one hundred seventeenth congress Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

> > July 1, 2021

Ms. Alison Silverstein Independent Consultant 2515 McBee Street Austin, TX 78723

Dear Ms. Silverstein:

Thank you for appearing before the Subcommittee on Energy on Wednesday, March 24, 2021, at the hearing entitled "The CLEAN Future Act: Powering a Resilient and Prosperous America." I appreciate the time and effort you gave as a witness before the Committee on Energy and Commerce.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from certain members of the Committee. In preparing your answers to these questions, please address your response to the member who has submitted the questions in the space provided.

To facilitate the printing of the hearing record, please submit your responses to these questions no later than the close of business on Friday, July 16, 2021. As previously noted, this transmittal letter and your responses, as well as the responses from the other witnesses appearing at the hearing, will all be included in the hearing record. Your written responses should be transmitted by e-mail in the Word document provided to Lino Peña-Martinez, Policy Analyst, at lino.pena-martinez@mail.house.gov. To help in maintaining the proper format for hearing records, please use the document provided to complete your responses.

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Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Lino Peña-Martinez with the Committee staff at (202) 225-2927.

Sincerely,

Frank Pallone, Jr.

Chairman

Attachment

The Honorable Cathy McMorris Rodgers cc: Ranking Member Committee on Energy and Commerce

> The Honorable Bobby L. Rush Chairman Subcommittee on Energy

The Honorable Fred Upton Ranking Member Subcommittee on Energy

# Attachment—Additional Questions for the Record

### Subcommittee on Energy Hearing on "The CLEAN Future Act: Powering a Resilient and Prosperous America." Wednesday, March 24, 2021

## Alison Silverstein, Independent Consultant

## The Honorable Kathy Castor (D-FL)

1. Ms. Silverstein, while there are some states that are leading on clean energy, others are not. What can Congress do to spur clean energy deployment in states that are currently lagging?

## **RESPONSE:**

Congress can enact a carbon tax or clean energy standard. Congress can also pass legislation that breaks existing logjams blocking new regional and interregional high voltage and extra high voltage AC and DC transmission development, to allow more clean energy projects to escape transmission interconnection queues and access the bulk power system to reach customers.

2. Ms. Silverstein, how can community solar increase equitable access to reliable, clean energy? How could investing in local solar drive economic growth?

#### **RESPONSE:**

Customer access to community solar projects can reduce those customers' energy bills and incrementally reduce the level of transmission and distribution investment required to serve that community reliably. Community solar, with other clean resources, can reduce the level of aggregate carbon and other emissions from electricity production, enhancing local health equity while reducing energy poverty for the benefiting community.

#### The Honorable Dr. Michael C. Burgess (R-TX)

1. How have federal incentives for intermittent sources of electricity impacted the reliability of the electric grid in Texas?

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# **RESPONSE:**

Federal incentives for intermittent sources of electricity have enhanced Texas' and ERCOT's success in developing record levels of wind and solar technology, just as in prior decades federal leasing programs and preferred tax incentives advanced the level of natural gas and coal production and power plant use. In the case of ERCOT (the electric region containing 90% of Texas' electricity use), reliability has recently become problematic as the frequency and severity of extreme weather events have accelerated. These have caused electric demand within ERCOT to spike at the same time that unprecedented numbers of fossil-fired and nuclear power plants have failed. All reputable analyses of Texas and other regions of the continent have concluded that electric reliability is best and most economically served by a diverse set of production resources, complemented by aggressive energy efficiency and demand response measures to manage demand levels and support grid operation.

2. Are there similar incentives for reliable sources of electricity such as coal, gas, nuclear, and energy storage systems?

## **RESPONSE:**

Coal, gas, and nuclear power have not been shown to be more reliable than intermittent generation, particularly since coal, gas and nuclear plants are generally several decades older than newer renewable generation sources and require more maintenance investment and down-time.

Federal incentives for gas, coal and nuclear plants or fuels differ from incentives for intermittent generation. Financial incentives for natural gas and coal generally subsidize fuel production (as with field depreciation and low-cost leasing of federal lands and mineral rights); nuclear incentives include construction loan guarantees and liability insurance in the event of a nuclear plant disaster.

3. You stated in your testimony that the blackouts in Texas were caused by factors often neglected in the public discourse, such as limited road de-icing supplies and critical infrastructure's lack of backup power. Would the CLEAN Future Act address those factors at all (Page 1 and 2 of your testimony)?

# **RESPONSE:**

It is not clear that the CLEAN Future Act would address these specific factors at all. On the other hand, the CLEAN Future Act would address other factors that enhance energy reliability and resilience, as by encouraging greater energy efficiency and demand response, microgrid and energy storage development, expanding electric transmission, and investing in energy production methods that reduce the carbon emissions that are accelerating rapid climate change and increasing the frequency and severity of extreme weather disasters.

4. The North American Electric Reliability Corporation (NERC) is currently working on standards for extreme winter weather. How do you expect these standards to impact our nation's grid operators, especially ERCOT?

# **RESPONSE:**

NERC has completed its standards for generator and transmission owner winterization. I expect that these standards as written will be grossly inadequate to drive effective winterization of power plants and transmission for three reasons:

- The NERC standards require winterization against historic weather conditions. Since climate change-induced extreme weather events are proving to be dramatically worse than historic weather, basing standards on past weather means that winterization to lower levels may not protect assets against more severe conditions.
- The NERC standards allow the power plant or transmission owner to determine what level of extreme weather is appropriate for reasonable winterization. This means that a power plant owner can legitimately select a reasonable winter conditions target that falls short of realistic future weather threats.
- NERC standards have minimal enforcement requirements and penalties. They check and penalize for whether plans are adequate and whether action matched the plan, but enforcement is slow and penalty costs for failure are low. As Polar Vortex winter events over the past decade and the ERCOT experience with Winter Storm Uri have shown, the societal and human costs of inadequate winterization vastly exceed any penalty costs that might be paid by a generator.