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OPSI Resolution #2017-01

DEMAND SIDE RESOURCE PARTICIPATION IN PJM MARKETS

WHEREAS, OPSI Resolution 2016-3 requested the PJM Board to direct its staff to develop market rules which optimize the participation and value of demand response (DR) in providing cost control, reliability, and competitiveness in PJM's wholesale markets; and

WHEREAS, the Congress of the United States shares OPSI's concern with robust participation of demand response resources in wholesale electric market stating in the Energy Policy Act of 2005, Pub.L. 109-58, § 1252 (e), (f) 119 Stat. 965 (EPA Act of 2005), that "the policy of the United States" is that such demand response "shall be encouraged." 16 U. S. C. §2642 . In particular, Congress directed, the deployment of "technology and devices that enable electricity customers to participate in . . . demand response systems shall be facilitated, and unnecessary barriers to demand response participation in energy . . . markets shall be eliminated; and

WHEREAS, the Supreme Court of the United States in Federal Energy Regulatory Commission versus Electric Power Supply Association, 136 S.Ct. 760 (2016) found the demand response language of the Energy Policy Act of 2005 applied to wholesale electricity markets; and

WHEREAS, PJM's forecasts of summer peak loads exceed winter peak loads by over 20,000 MW; and

WHEREAS, capacity requirements needed to maintain resource adequacy are closely related to these peak load forecasts and Loss of Load Expectation (LOLE), suggesting that summer capacity needs are considerably larger than winter capacity needs; and

WHEREAS, at the request of stakeholders, PJM staff has been evaluating the different amounts of summer and winter capacity required to maintain resource adequacy as measured by seasonal LOLE values. PJM's preliminary analysis indicates that the PJM system could accommodate a substantial quantity of summer-only resources while maintaining resource adequacy at the annual target LOLE level of 0.1 for the RTO region.¹ Work associated with that initiative is scheduled to be finalized in September 2017; and

¹ PJM's forecast of its summer peak load for the 2021-2022 delivery year exceeds its forecast winter peak load for that year by over 20,000 MW, and if the Internal Reserve Margin (IRM) for 2021 is equal to 16.6%, then the installed reserves during the 2021 winter peak week are equal to $1.166 / 0.867 = 1.345$ or 34.5%. The most recent IRM study shows that such a level of reserves during the winter peak week will result in a winter peak week loss of load expectation (LOLE) equal to 0.0000002 days/year. Recent winter reliability studies, using very conservative assumptions including historical data from the 2014/2015 winter and maximum historical planned outages, predict an RTO level LOLE of only 0.022669 days per year, while some individual PJM zones have no LOLE for the winter. The differentials between summer and winter peak loads are even larger for some regions, such as Eastern Mid-Atlantic, and all but two PJM zones peak in the summer. PJM's forecast of its extreme weather summer peak load for the 2021-2022 delivery year exceeds its forecast winter extreme peak load for that delivery year by over 25,000 MW.

WHEREAS, the PJM Region is fortunate to have available considerable amounts of summer seasonal resources that can help to meet the greater summer needs, such as some demand resources, and solar resources, among others; and

WHEREAS, the greater availability of summer capacity resources enables meeting resource adequacy requirements in a more efficient manner by matching the seasonal resources to the seasonal reliability requirements; and

WHEREAS, PJM's current capacity construct does not accomplish such seasonal reliability requirement matching, due to the requirement that the total quantity of winter capacity be no less than summer capacity; and

WHEREAS, PJM's increasing reliance on annual resources has resulted in declining DR capacity market participation; and²

WHEREAS, PJM acknowledges that consumer response to price is essential to efficient and competitive market outcomes. Increased participation by demand side resources in electricity markets will result in more competitive and robust market results. PJM states that customers should have the opportunity to purchase less capacity if they will ensure their load will not exceed the amount of capacity procured on their behalf by PJM; and

WHEREAS, PJM committed to FERC in ER17-367 to “work on further enhancements to recognize the value of – and support continued participation by – Seasonal Capacity Performance Resources in its markets.”

WHEREAS, Price Responsive Demand (PRD) enabled some seasonal DR participation in the 2017 base residual auction. However, PJM management, under its “short term goals,” is proposing to merge DR and PRD into one approach which would, beginning with the 2021/2022 delivery year, eliminate from eligibility all summer DR resources that are not able to obtain equal winter resource matches;³ and

WHEREAS, PJM has only recently proposed to work with states and other stakeholders on options to recognize the value of seasonal resource flexibility as part of their “medium term goals,” defined as three to five years in the future; and

WHEREAS, PJM has made progress in accommodating aggregation opportunities for demand resources, and has recently proposed to evaluate the opportunities for seasonal DR to participate in PJM markets other than the capacity market. Even so, PJM's initiatives fall short of achieving full utilization of the valuable market characteristics provided by seasonal resources like DR.

NOW, Therefore Be It Resolved: The OPSI Board of Directors urges PJM to create more effective and efficient market mechanisms which enable participation of summer-available demand resources consistent with FERC Order 719-A opt in/opt-out procedures;⁴ and

Be It Further Resolved That, OPSI supports cost effective and reliable programs to enable load serving entities to effectively decrease their reliability requirements through commitments to reduce demand in the summer period, with no annual matching requirement. OPSI urges PJM to promptly implement such a program or programs consistent with the findings in its summer and winter reliability analysis; and

² The phasing out of seasonal DR capacity products has resulted in a steady decrease in DR capacity market participation, from 10,679MW (5.5% of committed capacity) in the 2018/2019 delivery year, to 9,510MW for the 2019/2020 delivery year, and to 8,066MW in the 2020/2021 delivery year (4.0% of committed capacity).

³ Demand Response Strategy, PJM Interconnection, June 28, 2017, p. 1. PJM defines short term as within 1-2 years, and medium term as 3-5 years.

Be It Further Resolved That, OPSI recommends that PJM postpone the imposition of annual resource requirements on PRD until it has implemented an improved mechanism for summer seasonal resource participation in excess of winter seasonal resource participation, or until such time that winter reliability requirements equal or exceed summer reliability requirements.

Approved on October 5, 2017, and adopted by OPSI's Board of Directors: Vote: Yes: Delaware PSC, PSC of District of Columbia, Illinois CC, Indiana URC, Kentucky PSC, Maryland PSC, Michigan PSC, New Jersey BPU, Pennsylvania PUC, ; Abstain: Virginia SCC, North Carolina UC, PUC Ohio, Tennessee RA and PSC West Virginia