

ONE HUNDRED FIFTEENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**

COMMITTEE ON ENERGY AND COMMERCE

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October 30, 2017

Mr. Gerry Cauley  
President and CEO  
North American Electric Reliability Corporation  
1325 G Street, N.W.; Suite 600  
Washington, DC 20005

Dear Mr. Cauley

Thank you for appearing before the Subcommittee on Energy on Thursday, September 14, 2017, to testify at the hearing entitled "Part 1: Powering America: Defining Reliability in a Transforming Electricity Industry."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, November 13, 2017. Your responses should be mailed to Allie Bury, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to [Allie.Bury@mail.house.gov](mailto:Allie.Bury@mail.house.gov).

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Fred Upton  
Chairman  
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachment

## Attachment—Additional Questions for the Record

### The Honorable Fred Upton

1. In your testimony you mention that conventional baseload such as coal and nuclear plants – provide frequency support services as a function of their large spinning generators.
  - a. What are some of the consequences to deviations in frequency?
  - b. Does retirements of conventional baseload units impact frequency?
  - c. What policies does NERC have to ensure frequency is consistent?

### The Honorable Robert Latta

1. In your testimony, you explain how NERC performs a critical role in real-time situational awareness and information sharing to protect critical electric infrastructure.
  - a. Do you have examples of how this real-time situational awareness and has helped protect the grid?
2. Can you talk more about the Critical Infrastructure Protection Standards that FERC and NERC have worked together on? Specifically, could you talk about the tiered approach to cybersecurity that utilities began to implement in 2016?

### The Honorable Gregg Harper

1. Last year, NERC issued a report which found that “areas with a growing reliance on natural gas-fired generation are increasingly vulnerable to issues related to gas supply unavailability.” Can you explain the risks associated with gas supply unavailability?

### The Honorable Bill Flores

1. As you know, the rapid changes occurring in the generation resource mix and new technologies are altering the operational characteristics of the electricity system and are challenging system planners and operators.
  - a. How does NERC, through its standards, tackle these challenges?

## The Honorable Jerry McNerney

1. There's been discussion about the connection between markets and reliability and resiliency. Yet not all states regulators distinguish between reliability and resiliency.
  - a. Do you believe states should make a distinction between the two?
  - b. Does the electric sector use a standard definition of resiliency in both the distribution system and the bulk power system?
  - c. Are there potential benefits to having a more industry-wide accepted term or definition for resiliency?
2. Is there a standard training for NERC CIP auditors, regardless of the region in which they conduct audits? Has NERC received comments from multi-state IOUs regarding discrepancies in findings, audit results, and interpretations related to CIP compliance?
3. How can NERC and industry stakeholders improve the number of participants in GridEX?
4. Is there information on what causes outages or power disruptions – whether it's a squirrel, cyber-attack, fallen tree, etc.?
5. How can we properly recognize and value interdependency and cross sector security between oil and gas industries and the electric sector?
6. With limited resources, how can we prioritize and identify what to make resilient on the electric grid?
7. What barriers exist for utilities and for the federal government as it relates to utilities sharing resources during emergencies, such as hurricane response?
8. What are the three most common CIP violations, and how often did those occur in 2016?
9. To what extent has the increased utilization of distributed energy resources, IoT devices, and other smart grid resources affected the potential sharing of customer data that is potential threat and vulnerability information as it relates to utility-EISAC information sharing?
10. There is an ever-increasing amount of distributed generation and behind-the-meter technologies and market structures being deployed across the grid. How does additional behind-the-meter activity at the distribution level potentially affect the bulk power system? Is behind-the-meter information and data being shared between utilities, state regulators, and federal entities – including FERC, NERC, and DOE? Are there areas for improvement?