

August 22, 2019

U.S. Department of Energy
1000 Independence Avenue. SW
Mailstop OE-20
Washington, DC 20585
Attn: Office of Electricity, Guidance for Enhancing Grid Resilience

FILED ELECTRONICALLY TO GRID.RESILIENCE@HQ.DOE.GOV

RE: DOE's Office of Electricity Request for Information on Codes, Standards, Specifications, and Other Guidance for Enhancing the Resilience of Electric Infrastructure Systems Against Severe Weather Events

Please accept for filing the following comments of the National Rural Electric Cooperative Association in response to the above-captioned Request for Information ("RFI").

I. Introduction and Background

The National Rural Electric Cooperative Association (NRECA) is the national trade association representing nearly 900 local electric cooperatives, operating in 48 states. America's electric cooperatives belong to the communities that they serve and comprise a unique sector of the electric industry. From growing suburbs to remote farming communities, electric cooperatives power 1 in 8 Americans and serve as engines of economic development for 42 million Americans across 56 percent of the nation's landscape.

NRECA's member cooperatives include 62 generation and transmission (G&T) cooperatives and 831 distribution cooperatives. The G&Ts generate and transmit power to distribution cooperatives that provide it to the end of line co-op consumer-members. Collectively, cooperative G&Ts generate and transmit power to nearly 80 percent of the distribution cooperatives in the nation. The remaining distribution cooperatives receive power directly from other generation sources within the electric utility sector. Both distribution and G&T cooperatives share an obligation to serve their members by providing safe, reliable, and affordable electric service.

Electric cooperatives own and maintain 2.6 million miles of the nation’s electric distribution lines, serve 56% of the nation’s landmass, support 611,600 American jobs, contribute \$88.4 billion to the U.S. GDP annually and generate more than \$22 billion in federal, state and local taxes.

On July 9, 2019, the Department of Energy’s Office of Electricity published a Request for Information titled “Codes, Standards, Specifications, and Other Guidance for Enhancing the Resilience of Electric Infrastructure Systems Against Severe Weather Events”¹ From the outset, NRECA wishes to emphasize the importance of maintaining this process as information gathering. The Department states in the RFI: “The purpose of this RFI is to gather ‘relevant consensus-based codes, specifications, and standards,’ state and industry best practices, and other pertinent materials to provide guidance for enhancing the physical and operational resilience of electric grid systems and their components, e.g., generation, transmission, control centers, and distribution facilities, against these events.”² We are not opposed to the gathering of information but the phrase “to provide guidance” is troubling. Recognizing that it may simply be phrasing—i.e. that the entity providing guidance for enhancing physical and operational resilience remains the electric cooperative – nevertheless NRECA is compelled to point to the Office of Management and Budget Circular A-119 which requires federal agencies to use voluntary, industry developed codes and standards rather than developing their own codes and standards.³

II. *The Importance of the National Electrical Safety Code (“NESC”)*

The National Electrical Safety Code (or ANSI Standard C2) is a voluntary, consensus-based standard followed by the electric utility industry and widely adopted by state regulatory bodies. The NESC governs the safe installation, operation and maintenance of electric power systems including substations, overhead and underground lines. The Institute of Electrical and Electronics Engineers (“IEEE”) serves as the secretariat for the development of the NESC. The work of updating the NESC on a 5 year cycle is conducted by 7 subcommittees of the Main Committee and an Executive Committee. The members of the Main Committee are organizations, associations, and government agencies which are national in scope, the Chair and the most recent active past Chair.

¹ Codes, Standards, Specifications, and Other Guidance for Enhancing the Resilience of Electric Infrastructure Systems Against Severe Weather Events (Notice of Request for Information)” Federal Register 84:131 (July 9, 2019)

² Id at page 32730

³ Office of Management and Budget Circular No. A-119 Revised. Available at: <https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-119-1.pdf>

Currently, membership represents the following organizations:

- Association of American Railroads
- Association of Edison Illuminating Companies
- American Public Power Association
- American Public Transit Association
- Alliance for Telecommunications Industry Solutions
- Bonneville Power Administration
- Edison Electric Institute
- International Brotherhood of Electrical Workers
- Institute of Electrical and Electronics Engineers
- International municipal Signal Association
- National Association of Regulatory Utility Commissioners
- National Electrical Contractors Association
- National Electrical Manufacturers Association
- National Rural Electric Cooperative Association
- National Society of Professional Engineers
- Rural Utilities Services of the U.S. Department of Agriculture
- Society of Telecommunication Engineers
- Solar Energy Industries Association
- Tennessee Valley Authority
- Western Area Power Administration

The next version of the NESC is due to be published in 2022 and work has already begun in subcommittees to develop proposed changes to the Code. In October, 2019 IEEE will host a workshop to hear initial Subcommittee recommendations on key change proposals. Significant industry issues that will be discussed at the workshop include:

- 5G in the Distribution Network

- Distributed Energy Resources
- Energy storage and batteries
- Wind and ice load applications
- Electric Grid and Distribution Performance
- 60-foot exclusion
- Arc flash tables
- Joint Use

Further, the NESC is the basis for the U.S. Department of Agriculture Rural Utilities Service (“RUS”) codes and standards through which it regulates rural electric cooperatives that borrow from RUS.

NRECA recommends that DOE identify the National Electrical Safety Code as the primary code or standard for the electric utility industry.

The IEEE concludes that “the structural loads and resulting strength provided by the NESC criteria makes a definite contribution to the overall goal of obtaining a ***resilient*** and reliable electrical system.”⁴ (Emphasis added)

III. The Importance of Local and Entity-Specific Codes & Standards and policies.

Variations in geography, climate, topography, and regulatory requirements all combine to create a need for jurisdiction specific programs that contribute to resilience. As the IEEE states: “..the characterization for resilience involves a heavy emphasis on the contribution of operational processes such as vegetation management, regular pole maintenance and participation in mutual assistance.”⁵ Electric cooperatives have developed and implemented these policies and processes best suited to their specific service territories.

There are jurisdictions that adopt or amend parts of the NESC to suit their local purposes, and those that develop their own version of an electrical safety code such as California. While our comments are limited to identifying national codes and standards, we recommend that DOE include in its information gathering efforts local variations of the NESC in its process. Further, DOE should be aware that local jurisdictions may also revise model codes and standards and those processes should be reflected in the information gathering process as well. In other words, not only are codes and standards for our industry NOT one-size-fits-all, they also evolve over time.

⁴ IEEE Standards Association “Grid Resilience and the NESC,” 2018, page 14

⁵ Id, page 8

Comments of the National Rural Electric Cooperative Association
August 22, 2019
Page Five

Thank you for your consideration of our comments.

Respectfully submitted,

A handwritten signature in purple ink that reads "Martha A. Duggan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Martha A. Duggan
Senior Director, Regulatory Affairs
National Rural Electric Cooperative Association
4301 Wilson Blvd., 11th Floor
Arlington, VA 22203
Office Phone: (703) 907-5848
Mobile Phone: (202) 271-4395
Email: Martha.Duggan@NRECA.coop