Questions for the Record and Responses for Mr. Neil Chatterjee June 1, 2016

Questions from Ranking Member Maria Cantwell

<u>Question 1</u>: Chairman Murkowski and I tried to enact energy legislation last Congress that included reforms to hydroelectric licensing at FERC.

45 percent of FERC-licensed projects accounting for one-third of licensed capacity will begin pre-filing for new licenses by 2030. For many of these projects, it will be the first time they will participate in the licensing process Congress in 1986 amended the Federal Power Act directing FERC to given equal consideration to environmental factors.

I believe that, rather waiting for Congress to Act, FERC can, on its own, could make several changes that would improve interagency cooperation in the licensing process. For example, FERC could adjust how it implements its *ex parte* rules to encourage more of its sister federal agencies to accept cooperating agency status under the National Environmental Policy Act. FERC could also accept more requests from its sister agencies for studies likely to be required in any event under other federal statutes (e.g., the Endangered Species Act) at a later stage.

• If confirmed, will you help identify and reduce barriers to interagency cooperation within FERC's existing statutory authority?

<u>Answer</u>: I am aware that the hydropower licensing process can be complex and that, as a matter of law, decision making does not rest solely with the Commission, but also with other agencies that have mandatory conditioning authority. If confirmed, I will work with my colleagues to help identify and reduce potential barriers to interagency cooperation in the hydroelectric licensing process.

Question 2: Under its existing policy, FERC only considers investments in a project on a forward-looking basis as part of the licensing process. This creates a perverse incentive to delay potential investments that could benefit the environment and ratepayers.

The Commission recently asked for comments on whether it should revise its current policy with respect to establishing the length of new license terms for hydroelectric projects.

I have supported legislation to require the Commission to treat project investments by licensees under existing licenses (beyond those already required by the license) the same way it treats investments made under new licenses. This provision has been referred to as the "early action" provision. While accounting for prior investments may complicate the Commission's determination of an appropriate length license term, changing this policy could accelerate improvements in fish passage, turbine efficiency, and other project upgrades.

• Will you commit to considering changing the Commission's current policy with respect to establishing the length of hydroelectric license terms by removing the perverse incentive to delay investments under current licenses?

<u>Answer</u>: I have appreciated working with you and your staff on hydroelectric legislation. As you note, the Commission has issued a notice of inquiry on the subject of its policy for setting new license terms for hydropower projects, which the Federal Power Act requires to be between 30 and 50 years. The Commission asked for comments on a number of issues, including "early action" and whether there should be a 50-year default license term. If confirmed, I will review responses to the notice, and I look forward to addressing this matter with my colleagues.

Question 3: Unlike the Commodity Futures Trading Commission and the Securities and Exchange Commission, FERC cannot license or ban individual traders from trading in jurisdictional markets. It is estimated that more than 2,500 firms and thousands of individual traders participate in physical electricity and natural gas markets. Little is publicly known about which banks, hedge funds, utilities, and marketers are active players.

Furthermore, a repeat offender previously fined by FERC can continue to trade. A trader convicted of criminal fraud, or a former securities or commodities trader who had their securities or commodities trade over FERC markets.

- Do you think that FERC should explore adopting a registry to keep track of repeat violators of market manipulation restrictions?
- Do you think FERC should explore a licensing regime to, among other things, keep those convicted of market manipulation in other markets from participating in FERC-regulated markets?

<u>Answer</u>: I believe that it is important to be able to track repeat violators in the energy markets and those who may have committed manipulation in other markets. If confirmed, I look forward to discussing this issue with my colleagues and determining whether FERC needs to enhance this capability, whether through a licensing regime or otherwise.

Question 4: The Federal Power Act (FPA) limits FERC's jurisdiction with respect to certain utilities and FERC's authority to require participation in organized markets. Governmental entities and non-public utilities, including federal power marketing agencies, municipal utilities, rural electric cooperatives, and public utility districts, are exempt from most regulatory oversight by the Commission.

- What is your understanding of the limitations on FERC's authority with respect to the Bonneville Power Administration?
- What is your understanding about FERC's authority to require utilities to participate in organized markets?
- Will you abide by these limitations if confirmed?

<u>Answer</u>: In most respects, FERC's authority with respect to Bonneville is more limited than with respect to public utilities. Pursuant to the Pacific Northwest Electric Power Planning and

Conservation Act (Northwest Power Act), FERC's review of Bonneville's regional power and transmission rates is limited to whether Bonneville's rates meet the three specific requirements:

- (i) whether the rates are sufficient to assure repayment of the Federal investment in the Federal Columbia River Power System over a reasonable number of years after first meeting other costs;
- (ii) they must be based upon the Administrator's total system costs; and
- (iii) whether insofar as transmission rates are concerned, they must equitably allocate the costs of the Federal transmission system between Federal and non-Federal power. FERC also has limited authority with respect to Bonneville under provisions of the Federal Power Act, such as with respect to reliability standards adopted pursuant to section 215 of that statute.

If confirmed, I would abide by those statutory limitations, unless the law is changed.

In addition, my understanding is that FERC has ruled that the decision of whether to join a regional transmission organization or independent system operator, which operate organized markets in various parts of the country, is voluntary.

Question 5: Just before resigning Commissioner Bay wrote a Concurring Opinion to an order granting a natural gas pipeline certificate in which he suggested that the Commission should reconsider its use of precedent agreements between pipelines and potential future customers to assess whether a proposed new pipeline is needed. In particular, Commissioner Bay argued that precedent agreements involving pipeline affiliates are particularly suspect.

• Do you agree with Commissioner Bay that the Commission should reexamine its policies for assessing whether a new pipeline is necessary? If not, why not?

<u>Answer</u>: I understand that the Commission's current policy regarding demonstrating need was established in 1999. I believe that agencies should, from time to time, review their policies to ensure they are functioning effectively. If confirmed, I look forward to reviewing the Commission's current policies for considering pipeline applications with my colleagues to ensure that all relevant factors are appropriately considered in the Commission's review process.

Question 6: Just before resigning Commissioner Bay wrote a Concurring Opinion to an order granting a natural gas pipeline certificate in which he suggested that the Commission should engage in a broad regional assessment of the environmental impacts of the Marcellus and Utica shale gas development activities.

• Do you agree with this recommendation? If not, why not?

<u>Answer</u>: I believe it is important that the Commission ensure that its procedures for reviewing and acting upon applications for new infrastructure are both efficient and in compliance with all applicable statutes. If confirmed, I look forward to addressing with my colleagues any opportunities for furthering these goals.

Question 7: When FERC grants a Certificate of Public Convenience and Necessity to a proposed interstate natural gas pipeline, the developer is also granted eminent domain authority. Sometimes the eminent domain authority is used before the Commission has acted on a Request for Rehearing of its initial order and before a party to the proceeding has had an opportunity to seek judicial review of the order.

• Do you believe that a pipeline should have the opportunity to utilize eminent domain authority if it remains possible that the Commission, pursuant to a Rehearing Order, or an appellate court, can still issue an order reversing FERC's decision to grant the Certificate? Please explain.

<u>Answer</u>: It is my understanding that the authority for the developer of a natural gas pipeline to use eminent domain is established by the Natural Gas Act and is enforced by state and federal courts, not the Commission. That said, if confirmed, I look forward to working with my colleagues to ensure that the concerns of landowners affected by infrastructure projects are appropriately addressed in the Commission's processes.

Question 8: Both the Federal Power Act and the Natural Gas Act require that a rate or tariff change proposed by a jurisdictional utility or interstate natural gas pipeline goes into effect if the Commission fails to act within 60 days of the proposal. There have been instances in which a rate increase has been permitted to go into effect because a tie vote prevented the Commission from acting. An appellate court has ruled that, in those circumstances, a party opposing the rate increase has no standing to challenge the rate change in court because FERC never issued an order on the matter.

• Senator Markey has proposed legislation that would enable opponents of a rate or tariff change to seek judicial review even if the Commission fails to issue an order due to a tie vote. Do you support this legislation?

<u>Answer</u>: I am reluctant to comment on the proposed legislation that you noted, but I believe in general that it is appropriate for parties to a FERC proceeding who are adversely affected by a rate or tariff change to have the opportunity to seek relief.

Question 9: FERC Order No. 1000, which among other things, requires regional transmission planning, has received mixed reviews in part because it has not led to the development of transmission lines connecting separate energy planning regions, which would help access remotely located renewable electricity resources, such as wind and solar.

• What do you believe FERC should do, if anything, to encourage interregional transmission planning?

<u>Answer</u>: In June 2016, the Commission held a technical conference to explore issues related to the competitive transmission development processes that were established to comply with Order No. 1000. Issues related to interregional transmission coordination and regional transmission planning were included in the scope of that conference and in the follow-up responsive comments sought by FERC. I believe that development of that record and continued discussions

with industry to understand the issues surrounding interregional planning could be a productive next step. I understand the importance of transmission development to providing reliable electricity service, and, if confirmed, I look forward to addressing this issue with my colleagues.

Question 10: Last year the Senate Energy and Natural Resources Committee held a hearing on natural gas pipelines. We heard testimony that, in some instances, existing natural gas pipelines are not being fully utilized. For instance, several interstate pipelines serving the northeast were not fully utilized during the Polar Vortex.

• Do you believe we should explore how to use existing natural gas pipeline capacity more efficiently before the Commission grants new Certificates to build additional pipeline capacity in the same region?

<u>Answer</u>: I believe both that it is important to make efficient use of existing natural gas pipeline capacity and that our nation may need additional natural gas pipeline infrastructure. Making efficient use of existing capacity ensures that consumers obtain maximum benefit from prior pipeline investment. Investment in new pipelines can ensure that customers receive needed gas and enhance the resilience of the gas pipeline network.

Question 11: I am concerned that sophisticated energy traders can engage in schemes designed to manipulate energy markets without actually being in violating of a tariff on file with FERC. These traders argue that FERC's anti-manipulation authority does not apply if there is no specific tariff violation?

• Don't you believe that FERC's market manipulation authority can apply even if there is not a specific tariff violation?

<u>Answer</u>: Yes, it is my understanding that FERC's anti-manipulation authority may apply even where there is no specific tariff violation.

Question 12: Cybersecurity vulnerabilities in our nation's energy infrastructure pose grave national security and economic risks to the country. The Department of Homeland Security reported that 56% of cyber incidents against critical infrastructure in 2013 were directed at energy infrastructure. This number has since decreased: in 2016 it was down to 20%, but it is still too high. Although we have mandatory cybersecurity standards for electric utilities, natural gas pipelines are subject to merely voluntary guidelines issued by the Transportation Security Administration (TSA).

• Given the increased dependence on natural gas for power generation for many of FERC regulated utilities, don't you agree that there should be a mandatory standards regime for gas pipeline cybersecurity, just as there is for electric utility cybersecurity?

<u>Answer</u>: I defer to Congress and the Transportation Security Administration (TSA) as to the adequacy of TSA's natural gas pipeline cybersecurity program. Congress has granted TSA authority to establish mandatory cybersecurity regulations for natural gas pipelines. It is my

understanding that TSA is reviewing its voluntary cybersecurity guidelines for pipelines and that FERC staff has offered assistance with that effort.

Question 13: The 2000-2001 western energy crisis did a lot of damage to my constituents and the economy throughout the region. It became clear to me in the aftermath that FERC did not have sufficient authority to prevent market manipulation and punish those engaged in these acts. Through the Energy Policy Act of 2005 we gave FERC the authority it needed. The Commission has since investigated more than 100 cases of alleged manipulation, 32 of which have been settled. The Commission has imposed approximately \$547 million in civil penalties. I understand that the industry thinks FERC's Enforcement Office has been too aggressive and that the new Trump Administration provides a golden opportunity to weaken the anti-manipulation program.

• I need your commitment that you will support a strong Office of Enforcement that acts as "the cop on the beat" to prevent utilities and marketers from taking advantage of consumers. Will you give that commitment?

<u>Answer</u>: Absolutely. I believe in strong markets and I believe that strong markets are dependent on strong enforcement. Market participants have to have faith that there is not manipulation and I will work to ensure that enforcement is effective, fair and transparent. The commitment of FERC to continue to actively combat market manipulation is essential. I believe that greater transparency produces stronger markets and that is also true in the enforcement context. FERC has been working with other agencies to foster better coordination and I believe my experience and relationships across such agencies will add to that enhanced coordination.

Question 14: Last month, Secretary Perry sent a memo to his Chief of Staff asking that the Department prepare a study examine the state of wholesale electricity markets, especially why coal and nuclear plants are having a hard time competing with natural gas and renewable resources. The Secretary's memo also hinted that state and federal renewable energy incentives are to blame.

The Secretary followed this up a few days later with a speech in New York during which he suggested that the Trump Administration may try to preempt state programs, such as renewable energy standards. It does not take a rocket scientist to know that it is low natural gas prices, not renewable energy, that is making coal and nuclear power uncompetitive.

But it is also troubling that the Administration appears to be suggesting that adding more renewable energy threatens grid reliability especially when our national labs have repeatedly found this is not true. It is even crazier that Secretary Perry is making these false statements since Texas has more wind power than any other state.

• Are you aware that the National Renewable Energy Laboratory (NREL) has found that the eastern grid and the western grid could each reliably accommodate 30 percent renewable energy rates without any changes and that a third NREL study concluded that renewable energy will be able to reliably generate 80% of U.S. power needs by 2050 if we invest in increased grid flexibility?

<u>Answer</u>: Yes, I am aware of those studies. As I mentioned during my confirmation hearing, we need to be able to call on all forms of resources to meet our needs, including renewable resources. In pursuing this goal, we also must maintain our commitment to grid reliability.

<u>Question 15:</u> There is a growing tension between state energy policies and federally regulated electricity markets. Low wholesale electricity prices are benefiting consumers and challenging the economics of coal and nuclear power plants. The revolution in natural gas is the main cause. Commissioner Powelson in particular has been a big booster of the benefits of the Marcellus Shale.

Meanwhile, states continue to exercise their authority to encourage particular types of generation – especially zero emissions technologies. These policies have taken different forms, including: renewable portfolio standards (29 states), carbon caps (the Northeast and California), and direct payments to nuclear power plants (New York and Illinois).

Last year, the Supreme Court made clear that the Power Act prohibits state policies that directly intervene in wholesale markets. But the Court left clear room for states to continue to preferring some resources over others. Given these facts, I worry about FERC rushing to judgment based on an outdated or ideological view of the grid.

• Do you agree that FERC should not intervene and use the Federal Power Act to preempt state clean energy policies?

<u>Answer</u>: At times, state policy decisions potentially interact with FERC-jurisdictional wholesale electricity markets. FERC's role is to ensure that wholesale electricity rates remain just and reasonable. I appreciate that states and the Commission need to be respectful of each other's boundaries under the law. Thus, I will be respectful of state boundaries while carrying out my duties as a FERC commissioner, if confirmed.

Question 16: Since 1978, Section 210 of the Public Utility Regulatory Policies Act (PURPA) has required monopoly utilities to purchase competitive renewable energy from independent producers. While Congress has relaxed this requirement for utilities in organized electric markets, PURPA remains a key driver of renewable energy and competitive prices in the West and the Southeast.

Last June, FERC held a technical conference on the implementation of PURPA. Utilities used the technical conference to argue for greater FERC intervention to limit opportunities for small renewable energy developers. I believe state commissions already have many ways to tailor the must-purchase requirement to address local concerns. I am deeply skeptical about utilities running to Congress and FERC when they don't get their way with their own regulators.

• Do you agree that regulators in traditional monopoly states have powerful ways to adjust the "must-purchase" requirement under PURPA?

• Given the states' own authority under PURPA, why would FERC need to intervene to limit one of the only federal mechanisms that encourage independent power production in those states?

Answer: Both FERC and the states have important roles under PURPA. Last year, FERC convened a technical conference on a number of issues related to the statute's implementation. As I mentioned during the hearing, I believe that any major changes to PURPA need to come from Congress.

<u>**Question 17:**</u> Would you continue FERC's encouragement of a holistic approach to transmission planning that incorporates non-wires alternatives, high-voltage transmission lines, and advanced transmission technologies (such as high-capacity and high-efficiency conductors, compact transmission towers, and variable frequency transformers)?

<u>Answer</u>: FERC's Order Nos. 890 and 1000 require open, transparent transmission planning processes for public utility transmission providers. These planning processes provide the opportunity for consideration of various alternatives in identifying more efficient or cost-effective solution to transmission needs. I support planning that incorporates viable alternatives, including those that may be non-wires.

Question 18: FERC is responsible for protecting against corporate affiliate abuse in a variety of transactions, including power sales and facility acquisition. Transactions between a public utility and a merchant affiliate can expose the utility's captive customers to cross-subsidizing the affiliate and its shareholders.

- Are you familiar with the provisions of the Federal Power Act that prohibit public utilities from inappropriately cross-subsidizing non-utility corporate affiliates?
- Will you commit to enforcing existing FERC standards applied to reviewing market rate contracts between corporate affiliates?
- Do you agree that the transfer of facilities subject to FERC jurisdiction between a public utility and its merchant affiliate must always be scrutinized for cross-subsidization?

<u>Answer</u>: Yes, I am familiar with the provisions of section 203 of the Federal Power Act that prohibit public utilities from inappropriately cross-subsidizing non-utility corporate affiliates. I am also familiar with the Commission's policies under section 205 of the Federal Power Act that protect customers from the effect of inappropriate cross-subsidization between a public utility and its market regulated power sales affiliates.

I am generally aware of the Commission's precedent that applies to market rate contracts between corporate affiliates, and if confirmed, I will ensure compliance with the Commission's rules and regulations.

Question 19: In 2013, Congress passed the Hydropower Regulatory Efficiency Act, directing FERC to investigate the feasibility of issuing a license for hydropower development at non-

powered dams and closed loop pumped storage projects during a two-year period. FERC implemented a pilot program, ultimately applied to one non-powered dam project in Kentucky, and issued a license for the project within two years. Members of this committee look forward to FERC's report, required under the 2013 law, on this process, following a workshop held by the Commission this spring.

• If confirmed, how would you approach the challenge of reducing disincentives in the licensing process and potentially inadequate compensation in the wholesale markets to the development of hydropower at existing non-powered multi-purpose dams and at appropriately sited and designed pumped storage projects?

<u>Answer</u>: I believe that we should be able to rely on all forms of energy resources, including hydroelectric resources. I understand that Commission staff submitted to Congress the report required by the 2013 law on May 25, 2017, and that the report said hydropower licenses have been and can be issued in two years or less under the right circumstances. If confirmed, I look forward to discussing with my colleagues ways in which FERC could further improve the procedures for the development of hydropower.

Questions from Senator Ron Wyden

Question 1: It appears that the White House has thrown its support behind the Jordan Cove liquefied natural gas project, being discussed in my home state of Oregon. Should you be confirmed as FERC commissioner, will you commit to avoiding any step that could be interpreted as political interference from the White House in FERC's deliberative permitting process in Oregon and nationwide? And will you commit to leading a thorough and transparent stakeholder process, where all community voices in Oregon -- including tribal community voices -- can be heard?

<u>Answer</u>: The Commission is an independent agency and is required by the Natural Gas Act to issue decisions based on information set forth in the public record of each proceeding. That is an approach that I support and that I expect to continue. I believe that the Commission's processes should be open and transparent. Also, as I mentioned at the hearing, I appreciate that there are stakeholders with a variety of viewpoints on these issues, and all sides of the issues should be heard before a decision is made. If confirmed, I look forward to considering all comments in the record during deliberations on any project with my colleagues before making any decision.

Question 2: As you know, FERC has authority under the Natural Gas Act to review gas pipeline applications. What factors would lead you to deny approval for a new or expanded pipeline? Does that calculation change if there are customers for the proposed pipeline's capacity?

<u>Answer</u>: I recognize the importance of natural gas pipeline infrastructure to meeting the energy needs of our nation's consumers. The Natural Gas Act requires the Commission to determine that proposed pipeline projects are consistent with the public convenience and necessity. If confirmed, I look forward to reviewing the Commission's policies and processes for considering pipeline applications with my colleagues to improve their efficiency while ensuring that all relevant factors are appropriately considered.

Question 3: Former chairman Bay made comments before he left FERC noting that it is "inefficient to build pipelines that may not be needed over the long term and that become stranded assets." He also suggested that simply considering precedent agreements may not be an adequate measure of need. How would you define need for a gas pipeline? Is having customers for the pipeline's capacity enough? How is that decision-making changed if those customers are the same entities-- or affiliates of those entities--involved in seeking approval for the pipeline?

<u>Answer</u>: I recognize the importance of natural gas pipeline infrastructure to meeting the energy needs of our nation's consumers. The Natural Gas Act requires the Commission to determine that proposed pipeline projects are consistent with the public convenience and necessity. If confirmed, I look forward to reviewing the Commission's policies and processes for considering pipeline applications with my colleagues to improve their efficiency while ensuring that all relevant factors are appropriately considered.

Question 4: As commissioner, what steps would you take to promote public participation, transparency, and confidence in FERC's pipeline certification process by incorporating community, landowner and scientific inputs?

<u>Answer</u>: I agree that public engagement is important to FERC proceedings. Development of a record that reflects comments on all sides of an issue enhances FERC's ability to make appropriate decisions. The Commission is required to issue decisions based on the facts set forth in the public record (including input from affected landowners, general public, and other agencies), as well as based on legal precedent and policy. If confirmed, I look forward to addressing with my colleagues any steps the Commission may take in promoting public participation, transparency and trust in the pipeline certification process.

Question 5: Also in his departing comments from FERC, former chairman Bay noted that it is "in light of the heightened public interest and in the interests of good government, I believe the Commission should analyze the environmental effects of increased regional gas production from the Marcellus and Utica." As Commissioner, if confirmed, can you commit to directing Commission staff to conduct such studies on new and expanded pipelines?

<u>Answer</u>: I believe the Commission's consideration of pipeline applications should ensure that its procedures for reviewing and acting upon applications for new infrastructure are both efficient and in compliance with all applicable statutes. If confirmed, I look forward to addressing with my colleagues any opportunities for furthering these goals.

Question 6: Chairman Bay also noted that "where it is possible to do so, the Commission should also be open to analyzing the downstream impacts of the use of natural gas and to performing a life-cycle greenhouse gas emissions study." It is my opinion that FERC should incorporate climate considerations into their evaluation of the environmental impacts of proposed natural gas pipelines and liquefied natural gas export facilities, as required under the National Environmental Policy Act. As Commissioner, if confirmed, can you commit to including climate change considerations and analysis in the environmental review conducted on new and expanded pipelines?

<u>Answer</u>: I understand that the Commission's environmental analysis for a proposed natural gas pipeline or liquefied natural gas export facility considers the greenhouse gas emissions associated with the construction and operation of that project, as well as impacts potentially resulting from climate change over the region in which the project is located. If confirmed, I look forward to working with my colleagues in determining how information regarding climate impacts is addressed appropriately in such proceedings.

Question 7: I am concerned about abuse of eminent domain by the natural gas and pipeline industries in recent years, aided and abetted by premature and improper FERC authorization of eminent domain. A review of FERC's approval process is needed, because of the ramifications of the certificate, which grants the holder the ability to exercise eminent domain. If confirmed, will you take steps to review, and revise if necessary, the eminent domain proceedings at FERC? Also, can you commit to holding an evidentiary hearing, as articulated in FERC's official policy, when a significant amount of eminent domain is implicated in a project?

<u>Answer</u>: It is my understanding that the Natural Gas Act grants the ability to exercise eminent domain to the pipeline company once the Certificate is issued. However, if confirmed, I look forward to addressing with my colleagues the issue of how best to ensure that the concerns of landowners affected by infrastructure projects are appropriately taken into account in the Commission's decision making process.

Question 8: Mr. Chatterjee, a broad coalition in Oregon, including consumer advocates, electric utilities and environmental groups, championed recent legislation to increase the renewable portfolio standard to 50% for our state. The state legislature made that decision and the governor signed that into law. Now, in some FERC-supervised markets, this sort of democratic process is under attack. FERC recently held a technical conference to explore those assaults on state authority. Do you support the federal government trampling states' rights to pursue state energy policies, such as renewable portfolio standards? Or do you think states should have the authority to establish their own energy policy through their constitutional rights?

<u>Answer</u>: I believe that states should have the authority to make resource decisions within their jurisdiction. However, we need to be sensitive to instances where state policy intrudes into FERC-jurisdictional wholesale electricity markets and into FERC's role to ensure that wholesale electricity rates are just and reasonable. I also believe to ensure safe and reliable electricity we need fuel diversity, and I understand that there are some very complex questions about how to maintain that fuel diversity given some of the market challenges. FERC recently held a technical conference with respect to the interaction between state initiatives and FERC-jurisdictional wholesale electricity markets. If confirmed, I look forward to reviewing the record in the Commission's proceeding and working with my colleagues on these issues.

Question 9: Energy storage and distributed energy resources are some of the most rapidly growing energy technologies out there, and they can provide multiple benefits to the grid. And yet, there are unfair barriers to energy storage and distributed energy resources in the wholesale electricity markets. Do you agree FERC should be promoting technology-neutral competitive

markets? More specifically, do you think energy storage assets--and "distributed energy resources"--should be able to compete in wholesale electricity markets?

In your view, should FERC have a significantly different process for its certification of gas pipelines than it does for interstate transmission lines?

<u>Answer</u>: As I mentioned at my confirmation hearing, I believe that the nation should seek to rely on all forms energy resources, including storage resources. The Commission recently proposed new requirements to improve the opportunities for electric storage participation in organized wholesale electric markets. In issuing its proposed rule, the Commission stated that it has observed that market rules designed for traditional generation resources can create barriers to entry for emerging technologies, and I understand that the proposal seeks to eliminate or minimize those barriers. If confirmed, I look forward to addressing this matter with my colleagues.

Both types of infrastructure raise similar siting issues. After Congress in 2005 granted the Commission limited backstop authority with respect to the siting of electric transmission facilities, the Commission adopted implementing regulations based in part on its experience with permitting natural gas pipelines. However, the effectiveness of that statutory authority has been diminished by court decisions regarding when the Commission's backstop siting authority could be exercised and the sufficiency of the Department of Energy's national interest electric transmission corridor designations (which underline the Commission's backstop siting authority).

Question 10: As commissioner, what steps would you take to promote public participation, transparency, and confidence in FERC's pipeline certification process by incorporating community, landowner and scientific inputs?

Answer: Please see my response to your Question 4 above.

<u>Question 11</u>: Given that FERC has endorsed markets and competition for energy and ancillary services, is it your opinion that this approach can be successfully used for any and all providers of all reliability-related services?

<u>Answer</u>: Both energy markets and the manner by which ancillary services are obtained differ in various regions of the country. I believe that organized markets benefit consumers in those parts of the country that have chosen that structure. I also respect the decisions of other parts of the country not to pursue that path and, instead, to rely on a more traditional approach.

Question 12: Inter-regional, and economically beneficial electricity transmission is often neglected by the utility industry because of divisions in service areas, state's boundaries, and preferences of utilities to take narrow view of economic benefits. How will you support infrastructure investments, specifically electricity transmission, that bring lower energy costs to consumers?

<u>Answer</u>: FERC's Order No. 1000 may provide a platform for further discussion on ways to support needed transmission investment that brings reliable, cost-effective energy to consumers. I understand that much of the regional planning pursuant to Order No. 1000 is relatively recent and that FERC recently has directed increased focus and attention to interregional coordination. Finally, dialogue with state regulators over matters of beneficiaries and siting may prove beneficial.

Question 13: Do you believe there's been a lack of development of interregional transmission facilities, and if so, are there actions the Commission should take to facilitate such development?

Answer: The Commission has explored the issue of interregional transmission development in recent years. The Commission issued Order No. 1000 in 2011, a Final Rule that required improved coordination between neighboring transmission planning regions for new interregional transmission facilities. In addition, Order No. 1000 required each public utility transmission provider to participate in a regional transmission planning process that has an interregional cost allocation method. To date, the Commission has issued final orders approving interregional transmission coordination procedures for all the pairs of neighboring transmission planning regions that were required to comply with the Final Rule. As these pairs of regions have worked to implement their interregional transmission coordination procedures, the Commission has continued to examine issues related to interregional transmission development. I support this continued effort to make sure FERC policies are meeting their intended goals. In June 2016, the Commission convened a technical conference addressing competitive transmission development, including interregional transmission coordination. Several speakers at the technical conference, as well as some FERC Commissioners, questioned whether the Commission should do more to facilitate interregional transmission development. After the technical conference, the Commission requested post-technical conference comments on several issues related to interregional transmission development. If confirmed, I look forward to reviewing the record and addressing this issue with my colleagues.

<u>Question 14</u>: How will you facilitate the development of interregional transmission projects shown to provide more efficient or cost-effective solutions to regional needs?

<u>Answer</u>: In response to the preceding question, I noted that this issue is currently under consideration at the Commission following the June 2016 technical conference and subsequent request for post-technical conference comments. The technical conference proceeding has provided the Commission with a record that details various commenters' concerns with the interregional transmission coordination procedures in place today, as well as their suggestions for supporting more efficient or cost-effective interregional transmission development. If confirmed, I look forward to reviewing this record and addressing this issue with my colleagues.

<u>Question 15</u>: How will you promote joint and coordinated planning between regional transmission planners for needed inter-regional transmission?

<u>Answer</u>: The June 2016 technical conference on transmission development referenced in my response to the preceding question also explored the issue of joint and coordinated planning for interregional transmission facilities. Moreover, numerous commenters addressed issues relating

to joint and coordinated interregional transmission planning in their post-technical conference comments. If confirmed, I look forward to reviewing this record and addressing this issue with my colleagues.

Question 16: Will you ensure interregional transmission project proposals have the opportunity to be studied by each affected RTO?

<u>Answer</u>: As I described in my answer to Question 13, the Commission issued Order No. 1000 in 2011. In Order No. 1000, the Commission required that, to be eligible for interregional cost allocation, an interregional transmission project must be selected in each region's regional transmission plan for purposes of cost allocation. As a result, Order No. 1000 provides that all potential interregional transmission projects must be considered through each transmission planning region's regional transmission planning process before they are eligible for interregional cost allocation. Because Order No. 1000 applies to all public utility transmission providers, this is true regardless of whether or not the transmission planning region is also a Regional Transmission Organization.

Question 17: How will you ensure that interregional evaluation processes and cost allocation methods encompass the full range of benefits (e.g., reliability, resilience, security, facilitating state policies, and congestion/planning reserve margin reduction) provided by interregional projects?

<u>Answer</u>: As I noted in my answer to Question 13, in June 2016 the Commission convened a technical conference on competitive transmission development, including interregional transmission development. At the technical conference, both the speakers and FERC Commissioners raised issues relating to the evaluation processes and interregional cost allocation methods that apply to interregional transmission facilities. Commenters also addressed these issues in their post-technical conference comments. If confirmed, I look forward to reviewing this record and addressing these issues with my colleagues.

Questions from Senator Bernard Sanders

Climate change

Question 1: President Trump has suggested in the past that climate change is a hoax. Is the President correct? Is climate change a hoax?

Answer: I do not believe climate change is a hoax.

Question 2: Do you agree with the vast majority of scientists that climate change is real, it is caused by human activity, and that we must aggressively transition away from fossil fuels toward energy efficiency and sustainable energy like wind, solar, and geothermal?

<u>Answer</u>: I believe there is much we can do to achieve a sensible balance between protecting the environment from climate change and other threats while still maintaining a robust economy and the affordable and reliable power necessary to meet society's needs.

Question 3: Do you agree with the vast majority of scientists that the combustion of fossil fuels contributes to climate change?

Answer: Yes.

Question 4: Do you believe that FERC has a role in reducing the extraction and use of fossil fuels?

<u>Answer</u>: It is my understanding that the Natural Gas Act gives the Commission no direct role regarding the extraction or use of fossil fuels.

Question 5: If confirmed, how will you work to address climate change?

Answer: I think it is important to look at the actual role FERC plays in addressing this issue. Any policy to mitigate carbon emissions should originate in Congress; it should not be designed at FERC. Addressing climate change will require policy changes that the public accepts, and maintaining and enhancing affordability and reliability is vital to gaining that public acceptance. Should I be fortunate enough to be confirmed, my role as a FERC commissioner would be to ensure that any such policy not have a deleterious impact on reliability and affordability of our energy supply.

Energy system transformations

Question 6: What do you believe are the best ways to achieve a sustainable, carbon-free energy future?

<u>Answer</u>: While FERC's policies are resource- and fuel-neutral, the energy industry continues evolve and changes to the generation mix require that we continue to evaluate the performance of energy markets. This is critical because FERC relies on competitive markets to provide just and reasonable rates and reliable service for consumers, and to send appropriate investment signals for developers. On May 1-2, 2017, in Docket No. AD17-11, FERC held a technical conference to explore the interplay between wholesale markets and policy goals of states, including their support of particular resource attributes or externalities.

Comments are expected in that proceeding, and if confirmed, I look forward to reviewing the record and these matters with my colleagues.

Question 7: What ways can FERC prevent economic harm to low-income Americans during transformations of the energy system?

<u>Answer</u>: I believe FERC's responsibility to ensure just and reasonable rates is key to protecting consumers. If confirmed, I will carefully consider the matters before the Commission to reach decisions that ensure just and reasonable rates.

<u>Question 8:</u> What role do you see FERC has in increasing the reliability of the electric grid to increasingly extreme weather while ensuring generation is sustainable and low-carbon?

<u>Answer</u>: The Commission reviews reliability standards for approval and enforces those standards under section 215 of the Federal Power Act. FERC may require the Electric Reliability Organization (*i.e.*, North American Electric Reliability Corporation (NERC)) to develop a reliability standard to address a matter. The reliability standards are largely resource neutral. My understanding is that FERC looks to NERC to perform event analysis for extreme weather events on an interconnection wide basis; such analysis considers the use/performance of all resources to assess the risks to reliability during the extreme weather. If confirmed, I will work with my colleagues and engage stakeholders on these matters.

Question 9: If confirmed, what steps will you take at FERC to help the U.S. transform its energy system as quickly as possible from one based on carbon-intensive fuels to one based on clean, sustainable fuels?

<u>Answer</u>: Please see my response to your Question 6 above.

Question 10: Energy prices impact all American families. Yet climate change poses catastrophic economic, environmental and social threats to all Americans. Delaying action on climate change has severe long-term costs. Moreover, renewable energy sources like wind and solar are the cheapest available, and aren't subject to the sorts of wild price fluctuations that we see with fossil fuels. When combined with aggressive energy efficiency, they can provide cheaper energy over the long term than dirty fossil fuels.

If confirmed, what steps will you take at FERC to help the U.S. transform its energy system, as quickly as possible, from one based on carbon-intensive fuels to one based on clean, sustainable fuels?

Answer: Please see my response to your Question 6 above.

Question 11: In Vermont, energy efficiency investments have saved \$279 million in avoided regional transmission system upgrades. What additional steps can FERC take to aggressively promote the use of energy efficiency and other strategies to avoid unnecessary expensive new transmission lines and new baseload power plants?

<u>Answer</u>: FERC has taken certain steps to allow the integration of customer demand resources, such as energy efficiency, into the markets it oversees. For example, customer demand resources must be considered on a comparable basis to the services provided by comparable generation resources in local transmission planning processes where appropriate. Order No. 1000 required each public utility transmission provider to consider proposed non-transmission alternatives on a comparable basis when evaluating potential transmission solutions in their regional transmission planning processes. In addition, two of the wholesale markets that the Commission regulates, PJM and ISO-NE provide a mechanism for energy efficiency investments to participate in and receive compensation for their capacity value from the wholesale capacity market.

<u>Question 12</u>: What steps can FERC take to prioritize dispatching clean distributed renewable energy before dispatching fossil fuel generation?

<u>Answer</u>: RTO/ISO markets (*e.g.*, ISO-New England) dispatch the least cost resources to meet demand. Resources offer their supply into the markets based on their marginal cost of production and RTOs/ISOs clear their markets in a manner that minimizes costs to consumers of electricity while recognizing transmission constraints and other reliability issues. Many renewable energy resources have no fuel costs, and have low or zero marginal costs, and thus are economic to dispatch whenever they are available. They are fully dispatched by the RTO/ISO markets unless transmission lines become overloaded or other reliability constraints prevent their full dispatch.

Question 13: If confirmed, will you commit to encouraging utilities around the country to dramatically expand rooftop solar and other types of distributed generation?

<u>Answer</u>: The increase in rooftop solar and distributed generation has generally been driven by state-level forces. FERC has sought to remove barriers to the participation of resources such as distributed generation in the wholesale markets. Market operators like ISO-NE already recognize distributed generation capacity when establishing its capacity requirement so that states get the capacity benefit of actions designed to encourage rooftop solar and other distributed generation. In addition, late last year, FERC issued a Notice of Proposed Rulemaking on Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators proposed to address such barriers by providing a way by which distributed energy resource aggregators can participate in the organized wholesale electric markets. If confirmed, I look forward to reviewing the comments the Commission received in response to the proposal and addressing this issue with my colleagues.

Question 14: In 2013, you wrote: "renewable energy is simply not competitive, affordable or widely available, even with significant, expensive government support." Would you still make that claim? If so, why? If your opinion has changed, what are the factors behind your decision?

<u>Answer</u>: While natural gas, coal and nuclear remain America's principal sources of electricity, wind and solar power use has taken off across the U.S. thanks in part to tax incentives and supportive government policies. Renewable power is now cost-competitive with other sources of electricity in some parts of the U.S. I gained an appreciation for this while working with numerous Senators on tax provisions in this area that were included in the 2015 omnibus.

Question 15: Grid reliability is an important priority for FERC, but opponents of renewable energy often use this "reliability" argument as excuse for dismissing or undervaluing renewable energy. What steps will you take to ensure that FERC can protect the reliability of the grid while also transforming our energy system?

<u>Answer</u>: The nation's resource fuel mix is changing. One component of this transition is identifying the types and levels of essential reliability services needed for reliable operation of the grid.

If confirmed, I will work with my colleagues to address whether and how renewable energy resources can and should provide essential reliability services, where technically feasible.

Question 16: Are reforms needed to the wholesale market structures to support distributed energy resources? If not, do you commit to ensuring that wholesale markets continue to support distributed energy resources? If so, what could be done to ensure wholesale markets better support distributed energy resources?

<u>Answer</u>: I understand that FERC has taken steps to remove barriers to the participation of resources, such as distributed generation, in the wholesale markets. For example, late last year, FERC issued a Notice of Proposed Rulemaking on Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators proposed to address such barriers by providing a way by which distributed energy resource aggregators can participate in the organized wholesale electric markets. If confirmed, I look forward to reviewing the comments the Commission received in response to the proposal and addressing this issue with my colleagues.

Question 17: If confirmed, what steps will you take to move the American grid to a distributed, interconnected system?

<u>Answer</u>: The Commission issued a Notice of Proposed Rulemaking on Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators in November 2016. In this Notice of Proposed Rulemaking, the Commission proposed to remove barriers to the participation of aggregations of distributed energy resources in the organized wholesale electric markets. If confirmed, I look forward to reviewing this record with my colleagues.

Question 18: If confirmed, will you support the development of large and small-scale storage, which will make our grid more resilient and encourage the buildout of renewable energy technology?

<u>Answer</u>: I believe that the nation should be able to rely on all forms of energy resources, which includes renewable and electric storage resources. I understand that the Commission is currently exploring potential barriers to the participation of electric storage resources in the organized wholesale electric markets. In fact, the Commission issued a Notice of Proposed Rulemaking in November 2016 that proposed to remove barriers to the participation of electric storage resources and distributed energy resource aggregations in the organized wholesale electric markets. If confirmed, I look forward to addressing this issue with my colleagues.

Question 19: Do you see a role for FERC in encouraging ancillary and reliability services markets to ensure all generators can compete to provide services to maintain grid reliability and get compensated for those services?

<u>Answer</u>: FERC has identified ancillary services that are necessary to maintain reliable operation of the grid. As our nation's energy fuel mix changes, we need to identify the types and levels of essential reliability services needed for reliable operation. In both of these contexts, offering

opportunities for resources that are technically capable of providing these services to do so can benefit consumers.

Question 20: The 2017 Infrastructure Report Card produced by the American Society of Civil Engineers rates our nation's energy infrastructure as a D+. Most electric transmission and distribution infrastructure was built in the 1950s and 1960s with a 50-year life expectancy and the over 640,000 miles of backbone transmission infrastructure is at full capacity. How will you facilitate the transmission infrastructure investment needed to modernize and expand our grid, particularly on an interstate basis?

<u>Answer</u>: There are several ways in which FERC can promote investment in the transmission infrastructure needed to maintain and modernize our grid. For example, the transmission rates that FERC approves include a return on equity and, where appropriate, may include incentives consistent with the direction of Congress in the Energy Policy Act of 2005. FERC can use these ratemaking tools to promote investment, while also ensuring that rates are just and reasonable. In addition, FERC has spurred development of regional transmission planning processes that are intended to identify and then remove barriers to development of more efficient or cost-effective transmission solutions.

Question 21: The Public Utility Regulatory Policy Act (PURPA) allows industrial companies to build and operate combined heat and power (CHP) and waste heat to power (WHP) facilities that can simultaneously produce economical steam and electricity with energy efficiencies up to 80 percent. Do you support maintaining PURPA as currently enacted?

Answer: Whether to maintain PURPA as currently enacted is a matter for Congress.

Supporting the policy goals of individual states

Question 22: Given your stated dedication to state rights to dictate in-state energy policies, how will you ensure that states retain control of policies that incentivize distributed generation?

<u>Answer</u>: I appreciate that states and the Commission need to be respectful of each other's boundaries under the law. Late last year, FERC issued a Notice of Proposed Rulemaking that would govern the participation of aggregated distributed resources in the organized wholesale markets. The Commission proposed to require coordination with the operation of the distribution system. Additionally, FERC recently held a technical conference with the objective of exploring how FERC-jurisdictional wholesale electricity markets can select resources of interest to state policy makers. These resources can include distributed generation incentivized and controlled by the states. If confirmed, I look forward to working with my colleagues to address these important issues.

Question 23: Approximately 30 states have passed renewable portfolio standards. States are enacting these policies for a wide variety of reasons including fuel diversity, environmental benefits, and economic development. If confirmed, how would you act to protect states' rights to decide their own energy policy?

<u>Answer</u>: States have authority to make resource decisions within their individual states. At times, those state policy decisions potentially interact with FERC-jurisdictional wholesale electricity markets. FERC's role is to ensure that wholesale electricity rates remain just and reasonable. I appreciate that states and the Commission need to be respectful of each other's boundaries under the law. Thus, I will be respectful of state boundaries while carrying out my duties as a FERC commissioner, if confirmed.

Question 24: While recognizing that FERC must place a premium on system reliability, many states have established aggressive energy policy goals. Vermont, for instance, is committed to reducing greenhouse gas emissions by 90% by 2050. Should you be confirmed, what steps will you take to give more weight to the policy goals of individual states?

<u>Answer</u>: If I am confirmed, I will make every effort to balance FERC's responsibility to ensure that the reliability of the bulk electric system is maintained and wholesale electricity rates are just and reasonable with the states' energy policy goals. As you may be aware, FERC recently held a technical conference to address these issues, and, if confirmed I look forward to working with my colleagues to review the record in that proceeding.

Stakeholder influence and FERC management

Question 25: What specific issues in FERC regulation of energy markets cause you concern?

Answer: The U.S. has one of the most reliable and affordable energy systems in the world. The system functions due to a high degree of coordination and strong markets. Should I be confirmed, I will work to ensure that there is strong oversight at the Commission to keep the markets properly functioning.

Question 26: If confirmed, how will you work to prevent undue influence on FERC by the fossil fuel industry?

<u>Answer</u>: I will not be unduly influenced by any group nor will I pre-judge any action that could come before me should I be confirmed to the Commission. FERC is an independent agency and I will take that independence seriously.

Question 27: As a result of the Enron scandal, Congress changed FERC's enforcement and civil penalty authority under the Energy Policy Act of 2005. What lessons does the Enron scandal still have for FERC?

<u>Answer</u>: The Enron scandal demonstrated that as markets evolved, FERC needed to engage in strong oversight and to be able to deter market manipulation through surveillance, investigations, and appropriate penalties. The Energy Policy Act of 2005 expanded FERC's enforcement authority, and since that time, FERC has greatly enhanced its corresponding capabilities. If confirmed, I look forward to working with my colleagues to assure that the enforcement program continues to improve.

Question 28: One of FERC's most important responsibilities is to investigate and enforce against market manipulation. Is FERC devoting adequate resources to these enforcement activities? Are the fines sufficient? If confirmed, what steps will you take to sustain and improve on FERC's enforcement capacity and success?

<u>Answer</u>: I understand that FERC has provided significant resources to its enforcement activities and, if confirmed, I will work with my colleagues to ensure that the enforcement program continues to receive adequate resources to carry out its responsibilities.

Question 29: After the 2003 electricity blackout, Congress included federal backstop siting provisions for interstate transmission lines in the Energy Policy Act of 2005. These included Section 1221 for National Interest Electric Transmission Corridors, which has never been implemented effectively. Would you support FERC taking on the responsibilities of the corridor designation authority if the Department of Energy was willing to delegate its role to FERC, which would consolidate the designation authority with the backstop siting authority FERC already has under the Energy Policy Act?

<u>Answer</u>: While I cannot speak for the Department of Energy and whether it would want to delegate this role to the Commission, I would expect that, if confirmed, I would take action consistent with whatever authority is granted to the Commission. If confirmed, I would address with my colleagues and, as appropriate, the Department of Energy, the best way to implement the Commission's role with respect to federal backstop transmission siting authority.

Question 30: FERC is incredibly complicated, and the barrier to entry for someone to simply understand FERC proceedings, much less to participate, is extremely high. Stakeholders with considerable financial resources can participate, but everyone else is effectively excluded. How can FERC do a better job of ensuring all interested parties can meaningfully participate in FERC processes?

<u>Answer</u>: I understand the importance of FERC's proceedings being transparent and accessible. I support FERC's efforts to promote accessibility.

Question 31: If confirmed, would you support the creation of a "consumer advocate" office at FERC?

Answer: If confirmed, I will most certainly consider the issue.

FERC abuses of power in reviewing and approving pipeline infrastructure

Question 32: While instilling important powers in the federal government, the Clean Water Act also ensures the protection and respect of states' rights. Section 401 of the Act explicitly states that no [federal] license or permit shall be granted until the certification required by this section has been granted or waived. Similarly, the U.S. Supreme Court has said Section 401 requires States to provide a water quality certification before a federal license or permit can be issued and without [Section 401] certification, FERC lacks authority to issue a license.

Given the language of the Clean Water Act and its interpretation by the Courts, do you think it appropriate that FERC is routinely issuing its Certificates of Public Convenience and Necessity for pipeline projects prior to all affected states rendering their decisions on Section 401 certification? If confirmed, will you commit to ensuring all relevant state level permits are granted prior to issuing a Certificate of Public Convenience and Necessity for any pipeline project?

<u>Answer</u>: It is my understanding that it has been Commission policy to issue conditional certificates of public convenience and necessity for natural gas pipeline projects, and that those certificates preclude natural gas companies from commencing construction until they have obtained all necessary authorizations under federal law, including Clean Water Act certification. I also understand that the U.S. Court of Appeals for the District of Columbia Circuit recently held that a certificate conditioned on the receipt of state water quality certification did not authorize a discharge into the navigable waters of the United States and so did not violate the Clean Water Act. If confirmed, I will work with my colleagues to ensure that all Commission decisions regarding natural gas pipeline projects are consistent with law.

Question 33: Under federal law, a private party is not allowed to legally challenge FERC approval of a pipeline project until they have first submitted a rehearing request to FERC, and FERC has affirmatively granted or denied that request. Rather than do one or the other, FERC's practice has been to issue a tolling order in response to such requests, which puts the request under further consideration. The result is that communities are put into legal limbo, unable to challenge the FERC decision until a final grant or denial is issued from the agency. Routinely FERC leaves people in that legal limbo for months, and sometimes over a year, while it allows the applicant to exercise the power of eminent domain and advance construction.

Do you see the use of tolling orders as an abuse of power by FERC? If confirmed, will you commit to either affirmatively grant or deny a rehearing request?

<u>Answer</u>: Congress gave FERC 30 days under the NGA and the FPA to address rehearing requests filed with FERC. I understand that the courts have upheld FERC's use of tolling orders. I appreciate that in some instances this process places a burden on those affected by a FERC order. I cannot and will not prejudge how I will act on rehearing requests. However, if confirmed, I would consider with my colleagues whether tolling orders have been used too frequently and, if so, what reforms are necessary. I also commit to work to ensure the FERC's processes on filings are as efficient as possible.

Future of nuclear power

Question 34: What do you envision as the future of nuclear power?

Answer: I believe that the nation should rely on all forms of energy resources, which includes nuclear energy. I believe it is important to maintain America's leadership on nuclear energy and a path for people who are relatively early on in careers in energy to have options for meaningful work in the nuclear sector. I am also aware that the future economic viability of these resources is in question. For example, the relatively low cost of natural gas and the emergence of new

technologies has helped drive down energy prices and revenues. In addition, state and federal policies that impose new environmental requirements and seek to procure specific resource types have challenged nuclear resources.

FERC policies should focus on ensuring electric markets that promote the delivery of reliable power in a manner that is nondiscriminatory and resource-neutral, resulting in efficient price signals that market participants can rely on to make investment decisions.

In June 2014 in Docket No. AD14-14, FERC initiated a proceeding to evaluate issues regarding price formation in the energy and ancillary services markets operated by RTOs/ISOs. This ongoing effort strives to improve the accuracy of energy prices for all resources, including nuclear. Also, the Commission has recently held a technical conference regarding state policies and wholesale markets that may inform the Commission on this issue. If confirmed, I look forward to reviewing these matters with my colleagues.

<u>Question 35:</u> What do you believe is the proper role of FERC in the future direction of nuclear power in the United States?

Answer: Please see my response to your Question 34 above.

<u>Question 36</u>: Do you think any market reforms are needed to support the future direction of nuclear power in the United States?

Answer: Please see my response to your Question 35 above.

IMAPP and regional initiatives

Question 37: New England has a regional Independent System Operator (ISO), and over the past several years consumer costs have skyrocketed as the ISO has implemented and tweaked its forward capacity market. In the regional process known as IMAPP – integrating markets and public policy – the ISO and FERC are beginning to acknowledge these administrative markets are in conflict with some of the objectives states have with regard to energy policy.

If confirmed, would you support efforts, such as in New England, to develop fixes to wholesale markets to better implement state policy goals in wholesale markets?

<u>Answer</u>: I understand that this is an issue that the Commission is focusing on through a recent technical conference and follow-up request for post-technical conference comments on the interplay of state policy goals and the wholesale energy and capacity markets. If confirmed, I look forward to addressing this issue with my colleagues.

Question 38: Energy markets do not accurately reflect environmental costs, including the social costs of carbon pollution. Do you believe that FERC and wholesale market operators should continue to explore how to better integrate the real cost of carbon pollution into our energy markets?

<u>Answer</u>: FERC's policies are resource and fuel neutral and FERC develops market rules with the intent of encouraging competition. Nevertheless FERC has developed a record in a recent technical conference in order to explore ways to accommodate state policy efforts while retaining competitive market frameworks.

Question 39: Are you open to allowing ISO-New England to walk back from the capacity market model and return to a structure that allows load-serving entities to meet their needs through bilateral contracts with a residual market for capacity not otherwise procured through such bilateral contracts?

If confirmed, will you commit to just and reasonable rates for consumers, not just for market participants?

<u>Answer</u>: I have and will maintain an unwavering commitment to ensuring the rates are just and reasonable. I am mindful that the responsibility of the Commission is to ensure that rates are just and reasonable, independent of the mechanism used to satisfy resource adequacy obligations. I am not aware of any ongoing efforts from ISO-New England to abandon its current capacity market as a tool to ensure resource adequacy in the region. I appreciate that there are different approaches to satisfying resource adequacy obligations in various regions of the country.

Question 40: Earlier this month, FERC held a technical conference to examine how to better incorporate states' environmental policy objectives into wholesale markets. Stakeholders are working to address challenges in these markets, particularly as it relates to price formation like carbon pricing. More active leadership from FERC, however, may be necessary to direct wholesale market operators to develop solutions to address these price formation challenges.

If confirmed, would you help FERC take a more active role to assist state and market operator efforts to resolve price formation issues associated with states' environmental policies?

<u>Answer</u>: I am reluctant to speculate what decisions may come out of the recent technical conference; if confirmed, I look forward to taking a role with my colleagues in addressing the issues explored at the technical conference regarding the interplay between state policy goals and wholesale markets.

Question 41: Do you think there are ways to account for environmental costs in price algorithms that appropriately value the benefits of carbon free generation?

Answer: Theoretically, yes.

Question 42: New England is making considerable progress implementing renewable portfolio standards, renewable energy standards, and the Regional Greenhouse Gas Initiative. These reforms will be an enduring aspect of the region's energy strategy.

If confirmed, will you commit to work with ISO-New England to ensure that wholesale market rules complement state policies and regional agreements?

<u>Answer</u>: Yes, consistent with the obligation that, if confirmed, I will have as a Commissioner to treat all parties fairly and make decisions based on the record. If confirmed, I also look forward to addressing these issues with my colleagues.

Forward capacity auctions

Question 43: The New England region saw considerable price increases in the region's forward capacity auctions (FCAs) in 2014. In recent auctions, costs have come down, while the region has been able to secure sufficient resources to maintain system reliability. Part of the reason why auction prices came down is because ISO-New England included more renewable energy in its installed capacity requirement (ICR). ISO-New England has continued to improve its inclusion of renewable energy in the ICR calculation, but could do better.

How can ISO-New England's consideration of energy, efficiency, renewable generation, and improved metrics in the forward capacity auctions that value the benefits of carbon-free generation help reduce system costs and improve system reliability?

<u>Answer</u>: I am aware that in recognition of certain public policy initiatives, ISO New England recently prioritized the modeling of behind the meter renewable resources in making adjustments to the ICR. I understand the importance of reducing system costs and ensuring reliability. Further, I recognize efforts by independent system operators like ISO New England to accommodate efforts by the states to promote certain public policy initiatives. As noted above, this was the subject of a recent Commission technical conference.

Question 44: Carbon-free generation currently faces a large barrier for bidding into the FCAs because of upfront costs. If confirmed, will you commit to working with our ISOs to continue reducing the barriers to including more renewables into the ICR and for bidding into our energy auctions?

Answer: Please see my response to your Question 42 above.

Hydro relicensing

Question 45: As states implement policies to address climate change it is becoming increasingly clear that hydroelectric generation will continue to be a central component of the U.S. energy portfolio. Yet the licensing process for hydroelectric facilities can last a decade or more, cost hundreds of thousands of dollars, and often results in decreased electric production due to water quality concerns. What do you see as steps FERC can take to streamline this process, and how would you ensure state and federal environmental and water quality concerns are maintained?

<u>Answer</u>: As I noted at the hearing, I believe that the nation should rely on all forms of resources to meet its needs, including hydroelectric resources. I understand, however, that the hydropower licensing process can be lengthy and expensive, and that water quality issues are often a major concern. If confirmed, I will look forward to addressing with my colleagues the issue of streamlining the licensing process while satisfying federal and state water quality concerns.

Natural gas infrastructure

Question 46: Natural gas and pipeline advocates vocally hailed your nomination as a sign that future and pending fossil fuel infrastructure will be rubber stamped on your watch. What will you do to demonstrate your independence from fossil fuel special interest groups?

<u>Answer</u>: I will not be unduly influenced by any group nor will I pre-judge any action that could come before me should I be confirmed to the Commission. FERC is an independent agency and I will take that independence seriously.

Question 47: How will you evaluate climate impacts during the review of applications for the construction and operation of natural gas pipelines?

<u>Answer</u>: It is my understanding that the Commission's environmental analysis for each pipeline project includes the greenhouse gas emissions associated with the construction and operation of that project, as well as impacts potentially resulting from climate change over the region in which the project is located. If confirmed, I look forward to working with my colleagues in determining how information regarding climate impacts is addressed appropriately in such proceedings.

The Holman Rule

Question 48: What is your position on the Holman Rule, which allows any member of Congress to propose amending an appropriations bill to single out a government employee or cut a specific program?

<u>Answer</u>: I have no direct experience with the Holman Rule. If it becomes an issue for the Commission and I am confirmed, I will evaluate the matter with my colleagues.

Question 49: If confirmed, will you support or oppose Congressional passage of an amendment under the Holman Rule that targets one of your employees?

Answer: Please see my response to your Question 48 above.

Question 50: If confirmed, do you believe that you will be better able to recruit and retain top talent at FERC if Congress is able to individually target employees based on political criteria?

Answer: Please see my response to your Question 48 above.

Question 51: Do you support or oppose Congress targeting and altering the salaries of individuals at FERC?

Answer: Please see my response to your Question 48 above.

Question 52: How would you describe the division of responsibility and authority between Congress and FERC on agency personnel issues?

Answer: Please see my response to your Question 48 above.

Questions from Senator Al Franken

<u>Question 1</u>: Minnesota and other states have renewable portfolio standards that drive the transition to clean energy. Do you believe states should be able to implement these kinds of policies without federal interference?

<u>Answer</u>: States have jurisdiction over the resource mix in their individual states, but the Commission also has responsibilities under the Federal Power Act. I appreciate the importance of these issues to states. I understand the Commission recently held a technical conference with the objective of further exploring how the competitive wholesale markets can incorporate resources promoted by state energy policies while ensuring that wholesale electricity rates remain just and reasonable and that the reliability of the bulk power system is maintained. If confirmed, I look forward to working with my colleagues on this matter.

Question 2: As Senator Cortez Masto mentioned in the hearing, late last year, FERC started a process to "remove barriers to the participation of electric storage resources and distributed energy resource aggregations in the capacity, energy, and ancillary service markets."

- **a.** What role do you see energy storage playing in the future in the organized wholesale electricity markets and transmission system?
- **b.** And how can FERC help ensure that energy storage is receiving proper compensation for the multiple benefits it provides to the grid?

<u>Answer</u>: I believe that the wholesale electricity markets should offer opportunities for all types of resources that are technically capable of providing needed services, which includes storage resources. For example, FERC's price formation effort has identified opportunities to improve energy market price signals. Actions like a change in the settlement interval and the requirement to trigger shortage pricing any time a physical shortage occurs should provide more accurate price signals for flexible resources like energy storage. Also, the Commission is currently considering a proposal to eliminate barriers to the participation of electric storage resources in the organized markets. In addition, in a recent policy statement, the Commission provided clarification and guidance on how storage resources could be compensated for both market- and cost-based services in the organized markets. If confirmed, I look forward to addressing these issues with my colleagues.

I understand that the Commission has taken several actions to ensure adequate compensation for resources, including electric storage resources. For example, in Order No. 755, FERC provided for compensation of fast-acting resources, such as storage, to provide frequency regulation service. Similarly, FERC's price formation effort has identified opportunities to improve energy market price signals. Actions like a change in the settlement interval and the requirement to trigger shortage pricing any time a physical shortage occurs should provide more accurate price signals for flexible resources like energy storage. Further, in January, FERC issued a policy

statement providing guidance to storage resources seeking compensation for both cost-based and market-based services.

Question 3: FERC Order 1000 was intended to help identify such transmission needs and solicit competitive transmission projects by requiring regional transmission planning and interregional coordination.

- a. Do you support FERC order 1000?
- **b.** What are the barriers to interregional transmission lines and what can FERC do to remove those barriers?

<u>Answer</u>: I support the goals of Order 1000, which I understand to be to promote the identification of more efficient or cost-effective transmission facilities and to remove certain obstacles to the development of those facilities. In June 2016 the Commission convened a technical conference to discuss competitive transmission development. The technical conference proceeding has provided the Commission with a record that details various commenters' concerns with the interregional transmission coordination procedures currently in place, as well as their suggestions for supporting interregional transmission development. If confirmed, I look forward to reviewing this record and addressing this issue with my colleagues.

Question 4: A few years ago during the severe winter polar vortex, coal stockpiles at utilities in Minnesota repeatedly dropped to dangerously low levels, due to inadequate rail delivery of coal. At least four coal power plants in Minnesota were shut down, so that their stockpiles could be built back up before the cold winter months. And in the end, the cost of this unreliable rail service was passed on to the public, as they paid for the more expensive replacement power that was purchased to make up for lost generation.

During this time period, I sent a letter to FERC highlighting my concerns about Minnesota utilities' low coal stockpiles, and asking FERC to work with all other stakeholders to find a solution to this ongoing issue.

- **a.** What do you think FERC should do to mitigate the problems with rail delivery issues, since these issues impact the electricity markets?
- **b.** Last Congress I introduced the Emergency Fuel Supply Coordination Act, which would require coordination among key federal agencies when a fuel emergency is declared. Do you think this coordination is a good idea, and in what ways could FERC support such an effort?

Answer: Although the Commission does not have authority over the shipment of coal over the nation's rail lines, if confirmed, I would be willing to meet with utilities or the rail regulators to assess what type of assistance the Commission may provide. I believe that coordination among key regulators is prudent when a fuel emergency is declared.

Question 5: Because of its low prices, more and more Americans are using natural gas, both in homes and in industry. And the DOE Energy Information Administration projects that use of natural gas will continue to grow. At the same time, the federal government has already issued

final authorizations for liquid natural gas export volumes of over 72 billion cubic feet per day which is equal to about 96 percent of U.S. demand.

Explain to me how increasing exports of domestic natural gas won't drive up the price Americans pay to power their factories and heat their homes. Does FERC have a role to play here in making sure we are not unnecessarily increasing the cost of energy for Americans?

<u>Answer</u>: Jurisdiction over LNG exports is shared by DOE and the Commission. The Commission is responsible for the physical LNG export facilities under its National Environmental Policy Act responsibilities while DOE is responsible for authorizing the import or export of the natural gas commodity.

Question 6: Last month, Secretary Perry ordered a 60-day review of U.S. electricity policy to determine whether coal and nuclear plants are being "unfairly" pushed off the grid. He suggested that renewable resources—like wind and solar—were threatening grid reliability and that because of that, we need to prop up coal and nuclear plants. Since FERC is tasked with ensuring the reliability of the grid, do you share Secretary Perry's concerns about increasing integration of renewables?

<u>Answer</u>: In fulfilling its responsibilities under the Federal Power Act, FERC works closely with the North American Electric Reliability Corporation, which FERC certified as the Electric Reliability Organization, as well as with the industry and other interested stakeholders. As the nation's energy resource fuel mix continues to change, it is important to maintain our commitment to ensuring grid reliability.

Question 7: As you know, FERC's approval process for natural gas pipelines has gained national attention. Former Chairman Norman Bay released a statement on his last day recognizing the increased public interest surrounding the approval process and encouraging the agency to change how it determines whether approving a pipeline is within the national interest. Traditionally, FERC has relied on a contract with potential shippers to show market demand and therefore demonstrate that a project is in the national interest. But, this is fairly myopic view and Mr. Bay suggests that more comprehensive cost-benefit analysis may be necessary. Mr. Bay also recommended that FERC consider the environmental impacts of increasing gas production allowed by pipeline construction as well as an assessment of lifecycle greenhouse gas emissions. Do you agree with the former Chairman's assessment? If not, why not, and if so, what changes would you suggest?

<u>Answer</u>: I recognize the importance of natural gas pipeline infrastructure to meeting the energy needs of our nation's consumers. The Natural Gas Act requires the Commission to determine that proposed pipeline projects are consistent with the public convenience and necessity. If confirmed, I look forward to reviewing the Commission's policies and processes for considering pipeline applications with my colleagues to improve their efficiency while ensuring that all relevant factors are appropriately considered

Question 8: Senator Shaheen and I recently reintroduced legislation, the Public Engagement at FERC Act (S. 1240), that will improve public involvement at the FERC and facilitate advocacy

at the agency on behalf of residential and small commercial energy consumers. Specifically, the Public Engagement at FERC Act would build off existing language in the Public Utility Regulatory Policy Act (PURPA) and establish an Office of Public Participation and Consumer Advocacy to ensure the public has a strong role in shaping our nation's energy future. It is important that anyone who assumes the role of a FERC Commissioner understands how their decisions are directly or even indirectly impacting private citizens. When FERC evaluates whether a project or agreement is "in the public interest" it is vital that the Commission indeed consult the public.

- a. Do you agree that public engagement should be prioritized during the various proceedings administered by FERC?
- b. If confirmed, what steps will you take to make commission proceedings and processes more accessible to the public?
- c. While I'm not asking you to weigh in on the legislation directly, do you agree with allowing more public participation in the agency through the creations of a dedicated office?

<u>Answer</u>: FERC's procedures provide several means for members of the public, whether acting individually or as a group, to raise their concerns with FERC. They may intervene and actively participate in FERC proceedings. They also may file comments on rules and regulations that FERC proposes in Notices of Proposed Rulemakings. State utility commissions, who seek to protect the interests of retail and residential customers, regularly intervene directly in FERC cases and comment on FERC's proposed rules and regulations. If confirmed, I will work with my colleagues to see whether there are further steps FERC can take to make its proceedings and processes more accessible to the public.

Question 9: In 2006, FERC started requiring wholesale generators to file Form 556 Certificate of Qualifying Facility (QF) Status for a small power production facility. I'm concerned that some small, community wind facilities across the country may have missed this change. These projects went through an extensive study process to facilitate interconnection of their wind projects with the transmission grid. These interconnections were ultimately approved by FERC as exempt wholesale generators and have been operating safely. However, in 2006 FERC established a filing requirement for all facilities larger than 1MW, but some missed this change. The filing requires announcing the total electricity generated by the QF.

In one case, a company MinWind failed to start filing with FERC, and subsequently sought a waiver from FERC for the Form 556 filing arguing that they did not know about the rule. But, the waiver was denied and the company was assessed a substantial repayment obligation equivalent to the interest that they have been unfairly accruing since 2006. The amount was large enough that they were forced to file for bankruptcy. While I do not know the specifics of this case, in general, this seems like an onerous requirement that if not handled appropriately could drive more companies into bankruptcy. Will you commit to working with me to find a solution to this issue?

<u>Answer</u>: I understand the necessity of providing adequate notice of regulatory requirements to industry and having appropriate remedies for failures to comply. If confirmed, I would be pleased to work with you, and I look forward to discussing this issue with my colleagues.

Question from Senator Steve Daines

Question: FERC has a role in ensuring the grid is secure. Will you keep in mind impacts to baseload sources as you make decisions?

Answer: Yes.

Questions from Senator Joe Manchin III

Question 1: West Virginia's existing installed capacity is 90% coal (12,584 MW). The remainder is natural gas, hydro, wind and a little bit of oil. Overall, in PJM, coal represents 34% of capacity and natural gas is slightly higher than that. The Energy Information Administration states that "West Virginia typically generates more electricity than it consumes. Although more than two-fifths of West Virginia households use electricity as their primary source for home heating, retail sales to all customers account for less than half of West Virginia's net electricity generation. As a result, West Virginia is a net supplier of electricity to the regional grid. West Virginia is a leader in the nation in net interstate sales of electricity."

Do you believe that the regional grid (PJM specifically) can continue to operate without the contributions of West Virginia's fleet of power plants?

<u>Answer</u>: As I stated during my confirmation hearing, I believe that to ensure safe and reliable electricity we need fuel diversity. I also believe that FERC's responsibility to oversee grid reliability is critical. Maintaining fuel diversity in the context of wholesale electric markets that dispatch generation and other resources on a cost basis is a complex challenge. If confirmed I look forward to considering this issue with my colleagues.

Question 2: In 2011, FERC issued an Order – Number 1000 – which asserted agency jurisdiction over transmission planning in areas that were previously thought to be a state's responsibility. It's my understanding that – while intended to make transmission planning easier – it has bogged down the process more. Former FERC Commissioner Tony Clark expressed concern that "there is so much process built into Order 1000," that each step of that process "becomes an opportunity for litigation and delay." Andy Ott, the CEO of PJM, concluded that Order No. 1000 "was almost like a solution in search of a problem. ... It's actually creating more challenges to investment." Nick Brown, the CEO of SPP, stated that Order No. 1000 has "created more overhead and uncertainty at a time we didn't need more overhead in order to invest in transmission." We need transmission planning to work efficiently, and we need costs to be allocated where they belong.

Will you work with the Committee on ways to improve transmission planning and cost allocation?

<u>Answer</u>: If I am confirmed I will look forward to working with the Committee on matters of interest to them regarding these issues, as well as with my colleagues. After issuance of Order No. 1000, the Commission has continued to examine issues relating to transmission planning and cost allocation. I support this continued effort to make sure FERC policies are meeting their intended goals. For example, in June 2016, the Commission convened a technical conference on issues concerning competitive transmission development. Following the technical conference, the Commission requested post-technical conference comments on issues related to competitive transmission development, interregional transmission coordination, and regional transmission planning.

Question 3: Earlier this week, E&E news published an article regarding the cybersecurity challenges facing our natural gas infrastructure. They highlighted a five-year old attack on our nation's natural gas utilities which was perpetrated by Chinese hackers who were also members of that country's military. Gerry Cauley, President of the North American Electric Reliability Council (NERC) – a frequent witness before this committed stated that "Undercutting the gas supply is certainly a threat to the electric system." While NERC, utilities, and regional transmission operators (RTOs) like PJM are planning for multiple scenarios like extreme weather events (a repeat Polar Vortex for example), I'm also interested in your perspective on how FERC and DOE can further support natural gas utilities in their efforts to harden their systems not just again natural threats but against cyber threats.

Understanding that these energy stakeholders can't always pull back the curtain for us because of the threat of revealing too much to potential enemies, what more can DOE and FERC do to support natural gas pipeline operators in the face of these threats?

<u>Answer</u>: The intrusion campaign uncovered in 2012 underscores the importance of cybersecurity mitigation measures for the natural gas pipeline industry.

To this end, I understand that FERC assists states in better understanding cybersecurity threats to pipelines. For example, FERC has coordinated with other federal agencies to facilitate both unclassified and classified security briefings to state regulators.

I also understand that FERC assists to pipeline operators with identification and application of best practices for cybersecurity measures. As an example, FERC and Transportation Security Administration (TSA) staff have developed a joint, voluntary assessment program to conduct indepth cybersecurity reviews of pipeline entities. As a further example, FERC has established a similar program with the US Coast Guard to review the cybersecurity of jurisdictional LNG terminals. I understand that TSA is reviewing its voluntary cybersecurity guidelines for pipelines and that FERC has offered to assist with that effort.

FERC also could explore whether, pursuant to its authority under the Natural Gas Act, further steps are appropriate to address concerns that the industry may have with respect to recovery of costs for cybersecurity measures.

Question 4: I think it's fair to say that everyone knows West Virginia as an energy exporting state. Our state's coal miners helped power this nation through war and into prosperity in the

second half of the last century. And we continue to produce energy for our neighbors. But, we are an all-of-the-above energy state, and I think it's important to note that we have some critical hydropower resources. Hydropower is the most prevalent form of renewable energy used today to generate electricity. While hydro in West Virginia is small, it is also growing. The Glen Ferris project on the Kanawha River powers about 4,500 households. The Hawks Nest project is a 102 megawatt plant on the New River. These plants' licenses will expire later this year. Then there's the New Martinsville Hydroelectric Plant - a 36 megawatt project in Wetzel County that produces enough power for a city seven times the size of New Martinsville which has a population of about 7,000. And, furthermore, it's my understanding that there are untapped opportunities for additional hydropower on the Ohio River. I'd even love to see a plant along the Hatfield-McCoy Trail. I also introduced a bill - S. 710 - which would help provide certainty to the Jennings-Randolph dam.

But, what is your understanding of what FERC can do to improve and expedite the relicensing of these renewable energy projects?

<u>Answer</u>: I am aware that the hydropower licensing process can be lengthy and complex. As a matter of law, decision making does not rest solely with the Commission, but also with other agencies that have mandatory conditioning authority not only under the Federal Power Act, but also under other statutes. If confirmed, I will look forward to addressing with my colleagues the issue of any changes to make the relicensing process more efficient.

Questions from Senator Lamar Alexander

Question 1: In the past five years, six nuclear reactors have shut down prematurely due in part to financial concerns. Analysts have warned dozens of additional nuclear reactors could potentially shut down over the next 10 years due to market challenges. New York and Illinois have taken steps to help keep the nuclear reactors within their borders operating. These states recognize the importance of reliable nuclear power, which provides 60% of our country's carbon-free electricity. What can the Federal Energy Regulatory Commission do to help keep existing nuclear reactors operating and preserve low-cost, reliable, and clean nuclear power for the United States?

<u>Answer</u>: Congress tasked FERC with ensuring that the rules that govern wholesale electric markets promote the delivery of reliable power in a manner that is nondiscriminatory and resource-neutral, resulting in efficient price signals that market participants can rely on to make investment decisions. I believe that all resources should be fairly compensated for the value they provide the system.

The Commission has some generic proceedings where these issues are being examined in greater detail with broad stakeholder input.

If confirmed, I look forward to working with my colleagues in evaluating the issues explored at the technical conference.

Question 2: The federal wind production tax credit (PTC) has been in place for twenty-five years and has been extended by Congress ten times. The most recent extension in 2015 will cost taxpayers more than \$20 billion over ten years. The wind PTC not only costs the taxpayers billions, it also distorts the price of electricity. The subsidy to Big Wind is so generous that, in some markets, wind producers can literally give their electricity away and still make a profit. This phenomenon is called negative pricing. What can the Federal Energy Regulatory Commission do to minimize the unfair impact that negative pricing has on reliable generation like coal, natural gas, and nuclear?

<u>Answer</u>: Generally, RTO/ISO market dispatch rules are designed to find the lowest cost of dispatching resources, based on their bids, to serve load while respecting transmission system limitations.

At the recent May 2017 technical conference on the interplay between state policy goals and wholesale markets, there was a suggestion that RTOs/ISOs explore whether negative pricing continues to meet the goals of finding the lowest cost of dispatching resources. If confirmed, I look forward to addressing these matters with my colleagues.

Questions from Senator John Hoeven

<u>Question 1</u>: Electric reliability is a critical issue, especially as it relates baseload power and ensuring our country has the assets needed to maintain low-cost electricity.

For example, the previous Administration's EPA has promulgated substantial new regulations on electricity producers that would have subjected them to unachievable mandates and artificial compliance schedules. Together, the EPA's unwarranted attempts to reduce emissions would have driven up electricity rates for customers and potentially compromise the reliability of our power grid.

In another example, the Aliso Canyon natural gas storage facility provides electricity for southern California. However, state regulators have shut down the facility and now the Energy Department has registered concerns about having a sufficient baseload for summer energy demand.

- How will you approach reliability issues going forward?
- How do fossil fuels play a role in ensuring electric reliability and baseload power?

<u>Answer</u>: I recognize the importance of FERC's responsibilities under the Federal Power Act with respect to the reliability of the bulk power system.

In fulfilling those responsibilities, FERC works closely with the North American Electric Reliability Corporation as well as with the industry and other interested stakeholders. In the midst of a transition in our nation's energy resource fuel mix, it is important to maintain our commitment to ensuring grid reliability. I believe that a resource portfolio that includes the use of fuels that support the provision of baseload power makes an important contribution toward that goal.

Question 2: In order to become truly North American energy secure, we need the infrastructure to deliver our energy resources from producers to consumers. I have sponsored the North American Energy Infrastructure Act that would require FERC to approve natural gas import or export applications to Canada or Mexico within 30 days of filing.

- What is your view on the increased need for energy infrastructure?
- What is FERC's role in ensuring adequate pipeline capacity?
- Do you support efforts to increase our energy infrastructure network with Canada and Mexico?

<u>Answer</u>: As I noted at the hearing, ensuring adequate infrastructure is important for the nation's economy. Having adequate infrastructure also best ensures that consumers have access to a variety of energy resources. The Commission is obligated to approve natural gas pipeline projects that are required by the public convenience and necessity, which may include facilities for the import or export of energy with our trading partners to the north and south.

Question 3: In North Dakota, rural electric co-ops ensure that over 350,000 consumers have access to reliable and affordable electricity. The Federal Power Act exempts rural electric co-ops from FERC jurisdiction and this statutory exemption contributes to the state's affordable electricity rates.

• Do you plan to adhere to the Federal Power Act and continue to exempt rural electric coops from FERC jurisdiction?

<u>Answer</u>: Electric cooperatives that receive a certain type of financing or that sell less than a certain amount of electricity per year are exempt from certain provisions of the Federal Power Act. If confirmed, I commit to adhere to the provisions in the Federal Power Act regarding jurisdiction over electric cooperatives.

Question 4: Two of the industries FERC regulates – electricity and natural gas – are growing closer together as gas increases its share in electricity markets. This ties together the reliability of natural gas supply and the reliability of electricity supply like never before. This makes it all the more important that gas pipelines get sited timely when they are needed and not get bogged down in environmental reviews that, in the name of being thorough, lose all common sense. We have had projects delayed, for example, by consideration of greenhouse gas emissions. Fortunately the guidance requiring consideration of GHGs was rescinded in April.

Both Congress and the Administration have made it plain in law and by executive action that they want infrastructure reviews to be accelerated.

• Will you work to ensure that gas infrastructure is sited promptly and not unnecessarily delayed by overly bureaucratic reviews?

Answer: Yes.

Questions from Senator Angus S. King, Jr.

Question 1: How do you view the relationship between state energy policies, such as Renewable Portfolio Standards, and the wholesale electricity markets? Do you believe there is a conflict present between state goals and the operation of those wholesale markets? How do you think that conflicts that arise can and should be addressed by FERC?

<u>Answer</u>: States have jurisdiction over the resource mix in their individual states but the Commission also has responsibilities under the Federal Power Act. I appreciate the importance of these issues to states. I understand the Commission recently held a technical conference with the objective of further exploring how the competitive wholesale markets can incorporate resources promoted by state energy policies while ensuring that wholesale electricity rates remain just and reasonable and that the reliability of the bulk power system is maintained. If confirmed, I look forward to working with my colleagues on this matter.

Question 2: Do you believe that the competitive wholesale electricity markets are adequately incentivizing the development of renewable energy? If not, what market mechanisms can be put into place to do so?

<u>Answer</u>: I understand that FERC rules that govern organized and bilateral wholesale electric markets are meant to promote the delivery of reliable power in a manner that is nondiscriminatory and resource-neutral, resulting in efficient price signals that market participants can rely on to make investment decisions.

The Commission must be aware of changes in the industry, including changes to the resource mix, state actions and technology developments, and then adapt to these developments in order to carry out its statutory responsibilities.

Question 3: Do you believe FERC has a role to play in supporting and helping to manage the increase of distributed energy resources connected to the grid? If so, what is that role?

<u>Answer</u>: FERC has a role in fostering resource neutral, non-discriminatory policies with respect to the wholesale markets. This would include removing barriers to the participation of resources, such as distributed energy resources, in the wholesale markets. For example, late last year, FERC issued a Notice of Proposed Rulemaking on Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators proposed to address such barriers by providing a way by which distributed energy resource aggregators can participate in the organized wholesale electric markets. If confirmed, I look forward to reviewing the record developed in response to the proposal and addressing this issue with my colleagues.

Question 4: FERC has held that the costs of transmission infrastructure built to fulfill a reliability need can be recovered regionally from all beneficiaries. If a resource other than traditional transmission infrastructure, such as energy storage or a combination of other resources, is proposed and can meet the same reliability need, should the cost of that project be recovered in the same manner?

<u>Answer</u>: Through Order Nos. 890 and 1000, the Commission has allowed the consideration of those non-transmission alternatives in local and regional transmission planning processes. In other proceedings, the Commission also has recognized that resources other than traditional transmission infrastructure are capable of providing transmission service in certain circumstances, such that it may be appropriate to allocate costs of those resources through transmission rates. More recently, in January 2017, the Commission issued a policy statement to clarify its precedent and provide guidance on the ability of electric storage resources to provide services and seek to recover their costs through both cost-based and market-based rates concurrently. If confirmed, I will review these matters with my colleagues.

Question 5: New England currently pays by far the highest costs for transmission in all of the organized markets, and yet billions of dollars in additional investment in transmission will be needed in order to unlock new renewable resources in the region. What will you do to keep transmission costs under control for consumers in New England?

<u>Answer</u>: Investment in transmission is key to bringing about a diverse resource mix. Renewable resources are often located at a distance from consumers. It is my understanding that the Commission recently held a technical conference to consider issues related to the competitive transmission development processes that were established to comply with Order No. 1000, including the use of cost containment provisions, the relationship of competitive transmission development to transmission incentives, and other ratemaking issues. If confirmed, I look forward to addressing this issue with my colleagues.

Question from Senator Bill Cassidy

Question: If confirmed, one of your key responsibilities as a Commissioner will be to ensure grid reliability. I want to bring your attention to the worrisome decision by the California Public Utilities Commission regarding the shutdown of the Alison Canyon underground gas storage facility. The Department of Energy and SoCalGas have both written letters to the commission warning of possible blackouts and supply disruptions due to the Aliso Canyon decision, which I would like to submit for the record. This appears to be a significant problem waiting to happen.

Will you commit to studying this issue and ensure that the FERC does everything in their authority to protect the reliability of the grid for potentially effected consumers all along the transmission line?

<u>Answer</u>: Yes. I agree that grid reliability is a critical aspect of the Commission's mission. If confirmed, I will work with my colleagues to best ensure the reliability of the grid.

Questions from Senator Tammy Duckworth

Question 1: With respect to concerns for our aging energy infrastructure, how do you view the need to balance what consumers can afford with the tremendous expense to upgrade existing facilities and/or to add new infrastructure?

<u>Answer</u>: I agree that the Commission has a statutory responsibility to both promote adequate investment in needed energy infrastructure and ensure that the rates subject to the Commission's jurisdiction are just and reasonable. The development of a record that reflects a wide range of perspectives, including those of consumers, is essential to the Commission's ability to strike the right balance between these critical interests.

<u>Question 2</u>: Just and reasonable cost allocations for electric transmission projects have been a subject for discussion at FERC. As I'm sure you are aware, FERC Order 1000 established the "roughly commensurate" criteria for costs and benefits of transmission. How would you define "roughly commensurate"? Is that a standard that you believe is appropriate for all infrastructure costs?

<u>Answer</u>: My understanding is that, drawing upon a term coined by the U.S. Court of Appeals for the Seventh Circuit, the Commission in Order No. 1000 required that the costs of new regional or inter-regional transmission facilities be allocated in a manner that is at least "roughly commensurate" with their benefits. In Order No. 1000, the Commission also required that the costs of such transmission facilities should not be allocated involuntarily to entities that receive no benefit from those transmission facilities. While I cannot now say whether this standard may be appropriate for all types of infrastructure costs, I support the general principle.

<u>**Question 3:**</u> Regional Transmission Organizations (or RTOs/ISOs) typically build or upgrade new infrastructure to remedy reliability violations. What role, in your view, should cost play in the selection of transmission projects under order 1000 and as planned by RTOs?

<u>Answer</u>: Order No. 1000, which the Commission issued in 2011, set forth new requirements with respect to transmission planning and cost allocation. The Order was intended to promote the identification of more efficient or cost-effective transmission facilities and to remove certain obstacles to the development of those facilities. Regional Transmission Organizations and Independent System Operators must consider costs in their regional transmission planning processes to comply with the requirements of Order No. 1000.

The Commission has continued to examine issues related to interregional transmission development. I support this continued effort to make sure FERC policies are meeting their intended goals. In June 2016, the Commission convened a technical conference addressing competitive transmission development, including interregional transmission coordination. Several speakers at the technical conference, as well as some FERC Commissioners, questioned whether the Commission should do more to facilitate interregional transmission development. After the technical conference, the Commission requested post-technical conference comments on several issues related to interregional transmission development. If confirmed, I look forward to reviewing the record and addressing this issue with my colleagues.

<u>Question 4</u>: FERC Order 1000 provided opportunity for competitive transmission investments by independent transmission companies. What, if any, transmission investments do you feel should be exempted from the order 1000 competitive transmission process?

Answer: Under Order No. 1000, many transmission projects are not subject to competitive transmission development processes. Order No. 1000 only requires that transmission facilities selected in the regional transmission plan for purposes of cost allocation are subject to competitive transmission development processes. In addition, Order No. 1000 did not require that local transmission facilities, which are defined as transmission facilities located solely within a public utility transmission provider's retail distribution service territory or footprint that are not selected in the regional transmission plan for purposes of cost allocation, be subject to competitive transmission development processes. The Commission also stated in Order No. 1000 that its reforms were not intended to affect the right of an incumbent transmission provider to build, own, and recover costs for upgrades to its own transmission facilities, regardless of whether an upgrade has been selected in the regional transmission further allowed certain transmission planning regions to exempt from their competitive transmission development processes transmission planning regions to exempt from their competitive transmission development processes transmission planning regions to exempt from their competitive transmission development processes transmission facilities is needed in the near-term to address reliability concerns.

More recently, the Commission convened a technical conference in June 2016 on competitive transmission development, at which the speakers discussed exemptions from the competitive transmission development process. Following the technical conference, the Commission issued a post-technical conference request for comments, which included questions on whether the Commission should broaden or narrow the type of transmission facilities that must be selected through competitive transmission development processes. If confirmed, I look forward to reviewing this record and addressing this issue with my colleagues.

Question 5: FERC's use of RTOs to plan and manage competitive markets has recently come under fire from various public interest groups. They point out that public interest has an extremely limited voice in RTO Stakeholder discussions and RTO actions taken behind closed doors seem to be condoned by FERC. Do you believe this is a valid concern and if so how would you address it? If not, where and how do you see public interest being considered at FERC?

<u>Answer</u>: I understand that FERC has worked to maintain the transparency and responsiveness of RTO and ISO processes over the years. I recognize the importance of these efforts and the need for all stakeholders to be heard. If confirmed, I look forward to working with my colleagues on these issues.

<u>Question 6</u>: What role should FERC play in any attempts to work toward a cleaner environment?

<u>Answer</u>: FERC's policies ensure that the rules that govern organized and bilateral wholesale electric markets promote the delivery of reliable power in a manner that is nondiscriminatory and resource-neutral, resulting in efficient price signals that market participants can rely on to make investment decisions.

The Commission must be aware of changes in the industry, including changes to the resource mix, state actions and technology developments, and then adapt to these developments in order to carry out our statutory responsibilities.

If confirmed, I look forward to working with my colleagues on these issues.

Question 7: The recent "Wannacry" ransomware incident has once again brought cybersecurity to the forefront. Should FERC do more to ensure best practices are shared among utilities regarding detecting and preventing cybersecurity threats? How much information should be shared with state regulators? What role do you see at FERC for cybersecurity issues?

<u>Answer</u>: My understanding is that FERC coordinates with federal and state government partners, and with industry stakeholders, to address cybersecurity issues. Through these efforts, FERC provides leadership, expertise, and assistance in identifying, communicating, and seeking comprehensive solutions to significant potential cybersecurity risks to FERC-jurisdictional energy infrastructure.

For example, FERC is promoting identification and use of best practices in this area. FERC conducts analysis and outreach to share threat information and best practices for defensive and recovery measures to help mitigate risk. These efforts complement other programs at FERC such as the mandatory reliability standards that FERC has adopted to protect the bulk power system from cybersecurity threats.

Recognizing both the interconnected nature of utility systems and the nature of cybersecurity threats, I believe it is also valuable for FERC to work closely with states to share threat information and help implement best practices. It is my understanding that FERC assists states to better understand the cybersecurity threats to pipelines, such as by coordinating with other federal agencies to facilitate both unclassified and classified security briefings to state regulators.

FERC also has a seat at the table of the Electricity Subsector Coordinating Council, a group that includes governmental leaders and CEOs from utilities who work together to prepare for large-scale events to coordinate the response.

Question 8: States that are split into two RTOs are encountering issues where generating resources have been separated from the loads that they were built or contracted to serve. How should proximity to resources, actual power flows, and pre-existing transmission rights be considered in RTO modeling?

<u>Answer</u>: I cannot comment on these matters because the Commission has several open proceedings regarding inter-RTO coordination. If confirmed, I look forward to reviewing these matters with my colleagues.

Questions from Senator Rob Portman

Question 1: During the 114th Congress, Sen. McCaskill and I co-sponsored legislation that became Title 41 of the FAST Act, 42 U.S.C. § 4370m ("FAST-41"). FAST-41 created a new process to streamline permitting for significant infrastructure projects designated as "covered projects." Would it be beneficial for the FERC permitting and licensing process to operate within this new regulatory construct?

<u>Answer</u>: I am aware that the Commission designated both a Councilmember and a Chief Environmental Review and Permitting Officer to support the Federal Permitting Improvement Steering Council established by the FAST Act. In addition, the Commission has the greatest number of projects listed on the inventory of any federal agency. If confirmed, I look forward to working with my colleagues to ensure that up-to-date permitting information is presented to the public, as well as in establishing how independent agencies can effectively interact with the other permitting agencies subject to FAST-41.

Question 2: Do you support designating FERC as the lead agency in the licensing and permitting process, including the ability to set schedules for the review, comment, and permitting activities of other federal agencies?

<u>Answer</u>: As provided by Congress in the Energy Policy Act of 2005 and in the Federal Power Act, the Commission is the lead federal agency responsible for setting the environmental review schedule for all agencies acting on a federal permit. However, the Commission's scheduling authority does not override permit schedules, or agency processes otherwise established by law. If confirmed, I look forward to working with my colleagues to determine how the Commission can best coordinate the activities of multiple agencies that are subject to different statutes.

Question 3: Do you believe the current hydropower licensing process is well functioning? If not, what changes do you recommend?

<u>Answer</u>: I am aware that the hydropower licensing process is complex and that, as a matter of law, decision making does not rest solely with the Commission, but also with other agencies that have mandatory conditioning authority not only under the Federal Power Act, but also under other statutes. If confirmed, I will look forward to addressing the licensing process with my colleagues.

Question 4: What are your views on how RTO-administered capacity markets are working? Specifically, are these markets supporting the development of a diverse array of electric generating facilities in light of past and pending coal plant retirements, while minimizing adverse impacts on consumers? If not, what steps would you take to improve or modify them?

<u>Answer</u>: I believe that RTO-administered capacity markets have largely achieved their objectives in procuring adequate resources to meet their reliability criteria. However, changes may still be needed to support the development of electric generating facilities in light of past and pending coal plant retirements. Two of FERC's core responsibilities are to ensure that the reliability of the bulk electric system is maintained and that wholesale electricity rates are just and reasonable. If confirmed, I will work with my colleagues to ensure that we meet these core responsibilities when evaluating RTO capacity markets.

Question 5: I represent a state that choose to deregulate its electricity sector and leverage free market principles to deliver safe and reliable electricity to Ohio consumers. I am one of the few members on this committee who represents a state that has deregulated its electricity market. The rapid adoption of new technologies, low natural gas prices, and out-of-market subsidies have

been distressing competitive wholesale electricity markets. If confirmed, will you support FERC taking a leadership role in protecting wholesale electricity markets in order to ensure that electricity in these markets continues to be delivered safely and reliably?

<u>Answer</u>: Congress tasked FERC with supporting the reliability of the bulk electric system and ensuring that wholesale electric rates are just and reasonable. If confirmed, I will ensure that FERC fulfills its role with regard to wholesale markets.

Question 6: The Federal Power Act directs FERC to ensure that wholesale power rates are "just and reasonable." How do you believe that mandate applies today in the world of RTOs?

<u>Answer</u>: I believe that the Federal Power Act's mandate that FERC ensure just and reasonable wholesale power rates applies equally in both non-RTO and RTO regions. In regions where RTOs are in place, FERC reviews the justness and reasonableness of the market design, including effective oversight of that design, to ensure that the rates are just and reasonable.

Question 7: In Ohio, rural electric co-ops ensure that over 885,000 consumers have access to reliable and affordable electricity. The Federal Power Act exempts rural electric co-ops from FERC jurisdiction and this statutory exemption contributes to the state's affordable electricity rates. Do you plan to adhere to the Federal Power Act and continue to exempt rural electric co-ops from FERC jurisdiction?

<u>Answer</u>: Electric cooperatives that receive a certain type of financing or that sell less than a certain amount of electricity per year are exempt from certain provisions of the Federal Power Act. If confirmed, I commit to adhere to the provisions in the Federal Power Act regarding jurisdiction over electric cooperatives.

Question 8: On May 1st and 2nd of this year, FERC held a technical conference on the potential conflicts between state policies and electricity grid operators. If confirmed, will you commit to reviewing the findings of the technical conference?

<u>Answer</u>: If confirmed, I look forward to reviewing the findings of the technical conference and addressing these important issues with my colleagues.

Questions from Senator Catherine Cortez Masto

Question 1: In late 2016, FERC issued a proposed rule that would eliminate barriers to the participation of renewable energy and electric storage in wholesale markets. Will you support approval of the proposed rule? What changes, if any, would you support before issuing a final rule?

<u>Answer</u>: I am reluctant to address the specifics of a final rule given that I have not had the opportunity to study the record, but if confirmed I look forward to addressing this issue with my colleagues.

Question 2: Do you support removing market barriers so that renewable energy and electric storage resources can provide services in wholesale markets?

<u>Answer</u>: I believe that all resources should be able to compete for the ultimate benefit of consumers. Eliminating unjust and unreasonable barriers to participation in the market is an important aspect to ensuring competition among resources.

<u>Question 3</u>: What additional actions could FERC take to allow distributed energy resources access to wholesale electricity markets?

<u>Answer</u>: Late last year, FERC issued a Notice of Proposed Rulemaking on Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators proposed to address such barriers by providing a way by which distributed energy resource aggregators can participate in the organized wholesale electric markets. If confirmed, I look forward to reviewing the many comments the Commission received in response to the proposal and addressing this issue with my colleagues.

Question 4: In the state of Nevada, we have a successful renewable portfolio standard and have made great strides in creating a clean energy economy. Do you agree that states have the authority to establish the resource mix that best serves their customers?

<u>Answer</u>: States have jurisdiction over the resource mix in their individual states, but the Commission also has responsibilities under the Federal Power Act. I appreciate the importance of these issues to states. I understand the Commission recently held a technical conference with the objective of further exploring how the competitive wholesale markets can incorporate resources promoted by state energy policies while ensuring that wholesale electricity rates remain just and reasonable and that the reliability of the bulk power system is maintained. If confirmed, I look forward to working with my colleagues on this matter.

<u>Question 5</u>: If yes: How would you protect that authority?

<u>Answer</u>: Should I be confirmed, you have my assurance that I will be committed to protecting states' rights.

Question 6: If no: Why not?

Answer: Please see my response to your Question 5 above.

Question 7: Different regions of the country are reliably integrating renewable energy resources into the grid at very high levels. Numerous studies have shown that the grid can integrate far higher total levels of renewable energy on the grid than exist today. Do you agree that the evidence shows that solar and wind power can be reliably integrated into the power grid?

<u>Answer</u>: We can rely on all forms of resources to ensure reliable and reasonably priced energy, including reliance on solar and wind power. Those resources are playing an ever increasing part in our energy mix and we need to find a way to make sure those resources can be reliably integrated. Thus, while I am aware of some studies that show certain levels of integration can be achieved, my focus if confirmed will be on what the Commission can do to get resources integrated in a reliable and cost-effective manner.

Question 8: As levels of wind and solar energy resources expand, how important will regional coordination be in ensuring that these and other variable energy resources are cost-effectively integrated into the power grid?

<u>Answer</u>: I believe regional coordination is crucial in enabling cost-effective and reliable integration of all resources into the electric grid. By taking advantage of a larger pool of geographically-diverse resources, regional coordination is necessary to help balance power supplies, maintain grid reliability, and reduce power costs for customers.

Question 9: What can FERC do to facilitate this integration?

<u>Answer</u>: I believe that FERC has a role with regard to the integration of variable energy resources in a cost-effective and reliable manner.

I understand that FERC has sought to remove barriers to the integration of variable energy resources in its regulations. It has issued Order No. 764 requiring each public utility transmission provider to: (1) offer intra-hourly transmission scheduling; and, (2) incorporate provisions into the pro forma Large Generator Interconnection Agreement requiring interconnection customers whose generating facilities are variable energy resources to provide meteorological and forced outage data to the public utility transmission provider for the purpose of power production forecasting.

If confirmed, I look forward to working with my colleagues to monitor and review any proposed adjustments to specific markets or generic opportunities to ensure cost-effective integration of all resources including renewable energy resources.

Question 10: What are the main barriers to identifying transmission needs and getting these projects built?

Answer: In recent years, the Commission has considered ways to address barriers to needed transmission development. Order No. 1000, which the Commission issued in 2011, reformed public utility transmission providers' transmission planning processes and cost allocation mechanisms. As transmission planning regions work to implement both their Order No. 1000-compliant regional transmission planning processes and interregional transmission coordination procedures, the Commission has examined a number of issues related to transmission planning and cost allocation. For example, the Commission convened a technical conference in June 2016 on competitive transmission development. I support this continued effort to make sure FERC policies are meeting their intended goals. Following the technical conference, the Commission issued a request for post-technical conference comments on issues related to competitive transmission development, interregional transmission coordination, and regional transmission planning. If confirmed, I look forward to reviewing this record and addressing this issue with my colleagues.

Question 11: How will you promote joint and coordinated planning among regional transmission planners for necessary interregional transmission?

Answer: Interregional transmission development, including joint and coordinated interregional transmission planning, has been an issue before the Commission for several years now. Order No. 1000 required improved coordination between neighboring transmission planning regions for new interregional transmission facilities and that each public utility transmission provider participate in a regional transmission planning process that has an interregional cost allocation method for the costs of interregional transmission facilities. To date, the Commission has issued final orders approving interregional transmission coordination procedures for all the pairs of neighboring transmission planning regions that were required to comply with the Final Rule. Moreover, the technical conference on competitive transmission development that the Commission convened in June 2016 – described in my response to the preceding question – featured a discussion of interregional transmission coordination, including joint and coordinated interregional transmission planning. Several speakers at the technical conference, as well as some FERC Commissioners, questioned whether the Commission should do more to facilitate interregional transmission development. After the technical conference, the Commission requested post-technical conference comments on several issues related to interregional transmission development. If confirmed, I look forward to reviewing the record and addressing this issue with my colleagues.

<u>Question 12</u>: The lack of transmission is a barrier to transporting solar and wind energy to population centers. FERC Order No. 1000, requiring regional transmission planning and interregional coordination, was supposed to help identify transmission needs and solicit competitive transmission projects. Do you think that Order No. 1000's requirements for regional transmission planning were a step in the right direction towards facilitating necessary transmission infrastructure?

<u>Answer</u>: Order No. 1000 required each public utility transmission provider to amend its tariff to describe procedures that provide for the consideration of transmission needs driven by public policy requirements. This requirement applied to both local transmission planning processes and regional transmission planning processes. Specifically, the Commission required that each public utility transmission provider establish procedures through which it will identify transmission needs driven by public policy requirements in its local and regional transmission planning processes and evaluate potential solutions to those identified transmission needs.

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<u>Question 13</u>: Should FERC consider the underutilization of current pipelines when considering the need for a new pipeline?

<u>Answer</u>: As I understand the Commission's current policy, underutilization of current pipelines is one of the factors to be considered. If confirmed, I look forward to ensuring that all factors relevant to a determination that a proposed pipeline will serve the public interest are appropriately considered.

Question 14: Should FERC consider long-term stranded cost risk in examining the need for new pipelines?

<u>Answer</u>: My understanding is that the Commission evaluates the economic aspects of new interstate natural gas pipeline proposals. At present, such consideration is based on principles established in a 1999 Policy Statement. Under the Policy Statement, the pipeline applicant may not rely on its existing customers to help pay for the new project. This threshold requirement that the applicant must be willing to financially support the project without relying on existing customers appears to put the financial risk of overbuilding on the pipeline and not its existing customer.

Question 15: Who should be responsible for the costs of any wasteful overbuilding?

<u>Answer</u>: As I stated during my confirmation hearing, we need to strike the right balance between ensuring consumer protection while allowing for responsible energy development.