UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF ELECTRICTIY

Codes, Standards, Specifications, and Other Guidance for Enhancing the Resilience of Electric Infrastructure Systems Against Severe Weather Events	))))	Request for Information

RESPONSE OF THE AMERICAN PUBLIC POWER ASSOCIATION TO REQUEST FOR INFORMATION

The Department of Energy's ("DOE") July 9, 2019 Request for Information ("RFI") seeks "to gather available information on current consensus-based codes, specifications, standards, and other forms of guidance for improving the resilience of electric infrastructure systems against severe weather events, with respect to both the design and operation of these systems."[1] The American Public Power Association ("APPA") appreciates the opportunity to address these issues, and APPA offers its comments below.

I. Description of APPA

APPA is the national service organization representing the interests of not-for-profit, state, municipal and other locally owned electric utilities in the United States. More than 2,000 public power utilities, doing business in every state but Hawaii, account for over 15 percent of all electric energy (kilowatt-hours) sales to ultimate consumers in the nation and collectively serve 49 million consumers. The primary goal of these public power utilities is providing customers in the communities they serve with reliable electric power and energy at the lowest reasonable cost, consistent with good environmental stewardship. This orientation aligns the interests of public power utilities with the long-term interests of the residents and businesses in their communities.

[1] *Codes, Standards, Specifications, and Other Guidance for Enhancing the Resilience of Electric Infrastructure Systems Against Severe Weather Events*, 84 Fed. Reg. 32,730, p. 32,731 (July 9, 2019).

II. Comments

DOE seeks to identify existing "guidance for improving the resilience of electric infrastructure systems against severe weather events."[2] APPA expects that individual public power utilities may respond to the RFI, particularly with information relating to "state- or locally-adopted codes and standards that have resilience implications."[3] For its part, APPA wishes to briefly highlight three means of supporting weather-related resilience. *First*, the National Electrical Safety Code ("NESC") is a consensus-based, safety design criteria code updated every five years by the Institute of Electrical and Electronics Engineers ("IEEE") and approved by the American National Standards Institute ("ANSI").[4] Although the NESC is published as a voluntary standard, it is generally adopted by state legislatures and public utility commissions.[5] The NESC is the basis for requirements applied to electric cooperatives financed by the U.S. Department of Agriculture's Rural Utilities Service ("RUS"), and many rural public power utilities, particularly in the western United States, also utilize the RUS Guidelines.[6] As a 2018 white paper from the IEEE Standards Association observed, "[a]lthough issues such as

---

[2] *Id.* The RFI does not provide a definition of "resilience." APPA notes that DOE has characterized resilient systems as those that "anticipate, withstand, and recover critical loss-of-supply resulting from low-probability, high-impact threats." U.S. Dept. of Energy, Office of Electricity, North American Energy Resilience Model at 2 (July 2019).

[3] RFI at p. 32,731.

[4] *See generally*, IEEE Standards Ass'n, "The National Electrical Safety Code® (NESC®) the Definitive Safety Standard for the National Electrical Grid and Communication Systems," available at: https://ieee.app.box.com/v/NESC-Value. As the RFI notes, certain reliability standards developed by the North American Electric Reliability Corporation and approved by FERC can promote electric system resilience against severe weather. RFI at p. 32,731. These standards are "generally well-documented," *id.*, and APPA does not address them in these comments.

[5] *See* IEEE Standards Ass'n, "The National Electrical Safety Code® (NESC®) the Definitive Safety Standard for the National Electrical Grid and Communication Systems."

[6] The RUS Guidelines with resilience implications include those relating to: line construction, design guides, mechanical loading on distribution crossarms, distribution pole strength requirements, guide specifications, and wood pole inspection and maintenance. *Available at:* https://www.rd.usda.gov/publications/regulations-guidelines/bulletins/electric.

reliability and resiliency are not directly addressed in the [NESC], the NESC criteria provides for a foundational level of structural robustness that, in turn, makes a positive contribution to overall system reliability and resiliency."[7]

Second, APPA would emphasize the importance of mutual assistance programs in promoting resilience. In the event of a major outage, public power utilities coordinate with each other and with neighboring utilities to receive and provide assistance through a broad network of mutual aid programs. A national mutual aid agreement signed by more than 2,000 public power utilities and rural electric cooperatives links utilities. Public power utilities may also have other local, state, and regional contracts and agreements in place to render mutual aid. In 2013, APPA formed a Mutual Aid Working Group ("MAWG") to formalize the existing mutual aid network for the nation's public power utilities. The MAWG developed the Public Power Mutual Aid Playbook to outline the step-by-step plan for public power utilities, network coordinators, and APPA to refer to before and during a disaster to ensure an expeditious and organized response.[8]

Third, APPA administers a Reliable Public Power Provider ("RP3") program, which recognizes utilities that demonstrate high proficiency in reliability, safety, workforce development, and system improvement. The recognition is based upon review of an extensive application conducted by a panel of subject matter experts from other public power utilities. While not designed to evaluate resilience as such, an RP3 designation is a sign of a utility's dedication to operating an efficient, safe, and reliable distribution system.

---

[7] IEEE Standards Ass'n, "Grid Resilience and the NESC," available at: https://ieee.app.box.com/v/NESCResilienceWP.

[8] The Public Power Mutual Aid Playbook provides a protocol to coordinate dialogue and actions across a three-tiered national communications network, without impinging on one-on-one mutual aid agreements between utilities. Utility coordinators communicate with local and county partners; network coordinators correspond with state and regional partners; and the national coordinator collaborates with the Edison Electric Institute, National Rural Electric Cooperative Association, and emergency management agencies.

In seeking such examples of ways to promote resilience, the RFI explains that "DOE anticipates using this information to catalogue and synthesize a body of existing expert knowledge about how best to enhance the weather-related resilience of the grid, cost-effectively."[9] While APPA supports an effort to identify and catalog existing requirements and practices that can cost-effectively promote weather-related resilience, APPA cautions that it would not be appropriate for such information to be used by DOE or other agencies as the basis for federal standards or guidelines to promote weather-related resilience, as some language in the RFI could be read to suggest.[10] For one thing, federal agencies are generally directed to "use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical."[11] Moreover, there is no "one-size-fits-all" approach to promoting weather-related resilience. Different states and regions face different weather-related risks, influenced by factors such as climate, geography, generation resource mix, fuel availability, and transmission and distribution topology. State, regional, and local stakeholders are generally in the best position to identify and measure weather-related threats to resilience and develop any necessary solutions tailored to those particular risks. To cite just one example, utilities in California – including public power utlities – are developing wildfire mitigation plans pursuant to recent changes in California law.[12] Thus, while APPA supports DOE's effort to

[9] RFI at p. 32,731.

[10] *See id.* at p. 32,730 (explaining that assembled materials will be used "to provide guidance for enhancing the physical and operational resilience of electric grid systems and their components"); *see also id.* (noting that the information may aid "other federal efforts to enhance resilience.").

[11] Office of Management and Budget, Circular A-119 Revised (Feb. 10, 1998).

[12] Section 8387 of the California Public Utilities Code generally requires every California publicly owned utility to construct, maintain, and operate its electrical facilities to minimize the risk of wildfire posed by those facilities. It also requires every publicly owned utility to prepare and present a Wildfire Mitigation Plan ("WMP") to its governing body by January 1, 2020, and annually thereafter. And Section 326.2 of the California Public Utilities Code established a statewide California Safety Wildfire Advisory Board to review the WMPs and provide advisory opinions on the sufficiency of the WMPs.

identify and catalog existing requirements and practices to improve weather-related resilience, such information should be a resource for industry stakeholders and not a framework for federal standards or guidance.

APPA appreciates the opportunity to submit this response, and APPA respectfully requests that DOE consider these comments in acting on this matter.

Respectfully submitted,

/s/ John E. McCaffrey

John E. McCaffrey
Regulatory Counsel
American Public Power Association
2451 Crystal Drive
Suite 1000
Arlington, VA 22202
(202) 467-2900
jmccaffrey@publicpower.org

DATED: August 23, 2019