

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Grid Reliability and Resilience Pricing                    )                    Docket No. RM18-1-000

**COMMENTS OF  
THE AMERICAN PUBLIC POWER ASSOCIATION  
ON PROPOSED RULE**

Pursuant to the October 2, 2017, Notice Inviting Comments issued by the Federal Energy Regulatory Commission (“Commission” or “FERC”) in the above-captioned docket, and the October 4, 2017, notice issued by the Commission’s Office of Energy Policy and Innovation (“Staff Notice”), the American Public Power Association (“APPA”) provides its comments concerning the proposed rule submitted by the Secretary of Energy (“Secretary”) for final action by the Commission under section 403 of the Department of Energy Organization Act (“DOE Act”).<sup>1</sup> As discussed below, the Commission should: (i) decline to adopt the Proposed Rule; (ii) terminate this docket; and (iii) implement further procedures to assess the issues raised by the Secretary.

**I. INTRODUCTION**

APPA supports resource procurement policies that can accomplish a broad range of goals, including fuel supply diversity. By avoiding overexposure to a single fuel source, fuel diversity helps to enhance system reliability and resilience. APPA generally agrees with the Secretary’s assessment that the organized markets operated by Regional Transmission Organizations and Independent System Operators (collectively, “RTOs”) have not proven to be well-suited to addressing fuel diversity objectives. For example, baseload plant retirements, particularly of nuclear plants, have been more of a concern

---

<sup>1</sup> *Grid Resiliency Pricing Rule*, 82 Fed. Reg. 46,940 (Oct. 10, 2017) (“NOPR” or “Proposed Rule”).

inside RTO regions than outside RTO regions. While the RTO-operated markets provide many efficiencies and benefits through the centralized dispatch of existing resources, these markets have not proven to be useful as tools to plan for an optimal array of resources – a problem that is especially acute within the RTOs with mandatory capacity markets and whose investor-owned utilities are no longer vertically integrated. Secretary Perry has explained that the Proposed Rule is intended to start a conversation about the matters addressed in the NOPR,<sup>2</sup> and APPA agrees that an examination of the generation resource mix, its impact on system reliability and resilience, and the best way to accommodate a diverse mix of resources in the RTO-operated wholesale markets warrant further discussion and analysis by interested stakeholders.

APPA, however, opposes the NOPR’s precipitous proposal to require RTO tariff changes that would ensure full cost-recovery for certain “fuel-secure” resources in RTOs with energy and capacity markets. Although the NOPR’s proposal is based largely on the claimed need to ensure the resilience of the electric grid, the NOPR does not clearly define what it means by resilience in this context or explain how resilience should be measured. The evidence cited in the NOPR certainly does not establish that premature retirement of fuel-secure generation resources presents an immediate reliability threat that must be addressed through an ill-defined and hastily-promulgated Commission rule.

Even if the Commission were to accept the existence of the problem identified by the Secretary, the NOPR does not demonstrate that it offers a reasonable and effective remedy. The Proposed Rule merely presupposes the need for a very specific class of

---

<sup>2</sup> Perry: *Cost Recovery Rule is 'Not a Directive' for FERC*, Utility Dive, October 6, 2017.

resources, and then proposes to pay them a cost-of-service rate without any meaningful analysis of whether those resources are actually required for system reliability or resilience. In contravention of the Federal Power Act (“FPA”), the NOPR would take this step without even considering the potential rate impact of the Proposed Rule on consumers.

The amended regulations included in the NOPR are also ambiguous and incomplete in numerous respects, and they would be unworkable in their current form. The lack of detail in the NOPR effectively deprives interested parties of adequate notice in contravention of the Administrative Procedure Act (“APA”), and this deficiency cannot be remedied through the submission of comments by interested parties debating what the NOPR might really mean or how it could be implemented. The ambiguity of the Proposed Rule, moreover, would doubtless lead to controversy and litigation as RTOs try to implement the ill-defined requirements, and such disputes would undermine the cost recovery assurance the Proposed Rule is nominally trying to provide.

Beyond the substantive deficiencies with the Proposed Rule, the NOPR imposes unreasonably accelerated timelines for Commission action and RTO compliance. The Secretary has directed the Commission to act by December 11, 2017, and, as a result, the Commission has only given interested parties until October 23, 2017, to file initial comments on the Proposed Rule – a far shorter comment period than used for other significant proposed rules. The Commission should not act on regulations that, by design, could have a very significant effect on certain RTO markets without sufficient time for vetting and analysis of the proposal by interested parties and the Commission itself. As to RTO compliance, the NOPR’s proposed deadlines are a practical

impossibility.

Given its substantive and procedural deficiencies, the NOPR cannot satisfy the statutory requirements of sections 205 and 206 of the FPA or the obligations imposed on the Commission by the APA. APPA therefore urges the Commission to exercise its independent authority and decline to adopt the Proposed Rule pursuant to section 403(b) of the DOE Act. The Commission should terminate the instant docket without further proceedings.

While APPA cannot support the Proposed Rule, APPA generally agrees that the RTO-operated markets have not been an optimal means to determine the energy resources needed to provide specific attributes and achieve policy aims, such as ensuring fuel diversity and promoting environmental goals. The organized energy and capacity markets have long focused on treating each megawatt as interchangeable, and as a result have not been an effective means to achieve the optimal mix of generation.

APPA would therefore support a process for RTOs to undertake an evaluation of what resource mix would be needed to provide the services and attributes needed for reliability, as well as for resilience, and to identify any current or projected shortfalls in these resources. APPA also recommends that the Commission convene a technical conference to discuss the framework for such an evaluation. The conference would address the definition of and standards for resiliency, the types of attributes and services needed by the RTOs for both reliability and resiliency, how current market rules affect the needed level of these attributes and services, how regional differences impact the RTOs' reliability and resiliency needs, and other relevant topics.

In section III below, APPA discusses its substantive and procedural concerns with

the Proposed Rule, and suggests an alternative process to address the issues raised in the NOPR. In section IV, APPA responds to certain specific questions in the Staff Notice.

## **II. DESCRIPTION OF APPA**

APPA is the national service organization representing the interests of the nation's 2,000 not-for-profit, community-owned electric utilities. Public power utilities are located in every state except Hawaii. They collectively serve over 49 million people and account for 15 percent of all sales of electric energy (kilowatt-hours) to ultimate customers. Public power utilities are load-serving entities, with the primary goal of providing the communities they serve with safe, reliable electric service at the lowest reasonable cost, consistent with good environmental stewardship. This orientation aligns the interests of the utilities with the long-term interests of the residents and businesses in their communities. Public power utilities operate in all Commission-approved RTOs and ISOs, and APPA has a vital interest in maintaining just and reasonable rates for service in these regions.<sup>3</sup>

## **III. COMMENTS**

### **A. The Commission May Decline to Adopt the Proposed Rule Under Section 403 of the DOE Act**

The Secretary issued the NOPR pursuant to section 403(a) of the DOE Act, which authorizes the Secretary “to propose rules, regulations, and statements of policy of general applicability with respect to any function within the jurisdiction of the Commission under section 402 of [the DOE Act].”<sup>4</sup> Among the functions delegated to the Commission under section 402 of the DOE Act are “the establishment, review, and

---

<sup>3</sup> To the extent required, APPA moves to intervene as a party in Docket No. RM18-1-000 pursuant to Rule 214 of the Commission's Rules. 18 C.F.R. § 385.214 (2017).

<sup>4</sup> 42 U.S.C. § 7173(a).

enforcement of rates and charges” under sections 205 and 206 of the FPA,<sup>5</sup> and the Secretary proposes that the Commission act under sections 205 and 206 to adopt the Proposed Rule.<sup>6</sup>

Section 403(a) of the DOE Act gives the Secretary the right to propose rules to the Commission, but the Act is clear that the Commission retains “exclusive jurisdiction with respect to any proposal made under” section 403(a).<sup>7</sup> The Commission has the authority, and, indeed, the obligation, to make an independent determination that the Proposed Rule is just, reasonable and not unduly discriminatory.<sup>8</sup> Adoption of the NOPR would also require satisfying the requirements of the APA, including that the Commission’s actions are not “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,”<sup>9</sup> and that interested parties have adequate notice of the proposed rule.<sup>10</sup> If the Commission concludes that the Proposed Rule does not satisfy the applicable standards under the FPA or APA, the Commission must decline to adopt it.

---

<sup>5</sup> 42 U.S.C. § 7172(a)(1)(B).

<sup>6</sup> See NOPR at p. 46,945 (stating that “the Secretary is directing the Commission to exercise its authority under sections 205 and 206 of the Federal Power Act to issue a final rule . . .”).

<sup>7</sup> 42 U.S.C. § 7173(b). In addition, section 401(d) of the DOE Act provides that “[i]n the performance of their functions, the members, employees, or other personnel of the Commission shall not be responsible to or subject to the supervision or direction of any officer, employee, or agent of any other part of the Department [of Energy].” 42 U.S.C. § 7171(d).

<sup>8</sup> Consistent with this obligation, in prior instances where the Secretary of Energy has acted under section 403(a) to propose rules, the Commission has conducted an independent assessment of the proposal. See, e.g., *Ceiling Prices; Old Gas Pricing Structures*, Order No. 451, FERC Stats. & Regs. ¶ 30,701 (1986), 51 Fed. Reg. 22,168 at p. 22,177 (June 18, 1986) (explaining that “[t]he rule adopted today by the Commission represents an endorsement of the objectives set forth in the DOE proposal, modified to recognize the current needs of the natural gas market for regulatory change and the most practical means of meeting those needs.”).

<sup>9</sup> 5 U.S.C. § 706(2)(A).

<sup>10</sup> 5 U.S.C. § 553(b)(3).

**B. The Proposed Rule Does Not Establish that Existing RTO Tariffs are Unjust and Unreasonable**

The premise of the NOPR is that “[t]he resiliency of the nation’s electric grid is threatened by the premature retirements of power plants that can withstand major fuel supply disruptions.”<sup>11</sup> According to the Secretary, “[t]hese fuel-secure resources are . . . indispensable for our economic and national security,” but the regulated wholesale markets are not adequately pricing the resilience attributes of fuel-secure resources.<sup>12</sup> To address this concern, the Proposed Rule would require FERC-approved RTOs with energy and capacity markets to promptly establish tariffs that allow for “full recovery of costs” for a class of “eligible reliability and resiliency resources” defined in the NOPR.<sup>13</sup>

In order to compel the RTOs to modify their respective tariffs, the Commission must make and support findings under section 206 of the FPA that existing RTO rates or practices are unjust and unreasonable.<sup>14</sup> The NOPR does not acknowledge this burden, let alone purport to make findings that particular RTO tariffs are unjust and unreasonable.<sup>15</sup> The Commission, therefore, could only adopt the NOPR, if at all, based on a *generic* finding of unjustness and unreasonableness under section 206 of the FPA. As discussed below, however, the NOPR does not provide substantial evidence to support a generic finding that current RTO rates or practices are unjust and unreasonable.<sup>16</sup>

---

<sup>11</sup> NOPR at p. 46,941.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at p. 46,945.

<sup>14</sup> *See, e.g., Emera Maine v. FERC*, 854 F.3d 9, 24-26 (D.C. Cir. 2017); *FirstEnergy Serv. Co. v. FERC*, 758 F.3d 346, 352-54 (D.C. Cir. 2014).

<sup>15</sup> In fact, the NOPR never identifies which of the current RTOs and ISOs are expected to fall within the scope of the Proposed Rule.

<sup>16</sup> Even if the Commission were to find that the NOPR identified legitimate concerns with respect to premature retirement of specific resources, it is well-established that the Commission may not impose an industry-wide solution to a problem that is shown to exist, if at all, only in isolated pockets; any remedy

Crucially, although the Proposed Rule is premised largely on the need to ensure the “resiliency” of the grid, the NOPR does not define what it means by resilience, nor does it explain how any deficiency in grid resilience should be measured. Maintaining resilience against fuel supply disruptions, which appears to be the primary focus of the NOPR,<sup>17</sup> is an important consideration, but resilience is a multi-faceted concept. As the NOPR itself observes, the recent DOE Staff Report on Electricity Markets and Reliability found that a “comprehensive regional and national review is needed to determine how a portfolio of domestic energy resources can be developed to ensure grid reliability and resilience.”<sup>18</sup> Yet the NOPR dispenses with the recommended “comprehensive regional and national review” and simply concludes that certain resources are so indispensable to grid resilience that RTO tariffs must be immediately amended to support them. Because the NOPR does not clearly define what it means by resilience or how to gauge it, however, the NOPR cannot show that there is an immediate threat to resilience or that particular resources are essential to addressing that threat.

As evidence of the need for immediate Commission action, the NOPR points to the statement by the North American Electric Reliability Corporation (“NERC”) that “[p]remature retirements of fuel secure baseload generating stations reduces resilience to fuel supply disruptions.”<sup>19</sup> APPA has no reason to dispute NERC’s observation, but this

---

imposed must be proportional to the problem identified. *Associated Gas Distribs. v. FERC*, 824 F.2d 981, 1019 (D.C. Cir. 1987); *see also, e.g., Public Utils. Comm’n v. FERC*, 462 F.3d 1027, 1055 (9th Cir. 2006); *Interstate Nat. Gas Ass’n of America v. FERC*, 285 F.3d 18, 37 (D.C. Cir. 2002).

<sup>17</sup> *See, e.g.*, NOPR at p. 46,943.

<sup>18</sup> *Id.* at p. 46,943, citing Staff Report on Electricity Markets and Reliability, U.S. Department of Energy, August 2017, (“DOE Staff Report”), p. 14.

<sup>19</sup> NOPR at p. 46,943, quoting NERC Letter to Secretary of Energy Rick Perry, May 9, 2017, Attachment “Synopsis of NERC Reliability Assessments” at 3 (internal quotes omitted).



general statement certainly does not suggest that the grid faces a looming crisis, and NERC does not identify any imminent threats to grid reliability in its *2016 Long-Term Reliability Assessment*.<sup>20</sup> Even where NERC recognizes potential future reliability concerns, its recommendations focus on new plant and transmission development, or firm transmission contracts, and not on the preservation of existing plants.<sup>21</sup>

The NOPR’s reliance on the DOE Staff Report is also misplaced. The DOE Staff Report provides valuable information and analysis – and raises important questions – pertaining to the reliability and resilience of the grid that will inform the conversation on these issues, but the report concludes that reliability remains adequate notwithstanding the premature retirement of baseload resources:

BPS [Bulk Power System] reliability is adequate today despite the retirement of 11 percent of the generating capacity available in 2002, as significant additions from natural gas, wind, and solar have come online since then. Overall, at the end of 2016, the system had more dispatchable capacity capable of operating at high utilization rates than it did in 2002.<sup>22</sup>

The experience in PJM Interconnection (“PJM”) during the 2014 Polar Vortex is cited by the NOPR as “a warning that the current and scheduled retirements of fuel-secure plants could threaten the reliability and resiliency of the electric grid.”<sup>23</sup> Even accepting, *arguendo*, that natural gas supply problems contributed to the challenges faced by PJM during the 2014 Polar Vortex, this does not establish that RTO rates and practices

---

<sup>20</sup> See *2016 Long-Term Reliability Assessment*, North American Electric Reliability Corporation, December 2016, p. 2 (explaining that, according to available data, all areas’ reserve margins “meet or exceed their Reference Margin Levels. While three areas fall below their respective Reference Margin Levels in the 6- to 10-year time frame, there are measures that can be taken to address potential shortfalls. Examples include advancing designated planned resources within the generation queue, securing neighboring capacity through transmission expansions, and firm transmission contracts.”).

<sup>21</sup> See *id.*

<sup>22</sup> DOE Staff Report, p. 63 (footnotes omitted).

<sup>23</sup> NOPR at p. 46,942.

are unjust and unreasonable in the absence of special provisions to support “fuel-secure” nuclear and coal resources. For one thing, coal and nuclear plants can face challenges of their own during extreme weather events. The DOE Staff Report states that 26 percent of the 2014 cold-induced outages nationwide were coal plants and that “[m]any coal plants could not operate due to conveyor belts and coal piles freezing.”<sup>24</sup> And while nuclear plants performed well during Polar Vortex events in 2014 and 2015, the DOE Staff Report also notes that during Superstorm Sandy “[t]hree nuclear reactors totaling 2,845 MW of capacity were shut down, and five operated at reduced levels due to disruptions in transmission infrastructure, reduced demand from distribution outages, and precautionary measures to protect equipment.”<sup>25</sup> The fact that PJM successfully maintained reliability with a much lower forced outage rate during a second polar vortex event in February 2015<sup>26</sup> also tends to undermine the suggestion that urgent action is necessary.

The NOPR also directly references the FERC price formation initiative as the framework for the Proposed Rule, noting the DOE Staff Report’s recommendation to “correct distortions in price formation in the organized markets,”<sup>27</sup> and asserting that “the Commission has developed an extensive record on price formation in the Commission approved ISOs and RTOs. Nevertheless, the fundamental challenge of maintaining a resilient electric grid has not been sufficiently addressed by the Commission or the ISOs and RTOs.”<sup>28</sup> While the NOPR suggests that its proposed reforms are consistent with the

---

<sup>24</sup> DOE Staff Report, p. 98.

<sup>25</sup> *Id.* (footnote omitted).

<sup>26</sup> 2015 Winter Report, PJM Interconnection, May 13, 2015 at 5.

<sup>27</sup> NOPR at p. 46,943.

<sup>28</sup> *Id.* at p. 46,945.

Commission's price formation efforts, it is not at all clear how the NOPR fits within that context.<sup>29</sup> If the NOPR is interpreted as directing the RTOs to arrange a direct payment with the eligible resources, such an approach is not in sync with the basic goals of the Commission's price formation initiative.<sup>30</sup> Central to many of the price formation rulemakings has been a shift *away* from uplift payments to individual generators, and to the inclusion of such uplift in the Locational Marginal Price ("LMP"). While APPA is not in complete agreement with all aspects of the Commission's price formation rulemakings, providing direct cost-of-service payments to specific resources would be a stark departure from the Commission's approach to energy price formation. On the other hand, if the NOPR proposes to allow for eligible resource cost recovery through increases to the LMPs, this would be more consistent with the Commission's price formation reforms, but this approach would produce a dramatic and unjustifiable cost increase.

The NOPR also fails to acknowledge that there are regional differences between the RTOs in assessing any resilience concerns and any appropriate solutions, driven by different resource mixes, different state regulatory circumstances, different market designs, and other factors. For example, a higher proportion of wind-powered generation in one market might present fundamentally different reliability and resilience challenges than a market that relies heavily on natural gas-fueled generation. The generic approach taken by the NOPR in purporting to identify an urgent threat to resilience does not acknowledge these important regional differences.

None of this is to say that the NOPR fails to raise important issues. But the

---

<sup>29</sup> See NOPR at pp. 46,944-45.

<sup>30</sup> As discussed in section III.D, *infra*, the NOPR is not clear how its proposed cost recovery mechanism is to be implemented in the organized markets.

evidence cited by the NOPR as showing a need for the Proposed Rule cannot support a generic finding under section 206 of the FPA that existing RTO rates are unjust and unreasonable in the absence of a mechanism that would ensure cost recovery for “fuel secure” generation to prevent plant retirements. Even if the Commission concludes, however, that the NOPR has made such a showing, the NOPR’s proposed amendments to the Commission’s regulations to address the identified problem are neither just and reasonable nor the product of reasoned decision-making, as discussed below.

### **C. The Proposed Regulations are Not Just and Reasonable**

To address the claimed threat to system resilience posed by premature retirement of fuel-secure resources, the NOPR would amend section 35.28 of the Commission’s regulations to establish “eligible grid reliability and resiliency resources” as a new category of resource under the Commission’s open access transmission tariff regulations, and require Commission-approved RTOs with energy and capacity markets to ensure full cost recovery for these resources. Each RTO would be required to “establish a tariff” that provides a “rate for the - (1) Purchase of electric energy from an eligible reliability and resiliency resource; and (2) recovery of costs and a return on equity for such resource dispatched during grid operations.”<sup>31</sup> To qualify as an eligible grid reliability and resiliency resource, a generator must, among other requirements, have a 90-day fuel supply on site and have the ability to “provide essential energy and ancillary reliability services, including but not limited to voltage support, frequency services, operating reserves, and reactive power.”<sup>32</sup> The NOPR’s proposal is not just and reasonable.

---

<sup>31</sup> NOPR at p. 46,948 (proposed §§ 35.28(g)(10)(iii)(A)(1)-(2)). As discussed in section III.D, *infra*, it is not clear which Commission-approved RTOs and ISOs would fall within the ambit of the NOPR.

<sup>32</sup> *Id.* (proposed §§ 35.28(g)(10)(i)(B) and (C)).

## 1. The NOPR Does Not Address the Potential Impact on Consumers or the Wholesale Markets

It is axiomatic that application of the just and reasonable standard involves consideration of both consumer and investor interests.<sup>33</sup> Where, as here, the Commission is asked to balance non-cost factors such as reliability and resiliency against the cost to consumers, it must explain how it evaluated the Proposed Rule’s anticipated costs and claimed benefits, and how it weighed them to determine that the resulting rates would be just and reasonable.<sup>34</sup> Although the potential cost impacts of the Proposed Rule are difficult to determine given the uncertainty as to how the NOPR might be implemented, it likely would be extremely costly under any scenario. The NOPR, however, does not include any discussion, let alone quantification, of the potential costs of the Proposed Rule, nor does it attempt to balance such costs against the benefits the NOPR seeks to achieve.

Overlaying a cost-of-service recovery mechanism for “fuel-secure” resources onto RTO markets could present consumers with a “worst of both worlds” scenario in which they may be forced to pay the higher of generator cost or market price to certain resources in the organized markets – a danger implicitly recognized in the Staff Notice.<sup>35</sup> Moreover, depending on how the additional costs associated with ensuring cost recovery for eligible units are allocated, utilities, including public power utilities, that rely primarily on their own resources for capacity and energy could end up paying a portion of the costs of the “fuel secure” generation resources under the new RTO tariff provisions

---

<sup>33</sup> See, e.g., *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1175-78 (D.C. Cir. 1987).

<sup>34</sup> *TransCanada Power Marketing v. FERC*, 811 F.3d 1, 13 (D.C. Cir. 2015).

<sup>35</sup> See Staff Notice at 4 (asking whether “there should be any restrictions on alternating between market-based and cost-based compensation”).

proposed in the NOPR, as well as the costs of their own energy and capacity resources.<sup>36</sup>

Adopting the proposed cost-of-service mechanism for a specific class of resources would likely have significant collateral impacts on the organized wholesale markets, which could raise costs to consumers and have other undesirable long-term effects. To cite one important concern, the NOPR's cost-of-service recovery framework could have an adverse impact on bilateral markets because resources that have guaranteed cost-of-service recovery through an RTO tariff mechanism will have much less incentive to enter into bilateral contracts. If there is truly an imminent threat to reliability posed by the premature retirement of a specific generation resource, all the Commission-approved RTOs potentially impacted by the NOPR have some form of "reliability-must-run" ("RMR") contract to preserve generation needed for reliability without the need for the broader market intervention proposed by the NOPR.

Ensuring cost-recovery for a specific class of resources would also interfere with state and local decisions regarding the optimal resource mix and how to achieve it. Commission rules regarding wholesale markets should generally be fuel-neutral in the absence of a compelling and urgent reliability justification for favoring one type of fuel. Preferences for resource types should be expressed through state and local decision-making and procurement through bilateral contracting and utility ownership.

---

<sup>36</sup> APPA notes that the NOPR's exclusion of resources that are "subject to cost of service rate regulation by any state or local regulatory authority," NOPR at p. 46,948 (proposed § 35.28(g)(10)(i)(E)), could exclude resources owned by public power utilities whose rates are subject to cost-of-service regulation by a city council or other state or local authorities.

## **2. The NOPR Does Not Demonstrate that its Proposed Remedy Would Ensure Greater Reliability and Resilience**

The NOPR's proposed amendments to the Commission's regulations also fail to satisfy the relevant statutory standards because there is no evidence that the remedy the NOPR offers would actually address the identified problems.

In the first place, because the NOPR does not define resilience or identify a way to measure whether there is a deficiency of it, the NOPR cannot show that its proposed remedy is a reasonable and proportionate response to address system resilience concerns. Stated another way, because the NOPR never adequately defines the problem it seeks to address, there is no way to meaningfully evaluate the reasonableness of its proposed solution. The Proposed Rule's focus on "fuel-secure" generation is not supported by any analysis of why fuel security should be elevated above other potential resilience-enhancing grid attributes and singled out for support through a cost-of-service rate mechanism in the organized RTO markets.

The NOPR also fails to provide a reasoned basis for the suggestion that its resilience concerns must be addressed by plants with 90 days' worth of on-site fuel. While the presence of on-site fuel may increase a plant's resilience to fuel supply disruptions, having fuel on-site is no guarantee against fuel disruptions, as on-site coal can freeze or become waterlogged, and nuclear plants can also be impacted by extreme weather, as illustrated by the events of Superstorm Sandy.

The NOPR, moreover, does not provide any basis for the 90-day figure, which is wholly disproportionate to the duration of, for example, the 2014 Polar Vortex episode in PJM. In this regard, PJM's "on-site fuel capability index," assigns the highest score, a 1.0 to "resource types with 'significant' fuel stored on site to allow operations for an

extended period, typically one week or more.”<sup>37</sup> ISO New England’s (“ISO-NE”) Winter Reliability program compensates dual-fuel units for “(i) 85% of the usable fuel storage capability and (ii) supply sufficient to operate the Generator Asset for 10 days at full load.”<sup>38</sup> There is no evidence that a much longer 90-day supply of fuel on-site is needed for reliability or resiliency. Stockpiling of fuel for 90 days might actually increase coal-plant outages due to the refreezing of such stockpiles. Indeed, it appears the 90-days on-site fuel criterion is not based on determining the needed attributes for reliability and resiliency, but as a means to restrict eligible resources to nuclear or coal, which may have 90 days of fuel on-site.

The proposed regulations included in the NOPR require that eligible resources are able to “provide essential energy and ancillary reliability services, including but not limited to voltage support, frequency services, operating reserves, and reactive power.”<sup>39</sup> The NOPR does not determine whether any of these essential energy and ancillary reliability services are insufficient at present in any RTO, nor does it explain why a specific cost recovery mechanism is needed to support resources that can provide *all* of these services. PJM’s March 2017 study, “Evolving Resource Mix and System Reliability,” identified a set of generator reliability attributes needed for grid reliability, which included: frequency response, voltage control, ramp capability (regulation, contingency reserve, and load following), fuel assurance (resources that can operate at their economic maximum for 72 hours, or have on-site fuel inventory), flexibility

---

<sup>37</sup> PJM’s Evolving Resource Mix and System Reliability, Appendix at p. 24 (March 30, 2017). Available at: <http://www.pjm.com/~media/library/reports-notice/special-reports/20170330-appendix-to-pjms-evolving-resource-mix-and-system-reliability.ashx>.

<sup>38</sup> ISO-New England, Market Rule 1, Appendix K, Section III.K.2.

<sup>39</sup> NOPR at p. 46,948 (proposed §§ 35.28(g)(10)(i)(B)).



(cycling, short minimum run time and multiple starts per day, and minimum startup and notification time), black start capability, no environmental run hour restrictions and equivalent availability factor.<sup>40</sup> PJM found that no resource fully provides all of the attributes, but together the system is operating with sufficient levels of these attributes.

The Proposed Rule cites concerns over premature retirement of existing baseload generation, but the NOPR's proposed regulations are not expressly limited to existing resources, let alone resources that could make a showing that they would retire but for the cost-of-service tariff proposed in the NOPR. Application of these regulations could result in over-procurement of fuel-secure resources as entities seek to take advantage of the cost recovery assurance proposed in the NOPR.

Finally, the NOPR would impose a "one size fits all" remedy in response to a concern – adequate grid resilience – that should take into account regional differences, including different resource mixes. Even though the Eastern RTOs appear to be the only ones covered by the NOPR, as explained in section III.D. of these comments, there are likely to be important distinctions even among these regions that would make imposition of a single remedy unjust and unreasonable.

APPA agrees that promoting resilience against fuel supply disruptions is a worthy goal, but even if the Commission concludes that the NOPR has identified a potential threat to resilience, the remedy it offers is not just and reasonable, nor is it a reasoned response to the problem identified.

---

<sup>40</sup> PJM's Evolving Resource Mix and System Reliability, PJM Interconnection, Figure 6 (March 30, 2017); *see also* DOE Staff Report, p. 86.

#### **D. The Proposed Rule is Impermissibly Vague**

The amended regulations included in the NOPR are incomplete, ambiguous and confusing in numerous respects, and the NOPR therefore fails to provide adequate notice of the proposed rules to allow for meaningful review and comment, as required by the APA.<sup>41</sup> This lack of clarity also effectively precludes any finding that the proposed regulations would be just and reasonable or the product of reasoned decision-making. The proposed regulations' opacity is evidenced by the fact that the Commission's Office of Energy Policy and Innovation felt the need to solicit answers to 30 questions "in order to assist Staff in understanding the implications of the proposed rule."<sup>42</sup> The Commission, however, may not use the responses to the Staff Notice or the comments of interested parties to "bootstrap" notice of the substance of the Proposed Rule and cure the deficiencies presented by the lack of clarity as proposed.<sup>43</sup>

Of particular concern, it is not even clear which RTOs and ISOs would be covered by the Proposed Rule. The *Federal Register* version of the NOPR, in a significant change from the version originally sent to the Commission, states that the new requirements would only apply in Commission-approved RTOs and ISOs "with energy and capacity markets."<sup>44</sup> Assuming this change was intended to narrow the applicability

---

<sup>41</sup> 5 U.S.C. § 553(b)(3) (requiring notice of "either the terms or substance of the proposed rule or a description of the subjects and issues involved"); *see also, e.g., Fertilizer Institute v. EPA*, 935 F.2d 1303, 1311 (D.C. Cir. 1991) (noting that "an agency's notice must provide sufficient detail and rationale for the rule to permit interested parties to comment meaningfully" (internal quotes and citations omitted)); *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 549 (explaining that "[a]gency notice must describe the range of alternatives being considered with reasonable specificity.").

<sup>42</sup> *Grid Reliability and Resilience Pricing*, Docket No. RM18-1-000, Notice from J. Arnold Quinn, Director Office of Energy Policy and Innovation (Oct. 4, 2017).

<sup>43</sup> *Small Refiner Lead Phase-Down Task Force*, 705 F.2d at 549; *see also Fertilizer Institute*, 935 F.2d at 1312; *McLouth Steel Prods. Corp. v. Thomas*, 838 F.2d 1317, 1323-24 (D.C. Cir. 1988); *AFL-CIO v. Donovan*, 757 F.2d 330, 340 (D.C. Cir. 1985).

<sup>44</sup> NOPR at p. 46,948 (proposed § 35.28(g)(10)(ii)) (emphasis added).

of the Proposed Rule, it would exclude the California Independent System Operator (“CAISO”) and Southwest Power Pool (“SPP”), neither of which operate capacity markets.<sup>45</sup> This language would presumably encompass PJM, ISO-NE, and New York ISO (“NYISO”) (which all have mandatory capacity markets), but the application to the Midcontinent Independent Transmission System Operator (“MISO”) remains unclear given that MISO only operates a voluntary capacity market. To the extent the Commission proceeds with the NOPR, it should interpret the proposal to exclude MISO. As the Commission has recognized, generation resource procurement in most of MISO is accomplished through long-term commitments supervised by state authorities, with the voluntary capacity market playing a balancing role.<sup>46</sup>

The NOPR is ambiguous in numerous other material respects that make evaluation of the Proposed Rule difficult, if not impossible. The NOPR, for example, provides no detail on how a tariff providing for full cost recovery for eligible resources should be incorporated into the existing RTO markets. The text of the proposed regulations suggests that an eligible reliability and resiliency resource should be compensated through the RTO energy markets when “dispatched during grid operations.”<sup>47</sup> But the NOPR does not provide any meaningful detail as to how this would work. If, for example, an eligible coal-fired generation resource is only dispatched for several hours during the year under security-constrained economic dispatch, should

---

<sup>45</sup> Even this point is ambiguous, however, since other portions of the NOPR could be read to indicate that compliance filings are to be made by all six RTOs/ISOs. *See* NOPR at section IV.C (explaining that any final rule “shall provide that each Commission-approved RTO and ISO shall submit a compliance filing”); NOPR at section VI (burden estimate assumes all six RTOs and ISOs will be required to respond).

<sup>46</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229 at PP 43, 46-53 (2015), *petition for review pending*, D.C. Cir. No. 16-1027.

<sup>47</sup> NOPR at p. 46,948 (proposed §§ 35.28(g)(10)(iii)(A)(1) and (2)).

the plant be paid its entire annual cost-of-service for those several hours? And what form of payment would the compensation take? Would it be paid under an RMR-type arrangement? Would the eligible reliability and resiliency resource be eligible to set the LMP? The answers to these questions have enormous significance in considering the operation and effect of the regulations, but the NOPR does not address any of these issues. The Proposed Rule is also silent regarding the always-controversial issue of how to allocate the increased costs associated with providing full cost recovery to eligible reliability and resiliency resources.

The requirement that “each eligible resource recovers its fully allocated costs and a fair return on equity” also raises a host of questions.<sup>48</sup> Providing cost-based rate recovery for specific resources would require some form of individualized cost-of-service review to ensure that a particular resource is not permitted to earn in excess of a fair return on equity.<sup>49</sup> What process will be used to ensure just and reasonable rates in this respect? Will each eligible resource need to file a rate case? If RTOs review a resource’s costs, how will the required Commission supervision of the rate take place?<sup>50</sup> And in determining an eligible unit’s recovery of “fully allocated cost,” how will revenue streams other than payments under the proposed tariff mechanism be taken into account?

As well, the criteria for determining which plants would qualify as eligible reliability and resiliency resources are ambiguous. An important threshold question is

---

<sup>48</sup> *Id.* (proposed § 35.28(g)(10)(iii)(B)). The NOPR states that an eligible resource must be “fully compensated for the benefits and services it provides to grid operations, including reliability, resiliency and on-site fuel-assurance.” *Id.* It is not clear how this language is intended to qualify the requirement for full cost recovery.

<sup>49</sup> See *TransCanada*, 811 F.3d at 12-13; *NSTAR Elec. & Gas Corp. v. FERC*, 481 F.3d 794, 803-805 (D.C. Cir. 2007).

<sup>50</sup> See *id.*

whether the proposed regulations would apply to new and/or repowered resources notwithstanding the NOPR's stated purpose of preventing "premature retirement" of fuel-secure baseload units.<sup>51</sup> As noted above, there is nothing in the regulations that would explicitly restrict eligibility to existing plants. Other eligibility questions abound, such as how to measure and monitor whether a resource maintains a 90-day fuel supply on site, and who determines whether a unit is "compliant with all applicable federal, state, and local environmental laws, rules, and regulations."<sup>52</sup>

As a practical matter, the lack of clarity in the proposed regulations would undermine the cost recovery assurance the NOPR seeks to provide because there undoubtedly would be controversy and litigation as RTOs and ISOs try to implement the NOPR's requirements.

APPA recognizes that the Staff Notice has asked interested parties to comment on certain of the questions APPA raises above, and on other aspects of the NOPR. The Administrative Procedure Act, however, would not allow the Commission to rewrite the Proposed Rule by relying on filed comments to fill in the critical details omitted from the NOPR. Interested parties are entitled to notice of a proposed rule from the agency so as to allow for meaningful comment, and submission of comments by the parties does not provide notice for a final rule that deviates too far from a proposed rule.<sup>53</sup> The ambiguity in the NOPR also precludes a finding that the proposed regulations would be just and reasonable and not unduly discriminatory. Likewise, because of the lack of clarity in the regulations, the Commission cannot find that they reflect a reasoned response to the

---

<sup>51</sup> *See, e.g.*, NOPR at p. 46,941.

<sup>52</sup> *Id.* at p. 46,948 (proposed § 35.28(g)(10)(i)(D)).

<sup>53</sup> *See* cases cited in footnote 43, *supra*.

problem identified in the NOPR, *i.e.*, that the regulations draw a rational connection between the facts found and the choice made.<sup>54</sup>

**E. The Time Limits in the Proposed Rule are Unreasonable**

Beyond APPA’s substantive concerns with the Proposed Rule, the timeframes for Commission action and RTO compliance are patently unreasonable. As discussed above, the NOPR does not establish that there is an imminent threat to grid reliability that might warrant immediate Commission action. Nevertheless, the NOPR contends that there is a “crisis at hand,”<sup>55</sup> and directs the Commission to consider and take final action on the NOPR within 60 days of publication in the *Federal Register*, which gives the Commission until December 11, 2017, to act.<sup>56</sup> In an apparent effort to meet this highly accelerated timeline, the Commission provided interested parties only 24 days from the date the NOPR was filed to submit initial comments on the NOPR (only 13 days from *Federal Register* publication), and 15 days to prepare and file reply comments.

The timeline for Commission action established by the Secretary does not comply with section 403(b) of the DOE Act, which provides that the time limits set for Commission action must be *reasonable*.<sup>57</sup> As explained in the October 3, 2017, extension request filed by APPA and twelve other energy industry associations, the 60-day deadline imposed by the Secretary is too short to allow stakeholders to submit careful analysis on a rulemaking of the Proposed Rule’s potential scope and impact.<sup>58</sup> While the

---

<sup>54</sup> See *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962).

<sup>55</sup> NOPR at p. 46,945.

<sup>56</sup> *Id.* at p. 46,941.

<sup>57</sup> 42 U.S.C. § 7173(b) (providing that the Commission “shall . . . take final action on any proposal made by the Secretary . . . in an expeditious manner in accordance with such reasonable time limits as may be set by the Secretary for the completion of action by the Commission on any such proposal.”).

<sup>58</sup> *Grid Reliability and Resiliency Pricing*, Docket No. RM18-1-000, “Joint Motion for Extension of Time

APA does not specify a minimum length of time for public comment, Executive Order 12866 suggests that agencies allow the public at least 60 days to comment for “significant” rules and states that the comment period should be not less than 60 days “in most cases.”<sup>59</sup> The Commission routinely provides parties at least 60 days for even relatively uncontroversial rulemakings, and providing only 39 days for initial and reply comments for a rule of the NOPR’s potential scope and impact is simply not reasonable.

The compliance deadlines set forth in the proposed rule are also unreasonable. Any final rule adopting the Secretary’s proposal is to take effect within 30 days of *Federal Register* publication, with RTO compliance filings due a mere 15 days after the rule’s effective date.<sup>60</sup> The NOPR also proposes that such compliance filings “must become effective no more than 15 days after compliance filings are due.”<sup>61</sup> It is unrealistic to think that RTOs will be able to develop and submit compliance filings in response to any final rule within 15 days of the effective date (or even 45 days of the *Federal Register* publication date), given the numerous ambiguous and inevitably controversial issues raised by the Proposed Rule. The implementation of tariffs themselves could require changes to RTO software and staff training, which could take many months.<sup>62</sup> The proposal that such compliance submissions take effect within 15 days of filing does not acknowledge the statutory requirements of sections 205 and 206 of

---

and Request for Expedited Treatment of the Energy Industry Associations” at 3 (Oct. 3, 2017).

<sup>59</sup> Executive Order No. 12866 at § 6(a), 58 Fed. Reg. 51,735 (Oct. 4, 1993).

<sup>60</sup> NOPR at pp. 46,945-46.

<sup>61</sup> *Id.* at p. 46,946.

<sup>62</sup> The NOPR itself acknowledges that implementation “may be a complex endeavor,” *id.*, including “potential software upgrades.” *Id.*

the FPA.<sup>63</sup>

**F. The Commission Should Decline to Adopt the Proposed Rule, Terminate this Docket and Implement Further Procedures**

Given the deficiencies of the Proposed Rule, APPA respectfully submits that the Commission should decline to adopt the NOPR and should terminate the instant docket. As APPA has explained, however, the Proposed Rule raises important questions that warrant further analysis by the Commission and stakeholders.

APPA agrees that the RTO-operated markets have not been an optimal means to achieve a resource mix that will provide all the attributes required for long-term system reliability and resilience, achievement of fuel diversity, and other policy goals. The benefits of the organized RTO markets are in the efficient dispatch of existing resources, not the determination of an optimal resource mix. Achieving such a mix is best accomplished by integrated utilities, including public power and cooperative utilities, or by state agencies that, even in restructured jurisdictions, can take steps to promote resources to achieve policy goals.

APPA has been a proponent, for example, of reforming the mandatory capacity markets in the Eastern RTOs to make them voluntary markets with resource procurement conducted through state and local decision-making, long-term planning and a portfolio of bilateral contracts and utility ownership. Thus, while APPA opposes the adoption of the Proposed Rule, the termination of this NOPR should be followed by a more careful study by the RTOs of whether, in fact, the resources being developed by merchant, non-utility

---

<sup>63</sup> Section 205 of the FPA requires that rate changes be filed no less than 60 days prior to going into effect, unless the notice is waived by the Commission for good cause shown. 16 U.S.C. § 824d(d). A rate change under section 206 may only become effective prospectively from the date the new rate is “fixed” by the Commission. 16 U.S.C. § 824e(a); *see also, e.g., City of Anaheim v. FERC*, 558 F.3d 521, 524-25 (D.C. Cir. 2009).



owners will best provide the services needed for reliability and resilience. This is especially relevant given the changing nature of the energy resource mix and reliability needs as a result of increased penetration of variable energy resources, growth of distributed energy resources, expanding natural gas generation, and retirements of coal and nuclear facilities.

APPA therefore would support a process in which the Commission requests the RTOs and ISOs to evaluate the demand and supply-side services and attributes needed for reliability, as well as for resilience, and assess whether such resources and services are currently or predicted to be in a shortfall. Under such an approach, the RTO analyses would address:

- The services and attributes needed at the present and over a time horizon (to be determined by FERC) for both reliability and resiliency.
- Methodologies to measure resiliency.
- The degree to which such services and attributes are currently or predicted to be in a shortfall.
- Any features of the current market or other rules identified as contributing to the shortfall, including whether those services or attributes are properly valued in the markets.

Importantly, the approach outlined above would allow the different RTOs to account for regional differences in the current level of reliability and resilience, resource mix, state and local regulatory frameworks, etc. These RTO-specific analyses could then serve as the basis for determinations of what, if any, further action is needed by the different RTOs to accommodate a resource mix that ensures adequate reliability and resilience.

APPA recommends that the Commission convene a technical conference to assist the RTOs and their stakeholders in framing this further inquiry. Following this

conference, the Commission might provide guidance as to the analyses that would be most useful in evaluating the issues above.

#### **IV. RESPONSE TO THE STAFF NOTICE**

The Commission is not permitted to “fill in the gaps” of the NOPR based on comments and proposals of interested parties submitted in response to the Staff Notice, as discussed above. In an effort to be responsive, however, APPA responds below to certain of the questions included in the Staff Notice. The Commission should not interpret APPA’s responses to the questions below, particularly the questions addressed to specific aspects of the proposed regulations, as a suggestion that APPA would support the NOPR if the Commission were to adopt a modified version of the Proposed Rule reflecting APPA’s responses below.

##### **Need for Reform**

- 1. What is resilience, how is it measured, and how is it different from reliability? What levels of resilience and reliability are appropriate? How are reliability and resilience valued, or not valued, inside RTOs/ISOs? Do RTO/ISO energy and/or capacity markets properly value reliability and resilience? What resources can address reliability and resilience, and in what ways?*

Although the NOPR is not clear what it means by resilience, there are some generally accepted definitions of resilience, as noted in the DOE Staff Report:

NERC relies on the definition developed by the National Infrastructure Advisory Council developed in 2010: “Infrastructure resilience is the ability to reduce the magnitude and/or duration of disruptive events. The effectiveness of a resilient infrastructure or enterprise depends upon its ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event.” Examples of events that test a system’s resilience include severe natural events (wildfires, hurricanes, floods, droughts, and earthquakes) and coordinated, extensive physical and cyber-attacks and geomagnetic disturbances.<sup>64</sup>

Resilience itself is not an explicit value in the RTO markets, although there is

---

<sup>64</sup> DOE Staff Report, p. 63.

some overlap with the reliability standard that incorporates a 15 percent reserve margin. Moreover, the PJM Capacity Performance and ISO-NE performance incentive programs have some features that are intended to address resilience to fuel supply disruptions, such as promoting dual-fuel capability and on-site fuel storage. But it is not clear whether these efforts might also disadvantage resilience by providing disincentives to resources such as demand response, that can be a feature of a resilient grid. For example, demand response participation in the PJM Base Residual Auction dropped by 2,527.6 MW, or 24 percent, from the DR resources clearing in the prior auction following the full implementation of the Capacity Performance framework.<sup>65</sup>

A more fundamental question is whether the RTO markets themselves are the proper forums for ensuring resilience. At PJM’s September 19, 2017, Grid 20/20 workshop on Security and Resilience, John Norden, Director of Operations at ISO-NE said that markets play a limited role in addressing rare and extreme “black-sky” events.<sup>66</sup> Mr. Norden pointed to Grid Assurance as an example of an approach to such events. Grid Assurance is an entity created through industry collaboration that stockpiles transformers and other critical equipment, but is not part of an RTO-operated market.<sup>67</sup>

The DOE Staff Report notes that:

Resilience is typically achieved through hardening or recovery. Hardening refers to physically changing infrastructure to make it less susceptible to damage. Hardening improves the durability and stability of energy infrastructure, making it better able to withstand the impacts of hurricanes, weather events or attacks.

---

<sup>65</sup> 2020/2021 PJM RPM Base Residual Auction Results at 2. Available at: <http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx?la=en>.

<sup>66</sup> Grid 20/20: Focus on Security & Resilience, Webcast, available at: <http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-security-and-resilience.aspx>

<sup>67</sup> See, e.g., *Grid Assurance LLC*, 152 FERC ¶ 61,116 at P 14 (Aug. 7, 2015) (confirming “that contracting with Grid Assurance for access to spare critical transmission equipment is a permissible resiliency element of a physical security plan under Requirement 5 of Reliability Standard CIP-0141”).

Recovery, by contrast, refers to the ability of an energy facility to recover quickly from damage to any of its components or to any of the external systems on which it depends – typically through storage and redundancy.<sup>68</sup>

Such hardening and recovery may be less of a feature of markets than a function of planning an infrastructure investment. The DOE Staff Report further states that:

“Planning, practice, and coordination on an all-hazards basis *are as important for improving resilience as having a mix of resources and fuels available when a major grid disturbance occurs.*”<sup>69</sup>

APPA has long supported resource procurement policies that facilitate a diverse mix of resources, and it is this approach that is best for promoting resilience. All fuel sources can be susceptible to disruptions from extreme events, as can transmission and distribution infrastructure. Having a diverse mix of fuel types, ranging from nuclear plants to smaller scale energy storage, can improve the contribution to resilience from the generation component. But infrastructure investment is also critical to achieving resilience.

2. *The proposed rule references the events of the 2014 Polar Vortex, citing the event as an example of the need for the proposed reform. Do commenters agree? Were the changes both operationally and to the RTO/ISO markets in response to these events effective in addressing issues identified during the 2014 Polar Vortex?*

As noted above, APPA does not agree that the Polar Vortex demonstrates the need for the Proposed Rule. The steps taken by PJM to improve generators’ winter reliability contributed to a much lower outage rate during the 2015 Polar Vortex, but APPA does not believe that the Capacity Performance rules imposed in response to the Polar Vortex were necessary or effective in addressing the issues identified during the

---

<sup>68</sup> DOE Staff Report, p. 63

<sup>69</sup> *Id.* at p. 99 (emphasis added).

2014 event. First, the 2015 Polar Vortex experience demonstrated that these rules were not needed. Second, by disadvantaging certain other resources such as hydropower, demand response, and renewable resources, Capacity Performance could reduce incentives to develop resources that can provide numerous reliability and resilience attributes. As noted above, the participation of demand response in the PJM Base Residual Auction dropped significantly after adoption of Capacity Performance.

3. *The proposed rule also references the impacts of other extreme weather events, specifically hurricanes Irma, Harvey, Maria, and superstorm Sandy. Do commenters agree with the proposed rule's characterization of these events? For extreme events like hurricanes, earthquakes, terrorist attacks, or geomagnetic disturbances, what impact would the proposed rule have on the time required for system restoration, particularly if there is associated severe damage to the transmission or distribution system?*

As noted in response to the first question above, generation is not the only component of resilience, yet that is the exclusive focus of the NOPR. Further, the concept of resilience includes the ability to reduce the duration of disruptions, which is often a function of the resilience of the transmission and distribution networks. It is not clear that the Proposed Rule, if implemented, would have any measurable impact on system resilience. Moreover, by imposing significant costs on consumers to fund full cost recovery for eligible plants, the NOPR could make funding the needed hardening of the infrastructure more difficult.

4. *The proposed rule references the retirement of coal and nuclear resources and a concern from Congress about the potential further loss of valuable generation resources as a basis for action. What impact has the retirement of these resources had on reliability and resilience in RTOs/ISOs to date? What impact on reliability and resilience in RTOs/ISOs can be anticipated under current market constructs?*

APPA has seen no evidence that these retirements have caused any current reliability concerns in the RTOs. NERC's most recent Long-Term Reliability

Assessment found that all areas' reserve margins meet or exceed their Reference Margin Levels. As for resilience, APPA believes that the potential consequences of the retirement of large amounts of nuclear and coal generation is an issue that merits further analysis. As noted, APPA would support additional RTO analysis and development of measures of resilience. But APPA does not believe that the current constructs are best suited to develop an optimal mix of resources, which requires state and local utility resource planning and procurement.

5. *Is fuel diversity within a region or market itself important for resilience? If so, has the changing resource mix had a measurable impact on fuel diversity, or on resilience and reliability?*

Fuel diversity appears to have increased in recent years, as noted in the DOE Staff Report. Fuel diversity is one facet of resilience, as avoiding overexposure to a single fuel source helps to enhance system reliability and resilience. The expansion of merchant natural gas plant construction in PJM could be a cause for some concern if it leads to a loss of diversity, as is the adverse impact on renewables, hydropower and DR resulting from Capacity Performance. The grid resilience impacts from the increased penetration of wind-powered generation in SPP might also be an issue that warrants particular evaluation.

### **Eligibility**

1. *In determining eligibility for compensation under the proposed rule, should there be a demonstration of a specific need for particular services? What should be the appropriate triggering and termination provisions for compensation under the proposed rule?*

Yes, were an RTO to implement a separate mechanism to procure a service, a specific need should be determined. Compensation should only be paid as long as the service is needed, as is currently the practice under RMR arrangements, which are

designed to meet an identified reliability need for a defined time period.

2. *As the proposed rule focuses on preventing premature retirements, should a final rule be limited to existing units or should new resources also be eligible for cost-recovery? Should it also include repowering of previously retired units? Alternatively, should there be a minimum number of MW or a maximum number of MW for resources receiving cost-of service payments for resilience services? If so, how should RTOs/ISOs determine this MW amount? Should this also include locational and seasonal requirements for eligible resources?*

New resources should not be eligible for the proposed cost recovery mechanisms, because entities could simply construct resources under the expectation of full ratepayer-funded cost recovery. Moreover, entities should not be allowed to restructure and receive cost-recovery for plants that were part of a vertically integrated utility at the time of the issuance of the NOPR. In order to mitigate disincentives for bilateral contracting, the determination of eligible resources should also consider whether the resource is recovering its costs through a long-term contract providing sufficient revenue for cost recovery. Again, eligibility should be based on the resource's status at the time of the NOPR such that a resource cannot prematurely terminate a current long-term bilateral contract to take advantage of the cost-of-service tariff. Existing resources paid under this rule should be capped at the total megawatts that achieves the reserve margin to avoid excess procurement.

3. *Are there other technical characteristics that should be required for an eligible unit besides on-site fuel capability? If so, what are those technical characteristics and what benefits do they provide? What types of resources can meet the proposed eligibility criteria of the proposed rule? What proportion of total current generating capacity does this represent?*

APPA recommends that the RTOs first determine the types and amounts of specific attributes and services needed. Flexibility attributes, not currently included in the proposed rule, should be included within the list of such attributes and services.

4. *If technically capable of sustaining output for a sufficient duration (and meeting*

*other relevant requirements), should resources such as hydroelectric, geothermal, dual-fuel with adequate on-site storage, generating units with firm natural gas contracts, or energy storage (each of which might have a demonstrable store of energy to draw upon to sustain an electrical output, if not necessarily fuel) also be eligible? Why or why not? If technical capability is the appropriate criterion for eligibility, what specific technical capability should be required to be eligible?*

APPA agrees that if the goal of the NOPR is to ensure that sufficient resources are available in times of fuel supply disruptions, then a broader definition of “fuel secure” beyond simply on-site fuel storage is needed. For example, a disruption in natural gas pipeline delivery capability or a hurricane that damages coal stockpiles may necessitate greater use of dual-fuel units, hydropower, geothermal, or energy storage. Resilience can be enhanced by a diversity of resources. To be clear, however, APPA is not recommending a massive cost-of-service program for all of the resources capable of providing each service. Rather, the first step would be for the RTOs to determine specific types of services and attributes needed at present and in the future, along with an assessment of potential shortfalls in these services and attributes.

5. *The proposed rule would require that eligible resources be able to provide essential energy and ancillary reliability services and includes a non-exhaustive list of services. What specific services should a resource be required to provide in order to be eligible?*

As previously noted, APPA does not have a recommendation on specific services, other than to recommend an evaluation of needed attributes or services.

6. *The proposed rule would limit eligibility to resources that are not subject to cost of service rate regulation by any state of local regulatory authority. How should the Commission and/or RTOs/ISOs determine which resources satisfy this eligibility requirement?*

As noted above, this provision of the NOPR could exclude resources owned by public power utilities whose rates are subject to cost-of-service regulation by a city council or other state or local authorities. If, contrary to APPA’s position, the



Commission were to proceed with the Proposed Rule, exclusion of public power utilities' resources under proposed section 35.28(g)(10)(i)(E) would raise concerns about discriminatory treatment in violation of sections 205 and 206 of the FPA. In particular, if a public power-owned resource is able to provide reliability and resilience attributes that are of value to the entire grid, then there is no reason that public power customers should have to entirely bear the cost of that resource.

### **Implementation**

In responding to this set of questions, APPA notes that the language of the NOPR creates uncertainty about how the cost recovery would be achieved, whether it is accomplished through energy prices, capacity prices or through a direct payment. As discussed above, APPA is very concerned about the potential for implementation of the NOPR through the energy and/or capacity markets as a vehicle for full cost-recovery. Doing so would increase the prices paid for all resources dispatched at that time, or all resources clearing the capacity auction, resulting in potentially astronomical costs to consumers.

- 1. How would eligible resources receiving cost of service compensation under the proposed rule be committed and dispatched in the energy market?*

Any units receiving cost recovery should be subject to a must-offer requirement, and should be self-scheduled such that dispatch cannot be avoided by bidding at a price high enough to avoid dispatch.

- 2. How would eligible resources receiving cost based compensation under the proposed rule be considered in the clearing and pricing of centralized capacity markets?*

Were the eligible resources to be paid through a direct agreement, they should not participate in the capacity market to avoid a double-counting of revenue. Were they to

participate, the resource should not be subject to any MOPR or Buyer-Side Mitigation which would increase capacity prices and lead to a double payment for the same amount of capacity.

- 3. What is the expected impact of this proposed rule on entry of new generation, reserve margins, retirement of existing resources, and on resource mix over time?*

Were the plants to receive payments through an RMR-type agreement, and continue to participate in the markets, prices would be reduced and new merchant plant entry would be deterred. But if energy or capacity prices were the vehicle for cost recovery, then prices would be artificially sustained at high levels, resulting in additional entry and further cost increases.

- 4. Should there be performance requirements for resources receiving compensation under the proposed rule? If so, what should the performance requirement be, and how should it be measured, or tested? What should be the consequence of not meeting the performance requirement?*

Yes, if these resources are being paid for their contributions to reliability and resilience, they must meet performance requirements to continue to receive such cost recovery.

- 5. Should there be any restrictions on alternating between market-based and cost-based compensation?*

The cost-recovery should only be implemented, if at all, for a limited time period, after which the resource can choose to return to market-based compensation or retire.

## **Rates**

- 1. The proposed rule lists compensable costs that should be included in the rate as operating and fuel expenses, costs of capital and debt, and a fair return on equity and investment. Are there other costs that would be appropriate to be included in the rate? Would any of the listed costs be inappropriate for inclusion?*

The costs eligible to be included in the rate should be no more than needed for the

resource to continue to operate without a loss, plus a reasonable return. The return on equity should be comparable to a regulated utility, and not a merchant plant, because the plant is essentially returning to a regulated status under this rule.

2. *Should wholesale market revenues offset any cost of service payments stemming from the proposed rule?*

The resource should be allowed to earn wholesale market revenues and reduce any cost-of-service payments by the amount of market revenues earned through periodic reconciliations. In addition, any cost-recovery provided to a merchant plant must be net of all revenues received from the RTO-operated markets, as well as any Zero Emission Credits or other sources of revenue. If the merchant plant is currently receiving sufficient revenue to cover its costs, including cost of capital, it should not receive additional payments.

3. *How should RTOs/ISOs allocate the cost of the proposed rule to market participants?*

No allocation of this cost would lead to just and reasonable rates. But to prevent an excessive misallocation of the costs, were this rule to be implemented, public power, cooperative and vertically integrated investor-owned utilities that supply their customers' load should not be required to pay for additional resources beyond that cost. Therefore, any costs should be allocated to incremental purchases from the energy market beyond self-supplied load. To do otherwise would result in a double-payment for energy and capacity by the integrated utilities.

4. *How would the requirement that eligible resources receive full cost recovery be reconciled with the requirement, as stated in the regulatory text, that resources be dispatched during grid operations?*

This question is a consequence of the NOPR's lack of clarity. An arrangement for an RMR-type agreement, coupled with performance requirements, a must offer

requirement, and rules that would prevent economic withholding by bidding at a price too high to be dispatched, or a self-scheduling arrangement, would likely reconcile these two requirements.

## **Other**

- 1. The proposed requirement for submitting a compliance filing is 15 days after the effective date of any Final Rule in this proceeding, with the tariff changes to take effect 15 days after the compliance filings are due. Please comment on the proposed timing, both to develop a mechanism for implementing the required changes and to implement those changes, including whether or not such changes could be developed and implemented within that timeframe.*

The two 15-day timeframes for RTO compliance filings and for the effective date of the tariffs, respectively, are unreasonable and inconsistent with the rate-changing provisions of the FPA, as discussed above. APPA's recommendation for a more thorough RTO analysis, coupled with a technical conference, would require six months or longer. Regardless of whether the Commission requires such an analysis, any rule changes in the RTO markets of the magnitude described in this NOPR would be a complex endeavor, one that ideally would be developed through the stakeholder process, but would at a minimum require six months, and likely more. The implementation of tariffs themselves could require changes to the RTO software and staff training, which again could take multiple months.

- 2. Please comment on the proposed rule's estimated burden of \$291,042 per respondent RTO/ISO, to develop and implement new market rules as proposed, including the potential software upgrades required to do so.*

APPA is not responding to this question.

- 3. Please describe any alternative approaches that could be taken to accomplish the stated goals of the proposed rule.*

See APPA's recommended approach in Section III.F.

4. *What impact would the proposed rule have on consumers?*

APPA assumes the question is intended to be limited to the rate impact on consumers. Uncertainty about how the cost recovery tariffs required by the NOPR would be implemented make it very difficult to estimate the potential rate impact, although even applying conservative assumptions about how such tariffs might be implemented, the NOPR would be an extremely costly rule, and the costs would be exacerbated by any efforts to mitigate the impacts in the capacity markets. The absence of a demonstrated need for the rule shows that there are not likely to be meaningful verifiable benefits, and, thus, the benefit-cost ratio would be extremely low.

5. *The Commission may take notice of relevant public information, including information in other Commission proceedings. If a commenter views information in another Commission proceeding as relevant to the proposed rule, please identify that information and explain how it is relevant to the proposed rule. Such information may include a filing previously submitted by the commenter.*

Many of the comments and testimony in Docket AD17-11, *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.* are highly relevant. Accommodation of state and local utility policies would likely produce resource procurement or retention needed to address potential reliability and resiliency concerns.

**V. CONCLUSION**

The Proposed Rule raises important questions about the generation resource mix, its impact on system reliability and resilience, and the best way to accommodate a diverse mix of resources in the organized wholesale markets. These issues warrant further discussion and analysis by the Commission and interested stakeholders. The Commission, however, should decline to adopt the Proposed Rule, as it suffers from a

number of substantive and procedural deficiencies that cannot be cured in this docket, let alone in the timeframe directed by the Secretary. The Proposed Rule does not make the necessary showing under section 206 of the FPA that existing RTO tariffs are unjust and unreasonable without a mechanism that would ensure cost recovery for “fuel secure” generation to prevent plant retirements. Nor does the NOPR demonstrate that its proposed regulations are a just and reasonable and not unduly discriminatory remedy to the problems it purports to identify. The Proposed Rule is also impermissibly vague, which deprives interested parties of adequate notice under the APA and would render the proposed regulations unworkable in practice. Finally, the extremely compressed timeframe in which the Secretary has directed the Commission to act is unreasonable, as are the proposed deadlines for RTO compliance filings. For these reasons, the Commission should decline to adopt the Proposed Rule and terminate this docket.

The Commission should, however, initiate a process for RTOs to assess what resource mix would be needed to provide the services and attributes needed for reliability, as well as for resilience, and to identify any current or projected shortfalls in these resources, as well as any features of the current market or other rules identified as contributing to the shortfall, including whether those services or attributes are properly

valued in the markets. APPA recommends that the Commission convene a technical conference to discuss the framework for such an evaluation.

Respectfully submitted,

**AMERICAN PUBLIC POWER ASSOCIATION**

*/s/ John E. McCaffrey*

Delia A. Patterson

Acting Senior Vice President, Advocacy &  
Communications and General Counsel

John E. McCaffrey

Regulatory Counsel

Elise Caplan

Senior Manager, Electric Markets Analysis

2451 Crystal Drive

Suite 1000

Arlington, VA 22202

(202) 467-2900

[dpatterson@publicpower.org](mailto:dpatterson@publicpower.org)

[jmccaffrey@publicpower.org](mailto:jmccaffrey@publicpower.org)

[ecaplan@publicpower.org](mailto:ecaplan@publicpower.org)

Dated: October 23, 2017