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ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
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August 29, 2018

Dr. Zachary Kuznar
Director, CHP Microgrid and Energy Storage Development
Duke Energy Corporation
550 South Tryon Street
Charlotte, NC 28202

Dear Dr. Kuznar:

Thank you for appearing before the Subcommittee on Energy on July 18, 2018, to testify at the hearing entitled "Powering America: The Role of Energy Storage in the Nation's Electricity System."

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. To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Wednesday, September 12, 2018. Your responses should be mailed to Kelly Collins, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Kelly.Collins@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 Greg Walden

1. FERC issued Order No. 841, earlier this year, and asked the RTOs/ISOs to ensure their market rules are not creating barriers to the participation of energy storage resources in their capacity, energy, and ancillary services markets. As these market operators are contemplating their responses.

    a. From your perspectives, are the markets working? Are energy storage resources able to compete? If not, what are the barriers?

    b. Duke Energy operates in States with service territories that are part of competitive wholesale markets and in states outside of these markets.

        i. Do these different regulatory structures impact your investments in energy storage?

The Honorable Fred Upton

1. According to EIA, about 90% of large-scale battery storage capacity in the United States is installed in the regions covered by five of the seven organized markets (RTOs/ISOs). Nearly 40% of existing large-scale battery storage power capacity lies in the PJM footprint, the next being CAISO with 18% existing power capacity.

    a. What circumstances led to the PJM market having this large share of large-scale battery storage capacity?

    b. Could market rules in PJM be utilized in other competitive electricity markets?

2. As you highlight in your testimony, Duke Energy, has a decade of energy storage experience with 8 pilot projects and 40 megawatts of commercially owned and operated storage assets. Over the next 5 years, Duke plans to deploy a minimum of 145 MW of energy storage across its regulated businesses, which is approximately $300 million in new investment to help modernize your electric system.

    a. Ten years ago, what made Duke Energy decide to invest in energy storage for its electric system?

    b. After building several energy storage projects and looking to the development of future projects, how has the technology advanced? Are there new services energy storage has provided?

3. Your testimony talks about Duke Energy partnering with large customers including the Department of Defense, cities, and hospitals.

    a. What kind of benefits could energy storage provide to these large-scale consumers? How would it differ from the usual residential customer?

4. In your testimony you mention that energy storage can be a cost-effective means to defer or forego a distribution system upgrade and eliminate the need for wires.

    a. Can you explain in further detail how energy storage is an alternative to traditional infrastructure upgrades?

5. When it comes to energy storage you describe how electric utilities are in an ideal position to invest in and own storage, capturing the benefits that storage can provide.

    a. How are electric utilities in an ideal position to invest in energy storage? Can some utilities benefit from storage more than others?

    b. Does this differ for electric utilities operating in States with service territories that are part of competitive electricity markets and in States outside of these markets? If so, how?

The Honorable Jerry McNerney

1. How would each of you properly value storage?