FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

May 21, 2018

OFFICE OF THE CHAIRMAN

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton:

Thank you for the opportunity to appear before the Subcommittee on Energy on Tuesday, April 17, 2018, to testify at the hearing entitled "Oversight of the Federal Energy Regulatory Commission and the FY 2019 Budget." Attached are my responses to the Supplemental Questions for the Record.

Sincerely,

[redacted]

Kevin J. McIntyre
Chairman

Attachments

U.S. House Committee on Energy and Commerce, Subcommittee on Energy
April 17, 2018 Hearing: ***Oversight of the Federal Energy Regulatory Commission and the FY2019 Budget***
Questions for the Record Submitted to the Honorable Kevin McIntyre

The Honorable Fred Upton

Question 1: Following his appearance before the Subcommittee on May 3, 2017, Mr. John Katz was asked to list and provide the status of all pending hydropower proceedings where the Commission is waiting on another Federal or State agency to act of a Federal authorization. Mr. Katz responded by providing a table that shows the cases where the Commission staff has completed its environmental review and is currently waiting for an action to be completed by another agency before the Commission can issue a decision on the project. Of those 26 cases listed, 23 were relicenses.

a. Please provide an updated list and describe the status the pending proceedings.

Answer: Table 1 includes updated information regarding cases where FERC staff has completed its environmental review and is currently waiting for an action to be completed by another agency before the FERC can issue a decision on the project. Changes since the table was provided in May 2017 include the following:

- **R.C. Byrd Project (P-12796):** The Fish & Wildlife Service issued its Biological Opinion for the project on June 19, 2017, and the FERC subsequently issued the license on August 30, 2017.
- **Williams Project (P-2335):** The Maine Department of Environmental Protection issued its water quality certification for the project on June 20, 2017, and the FERC subsequently issued the new license on November 3, 2017.
- **Conowingo Project (P-405):** On April 27, 2018, the Maryland Department of the Environment issued a Water Quality Certification under Section 401 of the Clean Water Act. Endangered species consultation with the National Marine Fisheries Service concluded with the Service's concurrence filing of May 9, 2018.
- **Poe Project (P-2107):** On December 29, 2017, the California State Water Resources Control Board issued a Water Quality Certification under Section 401 of the Clean Water Act for the project.
- **Packwood Lake Project (P-2244):** On March 22, 2018, the National Marine Fisheries Service issued its Biological Opinion for the project.

Table 1: Cases Requiring Other Agency Action

Project No.	Project Name	State	FERC NEPA Completed	Time Since NEPA Completion (Years)	Authorization Type Needed	Federal / State Agency Responsible
2086	Vermilion Valley	CA	5/3/2004	14	ESA / WQC	FWS / CA

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Table 1: Cases Requiring Other Agency Action

Project No.	Project Name	State	FERC NEPA Completed	Time Since NEPA Completion (Years)	Authorization Type Needed	Federal / State Agency Responsible
2105	Upper N. Fork Feather	CA	11/10/2005	12.5	WQC	CA
2174	Portal	CA	4/27/2006	12.1	ESA / WQC	FWS / CA
11810	Augusta Canal	SC	9/22/2006	11.7	ESA	NMFS
1971	Hells Canyon	ID/OR	8/31/2007	10.8	ESA / WQC	NMFS and FWS / OR and ID
199	Santee Cooper	SC	10/26/2007	10.6	ESA	NMFS
67	Big Creek	CA	3/13/2009	9.2	ESA / WQC	FWS / CA
120	Big Creek 3	CA	3/13/2009	9.2	ESA / WQC	FWS / CA
2085	Mammoth Pool	CA	3/13/2009	9.2	ESA / WQC	FWS / CA
2175	Big Creek 1 and 2	CA	3/13/2009	9.2	ESA / WQC	FWS / CA
2088	South Feather	CA	6/4/2009	8.9	WQC	CA
803	DeSabla Centerville	CA	7/24/2009	8.8	ESA	NMFS
516	Saluda	SC	7/20/2010	7.8	ESA	NMFS
2106	McCloud-Pit	CA	2/25/2011	7.3	WQC	CA
2615	Brassua	ME	9/14/2011	6.7	WQC	ME
2079	Mid-Fork American	CA	2/22/2013	5.3	ESA / WQC	FWS / CA
2266	Yuba Bear	CA	12/19/2014	3.4	ESA / WQC	FWS / CA
2310	Drum Spaulding	CA	12/19/2014	3.4	ESA / WQC	FWS / CA
2179	Merced	CA	12/4/2015	2.4	ESA / WQC	NMFS and FWS / CA
2467	Merced Falls	CA	12/4/2015	2.4	ESA / WQC	NMFS and FWS / CA
2337	Prospect No. 3	OR	4/16/18	0.08	WQC	OR

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Project No.	Project Name	State	FERC NEPA Completed	Time Since NEPA Completion (Years)	Authorization Type Needed	Federal / State Agency Responsible

ESA = Endangered Species Act Consultation
WQC = Section 401 of the Clean Water Act Water Quality Certification
FWS = U.S. Fish and Wildlife Service
NMFS = National Marine Fisheries Service

b. If there is no change in the status, please explain why and describe the steps taken by the Commission to resolve to the matter.

Answer: As described in the May 2017 response, the projects listed in this table fall into two categories: (1) waiting for either the National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service to complete consultation under section 7(a) of the Endangered Species Act (denoted as "ESA" in the table); and/or (2) waiting for a state water quality agency to issue water quality certification ("WQC" in the table) under section 401 of the Clean Water Act. FERC staff continues to consult and communicate with these agencies regarding their progress or information needs. Specific examples are discussed below.

- **Santee Cooper Augusta Canal, and Saluda Projects – South Carolina:** Commission staff periodically consults with NMFS on the status of the Biological Opinions for these projects and is routinely informed that the expected date for the Biological Opinions is being revised. During October 2017, NMFS requested additional information on dissolved oxygen, water temperature, and shortnose sturgeon in the Saluda Project. FERC staff directed the license applicant to provide the information, which it has done.
- **Brassua Project – Maine:** FERC staff issued letters to the Maine Department of Environmental Protection (DEP) in 2017 and 2018 to assess the status of the state agency's review of the application for water quality certification, and whether there are any outstanding informational or procedural issues preventing Maine DEP from making a determination on the water quality certification. Maine DEP responded on May 9, 2018, indicating that it had a denial of the water quality certification for the project prepared, but instead intends to work with the applicant to provide it sufficient time to conduct a study during the upcoming field season and demonstrate that the aquatic life criteria are met in the project impoundment.
- **State of California Water Quality Certifications:** Pursuant to a Memorandum of Understanding between the FERC and the State of California, FERC staff meets semi-annually with the California State Water Resources Control Board to discuss the status of

the 401 certifications for pending projects. The last meeting was held on December 6, 2017, and the next meeting is scheduled for June 19, 2018.

Question 2: On August 15, 2017, President Trump signed Executive Order 13807, which established a One Federal Decision (OFD) policy for Federal review of major infrastructure projects, and set a goal for completing reviews and authorizations within two years. On April 9, 2018, Chairman McIntyre signed a memorandum of understanding (MOU) with 11 other agencies to implement the OFD policy.

a. Please describe how the OFD policy and the MOU will improve FERC's procedures for siting hydropower facilities, electric transmission, and pipelines.

Answer: The FERC has for many years worked closely with other federal agencies, as well as tribes, state, and local agencies, to complete reviews of all infrastructure projects in an expeditious, coordinated, and transparent fashion. I hope that the MOU, which calls for unified environmental reviews and federal agency decisions for major infrastructure projects, with the goal of completing action on all governmental approval decisions within two years, will encourage agencies to redouble their efforts to work in parallel and to eliminate unnecessary duplication of effort. In many cases, achievement of this goal requires the voluntary participation of state agencies that are not subject to the MOU.

Question 3: Congress provided FERC with authority under the Natural Gas Act to authorize the siting and construction of onshore and near-shore LNG export facilities. Once FERC has completed the review required under the National Environmental Policy Act, the Department of Energy begins a public interest review for the proposed export of the commodity. Given the sequential nature of these reviews, it is imperative that FERC's review be conducted efficiently and expeditiously.

a. Please list and describe the status of all pending LNG export applications before the Commission.

Answer: Attached is a table of all liquefied natural gas (LNG) export applications which currently have a pending status.

Pending LNG Export Applications				
Docket	**Company**	**Project Name**	**State**	**Application Filed/Amended**

CP15-521-000	Gulf LNG Liquefaction Company, LLC Gulf LNG Energy, LLC Gulf LNG Pipeline, LLC	Gulf LNG Liquefaction	MS	6/19/2015
CP15-550-000 CP15-551-000 CP15-551-001	Venture Global Calcasieu Pass, LLC; TransCameron Pipeline, LLC	Venture Global Calcasieu LNG, TransCameron Pipeline	LA	9/4/2015 6/28/2016
CP16-116-000	Texas LNG Brownsville, LLC	Texas LNG	TX	3/31/2016
CP16-454-000 CP16-455-000	Rio Grande LNG, LLC; Rio Bravo Pipeline Company, LLC	Rio Grande LNG, Rio Bravo Pipeline	TX	5/5/2016
CP16-480-000	Annova LNG Common Infrastructure, LLC Annova LNG Brownsville A, B, and C. LLC	Annova LNG	TX	7/13/2016
CP17-20-000 CP17-21-001 CP18-7-000	Port Arthur LNG, LLC & PALNG Common Facilities Company, LLC Port Arthur Pipeline , LLC	Port Arthur LNG Export and Pipeline	TX, LA	11/29/2016 10/16/2017
CP17-41-000	Eagle LNG Partners Jacksonville, LLC	Jacksonville Project	FL	1/31/2017
CP17-66-000 CP17-67-000	Venture Global Plaquemines LNG, LLC Venture Global Gator Express, LLC	Plaquemines LNG and Gator Express Pipeline Project	LA	2/28/2017
CP17-117-000 CP17-118-000	Driftwood LNG LLC, Driftwood Pipeline LLC	Driftwood LNG and Pipeline	LA	3/31/2017
CP17-178-000	Alaska Gasline Development Corporation	Alaska LNG	AK	4/17/2017

CP17-470-000	Freeport LNG Development, LP	Train 4 Project	TX	6/29/2017
CP17-494-000 CP17-495-000	Jordan Cover Energy Project, L.P. Pacific Connector Gas Pipeline, LP	Jordan Cove LNG Terminal Pacific Connector	OR	9/21/2017

b. Please list the number of full-time equivalent staff responsible for processing LNG export applications.

Answer: Staff from a number of different FERC program offices – the Office of the General Counsel, the Office of Energy Market Regulation, the Office of Enforcement, and the Office of Energy Projects – work on LNG export proposals and their companion interstate pipeline supply line proposals. The Office of Energy Projects contains a staff of 76 geologists, biologists, archaeologists, engineers, and other technical experts who are primarily responsible for analysis of all natural gas infrastructure proposals, including LNG projects. Of this staff, there are 14 engineers specifically charged with performing engineering and safety review of LNG facility designs and conducting both construction and operational inspections. The number of staff working on LNG export proposals at any one time is dependent on the nature and complexity of the various proposals under consideration and the number of other gas infrastructure proposals before the FERC.

c. Please describe any steps already taken or planned to improve efficiency and expedite the processing of LNG export applications.

Answer: The Office of Energy Projects has recently increased use of contractors to complete the construction compliance inspections for approved export LNG projects, has increased hiring efforts for engineers with LNG expertise, is actively exploring direct and third party contractor options, and is implementing procedural adjustments to improve processing timelines for pending LNG export applications. I also note that on April 19, 2018 the FERC issued a Notice of Inquiry (NOI) initiating the FERC's review of its 1999 policy statement on the certification of new natural gas transportation facilities. Among other things, the NOI seeks comments on how the FERC might improve the efficiency of its review of applications for natural gas infrastructure. Comments in response to that NOI are due to the FERC on June 25, 2018.

Question 4: Is Congressional intent undermined when a state can exercise its section 401 water quality certification authority to block construction of new pipeline capacity, regardless of any inconsistency with state water quality standards?

Answer: In the Natural Gas Act (NGA), Congress declared that the business of transporting and selling natural gas for ultimate distribution to the public was affected by the public interest and that federal regulation of these matters was necessary. Congress also provided in the Clean Water Act

(CWA) that states should have the authority to regulate discharges into navigable waters. It is for Congress, and not the FERC, to determine whether congressional intent is undermined when a pipeline project that the FERC has otherwise found to be in the public interest cannot proceed because the CWA water quality certification is denied.

Question 5: Do you have any advice or recommendation to Congress as to what can be done to reinforce and strengthen the FERC's role in administering a comprehensive Federal scheme of regulation of interstate pipeline development?

Answer: Under state agency practices currently in effect, the one-year time period for a decision under the CWA may be restarted through the withdrawal and refiling of a water quality certification application. Congress may wish to consider whether this practice should be permissible.

Question 6: FERC has long held that it "does not pick winners or losers" regarding the fuels for generating electricity -- rather FERC's role is to promote competition through market mechanisms.

a. How does this philosophy square with the fact that some generators have characteristics or attributes (e.g., onsite fuel) that allow them to provide additional value in terms or reliability or resilience?

Answer: The FERC has long regarded competitive markets as the appropriate mechanism for compensating resources for the services they provide to the electric grid and has aimed to do so independent of resource class. However, because different resources provide different services to the market, not all resource classes receive identical market revenues. Instead, the FERC seeks to ensure that the market is able to compensate resources for the specific value they provide without improperly favoring one resource type over another. In our ongoing proceeding, Grid Resilience in Regional Transmission Organizations and Independent System Operators (Docket No. AD18-7), the FERC seeks to identify areas of resilience risk, understand how that risk is assessed, identify the resilience attributes and services that are needed to maintain and improve resilience, and consider associated issues regarding compensation for such attributes and services.

Question 7: As you know, a request has been made to DOE for an emergency order to aid certain nuclear and coal-fired plants in PJM.

a. From your perspective, what tools does FERC have to ensure that struggling nuclear and coal-fired plants can be compensated at a level where they can continue to operate?

Answer: As you note above, the FERC does not pick winners and losers in its markets. Rather, the FERC focuses on approving market rules designed to identify needed services and compensate resources for the specific services they provide without improperly favoring one resource type over

another. In our ongoing proceeding, Grid Resilience in Regional Transmission Organizations and Independent System Operators (Docket No. AD18-7), the FERC seeks to identify areas of resilience risk, understand how that risk is assessed, identify the resilience attributes and services that are needed to maintain and improve resilience, and consider associated issues regarding compensation for such attributes and services.

Question 8: Under section 205 of the Federal Power Act, FERC is prohibited from making modifications to tariff proposals that are substantial enough to transform them into entirely new proposals. Last summer, the DC Circuit issued a ruling in NRG v. FERC that FERC had contravened this limitation on its authority when proposing changes to PJM's filing to change its rate structure. This undermines FERC's longstanding practice of approving filings subject to certain changes being made, rather than rejecting filings with questionable aspects altogether.

a. Can you describe if this ruling has adversely affected the way FERC reaches a determination?

b. Is the public interest harmed by this ruling?

c. Is a legislative fix necessary to clarify Section 205 of the FPA?

Answer: I do not believe the decision has adversely affected the way the FERC reaches a determination or has harmed the public interest. As clarified by the court, section 205 of the Federal Power Act (FPA) gives the FERC certain authority to attach conditions to its approval of section 205 filings, and the FERC is working within those requirements. In addition, when appropriate, the FERC may exercise its authority under section 206 of the FPA to direct changes to the existing rates, terms and conditions of service of public utilities. I have not concluded that a legislative fix to clarify section 205 of the FPA is warranted at this time.

Question 9: FERC does not have the authority to mandate that a certain amount of power be generated by resources. In response to various legislative efforts to support nuclear generation, the industry is debating whether individual state actions are harming the efficient operation of the organized wholesale electricity markets. States including New York and Illinois have enacted or legislation that would protect "at-risk" nuclear generation units from closure due to their inability to compete economically in a competitive market.

a. Litigation is currently underway in the U.S. Court of Appeals (2nd & 7th Circuits regarding the lawfulness of these subsidies. Will FERC assist the Court in providing its views (as requested by the Court)?

b. Do you or FERC have a position the appropriateness of these credits?

Answer: The U.S. Court of Appeals for the Seventh Circuit has invited the United States to file a brief in litigation with respect to the Constitutionality of the Illinois Zero Emissions Credits (ZECs) program. In light of the court's invitation, FERC staff is working with the Department of Justice, which plans to field the requested brief. In addition, matters currently pending before the FERC present the separate question of whether the Illinois ZECs program affects wholesale rates in FERC-jurisdictional markets in a manner that warrants FERC action. As the FERC is carefully considering that issue, expressing a view as to the appropriateness of ZECs at this time could prejudge that pending matter and thus would be inappropriate at this time.

Question 10: In 2014 FERC began to examine the issue of how non-market actions, events, and circumstances can influence wholesale electricity prices. Since then, FERC has initiated numerous "price formation" rulemakings on various topics. Several years have now passed and some have said that FERC is addressing "price formation" issues too slowly.

a. What is the status of these efforts and how do you see them relating to other market issues like grid resilience.

Answer: The FERC initially identified various issues that potentially warrant FERC action under the broad umbrella of "price formation." Since originally prioritizing action on issues that the FERC deemed the most ripe, we have taken a number of concrete actions. Since 2014, the FERC has issued 30 orders as part of the price formation initiative. Most recently, in April 2018, the FERC issued a final rule on transparency (Order No. 844). The transparency rule marked the last generic action among the initial set of price formation topics the FERC identified when the price formation inquiry began. Although the FERC has initiated several reforms, the results of some reforms are not yet apparent because the RTOs/ISOs are now working on implementation.

The price formation rules and orders help more accurately price system needs and make them more transparent, improve market participants' incentive to operate as dispatched, invest appropriately, and maintain reliability. All of these outcomes help address the operational challenges RTOs/ISOs face in supporting reliable operations, and may help inform further conversations on how to foster resilience.

Question 11: In July 2011, FERC issued Order 1000 – a landmark rule designed to increase regional transmission development by non-incumbent utilities and foster competition for innovative and cost-effective projects. However, after more than 6 years, few new transmission projects can be directly attributed to Order No. 1000 and a recent FERC staff report admitted that "[i]t is difficult to assess whether the industry is investing in sufficient transmission infrastructure to meet the nation's needs and whether the investments made are more efficient or cost-effective."

a. What are the Commissions views on this rule? Should it be reexamined?

Answer: Issued in 2011, Order No. 1000 significantly changed the process through which transmission facilities intended to address our nation's electric transmission needs are planned. Many in the industry expected Order No. 1000 to boost competitive investment in new transmission infrastructure, but I recognize that there is concern among some in the industry that such investment is not occurring at the levels anticipated. Driven at least in part by this concern, the FERC has continued to examine the implementation of Order No. 1000, its effect on regional and interregional transmission development, and related transmission development issues. In June 2016, the FERC convened a technical conference to discuss the state of competitive transmission development and requested comments on several associated issues. I expect that the record developed through that proceeding and other currently pending dockets will provide helpful information on potential FERC action to address these issues.

Question 12: FERC has struggled (since 2011) to come up with a methodology to calculate a legally-sustainable Return on Equity (ROE) for existing electric transmission infrastructure. Transmission owners argue that ROEs are set too low, and end-users argue that ROEs are excessive. In 2014, FERC developed a methodology (in Opinion No. 531) that made nobody happy and FERC's decision was appealed to the D.C. Circuit. As you know, that FERC policy was vacated by the Court in 2017, finding that FERC failed to engage in reasoned decision-making in crafting its ROE methodology.

a. Lacking a clear and stable ratemaking policy, transmission owners, developers, and financiers are concerned with the outlook of new transmission infrastructure projects. What is FERC doing with respect to Transmission ROEs?

Answer: I agree that the FERC must have a clear and stable policy for establishing transmission ROEs in order to, among other reasons, provide investor certainty such that developers can access the capital markets on reasonable terms for such long-lived infrastructure. Because the D.C. Circuit vacated the revised ROE methodology that the FERC implemented in Opinion No. 531, we are working on developing a way to meet these policy objectives that is consistent with the court's decision.

b. How much longer does FERC expect it will need to resolve this issue?

Answer: As you know, this issue is pending before the FERC in multiple proceedings, including the remand and vacatur of Opinion No. 531. Thus, I am not able to comment on the nature or timing of the FERC's action on the pending proceedings. I assure you we are now evaluating the records in these proceedings and will act upon them in due course.

Question 13: In light of the recent tax reform legislation, what is FERC doing to ensure that pipeline customers will realize the benefits associated with a lower corporate tax rate for the pipeline?

Answer: The FERC, on March 15, 2018, initiated a rulemaking proceeding in Docket No. RM18-11-000, *Interstate and Intrastate Natural Gas Pipelines; Rate Changes Relating to Federal Income Tax Rate*, wherein the FERC proposed a process that will allow it to determine which jurisdictional natural gas pipelines may be collecting unjust and unreasonable rates in light of the recent reduction in the corporate income tax rate in the Tax Cuts and Jobs Act of 2017 and changes to the FERC's income tax allowance policies following the *United Airlines, Inc. v. FERC* decision. Specifically, the FERC proposed to create a one-time financial report to be filed by all 133 interstate natural gas pipelines with cost-based rates, and proposed four options for each pipeline to voluntarily make a filing to address the changes to its recovery of tax costs or explain why no action is needed. After evaluating the results of these financial reports, the FERC may initiate an NGA section 5 proceeding to determine whether individual pipeline rates may no longer be just and reasonable, and establish just and reasonable rates on a prospective basis. Further, the FERC proposed an alternative NGA section 4 tariff filing method, should pipelines decide to select this option, that would expedite rate reductions. The FERC also proposed separate procedures for certain intrastate natural gas pipelines with cost-based rates. The FERC is currently evaluating numerous comments filed in response to the proposed rulemaking.

Also on March 15, 2018, the FERC initiated two investigations pursuant to NGA section 5 to determine whether the rates currently charged by Dominion Energy Overthrust Pipeline LLC and Midwestern Gas Transmission Company are just and reasonable. The FERC is also examining this issue as part of its review of pending filings under NGA section 4 and NGA section 7 where interstate natural gas pipeline companies are proposing new or revised jurisdictional rates. Finally, the FERC also has the authority to audit specific pipelines to ensure that they are complying with the policies and directives of the FERC.

Question 14: Each of the RTOs/ISOs employ a market monitor to oversee the activities of the markets, but each of them has a different structure. Some RTOs contract with an independent entity to serve this role (e.g., PJM and MISO), while others rely on an internal monitor (e.g., Southwest Power Pool and CAISO) and others have both an internal monitor and an external independent monitor (e.g., ISO-New England and New York ISO).

a. After 20 years of experience with market monitors in the organized markets, there remains a good deal of confusion regarding the role of the monitors, which type of monitoring structure works best, and who the market monitor is ultimately responsible to.

i. What are your thoughts on the role of the market monitor? Are any changes necessary?

Answer: Certain aspects of the market monitor's role are currently pending before the FERC. Because these proceedings are pending, I am limited in my ability to discuss my thoughts regarding

the market monitor's role and whether any changes are necessary to the role of the market monitors in RTOs/ISOs.

However, in creating the role for market monitors in 2005, the FERC recognized that market monitors "monitor organized wholesale markets to identify ineffective market rules and tariff provisions, identify potential anticompetitive behavior by market participants, and provide the comprehensive market analysis critical for informed policy decision making." Further, in Order No. 719 the FERC determined that a market monitor has three core functions: (1) evaluating the effectiveness of existing and proposed market rules, tariff provisions, and market design elements and recommending proposed changes "not only to the RTO or ISO, but also to the FERC's Office of Energy Market Regulation staff and to other interested entities such as state commissions and market participants"; (2) reviewing and reporting on market performance; and (3) referring the suspected wrongdoing of market participants, RTOs/ISOs to the FERC's Office of Enforcement.

Question 15: We've heard about benefits and drawbacks of financial trading in the RTO and ISO markets, including the use of "FTRs" and virtual bidding. The market monitors in PJM (Dr. Bowring) and CAISO (Dr. Hildebrandt) have raised some serious concerns regarding the auctioning of FTRs in their markets. For instance, in California, Dr. Hildebrandt alleged in a recent hearing that ratepayers are paying $400 million for FTRs due to market design flaws.

a. Is FERC looking into whether there is sufficient revenue adequacy in the various RTOs to fund the FTRs?

Answer: The FERC is aware of the concerns raised by the PJM and CAISO market monitors regarding FTR/Congestion Revenue Right (CRR) markets.

b. How can we address the persistent shortfalls in FTR funding?

Answer: Due to currently pending proceedings, I am unable to comment on this question at this time.

Question 16: It's my understanding that DOE has offered an open invitation for FERC Commissioners to receive intelligence briefings on cyber-related threats.

a. How many of you have taken DOE up on this offer?

Answer: All of the Commissioners either have received their intelligence briefings from the Department of Energy (DOE) or have upcoming briefings currently being processed

b. In this open setting, how much can you say regarding how prepared are the nation's utilities to fend off a cyber or physical attack?

Answer: Although I cannot provide specifics on how well prepared the nation's various utilities are, I can provide you with the following information on steps the FERC has taken over the past several years to help utilities prepare for cyber or physical attacks on the bulk power system. Of course, assuring preparedness requires ongoing vigilance.

The FERC uses a combination of mandatory reliability standards, promotion of voluntary best practices, and information and intelligence-sharing to address cyber and physical security. The FERC has authority under the FPA to review and approve mandatory reliability standards for the bulk power system that are proposed by the North American Electric Reliability Corporation (NERC). That authority includes authority over standards that address cybersecurity. The Critical Infrastructure Protection (CIP) Reliability Standards address cyber and physical security and have been continually updated since 2008, when the FERC approved NERC's initial set of proposed CIP Reliability Standards. The current version of the CIP standards requires asset owners to identify assets that are essential to reliable operation of the grid and to protect them behind an "electronic security perimeter," which insulates them from the most common cyberattacks that target email and corporate networks. Utilities that comply with the CIP standards are also required to limit physical access to critical systems, to address risks associated with malware, and to keep cyber systems updated. A physical security standard requires entities to identify and protect substations critical to the reliable operation of the grid.

The FERC also supports grid cybersecurity through voluntary and collaborative efforts. FERC staff has worked with the DOE, the Department of Homeland Security (DHS), the Federal Bureau of Investigations, and others to help support key cybersecurity initiatives. The FERC works closely with these agencies, state partners, and industry to identify key energy facilities, provide cybersecurity threat briefings, and assist with the development and identification of best practices for cybersecurity risk mitigation. This work has included coordinating with federal partners to provide information sessions (including classified briefings) on threats to asset owners and operators; actively participating in National Institute of Standards and Technology working groups developing the Cybersecurity Framework; and assisting DHS in identifying critical energy infrastructure.

c. Does FERC require additional statutory authority to ensure that the security of our nation's energy delivery infrastructure is protected?

Answer: I do not believe we need additional authority at this time.

Question 17: As you know, recent wildfires in California and the Western U.S. have resulted in the loss of life and billions of dollars in damages to affected communities. Electric utilities in this region have also been impacted by both the wildfires and state law that may impede their ability to recover the costs associated with the repair and restoration of damaged transmission infrastructure. What is FERC doing to ensure that these utilities remain viable

and resilient, and does FERC have policies to ensure that utilities with affected (FERC-jurisdictional) transmission assets can recover wildfire-related expenses?

Answer: The FERC's transmission ratemaking mechanisms provide the opportunity for utilities to recover prudently incurred costs for restoration and repairs, less any recoveries already provided by insurance policies, in their transmission rates charged to customers. Generally, the FERC presumes that a utility's expenditures are prudent in the absence of a challenge casting doubt on such prudence. I note that in 2014, San Diego Gas & Electric Company recovered $23.3 million in wildfire costs through FERC-jurisdictional transmission rates.

The Honorable John Shimkus

Load Serving Entity Rights; FPA §217(b)(4):

Question 1: Section 217 (b) (4) of the Federal Power Act directs FERC to exercise its authority to facilitate the planning and expansion of the transmission grid to meet the reasonable needs of Load Serving Entities, and enable utilities with an obligation to serve to secure firm transmission rights for their long term power supply arrangements. In your opinion, what is the extent of FERC's obligation to ensure that Congress' directive with regard to firm transmission rights for long-term power supply arrangements is met?

Answer: The FERC has taken steps to comply with section 217(b)(4) of the Federal Power Act (FPA). In 2006, the FERC issued Order No. 681, in which the FERC amended its regulations under the FPA to require transmission organizations that are public utilities with organized electricity markets to make available long-term firm transmission rights that satisfy certain guidelines. I note that the D.C. Circuit has held that section 217(b)(4) does not create a general preference for Load Serving Entities in all contexts and that the section would be violated only if the FERC were to exercise its authority in a manner that is at odds with the needs of load-serving entities. The FERC will continue to exercise its authority under section 217(b)(4) consistent with that reading of the FPA.

Ownership of Transmission Assets:

Question 2: The Commission has, on several occasions, expressed strong support for Joint Ownership of transmission, noting that it has proven to be a model that gets transmission built quickly, efficiently and at low cost. In its November 15, 2012 Policy Statement on transmission incentives, the Commission "encourage[d] incentives applicants to participate in joint ownership arrangements and agrees … that such arrangements can be beneficial by diversifying financial risk across multiple owners and minimizing siting risks included," but this statement has not spurred additional joint ownership arrangements. If it can be established that the joint ownership model of transmission ownership results in a more robust

grid, should the Commission do more to actively promote joint ownership arrangements involving public power entities? Why or why not?

Answer: I believe that there can be benefits to joint ownership of transmission facilities, particularly large backbone facilities, in terms of both increasing opportunities for investment in the transmission grid and ensuring nondiscriminatory access to the transmission grid for transmission customers. However, I also believe that whether a transmission owner wants to jointly own its facility with another entity is a business decision for each owner to make. I am open to exploring further the issue of joint ownership with my colleagues.

The Honorable H. Morgan Griffith

As I mentioned in my oral questions, I have heard from multiple homeowners and small business owners – many of whom are members of the "Friends of Claytor Lake" – who have concerns with FERC's licensing process of non-federal hydropower projects. These Virginians are worried about the negative impact Shoreline Management Plans (SMPs) have on privately-owned structures and property values. Please submit answers to the following questions regarding SMPs impacts on local property owners.

Question 1: If a county has zoned a specific project – in this case a lake – in the past, and the project is located solely within the one county, does FERC have objections to the county writing the zoning ordinance in partnership with the licensee and FERC? If so, please elaborate and cite authority for such objections.

Answer: Congress has required the FERC to ensure that hydropower licenses it issues are consistent with a comprehensive plan for improving or developing affected waterways, and the FERC must carry out this mandate. However, the FERC strongly encourages the settlement of cases before it, so that, if a licensee, a county, and other stakeholders can reach agreement on land use issues, the FERC has the authority to review and approve such an agreement.

a. **Does FERC have a process in place to ensure that SMP regulations are not duplicative and/or burdensome for a locality that already has comprehensive zoning and building ordinances?**

Answer: Yes. The FERC requires that licensees develop Shoreline Management Plans through a public process that involves consultation with affected entities, including local entities. Further, any stakeholder may raise with the FERC any issues it has with a proposed plan, and may intervene in the proceeding, thus obtaining the right to seek judicial review of FERC orders approving these plans.

Question 2: What is FERC's view of the role of state agencies – such as the Virginia Department of Game and Inland Fisheries, the Virginia Department of Conservation and Recreation, and the Virginia Department of Environmental Quality – in overseeing management of environmental and recreational resources?

Answer: Although the FERC must carry out Congress' requirement that the FERC ensure appropriate treatment of environmental and recreational resources affected by licensed hydropower projects, the FERC is respectful of the role of state agencies regarding these resources. The FERC requires that notice of hydropower proceeding be provided to state agencies and that licensees consult with them. State water quality certifying agencies have the authority to impose license conditions under section 401 of the Clean Water Act, and state agencies can propose fish and wildlife conditions under section 10(j) of the Federal Power Act (FPA), which the FERC must accept unless it explains why they are inconsistent with law. State agencies also may propose license conditions under FPA section 10(a). Finally, it is common practice for the FERC to require licensees to consult with state resource agencies on an ongoing basis during the term of a license.

a. Does FERC have an inter-governmental process to avoid duplication and conflict in areas where jurisdictions overlap?

Answer: The FERC regularly consults with other agencies whose authorities overlap those of the FERC. In the course of individual proceedings, the FERC provides notice to, and seeks comments from, such agencies. In addition, the FERC has, in its regulations, more formal processes, such as meetings with agencies where they propose conditions under FPA section 10(j) that the FERC believes may conflict with law.

Question 3: Are project licensees allowed to require inspections and permits for new owners of shoreline structures upon sale of property when no changes are planned to existing structures?

Answer: To the extent that structures are located on lands that licensees own in fee or to which they have other property interests, licensees may exercise whatever legal rights they have, as established by property instruments and interpreted by the courts. Although the FERC requires licensees to comply with the terms of their licenses, it has no other involvement in the relationship between licensees and private parties.

Question 4: Are project licensees allowed to require modification or removal of grandfathered structures that do not conform to new and current requirements?

Answer: Structures located on licensee-owned lands or lands to which a licensee has property rights are subject to whatever legal rights the licensee has to require modification or removal of those structures. The nature and extent of a licensee's property rights are matters outside the FERC's jurisdiction. Issues with property rights must be resolved by the courts.

Question 5: Are project licensees allowed to impose standards that impact property outside the project boundary?

Answer: The FERC has jurisdiction only over lands and waters that are part of a licensed project, which generally are limited by the project boundary. To the extent that licensees hold rights to lands that are not part of a project, the FERC has no jurisdiction over the licensee's exercise of those rights.

The Honorable Bill Johnson

Question 1: Congress provided FERC with authority under the Natural Gas Act to authorize the siting and construction of onshore and near-shore LNG export facilities. Once FERC has completed the review required under the National Environmental Policy Act, the Department of Energy begins a public interest review for the proposed export of the commodity. Given the sequential nature of these reviews, it is imperative that FERC's review be conducted efficiently and expeditiously.

a. Please list and describe the status of all pending LNG export applications before the Commission.

Answer: Attached is a table of all liquefied natural gas (LNG) export applications which currently have a pending status.

Pending LNG Export Applications				
Docket	**Company**	**Project Name**	**State**	**Application Filed/Amended**
CP15-521-000	Gulf LNG Liquefaction Company, LLC Gulf LNG Energy, LLC Gulf LNG Pipeline, LLC	Gulf LNG Liquefaction	MS	6/19/2015
CP15-550-000 CP15-551-000 CP15-551-001	Venture Global Calcasieu Pass, LLC; TransCameron Pipeline, LLC	Venture Global Calcasieu LNG, TransCameron Pipeline	LA	9/4/2015 6/28/2016
CP16-116-000	Texas LNG Brownsville, LLC	Texas LNG	TX	3/31/2016

CP16-454-000 CP16-455-000	Rio Grande LNG, LLC; Rio Bravo Pipeline Company, LLC	Rio Grande LNG, Rio Bravo Pipeline	TX	5/5/2016
CP16-480-000	Annova LNG Common Infrastructure, LLC Annova LNG Brownsville A, B, and C. LLC	Annova LNG	TX	7/13/2016
CP17-20-000 CP17-21-001 CP18-7-000	Port Arthur LNG, LLC & PALNG Common Facilities Company, LLC Port Arthur Pipeline , LLC	Port Arthur LNG Export and Pipeline	TX, LA	11/29/2016 10/16/2017
CP17-41-000	Eagle LNG Partners Jacksonville, LLC	Jacksonville Project	FL	1/31/2017
CP17-66-000 CP17-67-000	Venture Global Plaquemines LNG, LLC Venture Global Gator Express, LLC	Plaquemines LNG and Gator Express Pipeline Project	LA	2/28/2017
CP17-117-000 CP17-118-000	Driftwood LNG LLC, Driftwood Pipeline LLC	Driftwood LNG and Pipeline	LA	3/31/2017
CP17-178-000	Alaska Gasline Development Corporation	Alaska LNG	AK	4/17/2017
CP17-470-000	Freeport LNG Development, LP	Train 4 Project	TX	6/29/2017
CP17-494-000 CP17-495-000	Jordan Cover Energy Project, L.P. Pacific Connector Gas Pipeline, LP	Jordan Cove LNG Terminal Pacific Connector	OR	9/21/2017

b. Please list the number of full-time equivalent staff responsible for processing LNG export applications.

Answer: Staff from a number of different FERC program offices – the Office of the General Counsel, the Office of Energy Market Regulation, the Office of Enforcement, and the Office of

Energy Projects – work on LNG export proposals and their companion interstate pipeline supply line proposals. The Office of Energy Projects contains a staff of 76 geologists, biologists, archaeologists, engineers, and other technical experts who are primarily responsible for analysis of all natural gas infrastructure proposals, including LNG projects. Of this staff, there are 14 engineers specifically charged with performing engineering and safety review of LNG facility designs and conducting both construction and operational inspections. The number of staff working on LNG export proposals at any one time is dependent on the nature and complexity of the various proposals under consideration and the number of other gas infrastructure proposals before the FERC.

c. Please describe any steps already taken or planned to improve efficiency and expedite the processing of LNG export applications.

Answer: The Office of Energy Projects has recently increased use of contractors to complete the construction compliance inspections for approved export LNG projects, has increased hiring efforts for engineers with LNG expertise, is actively exploring direct and third party contractor options, and is implementing procedural adjustments to improve processing timelines for pending LNG export applications. I also note that on April 19, 2018 the FERC issued a Notice of Inquiry (NOI) initiating the FERC's review of its 1999 policy statement on the certification of new natural gas transportation facilities. Among other things, the NOI seeks comments on how the FERC might improve the efficiency of its review of applications for natural gas infrastructure. Comments on that NOI are due to the FERC on June 25, 2018.

The Honorable Billy Long

Question 1: On March 23rd, it was revealed that Iranian hackers attempted to breach FERC's computer systems. Although the extent of the breach has not been revealed publicly, I am deeply concerned that the sensitive details of our critical infrastructure could have fallen into the hands of malicious actors.

a. In this unclassified setting, what can you tell us about this breach?

Answer: In August of 2017, the FERC was notified by the Federal Bureau of Investigation that six employee email accounts were compromised and that the emails received by the individuals were copied utilizing an Outlook rule and forwarded to an unauthorized source. The compromise was a result of a "password spray" attack conducted on the FERC's cloud based email system sometime between November 2016 and August 2017. The FERC took immediate action, initiating incident response capabilities to mitigate the vulnerability of the email accounts, and notified the appropriate authorities as required by federal mandates. The FERC is conducting an investigation of the impacted email accounts and at this time has no evidence that anyone accessed data that would pose a significant threat to the grid infrastructure. The FERC continues to work with external authorities

to complete the investigation and to develop communication plans to notify impacted external entities.

b. What steps are being taken to prevent this from happening again?

Answer: Upon notification of the compromise, the FERC took the following steps to mitigate the vulnerability of the impacted employee email accounts:

- Enforced enterprise password resets to all FERC email accounts;
- Removed malicious Outlook forwarding rule within the six email accounts;
- Globally disabled users' ability to auto forward emails to a non "@ferc.gov" email address;
- Updated IT Service Desk procedures for password resets by specifically implementing a password generator for temporary passwords; and
- Retrained IT Service Desk staff on policy and procedures for password resets.

Additionally, during the time of the breach, the FERC was in the process of implementing a multifactor authentication solution for employee access to its cloud based email system. The solution has been deployed (completed), and the FERC is actively monitoring enforcement of multifactor authentication use to its remote cloud based email system to prevent this from happening again.

Question 2: Recently, City Utilities of Springfield, Missouri, has seen a substantial rise in its transmission costs in the Southwest Power Pool (SPP). Most of the costs are related to funding transmission projects outside of Missouri. Some of the projects allow utilities to access renewable energy located outside the state, however, the benefits are outweighed by the rise of transmission costs for projects located far away. SPP's own studies have shown that City Utilities' transmission costs and energy prices are substantially higher than any other customer in the SPP.

a. Will FERC address the concern that some customers like those in the City of Springfield, are paying for assets from which they receive no benefit?

Answer: I understand that SPP is working with its stakeholders on a proposal to address the concerns you have identified, and I encourage SPP to continue to work with its stakeholders on this issue. The FERC will address any proposal filed by SPP on this matter.

b. How can RTO policies that result in transmission costs to consumers that are not commensurate with the benefits be deemed just and reasonable under the Federal Power Act?

Answer: The FERC has required public utility transmission providers to participate in regional transmission planning processes that are designed to identify and facilitate development of more efficient or cost-effective electric transmission facilities. To address a longstanding obstacle to the development of such facilities, the FERC also has required that regional transmission planning processes include a method to allocate the costs of those facilities in a manner that is at least roughly commensurate with their benefits. Implementing those requirements, the FERC has accepted a variety of cost allocation methods, which reflect the considerable flexibility that the FERC gave individual regions to determine what benefits should be considered and how those benefits should be calculated. When a party contends that the approach adopted in its region is resulting in an allocation of costs that no longer satisfies the FERC's standards, the FERC will examine that contention.

The Honorable Richard Hudson

Question 1: As you know, my bill H.R. 2786, will expedite the approval process for small conduit hydropower projects. This bill passed the House by an overwhelming vote of 420-2, and there seems to be support for it in the Senate. You have also previously indicated that FERC would be supportive of streamlining the permitting process for these types of projects.

a. Will you commit to working with the Committee to see this bill signed into law?

Answer: My staff and I will be happy to provide Congress whatever technical assistance it may require in drafting and considering H.R. 2786.

Question 2: As you know, FERC is litigating a number of enforcement cases in federal district court and several of these cases involve virtual trading in the electricity markets. While some suggest that virtual trading allows utilities to hedge against price volatility and congestion, others have argued that virtual transactions are not being used as intended, resulting in profits to traders without adding any commensurate benefit and a decline in the performance of the markets.

a. Since there is a track-record of market manipulation involving virtual products, does FERC have any plans to review its existing policies regarding virtual trading in RTO markets?

Answer: The FERC is currently considering existing policies related to virtual transactions in several pending proceedings and, therefore, I do not want to prejudge those issues. More generally, the FERC continually monitors the functioning and efficiency of its markets, and seeks to identify opportunities for improvement.

b. What further steps can FERC take to prevent market manipulation through virtual trading?

Answer: The FERC's Office of Enforcement runs a market surveillance program which includes, among other things, monitoring all virtual trading in the RTO/ISO markets and identifying potentially manipulative behavior. The FERC's regulations require each jurisdictional RTO/ISO to electronically deliver to the FERC, on an ongoing basis, data related to the markets the RTOs/ISOs administer, including market data related to price formation such as virtual bids, offers, and cleared transactions. The Office of Enforcement's Division of Analytics and Surveillance uses these data to run algorithmic screens for all virtual transactions. Analysts review all of the screen results to determine if there is suspicious virtual trading activity and further inquiry is needed. In addition, analysts review data on both physical and financial positions that could benefit from improper virtual trading. The Office of Enforcement regularly communicates to industry participants how it surveilles virtual trading and provides high-level descriptions of conduct that may trigger a surveillance alert for potentially manipulative activity. The Office of Enforcement's robust surveillance program and industry outreach has been effective in identifying potential manipulation that involves virtual trading, increasing compliance, and deterring such manipulative activity.

The Honorable Tim Walberg

Question 1: Chairman McIntyre, at the NARUC annual conference in February, press reports indicated that you expressed your desire to update the regulations implementing PURPA. One issue that has not gotten much attention but that I hope you will look at is the impact that FERC's implementing regulations are having on natural gas powered, all-electric fuel cells. FERC's regulatory definition of a cogeneration facility requires that to qualify as a QF, a cogeneration facility must produce electric energy and thermal energy for an industrial purpose. The underlying statute only requires that a cogeneration facility produce electric energy and other forms of useful energy. This more stringent regulatory definition has had the effect of denying natural gas powered all electric fuel cells QF status and creating an uneven playing field in the market. The last time Congress opined on PURPA in the 2005 Energy Policy Act Congress specifically directed FERC to update PURPA regulations to ensure "continuing progress in the development of efficient electric energy generating technology." Natural gas powered fuel cells were not commercially available in 2005. However, the technology is now commercial, economical and can achieve efficiencies as high as 65%, exceeding the efficiency requirements under PURPA regulations. However, because of the overly restrictive regulatory definition of a cogeneration facility, FERC's regulations are having the opposite effect of what Congress intended under the Energy Policy Act of 2005.

So my question to you, Chairman McIntyre, is will you commit to looking at the treatment of natural gas powered, all electric fuel cells under PURPA regulations? Specifically, will you

examine whether something short of a full-blown rule making can address this small but important issue?

Answer: The FERC previously initiated a review of its PURPA policies, and at the FERC's May 17, 2018 open meeting I announced that I have directed FERC staff to return to that effort. I anticipate that we will allow for additional public comment on these types of issues in the context of that review. However, I note that under PURPA, a "cogeneration facility" is defined as "a facility which produces (i) electric energy, and (ii) steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating, or cooling purposes." 16 U.S.C. § 793(18)(A) (2012). Altering the definition may ultimately be a matter for Congress rather than the FERC.

Question 2: In 1983, the Supreme Court stated that FERC had "prescribe[d] the maximum rate authorized by PURPA," in part because it was just getting familiar with the new statute, and noting that customers would not significantly benefit from lower rates because there was a need, at that time, to incentivize new small power production facilities. Now, renewable portfolio standards and customer preferences have driven high rates of renewable facilities, and according to the NRDC, since 2008, costs have fallen dramatically: residential solar PV has fallen by 55%; utility scale solar PV has declined by 71%; wind costs have fallen by 75%.

a. Given the changes in the renewable landscape, what can FERC do to ensure that energy customers are not paying a premium for FERC's 40 year old regulations implementing PURPA? Certain states in organized markets have sought to implement market pricing for QFs, but those programs were struck down by federal courts because they ran afoul of FERC's regulations on pricing. How does FERC intend to address that challenge? How can FERC implement market pricing for qualifying facilities to ensure that customers do not pay more for renewable energy under PURPA?

Answer: While the FERC's regulations identify factors that should be considered in establishing such rates, the FERC does not itself establish the rates that qualifying facilities receive. Rather, that responsibility lies with states. In fact, PURPA provides that no rule adopted by the FERC "shall provide for a rate which exceeds the incremental cost to the electric utility of alternative electric energy," and PURPA defines that incremental cost as "the cost to the electric utility of the electric energy which, but for the purchase from the cogenerator or small power producer, such utility would generate or purchase from another source."

When establishing the rates a qualifying facility should receive, the states have considerable discretion. While there are factors in the FERC's regulations that the states are to consider, these factors provide states the ability to ensure that ratepayers are ultimately charged rates that reflect cost-effective procurement of electric energy.

Finally, as noted above, at our May 17, 2018 open meeting I announced that I have directed FERC staff to return to the PURPA review initiated a few years ago. Thus, the FERC is considering potential next steps regarding implementation issues under PURPA.

b. Ironically, FERC has stated that it will examine the 1999 Certificate Policy Statement because 1999 was a long time ago. How does FERC intend to review its PURPA regulations from 1980?

Answer: See my response to your question 2(a).

The Honorable Scott Peters

Question 1: As a Californian and more importantly, a San Diegan, you might guess that I'm particularly concerned with the connection between wildfires and electric grids, through issues like vegetation management, power management, and inverse condemnation, to name a few.

Recently, Governor Brown announced a need to focus on modernizing vegetation management practices, ensuring utility and public infrastructure maximizes resilience to extreme weather events and natural disasters, and updating liability rules and regulations for utility services in light of changing climate and the increased severity and frequency of weather events.

Chairman McIntyre, do you agree with the governor and if so, how do you believe we should move forward?

Answer: The FERC has certified the North American Electric Reliability Corporation (NERC) as the Electric Reliability Organization. NERC develops and enforces reliability standards for the bulk power system, subject to approval by the FERC, including current standard FAC-003-4, Transmission Vegetation Management. This standard requires entities to manage vegetation to prevent outages caused by vegetation through maintaining clearances between transmission lines and vegetation on and along transmission rights-of-way. The standard generally applies to all transmission lines operated at or above 200 kV and any lower voltage lines determined to be important to the reliability of the bulk power system.

However, the standard neither advocates for nor discourages any particular method as to how a utility chooses to manage vegetation growth, nor does it set a maximum clearance distance. The choice of how to trim trees and manage vegetation growth near a power line is primarily made by the electric utility, subject to state and local requirements and laws, applicable safety codes and any limitations or obligations specified in right-of-way agreements to the extent they do not conflict with the FERC-approved reliability standards.

Question 2: I assume you're familiar with the plight of California customers and utilities given our State's recent devastating wildfires, including the application of "inverse condemnation" that may threaten the long-term fiscal health of our utilities.

a. In your experience, what sort of utility-related costs come in the aftermath of wildfires or other natural disasters? Repair and restoration? Other damages and liabilities?

Answer: The cost of repair or replacement of transmission facilities and liability for property damage in excess of recoveries provided by insurance are two of the most common types of expenses. The costs of vegetation management and initial insurance expenses to cover a utility from at least some of the liability associated with natural disasters are also costs that must be borne by utilities.

b. I understand that in most cases, assuming the affected utility has acted prudently, then the utility may recover many of these costs through rates. Is that correct? Given the exorbitant costs associated with natural disasters, what would be the financial impact on utilities if they were unable to recover such costs in full or at least partially?

Answer: The FERC's transmission ratemaking mechanisms provide the opportunity for utilities to recover prudently incurred costs for restoration and repairs, less any recoveries already provided by insurance policies, in their transmission rates charged to customers. Generally, the FERC presumes that a utility's expenditures are prudent in the absence of a challenge casting doubt on such prudence. I note that in 2014, San Diego Gas & Electric Company recovered $23.3 million in wildfire costs through FERC-jurisdictional transmission rates. The financial impact on utilities if they were unable to recover would vary on a case-by-case basis, but in the event a utility was not able to pass such costs to ratepayers, the financial burden would be borne by shareholders.

c. Is there a correlation between the fiscal health of a utility and the reliable service it is able to provide its customers? Similarly, is there a correlation between the fiscal health of a utility and its ability to build a stronger, more resilient power grid?

Answer: All registered entities (i.e., utilities and other entities required to be registered with NERC due to such entities' operations and roles) are required to comply with the relevant reliability standards regardless of fiscal health. Generally, prudently incurred costs that a utility incurs for reliability purposes are recoverable from ratepayers.

d. Specific to FERC-jurisdictional facilities, assets, and rates, what ratemaking mechanisms or tools does FERC have in place to allow for consideration of recovery of costs for damages prudently incurred from natural disasters?

Answer: As noted in response to your question 2(b), the FERC's transmission ratemaking mechanisms provide the opportunity for utilities to recover prudently incurred costs for restoration and repairs, less any recoveries already provided by insurance policies, in their transmission rates charged to customers. Utility rates typically include mechanisms to take into account non-routine scenarios and emergencies in order to provide utilities with the funding needed sooner for repairs and recoveries. If assets need to be entirely replaced, utilities may seek to recover such costs over a longer period of time.

The Honorable Paul Tonko

Natural Gas Exports and Public Benefit

Question 1: The energy landscape has changed dramatically since FERC issued its 1999 policy for certifying natural gas pipeline projects. The U.S. Energy Information Administration's latest long-range projections anticipate liquefied natural gas (LNG) exports to grow significantly, so it seems reasonable to assume exports will play an increasing role in future gas infrastructure demand.

a. Will FERC's review of its 1999 policy statement consider the role of LNG exports when determining whether a proposed project is required by the public convenience and necessity?

Answer: On April 19, 2018 the FERC issued a Notice of Inquiry (NOI) initiating the FERC's review of its 1999 policy statement on the certification of new natural gas transportation facilities. The NOI seeks information and stakeholder perspectives to help the FERC explore whether, and if so how, it should revise its approach under its currently effective policy statement to determine whether a proposed natural gas project is or will be required by the present or future public convenience and necessity, as that standard is established in section 7 of the Natural Gas Act (NGA). I believe consideration of the role of LNG exports when determining whether a proposed project designed to bring natural gas to an export facility is required by the public convenience and necessity can be included in the scope of the NOI.

b. Should pipeline expansions that are intended to boost consumption overseas constitute a public benefit, particularly for those projects that require the use of federal eminent domain authority to take private property?

Answer: Section 3 of the NGA grants the Department of Energy exclusive authority to determine whether imports and exports of natural gas are in the public interest. However, the referenced FERC NOI poses questions in four broad categories of topics within the FERC's jurisdiction including whether, and if so how, the FERC should adjust: (1) its methodology for determining

whether there is a need for a proposed project, and (2) its consideration of the potential exercise of eminent domain and of landowner interests related to a proposed project. Specifically, the FERC seeks input regarding what benefits the FERC should consider in determining whether there is a public need for a proposed project. The FERC also specifically requests comments on whether the FERC should consider the intended or expected end use of the natural gas, including projects transporting natural gas to the border for export or to an LNG facility for export, in its determinations regarding public need. Comments on the NOI are due June 25, 2018 and I look forward to fully reviewing the record in this proceeding.

c. Do you believe it is possible, and would it be appropriate, for FERC to differentiate between domestic needs versus foreign exports when determining if a project is required by the public convenience and necessity?

Answer: In the NOI, the FERC requests comments on whether consideration of end uses would better inform the FERC's determination regarding whether there is a need for a proposed project. The FERC will review all input received in response to the NOI when considering any potential future FERC action.

The Honorable David B. McKinley

Question 1: When FERC denied the 403, did anyone come up with what the cost to that consumer could have been if 403 had been imposed on, let's say, in Pleasants County power plant?

Answer: Given that the Notice of Proposed Rulemaking (NOPR) initiated by the Secretary of Energy did not satisfy threshold legal requirements of section 206 of the Federal Power Act as discussed in the order terminating that proceeding, the FERC did not analyze what an appropriate cost-of-service rate would have been for resources subject to the NOPR.

The Honorable Frank Pallone, Jr.

Question 1: Pertaining to the JCP&L proposed reliability project in Monmouth County, New Jersey, echoed by New Jersey Administrative Law Judge Gail Cookson, how can you change this dynamic to ensure that utilities look at more than just new transmission lines that they look at non-transmission alternatives to ensure reliability? And how can we change incentives so that these non-transmission alternatives are still financially attractive to utilities?

Answer: The FERC's Order Nos. 890 and 1000 require open, transparent transmission planning processes for public utility transmission providers, which provide an opportunity to consider various transmission alternatives in order to identify more efficient or cost-effective solutions to

transmission needs. I support the goal of these efforts and will look for opportunities to ensure that FERC policy in this area continues to encourage consideration of the full range of potential solutions to transmission needs.