UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Meeting the Challenge of Resource Adequacy	:	
In the Regional Transmission Organization and	:	Docket No. AD25-7-000
Independent System Operator Regions	:	

PRE-FILED STATEMENT ON BEHALF OF INDUSTRIAL ENERGY CONSUMERS OF AMERICA, AMERICAN FOREST & PAPER ASSOCIATION, PJM INDUSTRIAL CUSTOMER COALITION, AND COALITION OF MISO TRANSMISSION CUSTOMERS

My name is Susan Bruce. My colleagues and I at McNees Wallace Nurick LLC have the privilege of serving as counsel to the Industrial Energy Consumers of America (IECA), American Forest & Paper Association (AF&PA), PJM Industrial Customer Coalition (PJMICC), and Coalition of MISO Transmission Customers (CMTC)(collectively, the "Industrials"). As discussed in more detail below, the Industrials represent businesses that require significant volumes of electricity and natural gas to support their operations. Given the energy-intensive nature of their operations, reliability and cost are key drivers of Industrials' competitive position.

The Industrials support the FERC's adoption of the principles outlined below to address specific fundamental concerns, such as diversifying energy sources, improving the efficiency of capital deployment, offering more pricing certainty, and allowing customers to choose their own price/reliability balance. I am filing this statement on their behalf to propose a framework to address resource adequacy needs. Thank you for the opportunity to share the Industrials' perspective.

Background

IECA and AF&PA are national trade organizations and have a national perspective on the current challenges around resource adequacy, including areas not covered by Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs). In contrast, PJMICC and CMTC members operate within the PJM and MISO RTO regions, respectively, and are directly affected by resource adequacy challenges. The composition of the groups represented here is diverse. The groups include paper, cement, chemical, metals, pharmaceutical, consumer goods manufacturers, institutional customers like large hospitals and universities, and other large energy users.[1]

[1] IECA, AF&PA, PJMICC, and CMTC have filed interventions in this docket, and more information about the individual coalitions can be found in their respective requests for intervention.

The decisions made by this Commission, the RTOs, and states impacting resource adequacy directly affect the Industrials. Most of the Industrials are subject to inter- and intra-company competition across the country and, in many cases, are subject to global competition. For example, business decisions about which facility adds a new process load or which facility is no longer economic take into account the reliability and cost of delivered energy, including electricity and natural gas.

Moment in Time

Industrial customers have strongly supported the formation and evolution of RTO and ISO markets. Industrial customers, which are in their own right subject to intense competition, have invariably favored the deployment of competitive forces in the energy industry. Before the organizational formation of RTOs and ISOs and the creation of various RTO/ISO markets, Industrial customers were concerned that energy infrastructure decisions were being made entirely by those entities with a self-interest to deploy capital, were concerned that those decisions were not exposed to competition, and were concerned that those decisions were being made based on insular geographic perspectives (*i.e.*, the single utility's franchise service territory). Competition for specific projects and the "competition for ideas" to cost-effectively resolve reliability challenges were non-existent. Monopoly utility decisions, rather than customer preferences or dynamically competitive forces, determined a customer's service reliability and price. There was no regional look at resource adequacy and resource deliverability. Similarly, there was no regional integration of transmission planning and generation.

For the past 25 years, industrial customers have supported RTOs/ISOs, notwithstanding occasional disagreements about market design, governance, transparency, transmission pricing, and other issues. Industrial customers value independent operators exercising objective fact-based judgment; adhering to principles of least-cost planning; harnessing competitive forces, technology, and innovation; promoting transparency; focusing on reliability; and working continuously to minimize the cost of delivered energy. Of particular note, RTO markets enabled the transition to non-utility natural gas-fired generation in a way that shifted risk away from customers, minimized stranded costs, and enabled the benefits from the shale gas revolution to accrue more quickly to customers.

With this context and against this backdrop, the Industrials voice serious concerns about the resource adequacy challenges currently facing the RTO/ISO regions. To varying degrees, the RTO and ISO regions confront a lack of dispatchable generation to complement the growing amount of intermittent resources interconnecting to the grid. To be clear, many members of the Industrials support the deployment of renewable energy sources to satisfy corporate sustainability initiatives and as an important part of a diverse resource portfolio. The markets are materially affected, however, by policies and customer preferences supporting renewable generation valued, at least in part, for their environmental attributes, and many renewable resources do not address reliability needs uniformly.

Moreover, there is a lack of trust that even very high prices in RTO/ISO markets can move the needle to get new dispatchable generation sited, interconnected, and in service. Numerous and continuous RTO/ISO market rule changes also weaken the environment for capital investment in

necessary infrastructure to support resource adequacy. Add in supply chain constraints for critical equipment and unprecedented, but undefined load growth due to data center and cryptocurrency mining development, electrification, and re-shoring, and it is hard not to see that we are presently confronting a perfect storm.

Given the time necessary to successfully site, build, and construct the required infrastructure, prompt action is needed now on several fronts to change our current trajectory. In Industrials' view, two foundational principles should guide our next steps.

One, competition remains key to handling the challenge before us - competition for capital, competition for ideas, competition to drive innovation, and competition to discipline costs. At this point in our investment cycle, given numerous exogenous forces, the platform on which that competition occurs appears ripe for change.

Second is the need for more comprehensive planning. As discussed below, Industrials believe that it is necessary for an independent entity to exercise engineering judgment to assess where resources to support reliability are required. The current structure depends on price signals to indicate to the market where investment is needed, but the purity of price signals has been skewed by various federal and state policies that, though well-intended, support policy goals that are not directly tied to reliable and low-cost system operations. There is a growing need to retain existing as well as add new dispatchable generation in all or at least most regions. Under an "all of the above" strategy, sound public policy supports retaining existing natural gas, coal, and nuclear generation with some remaining useful life, and attracting new dispatchable resources.

In addition to resource adequacy challenges concerning the RTO/ISO electricity markets, the Industrials would be remiss if they did not seek to elevate the infrastructure challenge associated with interstate natural gas pipeline capacity, given the electric industry's increased reliance on natural gas as a fuel source. In Industrials' experience, the nation's interstate natural gas pipeline system is undersized to support both the nation's need for natural gas across all customer sectors, including the electric generation sector. When interstate natural gas pipelines are constrained, industrial operations are commonly required to yield to other customers, including electric generation, who are perceived to be of higher value. With the United States' abundant availability of natural gas, the country should not be forced to choose whether to support manufacturing or support electric resource adequacy; it can and should do both.

Present-Day Concerns

The Industrials have several concerns about the current approach to resource adequacy in RTO/ISO markets. The problems that Industrials perceive are, in some respects, interrelated. They are listed below, in no particular order.

- Regulators tend to remain reactive to piecemeal changes proposed by the RTOs and ISOs, rather than engaging proactively to develop and implement a sustainable, predictable, and long-term approach. This Technical Conference presents an opportunity for the Commission to engage proactively. New rules of the road are necessary to support reliability.

- A well-balanced, reliable system requires a diverse mix of resources that align with operational needs, but RTO/ISO markets do not intentionally prioritize this requirement.

- RTO/ISO markets are not adequately optimizing generation, transmission, demand response, and storage options to minimize cost, minimize environmental impacts, and maximize reliability.

- Pricing results for capacity have been volatile and unpredictable in all RTO/ISO capacity auctions.

- Customers have suffered the pricing and reliability consequences of poor performance from resources that were paid to perform but failed to do so. On this point, we note that capacity resources are penalized for non-performance, but those penalties do not help those customers who pay the high energy and ancillary service prices resulting from resources' non-performance. The high energy and ancillary service prices are, of course, in addition to payments for the capacity designed to hedge against those high energy and ancillary service prices.

- Because RTO/ISO capacity market rules are incredibly complex and constantly changing, it is nearly impossible for Industrials to develop medium-range, all-in energy price forecasts for their own operational and capital deployment decisions.

- Likewise, energy suppliers cannot plan due to the same price uncertainty. Lack of long-term revenue certainty detracts from capital deployment in more capital-intensive resources, resulting in a generation mix that has recently tilted strongly in favor of lower-capital intermittent resources.

- RTOs and ISOs make unilateral decisions about what customers want or need in terms of reliability/price balance, rather than leaving that decision to customers. For example, an industrial customer may be willing and capable of having their electricity supply interrupted during times of system stress in exchange for reducing their capacity-related energy costs. Customers should be able to determine and purchase the level of reliability they want, they need, and they can afford – a concept that pervades just about every other market in existence.

- Customers have no assurance of long-term resource adequacy. As we sit here today, only one of the RTOs and ISOs that have some form of centralized capacity auction has resources procured beyond May 31, 2026. ISO New England, the exception, has resources procured through May 31, 2028. There are no mechanisms in place for RTOs/ISOs to ensure resource adequacy to cover load forecasts going out beyond three or four years.

A Potential Path Forward

The Industrials have developed a framework for moving beyond the current centralized capacity auction approach as a means of ensuring resource adequacy. When creating this framework, the Industrials drew on the positives from the RTO/ISO journey over the past 25 years and the advantages found in particular vertically integrated utility models used to serve the Industrials' operations outside of RTO/ISO regions. The Industrials would very much appreciate the Commission embracing this framework, then giving each region a reasonable period to work collaboratively on implementation and transition details that meet the needs of customers and suppliers in each region. If those collaborative efforts do not produce results that are just, reasonable, and non-discriminatory within the prescribed timelines, the Commission must be prepared to step in and prescribe results.

Overarching Principles

The following principles should guide the development and implementation of a solution framework.

- System planners should undertake an independent, integrated, and regional approach to defining the optimal combination of generation, transmission, demand response, and storage.

- Competition should be used to procure new and retain existing generation, transmission, demand response, and storage.

- Customers should, to the maximum extent possible, be able to determine their own balance of price and reliability, and then abide by the consequences of that determination.

- Procurement of generation, demand response, and storage should be done at the regional level and on a residual basis.

    - Self-supply decisions, whether by vertically integrated utilities, public power entities, or even individual customers, should be accommodated.
    - Where states retain integrated resource planning and vertically integrated monopoly utility models, those approaches should be accommodated.

- Reliability depends on adequate resources, but any framework must recognize that the laws and principles of electrical engineering and physics also bind the system.

- The framework must respect existing delineations of state and federal authority. Modifications of federal or state statutes are not within the scope of this docket or anticipated under this framework.

Potential Solution

- RTOs/ISOs, as central and independent entities, should determine, with stakeholder input and review, the optimal combination of generation, transmission, demand response, and storage needed for system reliability at the lowest cost for short-term and longer-term needs.

- The RTO/ISO should identify "needs" based on:

    - Load forecasts and surveys that account for electric distribution company load forecasts and technological innovation.
    - Age, useful efficient lives, and performance characteristics of the existing generation.
    - Other relevant factors to be proposed by the RTOs/ISOs for Commission consideration.

- RTOs/ISOs should competitively procure a mix of resources based on functionality, performance characteristics, and cost that takes into account at least the following Factors:

    - Mix of baseload/intermediate/peaking generation capability
    - Resource deliverability
    - Seasonal constraints on resource output and deliverability
    - Intermittent and non-intermittent resource performance
    - Ability to acquire short-term resources (*e.g.*, demand response as a "gap filler") and the need to commit to long-term resources (*e.g.*, baseload capacity and intermediate dispatchable capacity)
    - Attraction of new resources and retention of still-efficient existing resources
    - Planned and methodical phase-out of inefficient existing resources
    - The actual reliability value of resources
    - Any state integrated resource plans ("IRPs")
    - State renewable portfolio standards ("RPS"), to the extent necessary to avoid double-counting resource requirements
    - Mitigation of structural market power of existing resources

- The competitive procurement process should be a direct procurement approach, whereby the RTO/ISO, on behalf of the load and based on the RTO/ISO determination of need, enters into direct bilateral contracts with resources with contract length and payment terms varying for each procured resource based on the Factors above:

    - Contract durations should consider, as applicable, the useful lives of new resources or the remaining useful lives of existing resources.
    - Performance incentives/penalties should ensure that the provision of energy and ancillary services in real time is consistent with contract obligations and that customers receive some compensation for the repercussions of any non-performance if a resource's performance is not consistent with its contract obligations.

- Procured generation resources should be required to be offered into energy markets at the resource's short-run marginal cost.

- Cost Recovery:

  - Retain existing approaches for setting "capacity obligations" based on capacity use during peak load conditions.
  - Allow retail customers to choose their desired level of reliability, with financial and/or power supply consequences if consumption exceeds that desired level during system stress.
  - Capacity obligations and "all-in" cost per $/MW-day for customers should be calculated annually with enough predictability that customers are aware of their capacity costs for the next delivery year or planning year early enough that customers can forecast their costs for their operating budget. Final capacity obligations and "all-in" costs (in $/MW-day) should be posted at least 3 months before the 12-month period during which those costs are recovered.

- Generation interconnection queue priority would be given to new resources procured by and contracted with the RTO/ISO.

- Generation interconnection queues should be retained for those non-procured resources that want to continue pursuing interconnection on a merchant basis to provide energy and ancillary services.

- Every other year, the RTOs/ISOs would undertake a holistic needs assessment and procure any additional necessary resources.

- Energy market participation for procured and non-procured resources:

  - Retain locational marginal pricing for day-ahead and real-time energy markets.
  - Offers from resources procured for capacity would reflect actual short-term marginal costs (including fuel).
    - Any inframarginal revenue for procured resources should offset the fixed-cost payments reflected in bilateral agreements with the RTOs/ISOs.
  - Offers from resources that are not procured for capacity ("merchant resources") would occur pursuant to those resources' market-based rate authority with appropriate market power protections.
  - Reliability must-run/System support resource ("RMR/SSR") provisions:
    - Any existing RMR/SSR arrangements that the Commission has accepted would remain in effect, subject to any necessary adjustments to reflect this new approach.
    - The direct procurement approach should substantially reduce, if not eliminate, the need for RMR/SSR resources, as the "need" would be considered in the integrated system planning, and the duration of performance would be addressed in the contract.

- If an RMR/SSR is needed for merchant resources, the RTO/ISO would identify the need, competitively procure alternatives, and, if that process does not address the need, enter into an RMR/SSR cost-of-service arrangement.

Transition and Timing

The Commission and the RTOs/ISOs should target implementing this new approach so that resources are procured and obligations are incurred that become effective June 1, 2028.

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Industrials appreciate the Commission's consideration of the proposed framework as the Commission considers the need for reform of RTOs'/ISOs' resource adequacy constructs. During this time of energy transition and growth, Industrials require near-term and comprehensive solutions to support long-term reliability and just and reasonable rates for customers.