discussion as the Board moves forward