Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission\(^1\) ("FERC" or the "Commission"), the Natural Gas Supply Association ("NGSA") hereby respectfully moves to intervene in the above-captioned proceeding. NGSA also hereby submits its comments supporting PJM’s proposed Capacity Resource Performance provision\(^2\), which will create an incentive structure within PJM’s Reliability Pricing Model ("RPM") Capacity Market, as well as other related measures aimed at improving generator performance in the near-term.

NGSA represents integrated and independent energy companies that produce and market domestic natural gas. Established in 1965, NGSA encourages the use of natural gas within a balanced national energy policy, and supports the


benefits of competitive markets. NGSA promotes increased supply and the
reliable, efficient delivery of natural gas to customers. For our member companies,
it is important that wholesale power markets compensate gas-fired power
generators for investments that are required in order to meet electric reliability and
their capacity obligations. Failure to make these investments can lead to adverse
repercussions for the natural gas industry. As such, NGSA has a substantial
interest in this proceeding that cannot be adequately served by any other party

I. COMMUNICATIONS

Any communications with respect to this pleading and this proceeding
should be addressed to:

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II. EXECUTIVE SUMMARY

In its filing, PJM states that its existing capacity market rules are too weak
and ineffective to incent generating resources to undertake the contracting
practices and investment required to improve performance to levels that maintain
reliable system operations.\textsuperscript{3} NGSA supports PJM’s proposals in this proceeding to address these inadequacies through a new product called Capacity Resource Performance, as well as the other related measures that are to be placed into effect by April 1, 2015. If approved, these proposals will introduce an improved market design that is intended to provide greater fuel assurance. These proposed changes show PJM’s willingness to address the growing need for natural gas. Yet, in order for real infrastructure projects to come to fruition in the near-term, PJM’s proposed initiatives must result in genuine changes in generator behavior and investment that will bolster fuel assurance in that region.

PJM’s proposed Capacity Resource Performance provision is based on solid market principles that will provide a greater incentive for generators to exercise options to economically and reliably meet their power obligations.\textsuperscript{4} As discussed in greater detail below, if implemented appropriately, the Capacity Resource Performance provision should improve performance in PJM’s region by providing: (1) a market-based solution; (2) resource neutrality; and (3) clear and transparent market obligations and rules.

\textsuperscript{3} See, e.g., id. at pp. 6-7.

\textsuperscript{4} See id. at p. 21 (“The fundamental attribute of a Capacity Performance Resource is that it shall provide energy and reserves when called upon by PJM during Emergencies.”). See also ISO New England Inc. and New England Power Pool, Filings of Market Rule Changes to Implement Pay for Performance in the Forward Capacity Market, Transmittal Letter, Docket Nos. ER14-1050-000, et al. at 21 (Jan. 17, 2014) (“The Capacity Resource Performance provisions design adheres to three fundamental market design principles that characterize efficient, competitive markets.”).
Also of significance, on November 20, 2014, the Commission embarked on a comprehensive review of fuel assurance efforts underway in each regional power market.\(^5\) NGSA is pleased to see both PJM and the Commission beginning to tackle the fundamental problem with respect to gas-electric coordination: generators are not adequately compensated for costs associated with fuel assurance. NGSA has been a strong advocate for organized power market operators to establish rules and pricing structures that allow generators the opportunity to recover their costs and investment in improving fuel assurance and to contract for a portfolio of services that ensures electric reliability. Such actions are fundamental prerequisites if adequate infrastructure is to be in place to meet the increased natural gas demand and provide the level of service flexibility required to meet the varying load requirements of gas-fired generators.

### III. PJM’S MARKET DESIGN MUST BE MODIFIED TO IMPROVE FUEL ASSURANCE

Predominantly depending on “just-in-time” procurement of natural gas is no longer a valid market option for gas-fired generators to rely upon as power demand increases and gas system flexibility diminishes. It is understandable that generators had become accustomed to relying on such practices and did not see a need to ensure deliveries of natural gas by contracting for firm transportation and

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making advance arrangements for gas supplies. Until the last few years, gas-fired
generators generally had the ability to readily obtain natural gas simply by: (1) buying it at the point of consumption; (2) securing interruptible pipeline transportation; and/or (3) securing capacity released from firm transportation shippers. However, as demand for natural gas has grown, gas pipeline companies are operating their systems at increasingly high utilization rates, which results in constrained pipeline capacity that makes the practice of “just in time” gas procurement increasingly more challenging.

In its application, PJM states that currently, there are very limited consequences when generators fail to perform, with inadequate penalties and allowance of a generous number of excuses for non-performance.\(^6\) PJM’s proposals in this proceeding are positive steps in the right direction to discourage “just in time” procurement practices gas-fired generators rely upon when securing delivered natural gas. While it may have taken some time for power market participants to appreciate the ramifications of solely relying on interruptible transportation and the spot market for gas supply purchases, it is apparent from PJM’s statements in this application that they are beginning to recognize the risks and are now prepared to correct market design flaws that can adversely impact fuel assurance. For instance, PJM states that, “[t]he late January events more

\(^6\) See PJM Proposal at p. 7.
starkly illustrated, however, a different shortcoming in the current RPM rules lack of support for firm gas delivery arrangements.”7 Also, PJM explains that:

There currently are no explicit means in RPM to value the efforts generation owners must undertake to improve future winter performance and the very high rate of outages seen last January seem to confirm that, if anything, the current market design offers more disincentive (rather than incentive) to invest in improvements to winter-time performance.8

Not only should generators have firm transportation to ensure some level of service “on demand” to meet unexpected changes in variability, generators must also seek out flexible gas services that can reliably serve their immediate needs. This is simply a cost-versus-risk analysis for generators that have the responsibility to secure advance arrangements commensurate with their performance obligations – or to fully understand the financial risks associated with not doing so.

Typically, firm transportation must be secured by either the generator or its supplier. Gas supplies may not always need to be on a firm basis given the abundant supplies in the PJM market area. However, to limit exposure to spot market prices, generators should make advance arrangements for the gas commodity. To meet both expected and unexpected power obligations, generators have an array of flexible service options they can rely upon to ensure they receive delivered supplies of natural gas to meet their power market obligations. These

7 Id. at p. 19.
8 Id. (emphasis in original).
options include no-notice, storage, non-hourly rate, park-and-loan services, as well as asset management agreements, which can provide flexible capacity and shaped product offerings in which marketers stand ready to serve.\(^9\) While there is a premium associated with more flexible pipeline services, securing these services is necessary for electric reliability and should significantly improve PJM’s confidence in generator performance without a need for wholesale changes to the natural gas industry.

As the Commission appropriately found when it approved ISO-NE’s pay for performance proposal, subject to some modifications, generator performance must be closely linked to a generator’s capacity market obligation.\(^10\) It is simply illogical to provide capacity payments to those who cannot provide services required to maintain grid reliability. “Available” capacity committed in a capacity auction is virtually meaningless unless it can be relied upon when most needed. If the capacity committed in auction cannot reliably perform, one must ask if the capacity market provides the desired reliability and, consequently, true value to consumers.

\(^9\) To avoid shutting in production, producers must sell all flowing gas. There is no “on/off switch” to accommodate varying demand. Thus, if gas is required without advance contractual commitments, service will be limited to regional or local delivery assets.

(I) PJM Winter Outage Chart Mischaracterizes the Inability to Secure Delivered Gas as “Natural Gas Interruptions”

Perhaps one of the most referenced charts documenting the impact of last winter’s conditions in the PJM region is a chart that attributes nearly a quarter of PJM’s outages during a peak evening last winter to “natural gas interruptions.” While this chart is helpful in many respects, referring to “natural gas interruptions” is not an accurate characterization. We are concerned that, absent greater clarity, parties could be easily misled to the wrong conclusions about the actual problems and, thereby, to the wrong solutions.

PJM’s chart does not distinguish among the physical, contractual, and economic factors that may have contributed to gas-fired generators’ inability to procure natural gas to meet its performance obligations. However, as FERC pointed out in a recent report, “[d]uring each of these cold events, customers who had firm transportation capacity on natural gas pipelines generally managed to secure natural gas deliveries.” Thus, one can confidently assume that most, if not all, of the outages referred to as “gas interruptions” in PJM’s chart were actually

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11 See PJM Proposal at pp. 17-18. See also PJM Interconnection, L.L.C., Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events at 25, Figure 16 (May 8, 2014); Problem Statement on PJM Capacity Performance Definition, PJM Interconnection, L.L.C., at 6, Figure 3 (Aug. 1, 2014).

due to natural-gas fired generators holding interruptible pipeline contracts and/or failing to make advance arrangements for delivered gas supply.

Holding an interruptible transportation contract or being unwilling or refusing to pay the spot market price of natural gas due to “just in time” procurement practices does not constitute a gas interruption or curtailment. In fact, gas customers should only rely on interruptible transportation as a market option if they can: (1) accommodate occasional interruptions of their natural gas supply, (2) significantly reduce their consumption and operations when notified, or (3) rely on-site back up fuel. In the natural gas industry, a physical gas interruption occurs when there is a diminished physical ability to flow gas, which would then be referred to as a “gas curtailment” if firm capacity holders’ contractual requirements cannot be met. This past winter, actual physical interruption of gas supplies had a minimal impact on overall supply, with freeze-offs affecting less than one percent of total production and lasting less than a day.13 In fact, daily winter gas production last year exceeded the prior winter by nearly three percent.14 While pipelines also experienced some operational issues when

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13 See Platts Gas Daily, Bentek Data (March 31, 2014).

14 See U.S. Energy Information Administration, Natural Gas Monthly at P 3, Table 1 (Nov. 2014).
multiple compressor units failed, such issues were typically resolved in the course of a day.\textsuperscript{15}

IV. THE CAPACITY RESOURCE PERFORMANCE PROVISION IS A POSITIVE STEP TOWARD ADDRESSING PJM’S ELECTRIC RELIABILITY AND ECONOMIC CONCERNS

(1) Provides a Market-Based Solution That Can Provide Generators With a Greater Incentive to Perform

PJM has developed a market-based mechanism in which the capacity performance rate should provide better price signals to induce generators to more reliably perform. Greater revenues associated with superior performance, coupled with a heightened financial risk associated with poor performance during declared emergencies, should provide more motivation for suppliers to take actions to reduce their exposure by improving their physical performance. With more accurate market signals, generators can make their own decision about which measures they should undertake to improve their performance in the most cost-effective manner. Such investments for improved performance may include increased dual fuel capabilities, firm pipeline services, delivered gas supply from marketers or natural gas producers, LNG supplies, demand response, or bilateral agreements among generators, among other things.

Also, effective April 1, 2015, PJM proposes to tighten its parameter limits so that generators are no longer excused from penalties based on a multitude of reasons permitted today, even when such outages are a consequence of the seller’s actions. Generators will no longer be permitted to use economic or budgetary issues as a basis for non-performance. Also, PJM proposes to modify its force majeure rules to excuse performance only when catastrophic conditions broadly preclude performance. Recognizing that it will take generators time to invest in better performance, PJM proposes to provide a five-year transition period prior to making the full penalties for non-performance effective.

NGSA supports PJM’s proposal to significantly limit the number of excuses that can be used for non-performance. Each exemption granted would progressively weaken the market signals required to provide the proper price signal or incentive for improved generator performance. Moreover, if generators were to be excused when failing to perform due to a failure to secure delivered supplies of natural gas, such behaviors would perpetuate, continuing the existing disincentive to invest in gas infrastructure.

NGSA understands that there may be limited circumstances where it is appropriate to ensure that performance capacity penalties do not become

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16 See PJM Proposal at pp. 5, 39-40.
17 See id. at p. 5.
18 See id. at p. 27.
inordinately excessive, particularly in those instances in which there may be sustained performance issues (e.g. stop/loss provisions). The direct stakeholders will need to determine whether it is too extreme to limit *force majeure* to “catastrophic conditions.” However, to maintain an effective market-based approach, all market participants must be held to the same high standards to the maximum extent possible.

**(2) Ensures Resource Neutrality**

PJM proposes that, under its proposed Capacity Resource Performance provision, all types of generation would be held to the same standard of performance and will be subject to the same rate, with very limited excuses.\(^\text{19}\) Compensation would not be dependent on which technology or fuel source is used; it would depend solely on whether the generator is capable of meeting its performance obligation. NGSA believes that such a fuel-neutral mechanism is beneficial because, if resources are treated differently, the fundamental market-based concept would be compromised and could hamper the price signals needed to achieve the intended market behaviors.

Additionally, PJM states that its current offer cap in the RPM is not fuel-neutral in that it does not explicitly allow for inclusion of firm “gas supply transportation costs” to be included in a generator’s offer. While the Avoidable

\(^{19}\) *See id.* at pp. 18, 21.
Cost Rate (“ACR”) specifically allows the inclusion of costs associated with investment of fuel security, such as dual fuel, PJM states that the Market Monitor has explicitly disallowed firm transportation costs in the ACR. In fact, generators that invest in firm pipeline transportation could price themselves out of the market if their capacity bids reflected such increased costs of investment. Thus, the current rules provide a market advantage for dual fuel over firm pipeline transportation and advance gas supply arrangements.

NGSA strongly supports PJM’s proposal herein to eliminate the existing fuel preference by clearly stating that costs associated with obtaining fuel supplies, including costs of procuring firm gas transportation and advance supply arrangements, are legitimately included in the ACR offer. With acceptance of this change, gas-fired generators will be better equipped to decide which fuel best meets their needs to ensure they can perform when called upon by PJM.

(3) Provides Clear and Transparent Market Obligations and Rules

PJM’s proposed Capacity Resource Performance provision and accompanying changes to limit the number of excuses that can be made for non-performance clearly delineate each participant’s obligations. Clear rules and obligations allow all market participants to more fully understand what is

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20 See id. at p. 10.
21 See id. at pp. 21, 49.
expected of them with respect to their capacity commitment obligations and to take the steps required to meet those obligations. In contrast, a lack of clarity surrounding a participant’s obligation leads to instances in which the RTO feels compelled to over commit resources, and/or to resort to non-market actions to assure system reliability, further dampening market signals for economic long-term investment and increasing costs to consumers.

IV. THE SUCCESS OF PJM’S PROPOSAL TO BOLSTER FUEL ASSURANCE HINGES ON EFFECTIVE IMPLEMENTATION

NGSA believes it is most appropriate for the Commission, in conjunction with comments filed by direct stakeholders and market participants in the PJM region, to decide on the specific rates and provisions that should be approved to ensure the success of the Capacity Resource Performance proposal. For that reason, NGSA is not commenting on the proposal’s specific details, such as the appropriate level of the performance and penalties rates or the level of permitted exemptions. However, we do believe that the details stand to dramatically impact the overall effectiveness and success of PJM’s proposal. Therefore, NGSA is addressing some of these specific issues at a high level.

As the Electric Power Supply Association mentions in its comments, it is important that PJM set the market seller offer cap for Capacity Performance at a level that supports its goal to ensure that capacity bids sufficiently compensate generators for their costs and investments made so that generators can reliably
perform during emergencies. Therefore, it is important that generators, in order to recover all legitimate costs necessary to meet the new obligations set out in the Capacity Performance proposal, have the ability to bid up to that offer without triggering Market Monitor inquiries, notwithstanding FERC’s approval. Therefore, to ensure the success of PJM’s Capacity Performance Resource initiative, the Commission should provide assurances, to the greatest extent possible, that such offers approaching the established offer cap will be presumed legitimate in order to increase generator confidence that the cap is considered fully legitimate by all parties.  

Similarly, although NGSA has not weighed in with respect to PJM’s proposal to increase its energy price cap, NGSA is supportive of changes in power market rules that adequately compensate generators for costs prudently incurred to ensure performance and reliability in line with their commitments in the power markets. Therefore, to the extent that the energy price cap improves the ability to compensate generators for costs associated with fuel assurance measures, NGSA believes raising the energy price cap has merit.

Lastly, as PJM has stated in its filing that forced outage rates have continued to decline each year under the RPM, and given the tenuous situation experienced

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22 NGSA agrees with PJM that it makes sense that market participants can find the least cost manner to ensure performance without verification of legitimacy of such costs by PJM or the market monitor. See PJM Proposal at p. 54.
last winter, immediate action is required.\textsuperscript{23} Yet, to ease the impact of moving to
the Capacity Performance Resource Product, PJM has proposed a transitional
period before generators are subjected to the full performance payment rate
deemed necessary to induce the correct market behaviors.\textsuperscript{24} Given that each year’s
auction for capacity commitments becomes effective three years after the date of
the auction, under the proposed transition period, the proposed performance
enhancements will not be fully reflected until 2020/2021.\textsuperscript{25}

While NGSA believes that the existing market flaws must be corrected as
soon as possible, the proposed transition period proposed by PJM appears to strike
the right balance between immediate implementation versus allowing the time
necessary for generators to invest in fuel assurance, thus easing the cost on load.
However, given the immediate need to correct power market flaws, NGSA does
not endorse a longer transition period.

V. PJM’S PROPOSED MARKET IMPROVEMENTS WOULD HELP
MITIGATE COSTS ASSOCIATED WITH GREATER FUEL
ASSURANCE AND RELIABILITY

Certainly, there will be costs associated with improving reliability in the
PJM region that will have a direct financial impact on market participants as well
as consumers. Yet, any consideration of the financial impacts must also be

\textsuperscript{23} See PJM Proposal at pp. 15-16.
\textsuperscript{24} See id. at pp. 27-28.
\textsuperscript{25} Id.
measured against the possible adverse consequences that could occur absent effective measures to ensure reliability, such as customers losing service during peak periods.

In addition to increased system reliability, the Commission should also consider the cost savings associated with implementation of Capacity Resource Performance provision. The proposed Capacity Resource Performance provision stands to significantly limit the costs incurred during periods of high demand in which generators primarily relied upon spot market pricing to meet their power market obligations. The Commission recently recognized this problem, stating the “[f]ailure to address fuel assurance could also result in volatile (and often high) prices to consumers when generation resources are forced to procure fuel supplies at the last minute.”\(^\text{26}\) Such practices led to hundreds of millions of dollars in PJM last year alone.\(^\text{27}\) Thus, PJM’s proposed Capacity Performance resource would likely result in less costs to consumers if generators had a greater incentive to sign firm transportation contracts and enter into advance supply arrangements, which should ultimately help to address current pipeline capacity constraints.

Additionally, if PJM becomes more confident that generators will run when called upon, they will be less likely to commit additional units, which would give


\(^{27}\) See PJM Proposal at p. 20.
generators a greater opportunity to receive competitive market prices. Similarly, overall regional costs associated with the Capacity Resource Performance provision may be reduced due to less reliance on non-market mechanisms in which PJM procures additional generator commitments to address performance uncertainty.

VI. CONCLUSION

PJM’s performance proposal, based on solid market-based principles, is a positive step toward improved fuel assurance in the PJM region. If implemented appropriately, the Capacity Resource Performance provision would begin to address PJM’s current difficulties by incenting investments by generators that would help them perform more reliably and economically even during periods of peak demand. Therefore, the Commission should approve PJM’s proposal without delay.

Respectfully submitted,

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28 When an RTO lacks confidence in performance, they will at times over-commit resources, creating out-of-merit situations that can, in turn, inflate energy clearing prices relative to otherwise competitive market levels.
CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon those parties on the official Service List compiled by the Secretary in this proceeding.


/s/ Patricia W. Jagtiani