

Re: Board Docket EO 11050309, In the Matter of the Board's Investigation of Capacity Procurement and Transmission Planning **Date:** July 12, 2011

Dear Board President Solomon and members of the Board of Public Utilities:

Thank you for the opportunity to file these reply comments on behalf of the Sierra Club.

In our initial comments to the Board, we agreed with the Board that New Jersey has a vital interest in the success of PJM's transmission planning process. We urged the Board to engage with PJM and its Regional Policy Planning Task Force (RPPTF) as the RTO works to modernize its approach to account for new conditions, including the growing availability of demand-response and efficiency products, which have the capacity to help flatten demand forecasts, and the likely retirement of inefficient and out-dated coal generation. Properly managing these emerging issues is central to the Board's charge to maintain just and reasonable rates for ratepayers in New Jersey. *See* N.J.S.A. 48:2-21(d), 48:3-1.

Comments in this docket repeatedly demonstrate the need to manage these challenges effectively. The Division of Rate Counsel, for instance, emphasizes that "[r]etirements due to pending EPA regulations and high operating costs add an additional level of uncertainty to New Jersey's energy future and call into question the prudence of relying heavily on transmission upgrades to meet reliability concerns."¹ We agree: the Board should ensure that PJM is able to respond effectively to retirements, and is able to identify a broad range of reliability solutions, which extend beyond expensive transmission lines to other options, including using demand-response products to address reliability needs.

The linkages between coming retirement reliability issues and the growth of new demand and efficiency resources are critical to recognize, as the availability of demand response and similar resources has the potential to substantially offset and to manage reliability concerns associated with the retirement of coal-powered capacity. PJM's comments show that demand response and energy efficiency are becoming "viable resource[s] for New Jersey," with over 2,000 MW of demand response and 9.7 MW of energy efficiency offered in the 2014/15 RPM base residual auction.² The comments of Comverge, Inc, too, highlight the utility and importance of these new resources, which are "[f]ar easier and quicker" to develop than either new transmission or new generation."³

Thus, PJM and the Board have an important opportunity to enhance electrical reliability and capacity in New Jersey by focusing attention on these new resources, which can usefully ease the transition as antiquated coal-fired generation retires. New Jersey could meet its reliability goals through distributed generation. There will be additional capacity added through renewable energy

¹ Comments of the Division of Rate Counsel (June 17, 2011) at 2. *See also* Comments of NRG Energy Inc. at 4 (expressing concern that transmission lines may be uneconomic).

² Comments of PJM Interconnection (June 17, 2011) at 16-18.

³ Comments of Comverge, Inc. (June 17, 2011) at 2.

projects, and, in part due to LCAPP, combined heat and power and gas generation. The development of smart grid technology will also increase reliability. The Board will miss the opportunity to use new clean resources if it instead turns to aggressive, unnecessary efforts to construct new fossil-fuel capacity, as envisioned by the LCAPP program. Indeed, as the Comments of the New Jersey Electric Distribution Companies show, forcing this unneeded capacity into the market is likely to harm ratepayers, without effectively addressing reliability concerns.⁴

Thus, consistent with our opening comments, we continue to strongly believe that New Jersey can best address these issues by engaging with PJM to work to improve its market structures and transmission planning rules, rather than by undermining the market through programs like the LCAPP.⁵ We agree with the Independent Market Monitor in this regard that "New Jersey and PJM stakeholders . . . need to engage fully on the issues to ensure that the inputs to the markets are right, that New Jersey's reliability situation is fully and accurately reflected in market inputs and that the market design permits market outcomes to reflect these market fundamentals."⁶

To aid the Board, we therefore attach an expert report prepared by Synapse Energy Economics, which reviews PJM's RPPTF process and makes important recommendations as to how PJM can best address policy issues like those identified in the Board's May 16, 2011 Order opening this docket. The Report's recommendations include the following points:

Improving Load Forecasting and Stress Testing: Ever more efficient power use and the growing availability of demand-response products have changed the long-standing relationship between electricity demand and economic growth. PJM's taking these changes fully into account – e.g., by including 100% of state efficiency and demand-response mandates in its baseline load forecast – will lower its estimate of future demand. Indeed, the implementation of state energy efficiency programs alone would reduce PJM's peak load forecast by nearly 10,000 MW in 2025, thereby reducing the need to build transmission upgrades and making it easier to accommodate the retirement of inefficient and expensive generating units.

PJM planning also needs to effectively integrate states' renewable portfolio standards and distributed generation resources into its load forecasting and stress testing. By ensuring that the new renewable resources are modeled properly and that demand response resources are fully integrated into its load deliverability and generation deliverability tests, PJM will be better able to avoid unnecessary network upgrades and target needed grid improvements.

<u>Effectively Managing Retirements</u>: PJM and outside analysts agree that 14,000-17,000 MW (or more) of aging coal generation is at risk to retire in the next decade, as owners opt to retire units rather than upgrade very old plants to comply with modern pollution safeguards. The magnitude and diversity of potential retirements are unprecedented, and PJM's existing process is not well designed to handle it, creating the potential for incurring hundreds of millions of dollars of unnecessary costs.

⁴ Comments of New Jersey EDCs (June 17, 2011) (describing, in detail, the negative unintended consequences of unnecessary new fossil fuel-based capacity in New Jersey driven by LCAPP

⁵Comments of PJM Interconnection at 8-15 (showing that the RPM is adequately addressing New Jersey capacity needs).

⁶ Comments of Monitoring Analytics (June 17, 2011) at 5-6.

Specifically, PJM's tariff requires generators to give only 90 days' notice before they retire. Although in practice generators give somewhat more notice, they are not required to do so, and the notice provision is not calibrated to give PJM time to ensure that needed reliability solutions are in place by retirement dates. Nor is the planning process designed to enable PJM to act upon its own identification of at-risk plants. Without reform, this system is primed to generate last-minute reliability projects and, worse, multiple uneconomic reliability must-run contracts (RMRs).⁷ Thus, PJM should extend its retirement notification period to three years, consistent with the time periods used in its interconnection queue and capacity market, to give itself time to plan for retirement sensibly. It should also expand its ability to analyze and act upon data that indicates likely generator retirement, such as a resource's failure to clear capacity market auctions, very low capacity factor, or very high heat rate.

Developing Least-Cost Reliability Solutions Transparently: The public has a vital interest in the costs and impacts of PJM transmission decisions. PJM should therefore investigate ways to invite citizens, as well as market participants, to propose reliability solutions once a problem has been identified (e.g., as the NY ISO has done). Because the lowest-cost options to solve reliability problems may involve lowering demand, demand-response products should be included in this solution identification process.

Finally, because expensive reliability upgrades should not be locked into regional plans if they become unnecessary, the "deadband" approach PJM has suggested to lock in some transmission upgrades, even if reliability violations are no longer projected, needs to be thoughtfully limited. Stakeholders need to ensure that a "deadband" proposal does not insulate costly projects from on-going scrutiny.

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We continue to encourage the Board to engage in this vitally important reform process, and appreciate its work in this investigative docket.

Sincerely,

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⁷ Although RMRs are often cost-based, the costs are significant: RMR payments to two generators in Maryland, for instance, will exceed \$270 million from 2011 to 2014, and these costs are in addition to the costs of bringing a lasting reliability solution online.