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

August 2, 2021

Mr. Rob Gramlich Founder and President Grid Strategies, LLC 9207 Kirkdale Road Bethesda MD, 20817

Dear Mr. Gramlich:

Thank you for appearing before the Subcommittee on Energy on Tuesday, June 29, 2021, at the hearing entitled "The CLEAN Future Act and Electric Transmission: Delivering Clean Power to the People." 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 Monday, August 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.

Mr. Rob Gramlich Page 2

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,

Trank Pallone, Jr.

Chairman

Attachment

cc: The Honorable Cathy McMorris Rodgers 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 and Electric Transmission: Delivering Clean Power to the People" Tuesday, June 29, 2021

#### Mr. Rob Gramlich, Founder and President, Grid Strategies, LLC

## The Honorable Scott Peters (D-CA)

1. Mr. Gramlich, non-transmission alternatives, such as energy storage or demand response, can help reduce the need for additional transmission projects. However, I don't believe there are true alternatives to the large interstate transmission projects we are discussing here today. Do you agree and can you elaborate on why that is or isn't the case?

#### **RESPONSE:**

Representative Peters, I agree that non-transmission alternatives such as energy storage and demand response, and what FERC now labels "Grid-Enhancing Technologies" such as power flow control, dynamic line ratings, and topology optimization, can address certain transmission needs and they are often very low cost and fast to install.

However, there is simply no alternative way to ship large amounts of power across states and regions aside from transmission. Moving large amounts of power is going to be more needed in the future for resilience purposes and to operate reliably with large amounts of clean energy resources. For example the NREL seam study showed daytime power flowing from the sunny Southwest to the Midwest and night-time power flowing from the windy Midwest to the West. Only transmission lines can move that power. In many cases there is simply no capacity available so it must be expanded. Recent studies show that even with high penetration of Distributed Energy Resources, a similar amount of largescale transmission is needed. The POWER ON Act is a very helpful component of the package of transmission reforms that are needed.

2. Mr. Gramlich, the CLEAN Future Act includes a package of complementary climate policies, including a clean electricity standard. What would be the consequences of enacting some of these policies without also reforming the regulatory process for siting interstate transmission projects, as done in the POWER ON Act?

#### **RESPONSE:**

Mr. Rob Gramlich Page 4

Representative Peters, I believe transmission provisions are critical on their own for resilience purposes and become even more critical with any state or federal clean energy goals. I further believe that transmission is the primary barrier to large scale clean energy growth and that addressing transmission by itself will expand clean energy dramatically. The POWER ON Act would help resolve the siting challenges in transmission development.

3. Mr. Gramlich, I believe transmission policy is an area ripe for bipartisan cooperation. You are a perfect example of this as you have previously been a Republican witness on this issue and today you are a Democratic witness. Can you elaborate on the case for bipartisan collaboration on transmission?

## **RESPONSE**:

Representative Peters, I fully agree with you that transmission policy is ripe for bipartisan cooperation. When I worked for a Republican FERC Chairman and we worked closely with the George W. Bush White House and DOE on legislation that became the Energy Policy Act of 2005 I think it is fair to say that Republicans were leading on the transmission policies that a number of Democrats such as yourself are now leading on. Your POWER ON Act restores the intent of Republican Members of Congress and the Administration in my opinion. When I testified to this Committee as a Republican witness I made the same points as I said as a Democratic witness.

#### The Honorable Kathy Castor (D-FL)

1. Mr. Gramlich, would reforming interconnection cost allocation consistent with a "beneficiary pays" principle reduce the pressure on developers to enter speculative projects in interconnection queues? How would that help lower overall interconnection costs?

#### **RESPONSE**:

Representative Castor, yes, I believe reforming interconnection cost allocation to be consistent with the "beneficiary pays" principle would reduce the pressure on developers to enter speculative projects in interconnection queues. Currently developers have little ability to predict whether a project will receive a transmission charge that approaches the cost of the generation project or a charge that is far smaller. Given this uncertainty, they have an incentive to submit multiple requests at multiple locations. With so many interconnection requests, the interconnection process becomes overburdened and slow. It is also more equitable to charge more than just the generator for the shared network upgrades. The generator can be responsible for the generator tie line which is analogous to the driveway, but should not have to pay the whole cost of the "road" that all participants use. Fixing this cost allocation approach in tandem with pro-active transmission planning will reduce costs to consumers by building the most efficient scale and type of transmission. Your participant funding bill would be helpful in this regard.

2. Mr. Gramlich, how do financial deposit requirements and site control requirements help ensure that generation and storage projects in interconnection queues are not speculative?

### **RESPONSE**:

Representative Castor, financial deposit requirements and securing site control have costs, so generation developers make sure they have viable enough projects before they commit to paying them. FERC has undertaken a couple rounds of interconnection reform starting in 2007 that tended to increase the financial requirements, site control, and other measures of viable projects to reduce speculative projects in interconnection queues. More can likely be done to move towards a "first ready, first served" approach. But ultimately transmission capacity is the main constraint in the interconnection process and it must be addressed with pro-active transmission planning.

3. Consumers are currently paying for transmission congestion and are unable to access affordable renewable energy that cannot connect to the electric grid. Mr. Gramlich, how could reforming interconnection cost allocation consistent with a "beneficiary pays" principle save consumers money on their electricity bills?

## **RESPONSE**:

Representative Castor, yes, consumers are paying for congestion and they pay the costs of the accumulated incremental charges under the current reactive and incremental approach. There are very large economies of scale in transmission such that the delivered cost is much lower with higher voltage, larger-scale investments. If planners plan for the type, location, and quantity of expected future generation, then the efficient type of transmission can be built. That will tend to be much lower cost to consumers in the long run than the current type of incremental, smaller investments that are being made.

## The Honorable Lisa Blunt Rochester (D-DE)

1. As we have witnessed with recent extreme weather events and regional outages, interconnected transmission is critical to energy resilience. Can you elaborate on how local, state, and federal governments can work together to build a transmission system that operates across regions in different climates?

## **RESPONSE**:

Representative Blunt Rochester, I agree that interconnected transmission has kept the lights on in numerous severe weather events. In your region, the grid operator PJM has imported close to 10 GigaWatts of power when polar vortex events have centered in the Mid-Atlantic, and exported the same amount to the Midwest when the weather events were centered there. This common occurrence shows how interregional transmission

Mr. Rob Gramlich Page 6

> provides the best protection against severe weather and other threats to the power system. State, local, and federal governments can work together on consensus regional and interregional plans to provide system resilience. This capacity will also allow a lot more clean energy to be interconnected. This same effect is true with offshore wind and transmission which can allow for power sharing between the Mid-Atlantic region, New York, and New England.

2. How is the variability of certain renewable resources, such as wind and solar energy, mitigated through the greater deployment of transmission?

## **RESPONSE**:

Representative Blunt Rochester, in the wind business it is often said that "the wind is always blowing somewhere." That is very true, as it is typical for wind farms to produce at very different times when they are a few hundred miles away from each other. Similarly solar farms in different time zones and experiencing cloud cover at different times provide diversity. Given this diversity of output, steady aggregate output can be achieved when many projects across wide geographic areas are connected with transmission.

3. Delaware has significant potential for offshore wind relative to its size. What measures should we take to promote the deployment of more transmission to accommodate an expected increase in offshore wind development?

## **RESPONSE**:

Representative Blunt Rochester, yes, Delaware has excellent offshore wind resources close by. Transmission is needed to bring it to shore. There are limited connection points on land, and the state would be able to get much more offshore wind power in the future if there were a larger grid both offshore and onshore. The transmission planner in the region, PJM, is beginning to study transmission needed to support state clean energy goals including offshore wind. I encourage state officials to work with PJM and neighboring states on a long-term pro-active transmission plan to achieve state energy policy objectives and increase reliability and resilience.