UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Grid Resilience in Regional Transmission Organizations and Independent System Operators	Docket No. AD18-7-000

COMMENTS OF THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

On January 8, 2018, the Commission initiated this proceeding to evaluate the resilience of the bulk power system in the regions operated by regional transmission organizations (RTOs) and independent system operators (ISOs).[1] The Commission directed each RTO and ISO to submit information on certain resilience issues "to enable us to examine holistically the resilience of the bulk power system."[2] The Commission is seeking (1) to develop a common understanding of what bulk power system resilience means and requires; (2) to understand how the RTOs and ISOs assess resilience; and (3) to evaluate whether additional Commission action regarding resilience is appropriate.[3] The RTOs and ISOs submitted information in response to this directive on March 9.

In extending the time for reply comments, the Commission clarified that "interested entities may not only … respond directly to the express content of the RTOs/ISOs' submissions, but also … provide their own independent perspectives and

[1] *Grid Reliability and Resilience Pricing*, 162 FERC ¶ 61,012 (2018) (Order Terminating Proceeding, Initiating New Proceeding, and Establishing Additional Procedures) ("January 8 Order").

[2] *Id.*, P 1.

[3] *Id.*, P 18.

recommendations with regard to grid resilience."[4] The National Rural Electric Cooperative Association (NRECA) submits these comments in response to that invitation.

DESCRIPTION OF NRECA

NRECA is the national service organization for America's electric cooperatives. The nation's member-owned, not-for-profit electric cooperatives constitute a unique sector of the electric utility industry—and face a unique set of challenges. NRECA represents the interests of the nation's more than 900 rural electric utilities responsible for keeping the lights on for more than 42 million people across 47 states. Affordable electricity is the lifeblood of the American economy, and for 75 years electric cooperatives have been proud to keep the lights on. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

America's electric cooperatives serve 56 percent of the nation, 88 percent of all counties, and 12 percent of the nation's electric customers, while accounting for approximately 11 percent of all electric energy sold in the United States. NRECA's member cooperatives include 63 generation and transmission (G&T) cooperatives and 834 distribution cooperatives. The G&Ts are owned by the distribution cooperatives they serve. The distribution cooperatives provide power directly to the end-of-the-line consumer-owners. Both distribution and G&T cooperatives share an obligation to serve their members by providing safe, reliable, and affordable electric service.

[4] *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, 162 FERC ¶ 61,256 (2018) (Order Extending Time for Comments).

SUMMARY OF POSITION

NRECA is pleased that the Commission has initiated this proceeding and, in doing so, continued an important industry dialogue about the resilience of the nation's bulk power system.

Electric cooperatives support maintaining an "all of the above," diverse portfolio of power-supply resources to maintain safe, affordable, and reliable power for their consumer-members. For these purposes, cooperatives rely upon resource portfolios that may include coal, nuclear, natural gas, wind, solar, hydropower, and other types of generating resources, as well as demand-side programs such as load management and energy efficiency technologies. Cooperatives engage in long-term resource planning to provide the reliability, resilience, risk-management, and environmental attributes their consumer-members want. Thus, cooperatives' resource portfolios support bulk power system resilience by having, among other attributes, fuel diversity and fuel security.

On October 23, 2017, NRECA submitted comments on the Secretary of Energy's proposed Grid Resiliency Pricing Rule in Docket No. RM18-1-000.[5] In those comments, NRECA explained that it substantially agreed with the premise of the Secretary's proposal: the centralized wholesale markets operated by the ISOs and RTOs may not be compensating generating resources for all the grid resilience and reliability services they are providing. But NRECA did not support the proposed remedy, for two reasons. First, the proposal only provided for compensation to resources "not subject to cost of service rate regulation by any state or local regulatory authority," whereas compensation for grid resilience services should be based on the technical ability to provide the services, not on

[5] Comments of the National Rural Electric Cooperative Association, Docket No. RM18-1-000 (filed Oct. 23, 2017). *See Grid Resiliency Pricing Rule*, 82 Fed. Reg. 46,940 (Oct. 10, 2017) (notice of proposed rulemaking).

state or local regulatory status. Second, immediate implementation of the proposed rule's cost-of-service compensation posed risks of unintended distortions to the centralized wholesale markets and increased costs to consumers.

NRECA agrees with the Commission's conclusion in the January 8 Order that the resilience of the bulk power system "remains an important issue that warrants the Commission's continued attention."[6] NRECA thus appreciates that the Commission has continued to address that issue through the instant proceeding.

As the January 8 Order observes, the Commission has already taken multiple actions aimed at ensuring bulk power system resilience even without using that express term.[7] Nonetheless, changes in the nation's electricity generation resource mix, energy markets, and related public policies "may impact the resilience of the bulk power system."[8] NRECA agrees that wholesale electric market design, transmission planning rules, and mandatory reliability standards—including cybersecurity and physical security standards—will need continued evaluation by the Commission and the industry to ensure continued bulk power system reliability and resilience.[9] NRECA also agrees that these resilience challenges are not limited to RTO and ISO regions, or even to the bulk power system, and thus will require the attention of the Commission and the industry more generally. Gathering information from the RTOs and ISOs is a reasonable first step.[10]

These comments do not undertake a detailed evaluation of the submissions by the RTOs and ISOs in this proceeding. Instead, NRECA provides its perspectives and

---

[6] January 8 Order, P 13.

[7] *See id.*, P 12.

[8] *Id.*, P 17.

[9] *See id.*, PP 17, 18.

[10] *See id.*, P 19.

recommendations with regard to bulk power system resilience, as the Commission has invited. These comments focus on wholesale market design issues, because these appear to be the resilience policy issues on which there is the greatest present uncertainty.[11]

From reviewing the RTO and ISO submissions, and from the experience of NRECA member cooperatives, NRECA believes that the Commission's development of wholesale market design policies to address bulk power system resilience in RTO and ISO regions should be guided by the following principles:

1. The RTOs and ISOs should be afforded the flexibility to determine particular regional resilience needs and devise regional solutions, including resource compensation for bulk power system resilience services.

2. Resource compensation for bulk power system resilience services should be based on the technical ability of the resource to provide bulk power system resilience services—not on the identity of the resource's owner, the owner's financial condition, or their regulatory status under state or local law.

3. Resource compensation for bulk power system resilience services should be market-based where feasible—provided as always that market competition will result in just and reasonable rates.

4. Load-serving entities should be allowed to self-supply bulk power system resilience services and should not be required to pay twice for such services (once for their self-supply and also to the RTO or ISO).

---

[11] By focusing these comments on wholesale market design issues, NRECA is not minimizing the need for attention to be paid to bulk power system resilience in discussions of transmission planning and coordination or in the development and approval of mandatory reliability standards by the North American Electric Reliability Corporation (NERC) and the Commission. NRECA supports the broad view of resilience as articulated in the Commission's January 8 Order. *See id.*, P 19.

5. Costs for compensating resources for bulk power system resilience services should be just and reasonable and should be allocated on a cost-causation basis.

6. Commission actions to ensure bulk power system resilience should preserve the ability of local utilities and their state and local regulators to ensure safe, affordable, reliable, and resilient electric service.

As a next step in the consideration of these issues, the Commission should consider holding a technical conference to further examine possible wholesale market design reforms for consideration by the RTOs and ISOs and other interested entities.

COMMENTS

I. Cooperatives contribute to the resilience of the bulk power system by using diverse generation resource portfolios to ensure reliable and resilient power supply to their consumer-members.

Electric cooperatives rely on a broad portfolio of fuels, including clean and renewable resources, and energy-efficiency efforts to maintain affordable, reliable, and safe power. Cooperatives support modernizing our nation's energy policy in ways that keep costs affordable, promote system reliability, and avoid imposing undue burdens. The flexibility to use all energy resources, including abundant regional resources and energy-efficiency technologies, is important to meet future demand.

Given their typically low customer densities, electric cooperatives face unique challenges in ensuring reliable, affordable, safe and sustainable power for the communities they serve. Cooperatives support an energy policy that provides flexibility to use the best resources to meet future electricity demand, while controlling costs and keeping consumer-members' rates as low as possible.

Electric cooperatives are actively expanding their portfolios to include an array of renewable energy resources. Today, cooperatives in 43 states use hydro as a source of power. In addition to using roughly 10 gigawatts of federal hydropower, cooperatives have developed an additional 692 megawatts of hydropower, mostly small hydro and run-of-the-river systems.

Cooperatives have expanded their wind energy capacity and, in the process, have developed ways to integrate this intermittent resource into the grid. Cooperatives in 37 states use wind as a source of power. Wind development has surged in the last 10 years and is now second only to hydro in cooperatives' renewable portfolio.

Increasingly, cooperatives are bringing solar power to regions of the country once considered unsuitable for solar development. Because solar power is flexible and scalable, it can provide power in remote areas unconnected to the grid. Today, cooperatives in 43 states use solar as a source of power. Cooperatives lead the electric utility industry in the development of community solar, with 144 cooperatives in 30 states offering community solar programs.

Electric cooperatives support maintaining an "all of the above," diverse portfolio of power supply resources. Fuel diversity is key to affordable and reliable electricity and stable prices.

As part of this effort, 29 G&T cooperatives and 13 distribution cooperatives own or partially own operating natural gas-fired generating plants—including combined-cycle, combustion-turbine, and steam units—with a total nameplate capacity of about 31,000 megawatts (MW). These resources are physically located in several ISOs and RTOs—the PJM Interconnection (PJM), the Midcontinent Independent System Operator

(MISO) (both South and North), the Southwest Power Pool (SPP), the Electric Reliability Council of Texas (ERCOT)—and in non-RTO regions.

In addition, 35 G&T cooperatives and three distribution cooperatives today are owners or partial owners of operating coal-fired generation resources, with a total nameplate capacity of about 26,000 MW. These resources include units physically located in PJM, MISO (North and South), SPP, ERCOT, and in non-RTO regions.

Electric cooperatives also are partial owners of operating nuclear generating resources and are actively planning to participate in future units as a source of emissions-free, baseload generation. Specifically, eight G&T cooperatives are partial owners of eight of the nation's operating nuclear generating plants. The total nameplate nuclear capacity owned by these cooperatives is about 2,953 MW. These eight nuclear plants, in seven states, are physically located in PJM, MISO (North and South), SPP, and in non-RTO regions. Oglethorpe Power Corporation, a G&T cooperative, is a participant in the nuclear units now under construction at Plant Vogtle in Georgia.[12] NRECA supports the development of federal policies that will ensure existing nuclear generating plants will continue to provide clean, reliable, safe and affordable electricity, and allow for the appropriate expansion of and investment in the next generation of new nuclear power plants. Nuclear provides an emissions-free, reliable, baseload source of power for electric cooperatives, which is needed as more intermittent sources of power are added to the grid. Also, the nation's nuclear power plants have continued to operate with increasing availability and safety, substantially contributing to keeping fuel costs for the generation of electricity as low as possible.

[12] https://www.electric.coop/oglethorpe-electric-cooperatives-vogtle-nuclear-plant/

The generating resource portfolios of electric cooperatives support bulk power system reliability and resilience by having, among other attributes, fuel diversity and fuel security. Cooperatives incorporate fuel diversity and fuel security in their long-term resource planning to provide the reliability and resilience of service their consumer-members want.

The RTO and ISO submissions in this docket attest to the importance of fuel diversity and fuel security to bulk power system resilience and the particular attention being paid in some regions to fuel security risks.[13]

II. Several principles should guide Commission policies for wholesale market design to promote bulk power system resilience in RTO and ISO regions.

As noted, NRECA will not undertake a point-by-point response to the submissions by the RTOs and ISOs in this docket. Instead, NRECA will provide its own perspectives and recommendations with regard to grid resilience, including bulk power system resilience. From reviewing the RTO and ISO comments, and from the experience of cooperatives, NRECA respectfully submits that the following principles should guide

---

[13] *See* Response of ISO New England Inc. at 1 (Mar. 9, 2018) ("In New England, the most significant resilience challenge is fuel security …."); Comments of the California Independent System Operator Corp. at 1 (Mar. 9, 2018) ("CAISO will need gas fired resources to provide vital reliability services for the foreseeable future"); Comments of Southwest Power Pool, Inc., at 5 (Mar. 9, 2018) ("Lack of fleet diversity and any resulting over-dependence upon any particular fuel type also poses a potential capacity shortage risk. This risk has thus far been minimal in SPP because of operations and planning practices SPP has developed in the interest of resourcefulness."); Comments of the Midcontinent Independent System Operator, Inc., at 31, 33 (discussing fuel diversity and fuel security); Comments and Responses of PJM Interconnection, L.L.C. at 13, 15, 55–63, 64–66, 69–72 (Mar. 9, 2018) (discussing fuel diversity and resilience, gas-electric coordination procedures, and generation resource attributes that support resilience).

Since submitting its comments in this docket, PJM announced on April 30 an initiative aimed at valuing fuel security risk. *See* http://www.pjm.com/-/media/library/reports-notices/special-reports/2018/20180430-valuing-fuel-security.ashx. Moreover, on May 1, 2018, ISO New England requested a waiver of its tariff provisions in order to retain certain generating units in operation under reliability must-run agreements because of fuel security concerns. *See* Petition of ISO New England Inc., for Waiver of Tariff Provisions, Docket No. ER18-1509 (filed May 1, 2018) (available at https://www.iso-ne.com/static-assets/documents/2018/05/iso_petition_for_waiver_of_tariff_provisions.pdf).

the Commission's development of wholesale market design policies to promote bulk power system resilience in RTO and ISO regions.

A. The Commission should provide RTOs and ISOs with the flexibility to determine regional resilience needs and devise regional solutions.

In the January 8 Order, the Commission stated that it understands resilience to mean "[t]he ability to withstand and reduce the magnitude and/or duration of disruptive events, which includes the capability to anticipate, absorb, adapt to, and/or rapidly recover from such an event."[14] In their responses, the RTOs and ISOs generally support this definition as being consistent with their own understanding of resilience, while noting that further work will be needed to apply this concept of resilience to the risks in their particular regions.[15] NRECA concurs that the Commission's definition of resilience provides a good foundation on which to develop policies to ensure the resilience of the bulk power system, but important work must be done in each region to achieve the Commission's resilience goals.

The RTO and ISO comments in this proceeding document the various ways they assess the resilience of the bulk power system in their respective regions. To be sure, some bulk power system resilience risks are national or transnational, e.g., cybersecurity; physical attacks; geomagnetic disturbances. Other risks may be common to all RTOs and ISOs, but the degree of risk or the specific nature of the risk may vary among them, e.g.,

[14] January 8 Order, P 23 (citing National Infrastructure Advisory Council, *Critical Infrastructure Resilience Final Report and Recommendations* 8 (Sept. 8, 2009).

[15] *See* Response of the New York Independent System Operator, Inc. at 3 (Mar. 9, 2018); ISO-NE Comments at 33; CAISO Comments at 6–8; PJM Comments at 9; SPP Comments at 2–3; MISO Comments at 10.

the loss of critical infrastructure; fuel diversity; fuel security; or extreme weather events.[16]

Because the energy infrastructure, market conditions, and wholesale market designs differ among the RTOs and ISOs, however, the RTOs and ISOs need to have the flexibility to determine particular regional resilience needs and devise regional solutions. This includes the task of defining the resilience attributes and services needed in regional generating resources and the compensation mechanisms for resources providing those services. For this issue at least, a one-size-fits-all approach will not work. Innovative regional solutions may develop into best practices, but that has not happened yet.

Accordingly, the Commission should provide ISOs and RTOs with flexibility to determine regional resilience needs and develop appropriate regional solutions in conjunction with their stakeholders. The RTO and ISO comments uniformly support this approach.[17] NRECA endorses that position.

B. Resource compensation for providing bulk power system resilience services should be based on the resource's ability to provide the services.

As NRECA argued in its earlier comments on the proposed Grid Resiliency Pricing Rule, the compensation of resources for providing bulk power system reliability

[16] *See* PJM Comments at 13 (Noting threats that are "common to all RTOs" while "the degree of risk … differs by region"); CAISO Comments at 1 ("Although some threats potentially can affect all regions, individual regions also face distinct threats to resilience.")

[17] *See* CAISO Comments at 7–8 ("Resilience must account for regional differences, and entities in each region must have the flexibility to determine what capabilities are needed to maintain reliability and resiliency based on the specific circumstances in their region."); SPP Comments at 19 ("SPP agrees with the Commission's premise that a one-size-fits-all approach to resilience is not appropriate given the differences that can exist between the various regions the BPS serves."); NYISO Comments at 3 ("NYISO respectfully requests that the Commission allows the NYISO to continue to work with stakeholders in assessing and developing the enhancements necessary to ensure that the wholesale markets, in serving the evolving needs of the electric system, continue to provide benefits to the State and its electricity consumers."); ISO-NE Comments at 1; PJM Comments at 38, 40, 65–66; MISO Comments at 48–49.

and resilience services should depend on the technical ability of the resource to provide the service, not on the identity of the resource's owner, the owner's financial condition, or regulatory status.[18] Cooperatives, including those whose rates are regulated by a state utility commission, should be eligible to provide resilience services and receive compensation on a non-discriminatory basis with other suppliers.

C. Resource compensation should be market based where feasible—provided that market competition will result in just and reasonable rates.

In its comments on the proposed Grid Resiliency Pricing Rule, NRECA also expressed concern that immediate implementation of the proposal's cost-based compensation mechanism posed risks of unintended consequences for RTO and ISO wholesale electricity markets and increased costs to consumers.[19] "Designing mechanisms for compensating resources for providing grid reliability and resilience services may require careful review of how this compensation would interact with the ISO or RTO's existing design of its centralized wholesale markets."[20]

For this reason, and because cooperatives support the development and maintenance of competitive wholesale electricity markets, NRECA believes that resource compensation by an RTO or ISO for bulk power system resilience services should be market-based where feasible (i.e., where the conditions for a competitive market exist, so that just and reasonable rates are maintained). Compensation for bulk power system resilience services should be designed so that works with and does not undermine the region's existing wholesale markets.

---

[18] *See* NRECA Comments, Docket No. RM18-1-000, at 8–11, 15.

[19] *See id.* at 11–12.

[20] *Id.*

Without limiting the universe of possible solutions, several possible resilience services and compensation mechanisms would appear to be available. For example, the ISO or RTO could establish a separate product category for a bulk power system resilience service and allow for competitive supply from qualified resources. If a competitive market did not exist, suppliers would file cost-based rates with the Commission, similar to what suppliers of reactive power service must do.

Other examples of potential resilience-related products would be ramping resources; fast-start resources; resources with alternative fuel capability; resources with fuel storage capability; or resources with firm contracts for fuel supply with specified deliverability assurance.[21]

A corollary of this policy preference for market-based compensation is that RTOs and ISOs should be encouraged to internalize bulk power system resilience services into wholesale or ancillary service pricing and price formation where feasible. This avoids the inefficiency of uncompensated bulk power system resilience services by some resources and the possibility of "leaning on the system" by other resources, as well as the need for the ISO or RTO to procure resilience-related services by bilateral contract.

D. Load-serving entities should be allowed to self-supply resilience services and should not be forced to pay twice for the same service.

Commission policy should recognize that not all bulk power system resilience services will be provided or compensated through RTO and ISO centralized markets.

[21] See FERC-NERC-Regional Entity Blackstart Resources Availability Report 25–26 (May 2018) (noting potential fuel-related resilience concerns with blackstart resources) (available at https://www.ferc.gov/legal/staff-reports/2018/bsr-report.pdf).

Load-serving entities (LSEs) such as cooperatives may continue to build or acquire resources for local reliability or resilience needs, and if these resources also provide bulk power system resilience, the load-serving entity should not be forced to pay twice for the same service (once for their self-supply and also to the RTO).

This issue could arise if the RTO or ISO were to use a capacity-style auction to acquire a resilience product or service. Under such a scheme, LSEs such as cooperatives should be allowed to self-supply bulk power system resilience resources and receive compensation or credit against RTO or ISO costs allocated to them.

NRECA has long advocated that consumers will fare better in competitive wholesale power markets where LSEs such as cooperatives can first meet their power-supply requirements through voluntary measures such as resource ownership and long-term bilateral contracts—i.e., self-supply their resources—and then turn to the RTO-administered centralized capacity markets for residual needs.[22] By themselves, centralized forward capacity markets are inadequate substitutes for the multi-attribute, long-term resource planning practiced by cooperatives on behalf of their member-consumers. This principle applies with full force to resources that provide bulk power system resilience.

E. The costs of compensating resources for bulk power system resilience services should be just and reasonable and should be allocated on a cost-causation basis.

The questions posed to the RTOs and ISOs in the January 8 Order do not discuss the costs of assessing and mitigating threats and risks to bulk power system resilience,

[22] *See* Post-Technical Conference Reply Comments of NRECA, Docket No. AD17-11-000 (July 14, 2017); Initial Comments of NRECA, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of NRECA, Docket No. AD13-7-000 (Jan. 8, 2014); Post-Technical Conference Comments of NRECA, Docket Nos. ER11-2875-000 *et al.* (Aug. 29, 2011).

including how those costs should be weighed against the benefits of greater resilience. As some of the RTO and ISO comments note, however, cost and benefit issues will need attention as the RTOs and ISOs determine resilience needs and develop solutions.[23] Rates for resilience services must be just and reasonable and not exorbitant to consumers.

Costs incurred by the RTO or ISO to ensure bulk power system resilience should be treated like other costs incurred for providing transmission and ancillary services and operating wholesale markets. The ISO or RTO should allocate these bulk power system resilience costs, including the costs of compensating resources for resilience services, on a cost-causation basis in accordance with established Commission policy.

F. Commission actions to ensure bulk power system resilience should preserve the ability of local utilities and their regulators to ensure safe, affordable, reliable, and resilient electric service.

Commission actions aimed at ensuring bulk power system resilience should be designed to complement and not frustrate efforts by LSEs and state and local regulators to ensure resilient electric service to consumers.[24] The Commission should remain aware of possible unintended consequences its actions may have on local resilience programs and solutions.

For example, distributed energy resources (DERs) can provide important resilience benefits to local distribution systems. Load-serving entities and state and local regulators are developing programs and policies to achieve these resilience benefits for consumers at a fair and reasonable cost. The Commission's pending proposal in Docket No. RM18-9-000 to require RTOs and ISOs to revise their wholesale market rules to

[23] See CAISO Comments at 8; SPP Comments at 19; PJM Comments at 10.

[24] See MISO Comments at 7–8 (noting challenges to resilience at the distribution level and recommending the Commission work with state regulators to ensure a coordinated effort).

facilitate participation by DER aggregations is primarily aimed at promoting wholesale competition and lowering wholesale rates, although the potential for enhanced reliability of the bulk power system is also noted.[25] Nonetheless, the Commission is seeking comments on whether and how the proposed DER aggregations can be implemented without compromising the reliability of local distribution systems.[26] As the Commission appears to recognize, it is essential that cooperatives and other distribution utilities and their state and local regulators retain the ability to ensure safe, reliable, and resilient retail and local distribution service. The Commission's final action on its DER aggregation proposal must avoid undermining local distribution system reliability and resilience.[27]

III. Next steps

As a next step in the consideration of these important issues, the Commission should consider holding a technical conference to examine, among other things, possible wholesale market design reforms for consideration by the RTOs, ISOs, and other interested entities.[28] The technical conference could address such matters as (1) how RTOs and ISOs might define the bulk power system resilience services needed from the region's generation resources; (2) developing reasonable eligibility and performance criteria tied to the ability of the resources to provide these needed services; and (3)

---

[25] Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators, 81 Fed. Reg. 86,522 at PP 14–15 (Nov. 30, 2016) (NOPR). *See* Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators, Order No. 841, 83 Fed. Reg. 9,580 (Mar. 6, 2018) (final rule on electric storage resources; providing for further consideration of DER aggregation proposal in Docket No. RM18-9-000).

[26] *See* NOPR, PP 141, 149, 153, 155. *See also* Notice Inviting Post-Technical Conference Comments, Docket No. RM18-9-000 (Apr. 27, 2018).

[27] NRECA will be filing post-technical conference comments detailing its concerns with the Commission's DER aggregation proposal.

[28] See NYISO Comments at 5 (requesting a technical conference)

potential mechanisms for providing just and reasonable, and not unduly discriminatory or preferential, compensation for providing these services.

CONCLUSION

The Commission should consider initiating further proceedings on bulk power system resilience in RTOs and ISOs as described above.

Respectfully submitted,

/s/ Randolph Elliott

Randolph Elliott
Senior Director, Regulatory Counsel
Pamela Silberstein
Senior Director, Power Supply
Paul McCurley
Chief Engineer
National Rural Electric Cooperative Association
4301 Wilson Blvd., 11th Floor
Arlington, VA 22203
703-907-6818

May 9, 2018