

September 18, 2023

VIA Electronic Delivery Only

The PJM Board of Managers Mark Takahashi, Chair, PJM Board of Managers Manu Asthana, PJM President and CEO PJM Interconnection, L.L.C. 2750 Monroe Boulevard Audubon, Pennsylvania 19403

Re: Critical Issue Fast Path ("CIFP") Capacity Market Reforms and Looking Beyond

Dear Mr. Takahashi, Mr. Asthana, and members of the PJM Board,

The PJM Board of Director's activation of the CIFP process was a necessary response to the short-term reliability and capacity market design issues that were exposed by Winter Strom Elliot. This process has identified several proposals that address these issues; however, it has not produced, nor has it had enough time to produce a holistic, durable market design proposal that will encourage investment in resources needed to maintain the reliable operation of the electric grid into the latter half of this decade. This is why Shell Energy North America (US), L.P. ("Shell Energy") urges the PJM Board to (i) file a narrow set of updates with the Federal Energy Regulatory Commission ("FERC") that resolve the performance deficiencies of the current Reliability Pricing Model ("RPM"), and (ii) direct PJM Staff to engage stakeholders in a more comprehensive market design effort that will support private investment activity that has been the hallmark of PJM's power markets and provided significant reliability benefits and cost savings to consumers in the region.

Shell Energy has been an active participant in PJM's markets for over twenty (20) years. As one of the largest traders of electricity, natural gas, and environmental products in North America, Shell Energy provides hedges to load serving entities and generators in PJM. Shell Energy has affiliates and joint ventures developing offshore wind, onshore renewables, and transmission solutions in the region as well.

In support of this request, below Shell Energy describes (1) the elements it believes should be covered by a Section 205 filing in response to the CIFP, (2) barriers to merchant investment in PJM, and (3) future market design considerations.

1. Elements the Board Should Include in a Section 205 Filing

Several of the proposals presented in the CIFP received significant stakeholder support, including support from Shell Energy. They involve redefining the reliability metric to Expected Unserved Energy ("EUE"), using extended weather history in reliability modeling, and

implementing stronger seasonal capability and operational testing standards. These items are targeted adjustments to the RPM rules that will improve overall operational performance and should be included in a Section 205 filing that PJM is contemplating.

Also, the stakeholder body endorsed the status quo and modifying Performance Assessment Interval (PAI) penalties. Proposing to align the PAI design with shortage pricing in the energy and ancillary service markets is a step in the right direction, but the penalty and bonus structure can still conflict with energy and ancillary services pricing and is difficult for investors to evaluate market impacts for investment purposes, not only in new resources but with respect to investing in continued operation of existing resources.

By addressing the items mentioned above, PJM can maintain the reliability of the electric grid while it engages stakeholders in a deliberate process that elicits information about the environment for private investment and development of durable solutions to the long-term problem of ensuring its markets will provide the appropriate prices signals for investing, maintaining, or retiring in generating resources in its region.

2. Barriers To Investment

The first step in developing a market design that can encourage needed investment requires the PJM Board, stakeholders, and policymakers to understand the headwinds investors presently face for making these investments. Some of these headwinds have been mitigated in the renewable investment space with tax benefits and other programs, but investment in these resources is more expensive and customers and investors must absorb significant risk premiums when there is not an efficient market in which they can participate. In addition, PJM has indicated that all types of generating resources, including ones that do not get these benefits but are needed to maintain adequate reserve margins for the operation of the grid (new and existing), may not be available by the end of the decade.¹ Shell Energy does not believe that enhanced accreditation and qualification and performance requirements of capacity resources as recommended in the Four Rs Report² will provided sufficient incentives to address the potential capacity shortfall. Regulatory uncertainty, administrative complexity, and rule intervention further exacerbate these headwinds. Shell Energy recommends that PJM engage a consultant to identify these barriers, evaluate potential solutions, and deliver a report to stakeholders to guide discussions on market reforms.

As a market participant, Shell Energy actively evaluates long-term hedges for generators. It has provided hedges for generators in PJM with terms that are as long as 20 years to support the financing and development of new resources. These hedges have been a critical component supporting merchant development in the PJM region. As Shell Energy described in comments it recently filed with FERC in the PJM Capacity Forum proceeding, forward markets that support

¹ See PJM Interconnection, L.L.C., "Energy Transition in PJM: Resource Retirements, Replacements & Risk" (February 24, 2023) ("Four Rs Report"), located at <u>https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx</u>, wherein PJM found that "The projections in this study indicate that the current pace of new entry would be insufficient to keep up with expected retirements and demand growth by 2030. The completion rate (from queue to steel in the ground) would have to increase significantly to maintain required reserve margins," at 2. 2 Id. at 3.

this hedging activity have lost a significant amount of liquidity and will not support the same level of hedging activity going forward, not only for generators but for load serving entities as well.³ The CIFP process did not try to address this issue.

In addition, private investors have seen growing financial risks in PJM. The Institute for Energy Economics and Financial Analysis ("IEFA") identified several of these risks in a recent report. IEFA found that:

The 2010s saw a massive buildout of new capacity with relatively low risk, but the situation today is reversed, and it is a new, much riskier situation for private equity and private capital in the PJM market.⁴

The Report identifies lower capacity payments (a market signal contrary PJM's identified need for new capacity in the Four Rs Report), uncertainty surrounding future capacity auction results, and costs associated with non-performance as key factors fueling an increased risk in the PJM capacity market.⁵

3. Future Market Design

One of the main reasons Shell Energy opposed many of the CIFP proposals is because they maintain or exacerbate the administrative complexity of the current market design. While Shell Energy appreciates efforts toward more granularity, the main proposals do not adequately contemplate how they will improve liquidity of the forward markets, which is at an all-time low, and pending CIFP proposals will not deliver the resources PJM needs at least on a merchant basis. Any market mechanisms must be administratively simple, transparent, and durable for them to create a liquid forward market that instill confidence with market participants. Reliance on capacity markets as the primary mechanism for ensuring resource adequacy should be reduced over time as PJM transitions to a system with more intermittency. Energy and ancillary service market design enhancements can be administratively simple and transparent enough to effectively create market signals needed to address the unprecedented system changes and concomitant needs.

Also, Shell Energy supports the recent letter to the Board submitted by Lotus Infrastructure Partners on behalf of Garrison Energy Center, LLC; Fairless Energy, LLC; Vermillion Power, LLC; and Hazelton Generation, LLC LS Power Development LLC Rockland Capital, LP. Keycon Power Holdings LLC Chief Keystone and Conemaugh J-Power Development Co., Ltd. Red Oak Power LLC Earthrise Energy, PBC. Talen Energy Marketing LLC Middle River Power LLC Indeck Niles, LLC on September 13, 2023. As noted in their letter, capacity as a product, the market's overall design, and its inputs should be clearly defined, and procurement targets should be transparent and replicable.

³ See PJM Capacity Market Forum, FERC Docket No. AD23-7-000, Comments of Shell Energy North America (US), L.P., Filed August 14, 2023, where Shell Energy demonstrates the decrease in liquidity of secondary markets that supported merchant develop, at 11.

⁴ See Institute for Energy Economics and Financial Analysis, "Private Equity in PJM: Growing Financial Risks," David Wamsted, August 2023, available at: <u>https://ieefa.org/resources/private-equity-pjm-growing-financial-risks</u>, at 3.

⁵ Id. at 16.

Finally, the Board should seek stakeholder input on how to develop markets that are administratively simple, transparent, and durable. These attributes will help increase stakeholder confidence in the market by reducing some of the risks that have emerged, increase liquidity and tradability on a forward basis, and ultimately shift risks away from consumers, which is why PJM markets were built and what that they have historically done.

Now that the CIFP has concluded, the Board should direct PJM staff to work with stakeholders to continue developing a market design that will give merchant investors' confidence in the market so they will make needed investments. Such analysis should involve a holistic approach that includes consideration of the energy, ancillary services, and capacity markets such that reliance solely on capacity markets as the primary mechanism for ensuring resource adequacy could be reduced over time. As PJM has noted, these markets work together to deliver the resources PJM needs to meet its evolving reliability needs.⁶

It is our plan to have Shell Energy's President and CEO, Carolyn Comer, attend the Board of Directors sector meeting in November to engage with you further on these important topics.

Sincerely,

/s/ Matthew J. Picardi

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⁶ See Modernizing Wholesale Electricity Market Design, FERC Docket AD21-10-000, "Report of PJM Interconnection, L.L.C." (dated October 18, 2022) where PJM states that, "E&AS and capacity markets work together to provide both operational signals as well as signals for efficient investment, maintenance, and retirement, at Appendix A, p. 20 (referenced herein as the "PJM Market Design Report"). See also PJM Paper, "Proposed Enhancements to Energy Price Formation" PJM Interconnection, LLC, November 2015, available at: https://www.pjm.com/-/media/library/reports-notices/special-reports/20171115-proposed-enhancements-to-energy-price-formation.ashx, on importance of energy and ancillary service markets.