A REVIEW OF THE ADMINISTRATION OF LAWS UNDER THE JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION

HEARING BEFORE THE

COMMITTEE ON

ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

SEPTEMBER 28, 2021

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A REVIEW OF THE ADMINISTRATION OF LAWS UNDER THE JURISDICTION OF THE FEDERAL ENERGY REGULATORY COMMISSION

TUESDAY, SEPTEMBER 28, 2021

U.S. Senate,
Committee on Energy and Natural Resources,
Washington, DC.

The Committee met, pursuant to notice, at 10:08 a.m. in Room SD–366, Dirksen Senate Office Building, Hon. Joe Manchin III, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. JOE MANCHIN III,
U.S. SENATOR FROM WEST VIRGINIA

The CHAIRMAN. The Committee will come to order. I am pleased to be joined by all four of our sitting Federal Energy Regulatory Commissioners this morning. I want to thank you all for being here to discuss the work of the Commission. As you all have heard me say before, the best FERC is a fully seated FERC, and I am looking forward to quickly holding a hearing on Willie Phillips, President Biden’s nominee to fill the vacant seat on the Commission, once we receive all the necessary paperwork. Now, although we had some of you before the Energy Committee fairly recently as nominees, it has been over three years since we have had the full Commission appear together before our Committee.

This morning, I look forward to hearing how the Commission is working through our nation’s important energy challenges and ensuring that those issues are all balanced against affordability and reliability of electric services for all Americans and their businesses. I was pleased to see that the FERC and the North American Electric Reliability Corporation, or NERC, released their preliminary report last week, focused on the electric grid catastrophe suffered by millions of customers in Texas and other states last winter. I know there will be a great deal of interest in what corrections are needed to avoid these types of massive outages in the future. The energy mix has continued to undergo a transition due to market forces and weather patterns that are changing. We all had better focus on solving the challenges that come with this ongoing transition. A common theme in recent events from the extreme heat in California in August 2020 or the extreme cold around the country last winter is a failure to plan for adequate energy resources in the context of these changing weather patterns and generation portfolios. Having reliable power is not a “nice-to-have” for...
a superpower economy. We have to get this right. But we have an obligation to balance the cost of reliability and resilience with affordability because affordability is also not optional.

There is wide agreement that we need to address climate change, but less agreement on how, how fast, and at what cost. In my view, the only way to do it without sacrificing reliability and affordability is with policies that spur innovation, not elimination. It makes no sense to take tools out of the toolbox because we know that none of these energy resources are 100 percent immune to weather disruptions, whether that be freezing wind turbines, disruption to our natural gas production and delivery systems, or frozen coal stockpiles, all of which we saw happen last winter. We have to maintain a diverse and reliable energy mix with the technologies necessary to reduce our emissions, because when the sun sets in the middle of a regional heatwave, people expect grid operators and utilities to have firm generation ready to go, be that energy storage or natural gas. As we all know, FERC has a very important role in regulating natural gas markets and the infrastructure that is needed to move natural gas safely and efficiently.

We have natural gas to thank for the lion’s share of the decarbonization we have seen in the power sector over the last 20 years, and natural gas has helped manage prices and reliability. We have vast reserves of this commodity right in our backyard that can continue to support our energy independence. In 2019, the Appalachian Basin alone produced an estimated 11.5 trillion—that's with a “T”—cubic feet of natural gas, helping America become a net energy exporter for the first time in 67 years. However, moving this gas to market safely and efficiently is a necessity, and in order to do that we need to smartly expand the country's natural gas infrastructure system. According to regulators, pipelines have a 99.99 percent safety record, making them the safest mode of energy transportation. I believe that natural gas has an important role in the energy transition, and we need to ensure an efficient, predictable permitting process for pipelines. Congress expects FERC to update and revise its policies and practices in response to new facts and new technologies and certainly court decisions, of course, but that is while following current law and current policies in processing applications expeditiously.

I look forward to discussing how the Commission is balancing the need for updates with an obligation to the industry to provide fair and timely review of permit applications.

With that, I am going to turn to Senator Barrasso for his opening remarks.

OPENING STATEMENT OF HON. JOHN BARRASSO, U.S. SENATOR FROM WYOMING

Senator BARRASSO. Well, thank you so much, Mr. Chairman. Thank you for holding today's hearing. It couldn’t be coming at a more critical time. I am especially appreciative of your opening comments both focusing on affordability and reliability of our energy because, as we speak, this Administration and House Democrats are working frantically to impose a witch’s brew of reckless energy policies across the entire nation. The House Democrats’ plans will effectively end any new oil, natural gas, coal, and
hardrock mineral production on federal lands and waters. If enacted, their bill surrenders America’s energy independence and makes us dependent on OPEC, Russia, and China. It also would devastate communities across the West and the Gulf Coast. House Democrats also plan to impose a natural gas tax on American families and businesses. At a time when inflation is at its highest level since 2008, these policies make it more expensive for American families to heat and power their homes.

Mr. Chairman, the magazine, The Economist, last week pointed out that higher energy costs anger voters and hurt the poor. But price increases—they increase inflation, they lower standards of living, and yet the House Democrats’ plan would establish a so-called “Clean Electricity Performance Program,” which will add to the costs of energy. It is a scheme. It would use an estimated $150 billion of taxpayer dollars to pay off the largest utilities in the country to deploy the Democrats’ favorite energy sources. At the same time, it will allow those utilities to charge their customers for new transmission lines to service these facilities. And to add insult to injury, Democrats do not plan to debate and consider the legislation through regular order. They will not even allow the public to provide testimony on their bill. Instead, they plan to ram it through the legislative process on a completely partisan basis.

Not one Republican is going to support that bill. We will not support it because we have witnessed the disastrous results of these policies elsewhere. Let’s look at California. California prematurely shut down nuclear, natural gas, and coal-fired power plants. They have richly subsidized solar and wind energy. Now the people of California pay some of the highest electricity prices in the country. In return, millions of California residents have been subject to rolling blackouts over the last two years. They are having a hard time trying to keep the lights on in California. It is so bad that the Secretary of Energy and the Federal Energy Regulatory Commission have had to give California waivers. Waivers to do what? Well, to allow them to use natural gas plants to run overtime.

We should also look at what is happening in Europe. Like California, European countries prematurely shut down their nuclear power, their natural gas, their coal-fired power plants. And what did they do? They richly subsidized wind and solar energy. Now Europe’s electric grids are failing to deliver, and electricity prices in Europe are hitting all-time record highs. A recent headline in the Wall Street Journal, Mr. Chairman, here it is, “European Energy Prices Surge.” What’s the sub-headline? “Lack of North Sea wind curbs an electrical source just as stocks of natural gas are low.” The article notes that this month, electricity prices in the United Kingdom, because of policy decisions made there, are seven times what they were just one year ago—seven times higher than what they were one year ago.

[The article referred to follows:]
MARKETS

Energy Prices in Europe Hit Records After Wind Stops Blowing

Heavy reliance on wind power, coupled with a shortage of natural gas, has led to a spike in energy prices

The U.K. has leaned on wind power as it aims to slash carbon emissions.

PHOTO: PETER BYRNE/PA WIRE/ZUMA PRESS

By Joe Wallace
Sept. 13, 2021 6:17 am ET

Natural gas and electricity markets were already surging in Europe when a fresh catalyst emerged: The wind in the stormy North Sea stopped blowing.

The sudden slowdown in wind-driven electricity production off the coast of the U.K. in recent weeks whipsawed through regional energy markets. Gas and coal-fired electricity plants were called in to make up the shortfall from wind.

Natural-gas prices, already boosted by the pandemic recovery and a lack of fuel in storage caverns and tanks, hit all-time highs. Thermal coal, long shunned for its carbon emissions, has emerged from a long price slump as utilities are forced to turn on backup power sources.
The episode underscored the precarious state the region’s energy markets face heading into the long European winter. The electricity price shock was most acute in the U.K., which has leaned on wind farms to eradicate net carbon emissions by 2050. Prices for carbon credits, which electricity producers need to burn fossil fuels, are at records, too.

**Wholesale day-ahead power prices since 2019**

![Graph showing wholesale power prices in Europe with the U.K. and Germany highlighted.]

Note: €1 = $1.18
Source: ICIS

“It took a lot of people by surprise,” said Stefan Konstantinov, senior energy economist at data firm ICIS, of the leap in power prices. “If this were to happen in winter when we’ve got significantly higher demand, then that presents a real issue for system stability.”

At their peak, U.K. electricity prices had more than doubled in September and were almost seven times as high as at the same point in 2020. Power markets also jumped in France, the Netherlands and Germany.

Prices for power to be dispatched the next day rocketed to £285 a megawatt hour in the U.K. when wind speeds dropped last week, according to ICIS. That is equivalent to $395 a megawatt hour and marked a record on figures going back to 1999.
In electricity markets, the cost of generation at the most expensive supplier determines prices for everyone. That means that when countries derive power from thermal plants with comparatively high running costs, it boosts prices for the whole market. Operating costs at fossil-fuel power plants are high right now after a relentless climb in prices for gas, coal and carbon permits.

Energy prices could shoot even higher if cool temperatures stop gas stores replenishing before the period of peak winter demand, said Tom Lord, a carbon trader at U.K.-based Redshaw Advisors. “You’ve got a gas market that’s extremely tight,” he said.

Electricity, gas, coal and carbon markets have a way of feeding on one another. High gas prices prompted utilities to burn more coal, so they had to buy more emissions allowances. Expensive carbon permits then prodded energy companies to turn back to gas, whose price rose again because the fuel is in short supply.

The feedback loop has the potential to ripple into the broader economy. European Central Bank President Christine Lagarde this month referred to energy markets as one of the main forces driving inflation higher.

Wind accounted for about a quarter of Great Britain’s power last year, according to the system operator National Grid. After the wind dropped this month, National Grid asked Électricité de France SA to restart its West Burton A coal power station in Nottinghamshire. That won’t be possible in the future: The government has said all coal plants must close by late 2024.

To be sure, abundant wind power has at times led to periods of cheap electricity. This month, however, U.K. wind farms produced less than one gigawatt on certain days, according to Mr. Konstantinov. Full capacity stands at 24 gigawatts. Maintenance work on subsea cables restricted electricity imports from France.

Losers from the jump in prices include power-intensive companies that are due to renew multiyear energy deals and firms that haven’t hedged their electricity bills.

Two U.K. energy retailers—PFP Energy and MoneyPlus Energy—went out of business when electricity prices spiked this month. The companies, with a combined 94,000 gas and power customers, didn’t return requests for comment.

Winners include U.S. and Russian companies exporting gas to Europe, as well as renewable-power suppliers producing electricity with near-zero operating costs.
Energy Prices in Europe Hit Records After Wind Stops Blowing - WSJ

of Cheniere Energy Inc., a major U.S. exporter of liquefied natural gas, have risen 47% this year.

The price surge shows the need to have backup power supplies for moments when the wind doesn’t blow and the sun doesn’t shine, said Mark Dickinson, chief executive of Inspired PLC, which advises companies on energy costs and climate change.

Options include reserve thermal power plants, battery storage or cables for importing electricity from other markets.

Write to Joe Wallace at Joe.Wallace@wsj.com

Appeared in the September 14, 2021, print edition as 'European Energy Prices Surge.'
Senator BARRASSO. Now Europe does not have sufficient supplies of natural gas. This puts them completely at the mercy of foreign actors, including Russia. Make no mistake, this is America's future if President Biden and House Democrats get their way.

For these reasons, I am glad we have members of the FERC before us today. Among FERC's authorities, as the principal regulator of natural gas and electricity, the Commission has the responsibility to ensure Americans have affordable and reliable natural gas and electric service—Mr. Chairman, the two words that you used to start your opening statement today. FERC is an independent agency, not merely an arm of the White House. In other words, FERC Commissioners have the opportunity as well as the obligation to speak the truth about the potential impacts of these policies on all Americans. They can explain the consequences of the reckless policies to a President who seems intent on putting rhetoric ahead of reality and politics ahead of the people of this country.

Welcome to you all, and I look forward to hearing your testimony. A number of us have some probing questions.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Barrasso.

I would like to welcome all four of our witnesses to the Committee and thank you for being here today. It is nice to see all of you in person, in one place, in one setting.

We have Chairman Rich Glick with us. We have Commissioner Mark Christie. We have Commissioner Allison Clements. And we have Commissioner James Danly. Chairman Glick, we are going to begin with your opening remarks, if you will, sir.

OPENING STATEMENT OF HON. RICHARD GLICK,
CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION

Mr. Glick. Thank you very much, Chairman Manchin, Ranking Member Barrasso, and members of the Committee. Thank you for inviting my colleagues and me to appear before you today to discuss the important work we are doing at the Federal Energy Regulatory Commission. I am honored to appear before you for the first time since being designated by President Biden as Chair of the Commission in January. I am also very glad to be back in this room where I spent so many hours as a staff person on a couple of different occasions.

The nation's energy landscape is in the midst of a dramatic transformation driven by rapid changes in economics, technological innovation, changing consumer preferences, and the exigency of climate change. Residential, commercial, and industrial customers are increasingly demanding that their energy come from zero-emissions resources. Dozens of the biggest utilities in the country have established their own decarbonization goals, and a growing number of state and federal policies are aimed at dramatically reducing greenhouse gas emissions. The Commission's job is not to pick winners and losers, but we do have a role in eliminating barriers to technology's participation in wholesale markets. For instance, over the last several years, FERC issued landmark orders facilitating energy storage and aggregated distributed energy resources' participation in organized wholesale electricity markets.
Today, I will focus my remarks on five priority areas of our work: (1) building the transmission grid of the future, (2) modernizing electricity market design, (3) updating FERC’s natural gas certificate policy statement, (4) safeguarding the reliability of the electric grid, and (5) facilitating a more inclusive decisionmaking process.

The rapid shift in the resource mix and the growing threat to grid resilience due to the changing climate requires significant investments in new and existing transmission. In July, the Commission unanimously approved an Advance Notice of Proposed Rulemaking (ANOPR) inviting the public to comment on potential reforms to improve current transmission planning and cost allocation and generator interconnection processes. The aim of this initiative is to meet the transmission needs of the future at the lowest cost to consumers. Through the ANOPR, FERC is taking a critical step toward our first major effort of transmission reform in a decade, and I hope to move forward as expeditiously as possible with this priority work.

While organized wholesale electric markets continue to provide for lower prices, greater efficiencies, and increased innovation, these markets are now some 20 years old and in certain regards, may fail to reflect the modern electric sector. One key focus is to address the growing tension between state public policies and administrative pricing rules. As states were adopting clean energy policies that shifted the resource mix toward renewable and zero-emissions generation, the Commission expanded its minimum offer price rules (MOPRs) in the eastern RTO capacity markets in a manner that put state-supported generation resources at a competitive disadvantage.

In response to strong concerns from the states, clean energy industry, and consumer groups, the regional grid operators have initiated stakeholder discussions to reform their capacity market rules to better accommodate state policies. In addition, the Commission generally relies on competition to establish just and reasonable rates in wholesale markets, but this only works if there is true competition. The Commission’s vigilant use of its authority to prevent manipulation of electric and natural gas markets is an essential tool to ensure rates are just and reasonable.

Under the Natural Gas Act (NGA), FERC essentially must determine whether a proposed interstate natural gas pipeline is both needed and in the public interest before issuing the Certificate of Public Convenience and Necessity. In 2018, then Chairman McIntyre initiated a Notice of Inquiry (NOI) seeking input into the potential reforms to modernize the Commission’s 1999 certificate policy statement. While the Commissioner received numerous comments at the time, no action was taken. Earlier this year, we issued another Notice of Inquiry seeking additional input, including: (1) options for determining whether a proposed pipeline project is needed, (2) approaches for evaluating a proposed project’s impact on climate change, and (3) what considerations are required when a proposed project would be sited in an environmental justice community.

The need to see this proceeding to a conclusion is even more urgent in the aftermath of several appellate court decisions highly critical of aspects of the Commission’s approach to pipeline certifi-
cation. As we have witnessed in Texas this past winter, the pro-
longed loss of electric service is more than just an inconvenience.
It can and did produce tragic results. FERC and the North Amer-
ican Electric Reliability Corporation are conducting a joint inquiry
into the operations of the bulk electric system during Winter Storm
Uri, and recently released an interim report suggesting that a lack
of weatherized generation and problems associated with natural
gas production and processing were the main causes of the Texas
blackouts. I am determined that the recommendations arising from
this joint inquiry be implemented to avoid a reoccurrence of the
events. Whether it is prolonged record cold, heatwaves, drought
and wildfires in the West, or increasing ferociousness of hurricanes
in the Gulf, climate change poses a distinct threat to grid reli-
bility. The Commission recently initiated a docket to examine the
impact of extreme weather on grid reliability. It will continue to
focus on actions that utilities and others can take to address the
growing threat of extreme weather.

We need to be equally vigilant when it comes to potential
cyberattacks against the grid. At FERC, we use a two-pronged ap-
proach to safeguard grid security, employing mandatory standards
to set requirements for foundational practices like working collabor-
atively with industry, states, and other federal agencies to identify
and promote best practices. Given the high stakes, we devote con-
stant attention to, and continue to explore improvements in our cy-
bersecurity. And last, FERC’s regulatory actions have a significant
impact on the lives of millions of people. As a result, it is important
that our decisionmaking processes include robust input from di-
verse perspectives. That is why I am pleased that the new Office
of Public Participation is up and running. I want to commend my
colleague, Commissioner Clements, for her leadership and her hard
work in helping to establish the office.

Toward the goal of inclusivity, I want to highlight FERC’s efforts
to better incorporate environmental justice and equity concerns
into our decisionmaking. It is unlikely that FERC is hearing from
members of historically marginalized communities with the same
force and frequency as other stakeholders and thus, it is essential
that environmental justice and equity get the attention in our deci-
sionmaking processes that they deserve.

Thank you again for the opportunity to share some of the Com-
mission’s priorities. I look forward to responding to your questions.

[The prepared statement of Mr. Glick follows:]
Written Testimony of Richard Glick  
Chairman  
Federal Energy Regulatory Commission  

Before the  
Committee on Energy and Natural Resources  
United States House Senate  

Hearing to  
Review Administration of Laws Within FERC’s Jurisdiction  

September 28, 2021  

Chairman Manchin, Ranking Member Barrasso and Members of the Committee:

Thank you for inviting my colleagues and I to appear before you today to discuss the important work we are doing at the Federal Energy Regulatory Commission (FERC or Commission). I am honored to appear before you for the first time since being designated by President Biden as Chair of the Commission in January.

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1FERC is an independent regulatory agency with responsibilities that include ensuring just and reasonable and not unduly discriminatory or preferential rates associated with the sale of electricity, the transmission of electricity in interstate commerce, and the interstate transportation by pipeline of natural gas and oil. The Commission also sites interstate natural gas pipelines and liquefied natural gas terminals, as well as licenses hydropower projects. In addition, the Commission has authority over mandatory reliability standards for the bulk electric system. FERC on May 28, 2021 submitted to Congress its 2022 fiscal year budget request. As authorized by the Federal Power Act and the Omnibus Budget Reconciliation Act of 1986, the Commission recovers its full cost of operations through annual charges and filing fees assessed on the industries it regulates. The revenue is deposited into the U.S. Treasury acting as an offset to FERC’s budget appropriation. This results in a net appropriation of zero or “net zero budget impact”.

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ONGOING CHANGE IN THE ENERGY SECTOR

The nation’s energy landscape is in the midst of a dramatic transformation, driven by rapid changes in economics, technological innovation, changing consumer preferences, and the exigency of climate change.

Residential, commercial, and industrial consumers are increasingly demanding that their energy comes from zero-emissions resources. Dozens of the biggest utilities in the country have established their own decarbonization goals, and a growing number of state and federal policies are aimed at dramatically reducing greenhouse gas emissions.

The Commission’s job is not to pick winners and losers. But we do have a role in eliminating barriers to a technology’s participation in wholesale markets. For instance, over the last several years FERC issued landmark orders facilitating energy storage and aggregated distributed energy resources’ participation in organized wholesale electric markets.
FERC’S ROLE IN NAVIGATING SECTOR CHANGE

Today I will focus my remarks on five priority areas of our work: (1) building the transmission grid of the future; (2) modernizing electricity market design; (3) updating FERC’s natural gas certificate Policy Statement; (4) safeguarding the reliability of the electric grid; and (5) facilitating a more inclusive decision-making process.

BUILDING TRANSMISSION FOR THE FUTURE

The rapid shift in the resource mix and the growing threat to grid resilience due to the changing climate require significant investments in new and existing transmission.

In July, the Commission unanimously approved an Advance Notice of Proposed Rulemaking (ANOPR) inviting the public to comment on potential reforms to improve current transmission planning and cost allocation and generator interconnection processes. The aim of this initiative is to meet the transmission needs of the future at the lowest cost to consumers. Through the ANOPR, FERC is taking a critical step toward our first major effort at transmission reform in a decade, and I hope to move forward as expeditiously as possible with this priority work.
MODERNIZING ELECTRICITY MARKET DESIGN

While organized wholesale electric markets continue to provide for lower prices, greater efficiencies, and increased innovation, these markets are now some 20 years old and in certain regards may fail to reflect the modern electricity sector.

One key focus is to address the increasing tension between state public policies and administrative pricing rules. As states were adopting clean energy policies that shift the resource mix toward renewable and zero-emissions generation, the Commission expanded its minimum offer price rules (MOPR) in the eastern RTO capacity markets in a manner that put state-supported generation resources at a competitive disadvantage. In response to strong concerns from the states, the clean energy industry and consumer groups, the regional grid operators have initiated stakeholder discussions to reform their capacity market rules to better accommodate state policies.

In addition, the Commission generally relies on competition to establish just and reasonable rates in wholesale markets. But this only works if there is true competition. The Commission’s vigilant use of its authority to prevent manipulation of electric and natural gas markets is an essential tool to ensure rates are just and reasonable.
UPDATING FERC’S NATURAL GAS CERTIFICATE POLICY STATEMENT

Under the Natural Gas Act, FERC essentially must determine whether a proposed interstate natural gas pipeline is both needed and in the public interest before issuing the project a “Certificate of Public Convenience and Necessity.”

In 2018 then-Chairman McIntyre initiated a Notice of Inquiry seeking input into potential reforms to modernize the Commission’s 1999 Certificate Policy Statement. While the Commission received numerous comments at the time, no action was taken.

Earlier this year, we issued another Notice of Inquiry seeking additional input including: (1) options for determining whether a proposed pipeline project is needed, (2) approaches for evaluating a proposed project’s impact on climate change, and (3) what considerations are required when a proposed project would be sited in an environmental justice community. The need to see this proceeding to a conclusion is even more urgent in the aftermath of several appellate court decisions highly critical of aspects of the Commission’s approach to pipeline certification.

SAFEGUARDING INFRASTRUCTURE FROM EMERGING RELIABILITY THREATS, INCLUDING CYBERSECURITY

As we have witnessed in Texas this past winter, the prolonged loss of electric service is more than just an inconvenience. It can and did produce tragic consequences.
FERC and the North American Electric Reliability Corporation are conducting a joint inquiry into the operations of the bulk electric system during Winter Storm Uri and recently released an interim report suggesting a lack of weatherized generation and problems associated with natural gas production and processing were the main causes of the Texas blackouts. I am determined that the recommendations arising from this joint inquiry be implemented to avoid a reoccurrence of these events.

Whether it is prolonged record cold, heatwaves, drought and wildfires in the West, or increasingly ferocious hurricanes in the Gulf, climate change poses a distinct threat to grid reliability. The Commission recently initiated a docket to examine the impact of extreme weather on grid reliability. We will continue to focus on actions that utilities and others can take to address the growing threat of extreme weather.

We need to be equally vigilant when it comes to potential cyber-attacks against the grid. At FERC, we use a two-pronged approach to safeguard grid security, employing mandatory standards to set requirements for foundational practices, while we work collaboratively with industry, states, and other federal agencies to identify and promote best practices. Given the high stakes, we devote constant attention to and continue to explore improvements in cybersecurity.
INCLUSIVE ENGAGEMENT AND ENVIRONMENTAL JUSTICE

FERC’s regulatory actions have a significant impact on the lives of millions of people. As a result, it is important that our decision-making processes include robust input from diverse perspectives.

That is why I am pleased the new Office of Public Participation is up and running. I want to commend my colleague -- Commissioner Clements -- for her leadership and hard work in helping to establish the Office.

Toward the goal of inclusivity, I want to highlight FERC’s efforts to better incorporate environmental justice and equity concerns into our decision-making. It is unlikely that FERC is hearing from members of historically marginalized communities with the same force and frequency as other stakeholders and thus it is essential that environmental justice and equity get the attention in our decision-making processes that they deserve.

CONCLUSION

Thank you again for the opportunity to share some of the Commission’s priorities. I look forward to responding to your questions.
The CHAIRMAN. Thank you, Chairman Glick.
And now, we will have Commissioner Mark Christie.

OPENING STATEMENT OF HON. MARK C. CHRISTIE, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. CHRISTIE. Chairman Manchin, Ranking Member Barrasso, members of the Committee, it is truly an honor to be here for the first time as a member of the Commission. It was just over one year ago that I appeared before you as a nominee and I want to thank you for all the courtesies that this Committee gave me a year ago.

I said then that my two highest priorities—and I think FERC’s highest priorities—are to maintain the reliability of the electric grid and also make sure that costs remain affordable for consumers. I want to mention, Mr. Chairman, you made those same comments in your opening statement. So I want to mention something that I think is relevant to that. As you know, you asked me about this last year, and as you know, I spent 17 years as a state regulator in Virginia. And as a state regulator in Virginia, I learned an awful lot about your state, Mr. Chairman, West Virginia, because we share jurisdiction with Appalachian Power Company, which is the largest utility in West Virginia, certainly in the southern half of the state. West Virginia has a generating fleet that is 90 percent coal. If West Virginia is forced during the transition that we’re going through to prematurely retire that entire fleet, number one, you have a reliability problem in West Virginia because 90 percent of your generating fleet is coal. But second, you have a cost problem, because that fleet has to be replaced with replacement power and West Virginia consumers have to pay for that. And third, most of those generating units in West Virginia I am familiar with are in rate base. And what that means is, if you shut them down, West Virginians are going to be paying for them for years to come even though they are not operating.

So as you mentioned, Mr. Chairman, we’re going through a transition. We’re going through a transition to a lower carbon future, and everybody wants to get there. But as we go through this transition, it is absolutely essential that reliability not be compromised and that consumers not be exploited. And with that, thank you again. I appreciate being here, Mr. Chairman.

[The prepared statement of Mr. Christie follows:]
Chairman Manchin, Ranking Member Barrasso, members of the Committee, it is an honor to be here for the first time as a member of the Federal Energy Regulatory Commission.

It was just over one year ago that I appeared before you as a nominee for FERC. So first I want to thank you for the honor this committee gave me last year by reporting my nomination favorably.

During that appearance before you and in the follow-up written questions, I stated that I believed two of FERC’s highest priorities should be doing our part to maintain the reliability of the power system and protecting consumers from paying any more than necessary for a reliable power supply. These priorities are especially important now as we go through a changing generation mix and efforts to reduce carbon emissions. During this transition there can be no compromise on reliability and consumers must be protected from being exploited.

Americans expect their lights to be on 24 hours a day, 7 days a week, 365 days a year. For many, reliable power service is not just a matter of convenience, but literally a matter of life and death. It is very important that the resource mix remains capable of supplying power to meet that 24/7/365 standard and that we have a transmission grid that can deliver power to support reliability. Sufficient generation and transmission are both necessary to keep the lights on around the clock.

As I indicated to you last year, I came to FERC after 17 years as a state utility regulator and, of course, the states regulate retail rates not FERC, but what FERC does has a huge impact on retail rates, and retail rates ultimately drive the monthly power bills that consumers must pay. So we at FERC always have to be sensitive to the effect of our actions on consumer costs. Reliability is not free – transmission and generation facilities must be paid for – but we need to ensure that the costs consumers pay are no more than absolutely necessary to deliver a reliable power supply.

Thank you again for the honor of testifying today before you. I look forward to any questions you may have.
The CHAIRMAN. Thank you, Commissioner Christie.
And now we are going to hear from Commissioner Allison Clements.

OPENING STATEMENT OF HON. ALLISON CLEMENTS, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Ms. CLEMENTS. Thank you, Chairman Manchin, Ranking Member Barrasso, and members of the Committee. It is quite an honor to have an opportunity to testify before you today.

For several decades, the Commission has met its responsibilities under the Federal Power Act (FPA) and the Natural Gas Act (NGA) by adapting to reflect changing circumstances. These circumstances include technological advancements, shifting economic and market dynamics, the emerging cyberthreat, and evolving federal, state, and local energy policies. While the Commission’s adaptation to change is familiar, the current magnitude of challenges driving the need for this change is unprecedented. My testimony today describes three priorities the Commission should pursue to protect customers while facilitating a reliable and resilient energy system.

First, we must safeguard the energy system against extreme weather. Members of this Committee in particular understand the suffering and the issues posed by excessive heat, drought, and wildfires in the West, increasing frequency and severity of hurricanes in the Gulf Coast and up the Eastern Seaboard, and unusual heat domes and extreme cold around the country. Current policies are not adequate to meet these new realities. Of course, the issues cannot be boiled down to just a reliability standards problem, or just a transmission system planning problem, or just a market design problem. As FERC and NERC staff describe in the preliminary findings from the February Storm Uri event, we must address extreme weather holistically to ensure reliability and resilience. The Commission has appropriately opened a docket examining challenges posed by extreme weather, and I will urge Commission action based on what we learn in this record.

My second priority is ensuring that FERC’s regulations better facilitate construction of cost-effective, high-voltage transmission infrastructure. Action here is a priority for two reasons. First, as was affirmed in the initial analysis of Storm Uri, as well as in earlier polar vortex events in 2014 and 2019, linking grid regions together via high-voltage transmission continues to pay reliability and resilience dividends during extreme weather events. Second, the U.S. transmission system is not equipped to integrate resources that otherwise outcompete existing ones and meet consumer demands for clean energy. Declining costs of wind, solar, and hybrid generation, which make up the majority of the new supply seeking to connect to the grid, are not translating into the customer benefits they hold the potential to provide. The reason: outdated and often unworkable transmission planning, cost allocation, and interconnection policy. Current planning happens, generally, in a piecemeal fashion based on analysis that is not sufficiently forward-looking to protect customers. The result has been inadequate system build-out, leading to overloaded interconnection cues and project development delays and, of course, the costs that come along with them.
Failure to act on this priority will further endanger both customers and broader system reliability. The Commission’s recently issued Advance Notice of Proposed Rulemaking is a critical step to examine how holistic, forward-looking planning based on a more accurate assessment of future conditions can avoid such outcomes. It will provide an important record from which to take action.

My third and final priority is to modernize the Commission’s interstate gas pipeline certification approach to protect the public interest and increase regulatory certainty. I am eager to achieve a legally durable framework for considering certificate applications under the Natural Gas Act, one that achieves balance by providing consistency and regulatory certainty to both project sponsors and the public that we are pledged to serve. The Commission’s outstanding Notice of Inquiry on updating our 1999 policy statement provides a record to consider the perspectives of stakeholders across the energy sector toward this goal. While we are considering this record, however, we cannot ignore our responsibility to implement our existing policy statement consistent with binding appellate court instructions going back to 2017. The D.C. Circuit’s recent vacatur of the Commission’s decision granting Spire Pipeline’s certificate demonstrates the harm that may befall project sponsors and consumers when the Commission’s decisional process falls short. As part of this effort, I have prioritized improved public participation in Commission proceedings. The Chairman spoke about the Office of Participation, a Congressionally directed office which is intended to do just that.

It has been the greatest honor to begin service to the American people, and thank you again for the opportunity to be here today.

[The prepared statement of Ms. Clements follows:]
Written Testimony of Allison Clements  
Commissioner  
Federal Energy Regulatory Commission

Before the Committee on Energy and Natural Resources  
United States Senate  
September 28, 2021

Chairman Manchin, Ranking Member Barrasso, and Members of the Committee, thank you for the opportunity to testify this morning. The Commission’s core responsibility under the Federal Power Act (FPA) is to ensure reliable, affordable electric service for the American public. Its core responsibility under the Natural Gas Act (NGA) is to assure just and reasonable rates for the interstate transportation and sale of natural gas and the consideration of gas infrastructure consistent with the public interest. For several decades the Commission has met these objectives by adapting its regulations to reflect changing circumstances, which include technological advancements, shifting economic and market dynamics, the emerging cyber threat, and evolving federal, state, and local energy regimes and policies.

While the Commission’s adaptation to change is familiar, the current magnitude of the challenges driving the need for change is unprecedented. My testimony today describes three priorities the Commission should pursue to satisfy our obligation to protect customers while facilitating a robust, reliable, and resilient federal energy system.

First, we must safeguard the energy system against extreme weather.

Members of this Committee in particular understand the suffering and issues posed by excessive temperatures, drought and wildfires in the Western half of the nation, increasing frequency and severity of hurricanes in the Gulf Coast and Eastern seaboard, and unusual heat domes and extreme cold around the country. ¹

Current policies are not adequate to meet these new realities. The Commission has appropriately opened a docket examining challenges posed by extreme weather. Policy issues

¹ U.S. Gov’t Accountability Office, GAO-21-423T, Electricity and Grid Resilience: Climate Change is Here and Expected to Have Far-Reaching Effects and DOE and FERC Should Take Actions (2021). In August, 104 large fires were burning in the United States. See Madeline Holcombe, and Joe Sutton, Wildfire conditions expected to continue in the West
cannot be boiled down to just a reliability standards problem, just a market design or resource adequacy issue, or just a transmission planning failure. As FERC and NERC staff described in the preliminary findings from the extreme cold weather event in Texas and the Central U.S. (Storm Uri), we must address extreme weather risk across these areas holistically to ensure system reliability and resilience.

While staff’s inquiry into Storm Uri remains ongoing, I anticipate that necessary changes will include updating reliability standards, improving planning practices to better assess which resources will truly perform when needed, and facilitating the construction and enhancement of infrastructure to ensure the energy system performs reliably during these events. We should also consider market designs to ensure that they value the important flexibility service that many resources, including hydropower and fast-ramping batteries, provide to the system. Given that the challenges presented implicate the overlapping jurisdiction of other regulatory bodies, the Commission must work cooperatively with other entities in implementing solutions.

**Second, we must reform FERC’s regulations to facilitate construction of cost-effective high voltage transmission infrastructure.**

Action to spur construction of high voltage transmission infrastructure is a priority for two reasons. First, as was affirmed in initial analysis of Storm Uri, grid responses to extreme weather events continue to benefit from the reliability and resilience value of linking grid regions together via high voltage transmission. Earlier polar vortex events, in 2014 and 2019, similarly illustrated this critical reliability value.²

Second, the U.S. transmission system is not equipped to integrate new resources that otherwise outcompete existing resources and meet consumer demands for clean energy. Declining costs of wind, solar, and hybrid (wind or solar plus battery storage) generation, which

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make up the majority of new supply seeking to connect to the grid, are making these
technologies competitive. Continued development of these resources will not only contribute to
decarbonization mandates and commitments by states, cities, corporations and utilities, but will
also lower electricity costs for all customers, across all states.

Current transmission planning practices do not adequately account for this changing grid
mix. Instead, they generally plan grid upgrades in a piecemeal fashion that examines reliability,
economic, and public policy benefits in silos, based on analysis that is not sufficiently forward-
looking to protect customers. The result has been inadequate buildout of the high-voltage
transmission system, leading to overloaded interconnection queues and costly project
development delays. Nearly 750 gigawatts of generation are mired in interconnection queues
across the country, including nearly 700 gigawatts of renewable generation.3

It is clear that a significant buildout of transmission is the optimal approach to capturing
the benefits that low-cost clean energy resources present. A leading study from Princeton
University, for example, estimates that a least-cost approach to reaching a national net zero
greenhouse gas emissions target would require roughly 60 percent more high voltage
transmission infrastructure than exists today by 2030, and a tripling of such infrastructure by
2050.4

Failure to act will endanger both customers and broader system reliability. The
Commission in July issued an Advance Notice of Proposed Rulemaking (ANOPR) that examines

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3 See Joseph Rand, Queued Up: Characteristics of Power Plants Seeking Transmission
Interconnection as of the End of 2020, Lawrence Berkeley National Laboratory, May 2021,
available at https://eta-publications.lbl.gov/sites/default/files/queued_up_may_2021.pdf. In the
country’s two largest RTO regions, Midcontinent Independent System Operator (MISO) and PJM
Interconnection (PJM), 80% and 79%, respectively, of the total capacity in the interconnection
queue comes from solar and wind projects. See MISO, Generator Interconnection Queue –
Active Projects Map, available at https://giqueue.misoenergy.org/PublicQueueMap/
index.html; PJM, New Services Queue, available at https://www.pjm.com/planning/services-
requests/interconnection-queues.aspx.

4 Eric Larson, et al., Net-Zero America: Potential Pathways, Infrastructure, and Impacts,
how holistic, forward-looking planning, based on a more accurate assessment of future conditions, can avoid such outcomes. The ANOPR asks how we can leverage available modeling techniques to craft more realistic future scenarios to guide planning. It explores how we can better assess the full suite of benefits of large-scale transmission to improve the benefit-cost analyses that inform decision-making. It considers how to integrate transmission planning and generator interconnection—processes that, while separate today, could offer tremendous customer savings and other benefits if co-optimized. Finally, it asks about enhanced oversight and transparency to ensure money is spent wisely.

In working towards this reform, the Commission should continue its efforts to improve state-federal and inter-agency coordination. The FPA’s framework of cooperative federalism and the siting processes that accompany new infrastructure development—state and federal—assure that the Commission cannot successfully play its role in addressing the challenges described above without respect for, and cooperation with, the states and relevant federal agencies.

For example, the Commission’s recent creation of a joint federal-state task force with the National Association of Regulatory Utility Commissioners (NARUC) will examine a broad array of transmission planning issues and opportunities, alongside state partners that are responsible for transmission infrastructure siting. The Commission also recently issued a policy statement making clear that states and utilities are not precluded from pursuing voluntary agreements to plan and pay for new transmission facilities that support their priorities.

**Third, we must modernize the Commission’s interstate gas pipeline certification approach to protect the public interest and increase regulatory certainty.**

I am eager to achieve a legally durable framework for considering certificate applications under section 7 of the NGA—one that achieves balance and provides consistency and regulatory certainty to both project sponsors and the public we are pledged to serve. The Commission’s outstanding notice of inquiry (NOI) on updating our 1999 Policy Statement on the Certification of New Interstate Natural Gas Facilities (1999 Policy Statement) provides a robust record to consider the perspectives of stakeholders across the energy sector towards this goal.

While we are considering the NOI record, however, we cannot ignore our responsibility to implement the 1999 Policy Statement consistent with our statutory obligations as interpreted
by recent decisions of the D.C. Circuit Court of Appeals. The D.C. Circuit has made clear that the Commission is obligated under both the NGA and the National Environmental Policy Act (NEPA) to carefully consider a project’s potential environmental impacts from greenhouse gas emissions, as well as impacts on environmental justice communities.\(^5\) The Commission must also more fully consider need in its determination of public convenience and necessity under the NGA, and not rely solely on affiliate precedent agreements.\(^6\) The D.C. Circuit’s recent vacatur of the Commission’s decision granting Spire Pipeline’s certificate demonstrates the harms that may befall project developers and consumers when the Commission’s decisional process falls short.

As part of this effort I have prioritized improved public participation in Commission proceedings, which will provide more fulsome records that lead to stronger decision-making and more durable outcomes in pipeline certification and other proceedings within the Commission’s jurisdiction. The Commission recently established its Congressionally-directed Office of Public Participation (OPP), which is intended to do just that.\(^7\)

It has been the greatest honor to begin service to the American people. Thank you again for the opportunity to testify today.


OPENING STATEMENT OF HON. JAMES DANLY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

Mr. DANLY. Chairman Manchin, Ranking Member Barrasso, members of the Committee, thank you for having us here. I am going to begin by talking about a few items within the Commission’s jurisdiction that I am particularly concerned about.

The first is our authority to certificate pipeline infrastructure under Section 7 of the Natural Gas Act. The purpose of the Natural Gas Act is to encourage the development of plentiful supplies of natural gas at affordable prices. A handful of actions that the Commission has taken recently have created such a climate of uncertainty that it has stultified the ability of pipelines to rationally deploy capital or secure financing. In our utility system in America we rely upon private enterprise to deliver essential services and the business consequences to these jurisdictional entities are profound.

We have had a couple of cases that have thrown real doubt into the certificate process. One of them apparently seemed to reopen to litigation the terms of a closed certificate. You have to understand the consequences that can have. It costs hundreds of millions of dollars to operate and construct a pipeline and people will not finance projects of that size if they think that the certificate terms are up for later relitigation. Another problem has been the hints that have been dropped in our generic proceedings in another case that we could condition the certificates that eventually do issue on some form of mitigation. And it has yet to be seen what form or shape that would take or what the costs would be and how they would be imposed. And last, the pipeline industry has witnessed seemingly inexplicable delays in the processing of the NEPA documents, the National Environmental Policy Act documents we’re required to make, in which the Commission staff has determined that EAs—that is the shorter environmental assessments—were not sufficient, but full EISs (environmental impact statements) were required. And what I think causes the pipeline companies confusion is that, at least in two of the cases, the EISs—the full reviews—have come out and they’ve reached the exact same conclusion that the shorter environmental assessments did.

All told, these different actions of the Commission have caused such uncertainty that just last week, a very small pipeline project—it was upgrades to compressor stations in Pennsylvania and Virginia—the application was withdrawn because FERC did not take an action on beginning the environmental review. So I just want to highlight to the Committee that it is critical that we have stable processes in place, otherwise financing will not be available and this infrastructure that’s needed—remember, as we learned, sadly in Texas, if the light—if the gas system goes down so does the electric system. People rely upon this infrastructure and it needs to be developed in an orderly manner and there has to be stability for that.

I’ll briefly touch on two other points. I am concerned about our authority under the Federal Power Act to set rates for electric
transmission. There is, at this point, a great deal of enthusiasm for a rapid build-out of transmission in America and doubtless there are places in which further transmission development is necessary for reliability to reduce congestion. Those are legitimate and appropriate reasons to be building transmission and those costs rightly go to the consumers who get the benefit of that transmission build-out. But in the enthusiasm the people have to bring intermittent-resource-generated power from remote locations where it is produced to the load centers of the urban areas where it is consumed, I am greatly concerned that the value propositions set forth of getting inexpensive renewable energy may be a loser in the end because if the cost of the power is cheap but the cost of the transmission is high, you will see in the end, possibly, “all-in” bills to the ratepayer and it is the ratepayer that ultimately bears all of the cost of the transmission system. The all-in bill to the ratepayer may actually be higher than it would have been had locally produced electricity been employed. We are constrained by unambiguous court precedent to have a cost causation system in which the benefits derived from the transmission that the ratepayers are charged for is roughly commensurate with the cost they have to pay. And as we look at our generic proceeding for transmission, the Commission has to bear that in mind because it is a fundamental of transmission ratemaking.

And then, last, very briefly, I see I only have 30 seconds left. I am concerned about resource adequacy, specifically resource adequacy in our jurisdictional markets. The RTOs (Regional Transmission Organizations) and ISOs (Independent System Operators) have delivered immense benefits to ratepayers, but for those markets to work, they have to be designed properly, and I am concerned that incorrect price signals in our markets are failing to get the resource adequacy necessary—that is to say—the actual quantity of generation of the right type to ensure system stability. The Commission has to ensure that these markets are competitive so that the price signals are accurate and guard against the exercise of market power.

I am two seconds over. Thank you very much.

[The prepared statement of Mr. Danly follows:]
Written Testimony of James P. Dailey
Commissioner, Federal Energy Regulatory Commission
Before the Committee on Energy & Natural Resources
United States Senate
September 28, 2021

Chairman Manchin, Ranking Member Barrasso, and Members of the Committee:

Thank you for the opportunity to share my thoughts about how FERC is grappling with the many challenges of regulating a dynamic and complicated energy sector. In my opening remarks, I would like to take a moment to highlight the three subjects within the Commission’s jurisdiction about which I am most concerned.

The first subject is the Commission’s authority over natural gas pipeline infrastructure under section 7 of the Natural Gas Act (NGA). The interstate transportation and sale of natural gas is, by Congressional enactment, affected with a public interest. As the Supreme Court put it, the purpose animating the NGA is “the orderly development of plentiful supplies of . . . natural gas at reasonable prices.” As we witnessed last winter in Texas, reliable—affordable—supplies of natural gas are vital for the health, well-being, and prosperity of the American people.

I am concerned that a number of recent Commission actions have created such profound uncertainty throughout the natural gas pipeline industry that it is becoming increasingly difficult for the companies that build and operate natural gas pipelines to secure financing or rationally allocate capital.

In one decision (Weymouth), FERC called into doubt nearly a century of unquestioned precedent by apparently re-opening a finalized pipeline certificate, subjecting to potential re-litigation the FERC approval that allowed the construction and operation of natural gas infrastructure that had already been placed in service. The absolute finality of an issued pipeline certificate that has survived the gauntlet of FERC’s administrative processes and the inevitable challenges in court is necessary for the viability of the pipeline industry. It takes hundreds of millions of dollars to build and operate a natural gas pipeline. If the validity and terms of FERC’s approvals are now subject to re-litigation, no rational person would assume the risk of building or financing such enormous projects—at least not without a hefty risk premium priced in.

FERC has also upended years of practice regarding the significance of greenhouse gas emissions. In Northern Natural Gas Company, the Commission announced a standardless “eyeball test” for determining the line between de minimis and significant levels of carbon emissions. This uncertainty about how emissions will be evaluated has been compounded by hints the Commission has dropped in both its Certificate Policy Statement proceeding and its Weymouth decision, that future certificates may be conditioned on some unspecified form of “mitigation,” but the Commission has not announced a framework for how such mitigation will be determined or what form it might take. Pipeline companies now have no idea how the Commission will assess their project’s emissions or what additional costs the Commission may seek to impose.
The pipeline companies can also see that certificate applications for a number of major projects have been repeatedly delayed as the Commission has announced that instead of issuing the shorter, more abbreviated Environmental Assessments (a number of which had been completed last year), Commission staff—under the supervision of the Chairman—announced that the Commission would prepare full Environmental Impact Statements—adding significantly to the time those applications will spend sitting before the Commission.

You will likely hear that these more robust Environmental Impact Statements were required in order to ensure the legal durability of the ultimate orders. I do not see how that can be true. Among the projects that have been delayed, two have had their Final Environmental Impact Statements issued—and they reach the same conclusion that the Environmental Assessments did: that FERC staff is unable to assess the project’s impact on climate change. The Commission should have done what it had done (and successfully defended in court) for years—issue the Environmental Assessment and respond to comments in our orders. Instead, these projects have been significantly delayed in order to prepare Environmental Impact Statements that amount to little more than a paperwork exercise.

The uncertainty caused by these delays has a profound impact on the business decisions that pipeline companies must make. Last week, Eastern Gas Transmission and Storage, Inc. withdrew an application for a section 7 certificate which it filed nearly six months ago, requesting permission to build minor upgrades to three compressor stations in Pennsylvania and Virginia. It did so because, in their words, “despite [the project’s] limited scope, the Commission has not taken action to prepare an Environmental Assessment.”

Unless and until Congress changes the law, FERC is obligated to issue section 7 certificates for projects that are in the public convenience and necessity. I am concerned that, given the climate of uncertainty that the Commission has created and the inevitable chilling of investment that our actions have caused, there will be far fewer applications for the pipeline infrastructure we need to keep Americans warm in the winter and to ensure the stability of the electric system.

My second concern relates to the Commission’s obligation to ensure that electric transmission rates are just and reasonable under the Federal Power Act (FPA). There is presently a great deal of enthusiasm to build out the transmission system to bridge the great distances between intermittent generating resources in relatively rural areas to where power can be consumed in more urban locations. While the cost of the intermittent power may be low, I am concerned that the cost of transmission may prove to be extremely high. Ratepayers bear the all-in cost for generation and transmission.

Given the current scope of what some proponents seem to have in mind, I am concerned that the only means by which to finance transmission at this scale will be to socialize the costs as broadly as possible. This will stretch the principles of cost causation that govern how transmission costs may be allocated among ratepayers. Under longstanding judicial precedent, the costs that may be passed on to the ratepayer must be roughly commensurate with the benefits the ratepayer receives. FERC recently issued an Advanced Notice of Proposed Rulemaking, to
gather information on these issues from the public. As my colleagues and I review the comments in that docket, we must bear in mind that the costs of transmission are ultimately born by the ratepayers. The economic benefits of bringing low-cost power from intermittent generators will ultimately prove illusory if the ratepayers’ all-in bills end up being higher because of exorbitant transmission charges.

Finally, I want to bring to the committee’s attention my concerns about a particular aspect of reliability—the importance of resource adequacy to protect against grid disruptions. Resource adequacy is the assurance that there is sufficient generation, of the right type and in the right quantity, to ensure system stability. Resource adequacy is fundamental to keeping the lights on. FERC’s jurisdictional markets play a critical role in ensuring reliability and resource adequacy. Before the establishment of Independent System Operators (ISO) and Regional Transmission Organizations (RTO), planning to ensure resource adequacy was the responsibility of local utilities overseen by the states. However, a number of our ISOs and RTOs have assumed that responsibility from the states and have been designed to encourage resource adequacy through market mechanisms. I believe in the value of markets, and our ISOs and RTOs have delivered immense benefits to ratepayers. For markets to function correctly, however, they must be designed correctly. The markets must produce price signals that effectively create incentives for the entry of new resources and the retention of pre-existing resources of the correct type and in the correct quantity. FERC must remain vigilant and continue to police our markets to ensure that they compensate generation sufficiently to ensure resource adequacy and guard against the price-distorting effects of market power.

Again, thank you for the opportunity to address the Committee. I look forward to your questions.
The CHAIRMAN. Thank you all. I appreciate it. Now we are going to start with the questions and I will start with the opening questions.

I am going to ask all four of you the same question. If you were rating yourself on how you all work together, looking for commonality between zero to 100 percent, how would you rate yourself?

Chairman.

Mr. GLICK. I would rate us 80, 85. I mean, we have our differences, but I think, you know, I think we respect each other.

The CHAIRMAN. Commissioner Christie.

Mr. CHRISTIE. Well, I taught for a long time and grade inflation is real, so I am going to say 90.

[Laughter.]

Ms. CLEMENTS. I think we're at 80, 85, and just getting started.

Mr. DANLY. There's always one. I am not sure it is quite that high. Certainly, from my standpoint, I am very concerned about the clear, unambiguous letter of the law and the court's interpretation of it and so there are times in which I will admit that I can have a very clear-eyed view of that. But when it comes to the discretionary actions of the Commission, I think we get along very well. And I'll point out that 95 percent of our orders are unanimous. So for the vast majority of the work we do, we're of one mind.

The CHAIRMAN. Very good. Thank you, all.

According to the Bureau of Labor Statistics (BLS), over the last 12 months, the Consumer Price Index for energy has increased by 25 percent overall. That includes increases for natural gas, electricity, gasoline, and fuel oil. Right now, the benchmark Henry Hub natural gas prices are more than twice as high as a year ago, over $5 per million BTU, an annualized rate equal to $109 billion of increases to the consumers, the end users. As I said in my opening remarks, affordability is not an option. I am concerned we are on a one-way rise.

So do all of you want to comment very briefly on how does FERC take inflation into consideration when carrying out your authorities and determining what is reasonable? Quickly.

Mr. GLICK. Thank you, Mr. Chairman.

FERC has authority over the regulation of electricity, electricity wholesale markets, for instance, and electric transmission and natural gas transportation, but we do not have authority over fuel prices, whether it be oil, whether it be natural gas, and we take our job seriously in terms of regulating electricity markets to make sure, as much as we can, that they are sufficiently competitive and the rates that resulted are just and reasonable.

The CHAIRMAN. But nothing moves without electricity.

Mr. GLICK. That's correct, absolutely.

Mr. CHRISTIE. Mr. Chairman, I think in every case we do, we have to be very, very sensitive to the cost to consumers because what FERC does affects retail rates——

The CHAIRMAN. Correct.

Mr. CHRISTIE [continuing]. And that's what flows through to monthly bills. So I think cost has to be uppermost in every proceeding.
Ms. Clements. I think the two things we can do are plan ahead to save customers money and also encourage competition, non-discriminatory competition.

Mr. Danly. In the jurisdictional markets, the costs that rise because of inflation are inputs to the offers that are made by market participants and the contracts are negotiated by utilities—or as between them, they are jurisdictional to us—but they negotiate their own contracts.

The Chairman. The other question I am going to have is concerning Texas, the poster child that we are using, but those decisions regarding gas and electricity are being made all over our country. FERC’s interim report on the 2021 winter storm indicated Texas and the South-Central U.S. are heavily reliant on natural gas for fueling electric generation to meet peak capacity and energy needs. At the same time, the natural gas infrastructure is heavily reliant on electric power for producing, processing, and transporting natural gas to end users. As we all saw, the relationship was managed in February in a way that failed consumers drastically.

So you all have been thinking about gas-electric coordination for years. I know that has been going on and we know that you all have been talking about it. Why haven’t we solved the problem yet? Why is it taking so long to get that integration done?

Mr. Danly. We have been talking about it for years. In fact, the last concrete action we took—I forget how long ago it was, 2016 perhaps—was to implement NAESB standards to get the day-ahead—the scheduling fixed between the two. This is extremely esoteric material for a lot of the mechanics of the interaction between the two of them. But it’s a subject that we’re constantly concerned about and we’re working on it actively.

Ms. Clements. We have two important dockets open, Chairman Manchin, that will provide more information to allow us to take further steps on this interdependence. One is the docket on extreme weather and climate change and the other is the open inquiry on our certificate statement. So it is in the works.

When we think about Texas, whether it be in Texas, California, New England, across the country, the Gulf Coast, we have to think about planning, market design, and reliability standards. We cannot just fix one of them. They all fit together.

Mr. Christie. Mr. Chairman, gas-electric coordination has been an issue for years because we have such a large percentage of our generating capacity in gas. So it is absolutely a high priority. I would say in Texas, and I have said this before, I think the problem in Texas, and again, it is their issue to work out. They are not under FERC jurisdiction as far as their rate design and their energy market. I think an energy-only market, where subsidized resources are going to always win and non-subsidized resources are not going to win, is going to lead to an imbalance. And I think that’s what happened in Texas.

Weatherization, of course, was an issue and the gas plants needed to be weatherized. But where’s the money going to come from? The gas producers have to have an incentive to weatherize and they’ve never had one in an energy-only market. So I think the bigger problem has been exactly the way the market is designed. But
again, that’s for Texas to figure out. They are not under our juris-
diction.

The CHAIRMAN. I understand that.

Mr. Glick. Mr. Chairman, two issues. One, with regard to gas-
electric coordination, it is my opinion that the Commission has
been too deferential. We have only approved changes that actually
both the gas industry and the electric industry could agree with.
I think we actually need to bring the two sides together and kind
of knock heads and suggest we really need to make some changes
here.

Second, and most importantly, while we have reliability stand-
ards for the electric industry, we do not have reliability standards
for the natural gas industry, including pipelines. I think it is some-
thing Congress needs to seriously take a look at because we saw
what happened in Texas and the consequences—obviously, very se-
vere.

The CHAIRMAN. People are concerned about getting product to
market, okay? Getting gas pipelines built has been a tremendous
challenge. They believe that FERC has not been very clear in the
past about how they work through this process. Knowing up front
what to expect, making sure that they do not run into one thing
after another that is added on after they make their request for
their permit—I am hoping that you are getting your act together
on that, and providing clarity to the process so applicants know
what to expect so they can get it done. Or reject it. Either way, let
them know up front.

And the biggest thing I hear all the time: how in the world could
we, as a country, support Russia building the Nord Stream Pipeline
in Europe while we basically denied the pipeline coming from Can-
ada. Has that caused a problem? The product is still coming to the
market. You can talk about that later, but I am just telling you
what complaints I hear all the time.

With that, we will turn to Senator Barrasso.

Senator Barrasso. Well, thank you, Mr. Chairman. I would like
to follow up on some of those sorts of things.

Commissioner Christie, at the present time you are the only
Commissioner who actually has direct experience overseeing retail
electricity supply and sales. What is likely to happen to electric re-
liability if Congress enacts this so-called Clean Electricity Perform-
ance Program to force the closure of natural gas and coal-fired
power plants, the plants that generate electricity even when the
sun does not shine, the wind does not blow. For example, just con-
sider a region like PJM, which used to be Pennsylvania, New Jer-
sy, Maryland, but it is now 13 states from the middle of the coun-
try to the Atlantic Coast. How do they keep the lights on without
natural gas or coal-fired power plants?

Mr. Christie. Well, right now, PJM couldn’t. They are 20 per-
cent coal, I think about a third gas, and about 38 percent nuclear,
so they couldn’t keep the lights on. My concern about any kind of
national mandate with deadlines and timetables is that the dead-
lines and the timetables for how you change the generation mix do
not fit the reality of the facts. And as the Chairman said at the be-
ginning, as we go through this transition, which everybody wants—
this lower carbon transition—it is absolutely essential to keep reli-
ability uncompromised. And NERC has warned that if you inject intermittent resources, of which, of course, wind and solar are two examples, if you force intermittent resources at a higher percentage than the system can balance and you do not have reliable dispatchable resources—gas, coal, nuclear—you have a reliability problem. And NERC has warned about that repeatedly.

So my concern about a deadline for when you have to have a certain percentage of a certain generation mix is that it doesn’t fit the actual technology. Today, we do not have the technology to have a 100 percent emission-free grid. We do not have that technology. So a deadline of 2030 or 2035, essentially, is a gamble that the technology is going to develop. We want the technology to develop. So the question really is what’s the best way to do it? I personally think the best way to do it is to pour money into R&D, but that’s not my call. But if you mandate deadlines that cannot be met based on technology, you’re going to get reliability problems.

Senator BARRASSO. So you addressed one of the two comments that the Chairman raised at the beginning of the Committee hearing—reliability. Now I want to ask about affordability.

Commissioner Christie, what is going to happen to the electric bills of our constituents if Congress forces states to rely almost exclusively on intermittent wind and solar, and won’t this just drive costs, especially if we find, as Germany has discovered, that we must have backup—natural gas, coal-fired power plants?

Mr. CHRISTIE. Well, a national standard, of course, is going to treat different states differently. We have 50 different states. Each one has a different generation mix. Right now, the generation mix is totally under the control of those individual states. So it affects individual states differently. I am very familiar with Virginia because I was a state regulator for 17 years, and I am very familiar with West Virginia because we shared jurisdiction with their largest utility. As I said in response to the Chairman’s opening, West Virginia is 90 percent coal. If a national standard forces West Virginia to shut down 90 percent of their generation mix, you obviously have a reliability problem. That is not hard to figure out. But from a cost standpoint, West Virginians have to pay for replacement power. Paying to replace 90 percent of their generation mix is going to be extremely costly.

And also, West Virginia happens to be a vertically integrated, cost-to-service state. That means that the generating plants that would be forcibly shut down by a national standard are in rate base. And so West Virginia consumers are going to pay for years to come even though those plants are not running. And the same thing applies to Virginia, my state. Our largest utility, Dominion, has numerous combined-cycle gas plants. If you forcibly shut those down, Virginians have to pay for replacement power and they are also going to pay for the plants because I can tell you, they are all in a rate base.

So different states are affected differently, but for states that are heavy on dispatchable resources, like gas, coal, nuclear, it could potentially have a very heavy impact, certainly, on cost.

Senator BARRASSO. Thanks so much, Mr. Christie.

Mr. Danly, today’s Wall Street Journal editorial, “Climate Policy Meets Cold Reality.” It is an op-ed. In it, the author points out that
Europe’s rush to renewables is causing prices to spike and energy shortages. So you have both. You have reliability and affordability issues. The author concludes, she says, “Europe offers a portent of the havoc to come under the Biden Administration’s policies that aim to shut down fossil fuel production and power the U.S. grid exclusively with renewables.”

[The editorial referred to follows:]
Climate Policy Meets Cold Reality in Europe

The rush to renewables causes severe energy price spikes and shortages. Biden’s policies would do the same in the U.S.

By Alyse Finley
Sept. 27, 2021 12:40 pm ET

European leaders at the United Nations last week applauded themselves as they doubled down on their pledges to slash CO2 emissions. And Prime Minister Boris Johnson said the U.K. “will lead by example, keeping the environment on the global agenda and serving as a launch pad for a global green industrial revolution.” Such vows of carbon chastity are, to say the least, ironic as Europe grapples with a severe energy shortage and surging prices wrought by its green industrial revolution.

In the past decade, the U.K. and Europe have shut down hundreds of coal plants, and Britain has only two remaining. Spain shut down half of its coal plants last summer. European countries have spent trillions of dollars subsidizing renewables, which last year for the first time exceeded fossil fuels as a share of electricity production.

But renewables don’t provide reliable power around the clock, and wind power this summer has waned across Europe and in the U.K., forcing them to turn to gas and coal for...
backup power. Yet demand for these fossil fuels is also surging across Asia and South America, where drought has crimped hydropower. Manufacturers there are also consuming more energy to supply Western countries with goods.

Japan has become especially dependent on liquefied natural gas imports since it shut down most of its nuclear power plants after Fukushima in 2011. Even China has been forced to ration electricity to energy-hungry aluminum smelters because of a coal power shortfall. This has sent global aluminum prices soaring.

Increased global demand has caused the price of coal to triple and the price of natural gas to increase fivefold over the past year. Europe’s cap-and-trade scheme has pushed prices even higher. Under the program, manufacturers and power suppliers must buy carbon credits on an open trading market to offset their emissions. The price of credits has spiked this year as demand for them from coal plants and other manufacturers has increased while government regulators have tightened supply.

Russia is exploiting Europe’s energy difficulties by reducing gas deliveries, perhaps to pressure Germany to complete certification of its Nord Stream 2 pipeline, which bypasses Ukraine. Russia’s Gazprom has booked only a third of the available transportation capacity through its Yamal pipeline for October and no additional deliveries via its Ukraine pipeline. Europe has become ever more dependent on Russia—the world’s second largest gas producer, after the U.S.—for energy because the U.K. and Germany have banned hydraulic fracturing, letting their rich gas shale resources go to waste. Meanwhile, the Netherlands is shutting down Europe’s biggest gas field.

In short, all of Europe’s green chickens are coming home to roost. Several U.K. retail electricity providers have collapsed in recent weeks because of the surging price of gas. Energy experts warn that some German power suppliers are in danger of going insolvent. Germany’s electricity prices, which were already the highest in Europe because of heavy reliance on renewables, have more than doubled since February.

Skyrocketing power prices have caused U.K. steel makers to suspend production. A former energy adviser to the U.K. government warned last week that the country’s energy shortage this winter could prompt a “three-day working week”—a reference to the coal and rail worker strike in 1974 that caused the government to ration energy for commercial users.
The European Steel Association has warned that the Continent’s producers are becoming globally uncompetitive. Fertilizer producers, which use gas as a feedstock, are raising a fuss. Norway’s *Yara International* plans to curb 40% of its fertilizer production capacity in Europe. U.S.-owned *CF Industries* earlier this month halted operations at its fertilizer plant in northeast England, threatening downstream businesses.

Beer and soda manufacturers use the carbon dioxide that is generated as a byproduct of fertilizer production for fizz. Carbon dioxide is also used to stun livestock before they are slaughtered, as well as for vacuum packs and dry ice to store frozen foods. The *U.K. Food and Drink Federation* has warned that consumers might soon notice products missing from supermarket shelves from the carbon-dioxide shortage.

The warning prompted the U.K. government last week to lend financial support to CF Industries. European metals producers are asking governments for aid. There will be more bailouts as European energy demand heats up this winter. These energy woes will only get worse in the coming years as governments push harder to purge fossil fuels.

U.S. gas and coal producers have benefited from rising prices in Europe. Growing exports, however, are pushing up prices that Americans pay for energy because domestic production lags pre-pandemic levels. Natural-gas prices in the U.S. have doubled since the spring, and some coal power plants are scrounging for fuel.

Europe offers a portent of the havoc to come under the Biden administration’s policies that aim to shut down fossil-fuel production and power the U.S. grid exclusively with renewables. Democrats won’t succeed in banishing fossil fuels. Instead the U.S., like Europe, will need more gas and coal to back up renewables, and the U.S. will become dependent on adversaries like Russia for energy.

*Ms. Finley is a member of the Journal’s editorial board.*

*Appeared in the September 28, 2021, print edition as “Climate Policy Meets Cold Reality.”*
Senator BARRASSO. So if Congress enacts this so-called Clean Electricity Performance Program, and it severely restricts natural gas production as the House Democrats are proposing, will we be headed for higher prices and energy shortages, both?

Mr. DANLY. Thank you, Senator.

I think that it is almost inevitable. I typically do not think it is my role to comment on the legislation before Congress, but in this case, I want to be responsive to your question. The markets that we have, which are organized markets, ISOs and RTOs, they cover about two-thirds of the population of the United States to deliver their power. These are mechanisms that we have very slowly refined incrementally over the course of decades. And this—the text of the bill as I read it seems to create an incentive and penalty structure that would absolutely change and frustrate every subtle expectation we have for these slowly developed, incrementally produced markets of ours, effectively dropping an H-bomb into the middle of them and it will effectively end the markets as being anything other than administrative constructs, perhaps for the purpose of balancing and dispatch.

Just, if you'll indulge one minute here—imagine how hard it would be when you get a capacity supply obligation, which, you know, some are three years ahead, they are three years forward—and you got that supply obligation in return for a payment when the market cleared and your further bids that you make in later auctions are going to then have to not only have you figure out what the cost is, but also what your competitors—who are bidding in—what their new calculus will be, based upon performance metrics that have not even been achieved yet. I cannot imagine how the markets could possibly take that.

Senator BARRASSO. Thank you.

Thank you, Mr. Chairman, thank you.

The CHAIRMAN. Thank you, Senator Barrasso.

And now we are going to have Senator Heinrich.

Senator HEINRICH. Well-planned transmission projects tend to create net savings for customers. In fact, the NREL (National Renewable Energy Laboratory) Seam study found that for every dollar invested in transmission repairs, we tend to see more than $2.50 in benefits. One of the challenges, however, is that the perceived distribution of benefits can be quite uneven to various customers across the regions served by transmission projects. I wanted to ask each of you: does FERC currently have the tools it needs to allocate transmission costs equitably across multiple regional beneficiaries?

Mr. Glick, why don't we start with you and we will just go down the line.

Mr. GLICK. Thank you, Senator Heinrich, for the question.

So the answer is yes. We do have the authority, as Commissioner Danly mentioned earlier. We are required by the courts to ensure that the cost of transmission is allocated in a manner roughly commensurate with benefits. But I think sometimes we look at benefits way too narrowly. So for instance, generally, if someone receives power from a particular transmission line, they're considered a beneficiary. But as you pointed out, transmission opens up congestion and it allows you to get access to cheaper power, certainly en-
hances greater resilience and reliability, and there is a significant number of benefits I think we need to take into account. That’s what we’re looking at in our ANOPR process right now.

Senator HEINRICH. Ms. Clements, did you want to add to that?

Ms. Clements. Thank you, Senator, for the question.

I think it’s important to put a human face on the statistics that you just mentioned. In the Midwest, in the 2010 to 2012 period, the region got together and made a significant investment in transmission called the Multi-Value Portfolio Lines. To this day, in the cold weather Uri event, those lines were protecting customers and keeping the lights on a decade later, benefits that were never considered at the time that those investments were made. Smartly planned transmission brings resilience and reliability benefits to all customers across all states. It also provides the opportunities for low-cost resources to bring down customer costs, not just in states with policies promoting those resources, but again, across states.

Senator HEINRICH. So your point of view is we should be considering things like reliability as a value that transmission brings?

Ms. Clements. Yes, sir. If we do not, we will find ourselves in a position 10 years from now where the lack of interconnection between regions, between states, is going to cost customers a whole lot of money.

Senator HEINRICH. Lengthy timelines for projects that have been stuck in interconnection queues are one of the primary barriers to deployment of new, clean sources of energy, particularly in wholesale markets—PJM, ERCOT, others. A Berkeley National Lab study from May 2021 found that in four ISOs, the typical duration from connection request to actual operation went from 1.9 years back in the 2000–2009 timeframe to about three and a half years for those built in the last 10 years.

What can FERC do to help make RTO-ISO interconnection processes more efficient so that we can get more energy deployed faster to meet these challenges?

Mr. Glick. Thanks for the question, Senator.

I think what you said is exactly right and the queue devices we have in this country are far too long and they are obviously causing issues. I think we need to do a couple of things. First of all, we need to marry up our transmission planning process with the interconnection queue process. Right now, they are disjointed, and that’s causing the queue process to take forever. Second, I think we need to look at the way that network upgrade costs are allocated. Traditionally, what the Commission has supported is a situation in which the generator connected to the grid has to pay all of the upgrade costs when there are a significant number of beneficiaries, as we just talked about elsewhere. And so that’s actually slowing down the process. Sometimes these upgrade costs are so expensive, it is causing generators in the interconnection queue to drop out at the last minute.

Senator HEINRICH. Mr. Christie.

Mr. Christie. Senator, one thing we need to do is—I guess the general term is queue reform—but the number of projects in the queue is not the total picture, because of all those projects in the queue, some are ready to go, some are not. And so I think that the queue needs to start taking into account which projects already
have a state certificate, which projects already have a PPA, a Purchase Power Agreement with a seller, so they are already financeable, and start prioritizing which projects are, to coin a phrase, shovel-ready, and which ones are not and still do not even have financing.

So I think queue reform includes prioritizing the ready projects against the not-so-ready projects.

Senator HEINRICH. Thanks.

Ms. Clements.

Ms. CLEMENTS. Thank you, Senator.

I would add to those two comments that we need to have states at the table in the conversations, and we have set up a joint task force with NARUC, the National Association of Regulatory Utility Commissioners, so that we can start having conversations about some of the really difficult siting issues, which are one of the main delays to getting transmission built, together outside of contested proceedings.

Mr. DANLY. I think that one of the easiest things that the Commission can do is stop issuing unlawful retractive waivers of the queue deadlines, which are the means by which markets actually manage their queues. That would be simply us not doing something unlawful, and that would be an easy partial fix.

The CHAIRMAN. Thank you, Senator.

Now we have Senator Lee.

Senator LEE. Thank you, Mr. Chairman. Thanks to all of you for being here.

Mr. Danly, I would like to start with you. Senator Barrasso referred a few moments ago to the Clean Energy Performance Program, which would require increasingly massive amounts of our energy to come from low-emission sources, presumably a lot of that coming from intermittent sources like solar and wind. Now, these types of energy projects often require costly new transmission lines to be built to connect the generating sites—which are, of course, many—to the consumers. Can you explain to us the cost impacts that this might have on consumers? In other words, how might consumers be affected by a proposal like the Clean Energy Performance Program?

Mr. DANLY. Certainly. So consumers will be, I would predict, affected in two ways. The first is that the cost of transmission is going to go up drastically because the amount of wire you're going to have to string across the country to bridge those distances between the remote locations where intermittents are and the load pockets is going to be very expensive and that will go directly into the customer's bills.

But the other thing that is going to happen is, there's going to be a reliability consequence. As the markets fail to produce correct price signals as a result of these new incentives and penalties, they are going to fail to accomplish the resource adequacy goals that the markets have taken over from the states. And when that happens—this is not some obscure, you know, part of market design, this has a real-world consequence that when we fail to have resource adequacy properly achieved by the markets, then the lights do not turn on when you need them to. And we have seen this hap-
pen in California in the not too distant past—price signals failing to get the right resources.

Senator Lee. So as we are building these big projects, a small handful of people will make a fair amount of money off of it. It sounds nice. In many ways, it is. But you are saying customers will pay higher prices?

Mr. Danly. I believe they will.

Senator Lee. They will also pay for it in terms of diminished reliability?

Mr. Danly. Yes, that’s hard to predict specifically, but actuarially speaking, there is greater risk.

Senator Lee. Reliability is certainly something that FERC is charged with looking at and therefore, something we ought to be concerned about.

Now, Commissioner Danly, in its review of natural gas pipelines, the Commission may be delaying issuance of Certificates of Public Convenience and Necessity due to disagreements of what fits within the statutory definition within the meaning of reasonably foreseeable. What is the appropriate standard that you think the Commission ought to use in making these determinations?

Mr. Danly. So I presume you’re talking about how under a NEPA review we determine what the significant impacts on the human environment are for EISs and EAs? Is that right?

Senator Lee. Yes.

Mr. Danly. So what we’re required to do under the implementing regulations for NEPA is review all—or take account of all the significant foreseeable facts in the human environment, and in doing so there is a—you’ll appreciate this—a Palsgraf-style proximity question, how easily——

Senator Lee. Foreseeability and——

Mr. Danly. That’s right, exactly.

So if something is not foreseeable in that tort scheme, then it just doesn’t fall within the compass of the required review.

Senator Lee. Is that the case where all the explosives, the fireworks went off?

Mr. Danly. Yes.

Senator Lee. It was a big backup.

Mr. Danly. Yes.

Senator Lee. I read that in conjunction with the Wagon Mound case.

Mr. Danly. That’s right, exactly. Yes.

Senator Lee. Okay. This is something I am concerned about, because if in determining this, you get that wrong, either in pursuit of an environmental agenda or otherwise, you could be sacrificing other things that the Commission is charged with overseeing, including things affecting the price, or things affecting the reliability of the grid.

Commissioner Christie, there has been vocal support for the creation of one or more western regional transmission organizations or RTOs as they are sometimes described. Under an obligatory RTO, could consumers who were in previously independent markets that become part of that obligatory western regional RTO—could they face increased prices due to the renewable energy portfolio commit-
ments made by other states, not made by their own elected repre-
sentatives in their own state?

Mr. CHRISTIE. Well, Senator, if I understand your question, let
me just first say, I think the decision whether a state should go
into an RTO is purely up to that state. I do not think FERC should
mandate it and I hope Congress wouldn’t mandate it, but it should
be a state decision. And all the RTOs in America are different. I
spent 17 years in PJM. That’s very different from California ISO.
So the details of how an ISO or RTO operate are going to be
worked out, you know, within that RTO. One of the issues you
have in a multi-state RTO like PJM—I know from experience—is
that you have 13 states and DC in PJM. Trying to mesh those pub-
lic policies is always a challenge and you have always got a threat
that consumers in one state are going to end up paying for the de-
cisions of politicians in another state.

So if the Western states, like yours, want to join an RTO, it
should be their decision. I would just say look very closely at the
details before you make that decision.

Senator LEE. Thank you. I see my time is expired. Thank you,
Mr. Chairman.

The CHAIRMAN. Senator Cortez Masto.

Senator CORTEZ MASTO. Thank you, Mr. Chairman. Commis-
sioners, welcome. Thank you for being here.

This summer in Nevada, we actually experienced the harmful im-
pacts of jet fuel shortages, particularly at Reno-Tahoe International
Airport. And there were multiple factors involved, including the in-
creased volume of air travel and the strained supplies at airports
throughout the West. This resulted in airlines limiting the number
of passengers so that they could fly on extra fuel rather than re-
fueling locally.

So my question to you is, as commerce returns, what actions is
FERC taking to help reestablish normal access to fuel among the
different transportation sectors and then, what more can Congress
do to assist FERC in preventing future shortages?

Mr. GLICK. Well, thank you very much for the question, Senator.
And so we did experience some issues this past summer and cor-
rectly so in Reno. And the reason is by historically, in terms of our
regulation of liquid fuel pipelines, sometimes when there’s more de-
mand than the supply in terms of capacity on the pipeline, that
pipeline capacity is allocated out based on historic use, based on
the previous year’s use. And because the airlines didn’t have sig-
ificant demand for jet fuel for the previous year because of the
pandemic, the airlines actually got caught in a situation where
they were allocated less fuel than they had been in the past. As
demand for flying increased, especially in terms of certain airports,
they ended up short and they had to bring in jet fuel by truck and
so on and there weren’t enough truckers and so on. So it was a dif-
ficult issue.

I think this issue of historic use needs to be addressed. I raised
it as an issue at a technical conference we had earlier in the year.
I think we need a different approach to allocating capacity because
of the different anomalies, and you have my commitment that we
will take a look at that, and hopefully act before next summer's demand peak.

Senator CORTEZ MASTO. I appreciate that. Thank you so much.

And then, to the panel, as we are all aware, the drought in the West is not letting up. If anything, it is getting worse. It is going to be our norm. And as a result, the Energy Information Administration (EIA) recently released a report that found that U.S. electricity generation from hydropower is expected to drop 14 percent this year compared to the year 2020. So from your perspective, how can FERC better account for drought in future efforts to ensure grid resiliency and sustainability? And I will open that up to the panel, if any panelists have any comments on that.

Ms. CLEMENTS. I am happy to start, Senator.

Senator CORTEZ MASTO. Thank you.

Ms. CLEMENTS. Thank you for the question.

The answer to that question is to plan—understanding that the impacts of extreme weather events, the continuing excessive heat to be expected now in the West, the impact of that heat and that drought on our hydropower reserves, the answer is to plan ahead to address that. I think it is really important that we live in the nuance of the facts of the energy transition which we find ourselves in the middle of. Variable energy resources, like wind, solar, and other emerging technologies are proven to be reliable resources, that is—real experience—in normal operating conditions, SPP has 80 percent penetration of wind and solar. It is this extreme weather change, the impact that stresses the system in ways that we haven’t had to plan for in the past, that is the issue to be addressed. And that’s why, I think, this Advance Notice of Proposed Rulemaking that the Commission has put forward to think about how we better predict the resources that will be available will take us safely through to the other side of the energy transition.

Senator CORTEZ MASTO. Thank you. Any other comments?

Mr. GLICK. I would just say, Senator, we have authority over the reliability of the bulk power system and one of the things I think we need to take a look at is requiring utilities to plan for—as Commissioner Clements mentioned—to plan for climate change. We cannot expect that the generation is always going to be there, and it is not just hydropower capacity, it is other power plants freezing during very cold weather or malfunctioning because of very hot weather. And utilities need to take that into account as they move forward.

Senator CORTEZ MASTO. Thank you.

Commissioner Christie.

Mr. CHRISTIE. The question you asked, Senator, it illustrates how absolutely important it is when you plan for resource adequacy that you accurately document what the capacity is you’re likely to get from resources. And that’s been an issue in all the RTOs is—you cannot plan on getting more actual capacity than is realistic. And that goes to why planning—which is absolutely essential, you’re right—has to be accurate about the resources that you’re going to expect to get.

Senator CORTEZ MASTO. Yes, thank you. I really appreciate that. Thank you for being here.

Thank you, Mr. Chairman.
The CHAIRMAN. Thank you.

Senator Lankford.

Senator LANKFORD. Mr. Chairman, thank you. Thank you all, for your continued service.

I want to be able to follow up on a conversation, Commissioner Danly, that you brought up earlier about the environmental impact statements versus the environmental assessments. This has been a question from multiple different individuals and groups within my state on trying to be able to figure out the certainty of where things are going on that. Is there something you need to be able to finish out in that statement? You raised that earlier on that.

Mr. DANLY. No, I think I made my point from before. I am merely concerned that in some perhaps misbegotten desire to ensure that our orders are legally durable, unnecessarily, because basically, I think that we have been able to deal with most of the alleged legal infirmities that have been raised by my colleagues on our EAs, specifically as we have for years and they’ve withstood every challenge in court by addressing those comments in the order, right? The Record of Decision (ROD), which is the summation of the NEPA process in the case of FERC is actually the initial order that we issue. And I do not think that it is necessary to go through the process of producing EISs that come to the same conclusion that the EA did.

Senator LANKFORD. Right.

Mr. DANLY. We can handle those comments.

Senator LANKFORD. Chairman Glick, this is an ongoing issue as well, just the predictability of the process so that people, when they are planning capital, know that they are actually going to be able to do investment at a time based on what they already received. How do you balance that out?

Mr. GLICK. Absolutely, I think you hit on the key word—“certainty.” The D.C. Circuit has admonished the Commission on three separate occasions just with regard to our examination of greenhouse gas emissions. We actually didn’t review those emissions. We didn’t review the significance of those emissions and the court said all three times—“We’re sending the case back to FERC.” It causes extra delay. We have seen that in a bunch of other cases. You look at the Atlantic Coast Pipeline, which is probably the poster child for this. This is a different agency—the Interior Department. It got it wrong in the previous Administration. The court sent it back, added several years and extra billions of dollars on to the process——

Senator LANKFORD. So with that, are you assuming that all orders in the future are going to be EIS statements? There won’t be EAs at all?

Mr. GLICK. No, I think we still go forward with some EAs, but if there was any question as to whether there is significance of greenhouse gas emissions, the law requires us to do an environmental impact statement instead of an EA.

Senator LANKFORD. So you think that is going to be closer to the default then?

Mr. GLICK. No, I think what we’re going to do, hopefully pursuant to this Notice of Inquiry process that’s been initiated, is set up a particular standard, below which a certain number of emissions—
and I do not know what that is—obviously, all the commissioners have to agree on that. Below which, I think projects can go forward with environmental assessments, above which are significant, and then we’re going to need to consider other issues pursuant to an environmental impact statement.

Senator LANKFORD. How will you handle social costs of carbon scoring or will that fit into this?

Mr. GLICK. Well, we’re waiting for guidance from the CEQ (Council on Environmental Quality) on that, but the court in the Vecinos case that we just issued recently suggests that the Commission needed to at least take a look at the social cost of carbon in terms of assessing whether the greenhouse gas emissions—

Senator LANKFORD. Clearly when you get into social costs of carbon, you get into lots of different models from lots of different places. The people that typically write the models for social cost of carbon have a certain view as well of what they are taking into account on that. As an independent body, how are you going to be able to manage what is the right scoring for social cost of carbon?

Mr. GLICK. Well, there is a level of uncertainty, and the Vecinos Court pointed that out recently, but we do actually have to take that into account and we’re waiting from guidance, again, from CEQ. But as an independent agency, we’re going to have to make our own judgment pursuant to a majority vote of the Commission.

Senator LANKFORD. So this is not an assumption that this is going to come down from the Administration and hand you—“Here’s the way to be able to handle social costs of carbon?”

Mr. GLICK. No, the Commission has historically tried to follow CEQ guidance on NEPA reviews as much as we can, but no, we have to make our own determination.

Senator LANKFORD. So Chairman Glick, let me just stick with you. FERC trying to be able to issue the revised pipeline certification policy statement—there has been some conversation about this. When do you think that comes down?

Mr. GLICK. We received a large number of comments for reviewing it. I was disappointed, you know, we started this process back under Chairman McIntyre several years ago and the Commission never moved it forward. So we’re trying to move it forward now as quickly as we can. I am hoping within months, but I do not have an exact timetable for you just yet.

Senator LANKFORD. Okay, thank you.

Mr. Christie, I want to be able to drill down on the issue about large transmission lines. Obviously, you have dealt with this a lot. I have brought up multiple times the TransWest transmission line. There are lots of other ancillary issues there, but they have been 14 years in process just to do the permit and they have not put up a tower yet. There has been a lot of push on having us at 100 percent renewable in the generation field by 2035—14 years away from that. Is that a realistic time period just based on the permitting process to be able to transmit power from long distances and intermittent sources?

Mr. CHRISTIE. Well, the problem, Senator, is with these long-distance transmission lines that go over multiple states, and I have sat on many transmission line cases and actually voted for the longest transmission line in PJM today—the TRAIL Line—Trans
Allegheny Interstate Line. The fact is when you cross five or six states with 300 or 400 miles of a 765-kV line, they are going to have tremendous opposition. That’s just political reality. And so you’re not going to get many of those permitted and it is not because of any conspiracy, it is just the political reality that people don’t want—you’re going to have a tremendous political backlash. It is very hard to get these interstate lines sited.

The important thing about transmission is this: if a transmission line is needed, then it ought to be built. If it is needed to serve reliability, then it ought to be built. And I think, frankly, the people in each state are willing to accept transmission lines. They are going to be controversial, I can tell you. I have sat in high school gyms and been yelled at by people that didn’t want to look at a transmission line. But if the people will accept—if they think that their state regulators have done right by them, had a good record—but I think, though, that politically, if you try to run a line across six states, I think that it is going to be much harder politically to get those sited and people are not going to really accept the fact that a line like that is needed, particularly if it is only going to benefit a special interest group.

Senator LANKFORD. Great, thanks, and I will follow up with questions for the record. Thank you.

SENATOR CANTWELL [presiding]. Thank you.

The Chair had to run to another committee and so I am helping and calling on myself, as I am next in the queue.

I do want to thank the Chairman of FERC for mentioning the market manipulation authority and the advantages that that’s given and thank FERC for its uses over time. I do think it has really helped in policing the market. As we discuss this larger issue of transformation and where we need to go, I want to point out that GAO did a 2021 report that said the impacts on the grid will cost utilities and consumers billions without more significant resiliency investment.

So doing nothing is going to cost us, and we see that all the time. I mean, this research now that says electricity lines sag in hotter temperatures and cause fires and the fact that we could make them more intelligent than they are. The lack of capacity caused lengthy interconnection queues to top 750 gigawatts in 2020. So there we are with basically congestion that could be resolved. We know in Spokane, when we had this heatwave, which was record heat for the Pacific Northwest, we had the electricity, we just couldn’t get it to the right spots at the right places.

And so this is going to occur more and more. And what is happening because of this is we are now having the increase in electricity costs for consumers because we have not met these demands or missed the rural economic development opportunities or the job opportunities. I just, you know, come from a very, very rich state reliant on electrification and it has paid the bills over and over and over and over again. And so I am just a big believer in electricity and the investments that we can make that make our economy more robust. So we know we now have a rapidly electrifying transportation sector. Ford made this big announcement today, how they are going to go with even more electric vehicles, which would mean roughly 25 percent more electricity than we are producing today.
So we know that this is where we are going so we have to have a grid that is going to get the job done for the economy of the future.

So I would like to discuss a couple of issues. One, this notion of installing fiber on top of transmission towers. Not only is it an affordable way to transmit mass-amounts of data, which I think you need for that automobile sector or smart-grid sector or application sector. I have often said this is like the operating system of the future. And if we invent it and we work on it, and I guarantee you—and it is basically driving down cost and giving you more options—everybody will want it. So to me, it is as unique as what Ben Franklin contributed. And I hope that we will continue to lead in electrification technology. But encased fiber, 40 feet in the air, surrounded by high-voltage transmission lines—pretty secure against physical attacks. So a great concept. But it also provides a closed-loop network for cyber communications, which we also know, given the Colonial Pipeline and everything else—this is just unfair to say that we are going to have a simplistic answer to cybersecurity when now utilities are being attacked from state actors. These are sophisticated nation-actors taking aggressive action toward us. Why? Because this is where the money is. This is where the intimidation is. This is where the economy of the future is. So you can do a lot of damage, really simply.

And so I would like to—you know, there is a lot that lighting up dark fiber and building out OPGW (Optical Ground Wire) along our nation’s transmission grid could do to improve data needed to modernize the system and make our grid more secure. So I would like to start. Do you, Mr. Chairman, agree that expanding communication capacity and using the grid’s existing rights-of-way could help provide benefits for cybersecurity, grid modernization, and high-speed internet? And that is a grant/loan/cost-share EEI has basically talked about. There are examples in the Chairman’s state, his own state. There are great examples of utilities and telcos working together. I know in my state, some of the public utilities and people are working together. They see the future of the grid and they are trying to capture that. So what does FERC have? What do we need to do to build out that capacity for the future?

Mr. Glick. So Senator Cantwell, I agree with you completely. I think this is the—fiber provides a significant number of benefits in terms of use, like cybersecurity, certainly bringing up broadband. But I want to point out one other issue. You know, we talk about building transmission—we need to build a lot of extra transmission—but we also need to make our existing transmission grid more efficient. And one of the ways we make it more efficient is operating the grid a little more dynamically. And in order to do that we need a significant amount of additional data—data points—as to where the transmission lines are and are they sagging, are they, you know, depending on weather changes and other changes to the grid. And we’re not going to be able to do that, to operate it more efficiently and more dynamically without that particular data. So it provides significant benefit to have that fiber-optic capability as well.

Senator Cantwell. Thank you. I have even heard that people say you will be able to hear fire on the lines if you had this kind
of system in place. And to me, if you could detect, instead of what we have gone through in California where you either have to preliminarily shut down for days and days in advance of a big temperature burst or the after effect. To me, having a smarter grid just to deal with fire, it would be a big benefit.


Senator MARSHALL. All right, thank you, Madam Chair, and welcome to all of our guests today.

I just want to make sure you all are feeling the same pain that Kansans are feeling from the economic cost of the February winter events. I hope that you can feel the same pain that we are going to feel for a decade. An average family home, like I grew up in, three bedrooms, two baths, natural gas, probably about $80, $90, $100 a month. That cost was $2,500 for February. And what they are going to do is take that over the next 10 years and let people pay off that debt—probably it will double the average Kansas family’s natural gas bill for the next 10 years. And it feels like we are just piling on when it comes to energy costs. We are already paying 40 percent more at the gas pump and as the Chairman indicated earlier today, the cost of natural gas has more than doubled since this Administration has taken over. So certainly the cost of energy is just through the roof.

Some small businesses in Kansas—Sugar Creek Beef Packing typically pays about $24,000 a month and they got stuck with $600,000 that month. So it went from $24,000 on average, you’re making a business plan, you get a $600,000 hickey. A homeless shelter is Kansas usually paying about $2,000 a month. Their bill for February was $48,000. This little city of Mulberry, not to be confused with Mayberry, but the little city of Mulberry typically pays about $2.50 a unit. They were charged $330 a unit, a 13,000 percent increase—13,000 percent increase. The city of Winfield, a municipality there, typically has a monthly bill of $130,000 a month—$8 million—an $8 million surprise for them.

You know, the people of Kansas want to know what is their Senator doing and FERC would be one of my resources. So I will start with the Chairman and—kind of multiple questions here to try to answer together. I think what the people of Kansas want to know is who made the money? Who made all that money on that increase? What has FERC done about it? Is there an investigation underway and what would be a reasonable timeline for the people of Kansas to know the truth about this? Was there price gouging, and who made the money?

Mr. GLICK. Well, thank you very much, Senator. At first, I will say that the impacts were horrific and that’s—we need to think about these types of situations where there are shortages and what happens in terms of prices and I want to start with jurisdiction. We do not have jurisdiction over the price of the sale of natural gas. Congress deregulated that a number of years ago. I believe it would be helpful if Congress were to—whether it give FERC or some other agency some sort of circuit-breaker authority when there are extreme prices to impose some sort of limitations at certain times. I think that would be helpful.

Second, as you mentioned, we do have authority to guard against the manipulation of both our electric markets and our natural gas
markets. We have entered into a number of inquiries with regard to alleged manipulation that occurred during Winter Storm Uri. Several of them—we found a number of anomalies. Several of those particular anomalies, when we investigated them, we moved them on to what we call our Investigations Office. So we're moving forward and that takes a while, unfortunately, because we have to go through a lot of data. We haven't made any final determinations yet, but I can assure you, to the extent that we do find that there's manipulation, we will make sure that——

Senator MARSHALL. Who made the money and what is a reasonable timeline?

Mr. GLICK. I can get you a list of individual companies that reportedly made a significant amount of money. In terms of the timeline of the manipulation investigations, I do not have a specific timetable for you, but we're moving as quickly as we can.

Senator MARSHALL. Months? Years?

Mr. GLICK. I am hoping months.

Senator MARSHALL. Yes. Mr. Christie, you have been on the state end and the federal level. Now, who made some money in these events? Is it the pipeline? Is it the people that are selling the natural gas at the pump? You know, not specific companies, but who benefits from this, a 13,000 percent increase? Somebody got rich.

Mr. CHRISTIE. Well, as the Chairman said, the situation from February is under investigation by our enforcement division and so I do not want to comment on that investigation. Your question about who makes the money—it could be traders, it could be suppliers. It depends on the facts of the situation and what happened in Kansas and Oklahoma and this past February, of course, as the Chairman says, is under investigation. I think a bigger issue, too, that needs to be considered is background, as we go through this transition to a different resource mix—lower carbon—gas has to be part of the mix and that means gas supply has to be plentiful and gas supply has to be transported. You have to transport a product before you can use it.

And so that gets to the market availability of gas. But as far as the manipulation of this intense shortage that we had in February, that's definitely under investigation—needs to be investigated to see whether there was manipulation that drove those—that took advantage of that, a very tragic situation.

Senator MARSHALL. Thank you, Madam Chair. I yield back.

Senator CANTWELL. Thank you.

Senator HICKENLOOPER. Thank you, Madam Chair, and thank all of you for being here today but also for your service. Just as Senator Marshall pointed out, you guys are right in the crosshairs of a lot of the most difficult decisions that are going to happen over these next few years.

I brought an audio-visual—really just a visual. It is out of our National Renewable Energy Laboratory in Golden, Colorado and shows basically the extent of our clean energy resources.

[The map referred to follows:]
Senator HICKENLOOPER. The blue is the wind. The yellow is solar. And then the green—green being the green light—is where you have both. As you can see, these are states that are Democratic, Republican, really cover a large portion of the country. I think this represents a unique opportunity to be able to reap the economic and employment benefits of making this work. But we only are able to make this work if we link our resource supply to our energy demand. And obviously, a lot of the questions you are all getting today are on this.

Chairman Glick, if Congress had the desire to enable more transmission buildout, could the creation of a new federal siting authority for transmission be an effective policy that would help enable that goal?

Mr. GLICK. So there are three general barriers to transmission development in the U.S. One of them is siting. One of them is cost allocation. The third one is planning. We have jurisdiction over the last two. We do not have jurisdiction—much jurisdiction—over siting. If Congress were to create some sort of siting body, that would certainly have some benefits in terms of pushing transmission forward. But I would say we also have to address planning and cost allocation as well in order to get it right.

Senator HICKENLOOPER. Right. I think we agree.

And while we are talking, Mr. Glick, the U.S. was able to successfully take advantage of the innovations in hydraulic fracturing, and this so-called gas revolution and part of this was because of the federal siting authority in terms of gas pipelines. Natural gas pipelines clearly propose different environmental, human health, and aesthetic challenges than transmission lines. Is it therefore appropriate for a hypothetical transmission siting authority to potentially have correspondingly different guardrails and protections for both states and landowners that are existing gas authorities while still maintaining its integrity enabling the buildout of new transmission?

Mr. GLICK. Well, thank you, Senator, for the question. I think there is. I think there certainly are differences. There are a lot of similarities in terms of siting the two technologies as well. I would say, though, we need to learn from the mistakes that the Commission has made in the past about ignoring certain parties, not facilitating greater participation in our proceedings, ignoring what’s required under NEPA. We need to do that, whether Congress does that or the Commission does that itself in a new transmission siting authority. I think we need to learn from that and do better the next time.

Senator HICKENLOOPER. All right.

And Commissioner Christie, as a former state regulator, what is your sense of this?

Mr. CHRISTIE. Thank you, Senator.

My sense is the states are not the reason that the lines are not getting built. I know we hear a lot of rhetoric about how the states are the barriers, they are the ones in the way. I will tell you one of the first transmission line cases I am aware of when I went on the Virginia Commission was a line that ran from West Virginia down into Virginia. It was a 765-kV large line. And it was delayed for almost two years and it wasn’t because of the state commis-
sions. We approved it. West Virginia approved it. It was delayed because of federal agencies. There were three different federal agencies, Army Corps, Forest Service, and there was one more—Fish and Wildlife—and they were delayed for various reasons. It wasn’t the state commissions. And so I think the idea that, well, if you just get the state commissions out of the way and create a federal authority, you can just get all these lines built, I don’t think you change the political dynamic that—the reality is, again, as I mentioned before, I have sat in high school gyms and been yelled at by hundreds of people that didn’t want to look at a 500-kV line.

And so you’re going to have that same dynamic even if you go to federal siting. In fact, I think you’re going to have less political support for building those lines because they can all blame the Washington people, right? It is harder to blame your own state officials. And you’re from Colorado—you know, if the Colorado public utility commission approves the line it is going to have a lot more credibility that if somebody in Washington says build that line from Pueblo down to Albuquerque.

Senator HICKENLOOPER. Right. Or from Wyoming out to California. That’s——

Mr. CHRISTIE. No, exactly.

Senator HICKENLOOPER [continuing]. A case in point.

So I would like to ask you, either Ms. Clements or Mr. Danly, if you have any additional perspective or suggestions in terms of how we can make these siting necessities more efficient.

Ms. CLEMENTS. Thank you, Senator. There are political realities to any kind of significant infrastructure investment, whether that be on the gas side or the electric side on the issues within our jurisdiction. And those political realities will be different in all cases. The only way we succeed in building out the transmission system, to integrate all the resources that are trying to connect and provide customer benefits to protect against the impacts of extreme weather and the events that need that strengthening of our system, is to get buy-in from the parties around the table, whatever that line might be.

So it would be great to have other tools in our toolbox as a Commission, but we can have all the tools in the world—if we do not have buy-in that this is an important thing that the country has to get done to maintain our leadership across the world, frankly, going forward.

Senator HICKENLOOPER. Mr. Danly, you want to?

Mr. DANLY. No, I have nothing to add to my colleagues on this, thank you.

Senator HICKENLOOPER. Right, that would be the mythical alignment of self-interest.

Ms. CLEMENTS. Yes.

Senator CANTWELL. Thank you.

Senator HICKENLOOPER. Thank you, Madam Chair.

Senator CANTWELL. Senator Daines.

Senator DAINES. Thank you, Madam Chair.

Thanks for being here today. It is good to have you in the room. FERC is inherently an economic as well as safety regulator. Your mission, as given by Congress and explicitly summed up on your website is to, and I quote, “To ensure economically efficient, safe,
reliable, and secure energy for consumers.” This means that when you are looking at approvals for pipelines, for hydro facilities, LNG terminals, your chief view is to make sure the projects are safe and they economically benefit the consumer. That is a really important mission. When Montanans go to turn on their lights or heat their home in the wintertime, they expect they are delivered affordable and reliable energy. Unfortunately, Democrats in the U.S. House are trying to pass their tax-and-spend bill that would include provisions that would kill jobs and increase consumers’ energy costs. Their bill includes new methane taxes and fees as well as increasing the royalties on oil and gas development. In fact, the new methane tax alone is estimated to increase energy prices for consumers by $100 a year. That would be a tough hit for many of our low-income and fixed-income families across Montana.

I have a question for all commissioners and that is this—looking at it from FERC’s economic viewpoint and knowing that consumers use natural gas in their homes—in fact, 40 percent of the U.S. electricity generation comes from natural gas—would you agree that increases in taxes and fees on natural gas production, transportation, and storage will increase consumer energy prices and would have a negative impact on low-income communities?

Do you agree with that? Let me ask this. Would anybody disagree with that?

[No response.]

Senator DAINES. So is the silence that you would agree they will increase prices?

Mr. DANLY. I think price increases would be inevitable, yes.

Senator DAINES. Right.

Mr. GLICK. Senator, if I may?

Senator DAINES. Yes.

Mr. GLICK. We regulate the transportation of natural gas but we obviously don’t regulate natural gas, you know, produced natural gas—the prices that are for sale. But I would say certainly that if anybody’s costs go up then the tax cost for it will go up and the rates will likely go up, but it is not necessarily a one-to-one measurement. It depends how competitive the market is, what other opportunities there are for other sources of energy, for instance, that might be less expensive and so on. So it is a little bit difficult to say that without knowing what the market is going to look like.

Ms. CLEMENTS. And sir, I would add that one thing that comes to mind from the extreme weather event in February is the fact that the pipelines performed pretty well. The issues that happened were related to the weather—the lack of weatherization or failures due to freezing at the well heads and the production level and down on the generating side. And so when you think about how to make investments that are prudent, relative to customers, thinking about reliability standards in other areas, some of which fall outside the Commission’s jurisdiction, are important.

Senator DAINES. Okay. Well, I think as a consensus, you raise taxes and fees of natural gas, ultimately the consumer is going to end up, most likely, paying more.

Chairman Glick, many members of this Committee wrote you a letter in April requesting the status of over a dozen natural gas infrastructure project approvals and asking the Commission to quick-
ly process these important projects. As of today, how many new natural gas pipelines are currently awaiting approval?

Mr. Glick. How many new proposals for natural gas—if I can get you that for the record—I do not have an exact number, but a significant number.

Senator Daines. Yes, what is your best estimate? I respect the fact you want to get the exact number. What is your best estimate?

Mr. Glick. I am going to guess in the neighborhood of 150 projects, including LNG projects and gas pipeline certificate projects.

Senator Daines. One hundred and fifty. And we have heard that approvals are taking longer and we are seeing what is going on right now around the world. In fact, just in the last 48 hours—spikes in natural gas prices. This is related to the fact that the wind stopped blowing in the UK. Do you think this could, by delaying these projects, could this have an effect on price?

Mr. Glick. So a couple points, Senator, thank you for the question.

First of all, the situation in Europe and in Asia, yes, there are certainly increased price pressures and a lot of that has to do with their reliance on LNG. And the fact is that they had a very hot summer and a very cold winter so they haven’t been storing natural gas. They have low supplies of natural gas and high demand. It is obviously going to increase prices and it did increase pretty dramatically. In the U.S., we have a much different situation. We have our own. We’re not heavily reliant on LNG, except for in terms of exports, but not in terms of imports to supply ourselves and so I do not think you’re going to see similar price pressures.

Senator Daines. Yes, it is just remarkable to me as I am watching the dynamics here in Washington that we have increasingly more Democrats that are on the bandwagon of stopping more natural gas consumption, which I did not think we would come to that point in this country, but I think it is a real threat to reliable and affordable energy in America.

I want to switch gears here and talk about hydropower. Commissioner Danly, in Montana, approximately half of our electricity is generated from affordable, reliable, renewable hydropower. I believe that we need to continue to expand hydropower throughout Montana and the United States by streamlining and expediting hydropower permitting. With my support, Congress actually streamlined permitting for small hydro projects but I believe there’s a lot more we can do. The question is, in what ways do you think FERC and Congress could help expedite the approval and the development of new hydropower facilities?

Mr. Danly. So thank you for the question, Senator.

Every chairman that I have worked either under or alongside has wanted to make the hydro process more speedy and clear. One of the problems, and I think it is necessary to set expectations here, is that our authorities under Part I of the FPA are pretty broad-ranging and the number of inputs that go into a hydro project are huge. We have resource agencies. We have various communities and stakeholders that need to have input on it. We have the state and local authorities. And so there is no doubt that there are efficiencies that can be gained in the process, but they are com-
plicated projects that have tremendous potential for destruction of property and loss of life. So deliberate hydro processes are probably called for.

The best way to improve it would probably be the inputs from the federal agencies because often—I know, I am saying that FERC does things faster implicitly here—but often federal agency inputs are the problem. And streamlining that process to get the single choke-point to get the information to the resource agencies could help a great deal.

Senator DAINES. Thank you very much.

Senator CANTWELL. Senator King.

Senator KING. Well, I cannot resist, because you suggested one of my favorite mottoes of business, which is you always want to have one throat to choke.

[Laughter.]

Senator KING. And what that means is somebody needs to be responsible. So I appreciate your comment. It is a life principle that I have lived by for some time.

Mr. Chairman, first, I apologize for being late. We were having another hearing on Afghanistan in the Armed Services Committee. We have artificial intelligence, but also an inability to schedule Senate hearings so that there aren’t conflicts.

I am gravely concerned about the cybersecurity of our pipeline system. And as you all know, the pipeline system is not really under your purview explicitly and yet, it is really, in my view, part of the grid. In New England, over 60 percent of our electricity comes from natural gas—all of which comes through the pipeline. So if there is a compromise, a cyber-compromise of the natural gas pipeline system, our electric grid is down. And so I would like to ask the Chair and other members, if they are interested, how do we deal with this issue? I have met with the pipeline industry. They are taking steps on this, which I appreciate, but I always follow President Reagan’s admonition—“Trust, but verify.” And I am not sure we have sufficient verification of the cybersecurity of the pipeline system.

Any of you that want to comment, but I will start with the Chair.

Mr. GLICK. Thank you, Senator and I want to start by saying I very much agree with your statement. The natural gas sector and the electric sector are so heavily reliant on each other for reliability purposes. And on the electric sector, as we know, we have mandatory reliability standards, and that’s not necessarily, you know——

Senator KING. But that is my point.

Mr. GLICK. Yes.

Senator KING. You have great standards on the grid side.

Mr. GLICK. Right.

Senator KING. But not on the pipeline side and yet, they are——

Mr. GLICK. Exactly, exactly. And as Senator Cantwell and you, Senator King, and others have been leading this effort for a number of years pointing out that the TSA has authority over pipeline cybersecurity authority and not FERC, not the Department of Energy. Former Commissioner Chatterjee and I actually wrote an Op-ed about this, because it is a serious issue, and I think TSA, to their credit, at least now is actually considering——
Senator King. So what should we do? Do we need to change the law?

Mr. Glick. I think we need to do two things. I think, first of all, TSA needs to move forward with their mandatory standards, but even more so—I think I said this earlier—we need to consider mandatory reliability standards for the natural gas pipeline industry, and that includes cybersecurity, but other standards as well, because we saw what happened in Texas. When there are not similar standards on the electric and gas side, we see some of the issues that occur. And I think Congress at least needs to consider whether TSA is the appropriate agency, whether there’s another agency that could do a better job in terms of imposing mandatory cybersecurity and reliability standards in the pipeline industry.

Senator King. Could you supply this Committee with your recommendation to help guide our deliberations on that subject?

Mr. Glick. Be glad to do so, Senator.

Senator King. I think this is an absolutely urgent question. Any other members of the Commission wish to comment?

Mr. Danly. Senator, I think that when it comes to something like cybersecurity, FERC is probably not the ideal agency to take the lead on something that requires nimbleness and immediate reaction. The threats that are developed in cybersecurity——

Senator King. You are suggesting that the U.S. Government should—is nimble and——

Mr. Danly. Well, I mean, just because they are nimbler than five rate-makers, I mean, it is a comparative that I am using here.

Senator King. Yes.

Mr. Danly. So that strikes me as being something that would be better for an executive agency like the Department of Energy, specifically when it comes to this subject. We have an Office of Energy Infrastructure Security that constantly deals with various jurisdictional entities, does best practices. Of course on the gas side, none of that is mandatory. But I just question whether FERC itself would be the best agency to oversee cybersecurity directly.

Senator King. Do you agree though that there should be greater oversight and standards for the pipeline system?

Mr. Danly. Yes, I do.

Senator King. Thank you.

Thank you, Ms. Chairman. I yield.

Senator Cantwell.

Senator Cassidy. Thank you.

Mr. Christie, earlier you mentioned, in response I think to a question from Mr. Lankford, that it is difficult to get folks to agree to permitting when they perceive that the line being permitted is for special interest. Can you elaborate? Who would be the special interest that somebody in Arkansas may perceive as the excuse for a transmission line?

Mr. Christie. Well, I think obviously, developers—generation developers, transmission developers—and I am not impugning anybody’s motives, but the fact is if you build a transmission line—essentially a high-voltage line, like a 765-kV, which is a very—you have high towers, it goes—especially if they are greenfield—those are going to be extremely controversial and hundreds, even thou-
sands of people are going to be opposed to those. Getting those built—and it is essential to build them—if they are needed for reliability, we absolutely need to build them. But the people who are naturally opposed to those very intrusive facilities, I think, are going to be much more willing to accept that construction if they know, number one——

Senator Cassidy. Well, let me ask you, because you said that earlier.

Mr. Christie. Yes.

Senator Cassidy. But I am guessing—my perception, correct me if I am wrong—if you have wind in the panhandle of Texas and Oklahoma and you need to transmit it to Atlanta, the people in Arkansas are going to be wondering—or the people in North Louisiana are going to be wondering, why is it coming across my state, tearing up forests, wetlands, et cetera? Is that a correct analysis of who are the players involved?

Mr. Christie. Well, without speaking to an individual line, I think you’re right about the people in the middle between, you know, the Alpha and the Omega of the line if it is going to run from Oklahoma or West or North Texas to Atlanta. People in Louisiana, Mississippi, and Alabama are going to wonder why a 765-kV is being driven through their state. That’s just the reality of——

Senator Cassidy. Believe me, I get that.

Mr. Glick, you had spoken in your testimony of trying to address the growing threat of extreme weather. My state has been impacted by that with multiple major transmission lines collapsed. What is FERC doing that people in my state will look at and say, “My gosh, that’s what FERC’s doing to prevent us from having the consequences of extreme weather?”

Mr. Glick. So I just want to point out, first of all—thank you for the question, Senator—I want to point out first of all that we have jurisdiction over the bulk power system and not necessarily the distribution system.

Senator Cassidy. I get that.

Mr. Glick. And you understand that was where most of the issues were, but we do have authority again over the bulk power system and one of the things that we’re doing is we’re looking at the reliability standards that utilities currently operate under. What we learned from Winter Storm Uri in Texas and elsewhere is that there are significant gaps in terms of what utilities do and what they should be doing to ensure reliability, and given the fact that we’re going to have increased occurrences of extreme weather, we need to ensure through our reliability standards that utilities plan for extreme weather in terms of enhancing their grid, making the transmission towers more resilient against 140 mile an hour storms that aren’t necessarily——

Senator Cassidy. So is that, I am sorry, is that FERC or is that my local public service commission that is going to require those enhanced transmission lines?

Mr. Glick. It depends on the transmission line. It is a little bit complicated, but some transmission facilities are considered part of the bulk power system—our responsibility—some more of the local distribution——
Senator Cassidy. So those ones that are made like an erector set, which I am told have a stronger wind profile, and after Hurricane Laura and the more recent one, Ida, were collapsed, as opposed to the ones that look like a thin stick.

Mr. Glick. Yes.

Senator Cassidy. Those stood up. These collapsed.

Mr. Glick. Yes.

Senator Cassidy. Is that you or my public service commission that would mandate an evaluation of whether or not those should be replaced?

Mr. Glick. Primarily, your public service commission. Obviously, it is a case-by-case basis, but primarily your public service commission.

Senator Cassidy. Okay.

Then next, when you do the environmental impact of gas, I will ask this to you, Mr. Chairman. There is evidence and there is a report out of a national lab here in the United States that both on a 20-year and 100-year horizon, gas exported from the United States to Europe contributes significantly less to global greenhouse gas emissions than does Russian gas. Is this taken into account as this analysis is made of the environmental impact of our gas production upstream?

Mr. Glick. So the way the law is structured with regard to our approvals of LNG facilities, the Department of Energy is actually required to make the determination as to whether the export is in the public interest. And in doing so, they do an environmental analysis to determine whether the export of natural gas produces environmental benefits or adverse impacts. We are only required under the law to examine the construction and operation of the project. The emissions associated with the project——

Senator Cassidy. And one more thing, really quickly. I was told last night by somebody that does a pipeline that he can convert his compressors from gas to electric and he could decrease his fugitive gas emissions, but it would take him so long to get the permit through FERC because he is constructing this now originally out of gas power compressors. It would take him so long to get that changed through FERC that it is not worth it, that he will tolerate the increased emissions precisely because of the regulatory delay. Now, is that an accurate kind of depiction of what he would confront should he ask that request to be made?

Mr. Glick. Yes, well, first of all, I think it is helpful to make those requests. We consider those types of requests all the time. I think, actually, if you look at our record, and I’ll be glad to get you information for the record, I do not think that the time we take to approve particular certificate applications is much longer than they have been previously. We try to do it as quickly as possible. We have a lot of requests we have to go through under the law. We’re supposed to go through various environmental analyses, but we actually try to move through it as quickly as possible. And even if I do not agree with the case in order, I still bring it up for a vote because I think that’s a requirement and I will continue to do so.

Senator Cassidy. But how long would it take him to get that request through, on average, now?
Mr. Glick. I have to get you that information for the record. But again, I think if you look at it based on previous chairs and our current approach, I don't think it's any different.

Senator Cassidy. Thank you, all.

Senator Cantwell. Thank you.

I am aware that a vote has started. I think maybe more than 15 minutes ago. So we need to move fast. Senator King, did you have something you wanted to say quickly? Because Senator Murkowski has been waiting very, very patiently.

Senator King. Oh. I'm sorry.

Senator Cantwell. So we have two members who have yet to ask questions. Yes, Senator, I thought maybe you had a question.

Senator King. Building transmission lines is going be a huge issue. We have a referendum in Maine right now on a project bringing hydropower from Canada to Massachusetts and people in Maine are saying “Why should we have the corridor?” So you are absolutely right about that as a looming, I think, major issue.

Senator Cantwell. Senator Murkowski.

Senator Murkowski. Major issue. Love the fact that we have four of the FERC Commissioners with us and we don't have protests. We don't have people screaming out in the halls. This is the calm, new FERC. So congratulations to you.

But as Senator King has pointed out—many, many issues that generate their own level of controversy. I have been waiting patiently, Madam Chairman. And the beautiful thing is that I can hear the responses to the many good questions that colleagues have asked. Senator Daines raised the issue of hydro and the issues that we face with the FERC in advancing our hydro projects. About 20 percent of Alaska's electricity on average comes from hydropower, but so much of ours is really small. I was out in the Eagle River Valley just last Saturday. There is a small project that one guy with a vision is developing. Juniper Creek, 300-kW, came online. It is not much, but you can imagine the frustration of so many that are trying to get these really small projects online, recognizing that you have these multiple agencies that you have to work through.

And so I would love to figure out a way that we can get beyond, and whether it is the efficiency issues, the multiple layers. Mr. Danly, those were your suggestions. I don't know if anybody else has anything that they can provide for the good of the order here on smaller scale, really smaller scale hydro, and what more we might be able to do to help advance some of these projects.

Mr. Glick.

Mr. Glick. Thank you very much, Senator.

So first of all, I want to say I agree wholeheartedly with what Commissioner Danly said earlier that a lot of the issues associated with the speed, the length of time it takes to move hydro license projects is due a lot to other agencies' involvements. But I would say that, you know, pursuant to legislation that you all enacted a couple of years ago, we do have a pilot project with regard to pumped storage.

Senator Murkowski. Right.

Mr. Glick. We're dealing with a pilot project with regard to developing projects at 900-power dams to try to expedite the process.
And the problem is, we haven’t received too many applications yet. And we want to work with the hydro industry to do that. But I would also think that with regard to smaller projects, we need to consider, maybe, additional pilot projects to try to expedite the process as much as we can at FERC and try to work with our other agencies like the Interior Department and NIST and so on and try to figure out how we can break the logjam.

Senator Murkowski. Well, I like that idea and I am sure that we can provide you with some potential pilots.

The issue of cybersecurity that has been raised by a couple—again, this is something that we are very keyed in on but again, when you have really small utilities, we all know that we want greater oversight, we know that there need to be standards, but sometimes with particularly your smaller entities, they do not have the up-front capital that is available. They cannot make these investments. And so, how do we address this? We have a measure, Senator King and I, along with the Chairman and Senator Risch, of this PROTECT Act that provides incentives for utilities to make the upgrades. Your comments on what more we can be doing when it comes to the smaller utilities and really—the very same threat that the big guys are facing—we face it down here and it has a level of impact that is also just really debilitating. So comments to that?

Chairman.

Mr. Glick. So Senator, again, and I appreciate the question. I spent quite a bit of time speaking with your, I think, member of your state public service commission about this very issue. I know it is a very important issue. I think we need to revise the way we and NERC together look at cybersecurity threats. For instance, we had these high-value facilities and low-impact facilities and so on and we have learned through the solar/wind situation and so on that that’s not necessarily the right metric because low-impact facilities—a foreign entity can get into a low-impact facility and then infiltrate a higher impact facility associated with that.

I think we need to take a look at where the threats are, where the threats are most likely to occur, and try to work our standards in a way that really focuses more on that and less on these categories that I do not think work anymore. And I know it is a big issue with smaller utilities. And I agree with you 100 percent that we also need to figure out a way to help these smaller utilities fund investments because investments aren’t going to go down. They are going to increase singly, but they are going to increase as time goes on.

Senator Murkowski. And to penalize them when they do not have the capital up front—it is not that they do not want to, it is just that it is really challenging.

One last quick question. The Alaska Gasline pipeline—FERC is very, very familiar with this project, having had it in front of it for years. Of course, we were pleased to see the project approved by the FERC last year. But throughout that, a lot of questions were highlighted. So I guess the last question for you, Chairman Glick, is, you said in 2019 that, “FERC is obligated to consider greenhouse gas emissions and impacts to environmental justice communities.” And so, as you think about that in relation to the Alaska
project, I guess the basic question is, what are environment justice communities and do you think that it is just from an environmental or an economic perspective for these rural—very rural, very remote communities to continue to rely on their fuel source right now, which is very expensive diesel-powered generation? How does that work?

Mr. Glick. So thank you very much, Senator.

First of all, we rely on EPA’s regulations to determine what an environmental justice community is and isn’t. With regard to your second question, we are required—whether it be an LNG facility or a natural gas pipeline—we’re required to determine whether the project is essentially in the public interest. We look at the benefits of the project against the potential adverse impacts to species or the environment or whatever else you’re taking a look at. And those particular issues—about increased access to cleaner fuel, economic development in the local community—that are the very type of issues that we consider on the benefit side of the ledger when we do a public interest analysis.


Senator Hoeven. Thank you, Acting Chairman Cantwell.

For Commissioners Christie and Danly, what immediate actions should the Commission take to make sure that the regional grid operators are retaining sufficient baseload generating capacity, particularly during events that create stress on the grid?

Mr. Danly. I’m sorry, Senator. Whom did you specify to take that action, just the states or the Commission?

Senator Hoeven. The Commission.

Mr. Danly. Okay, I mean, the Commission’s powers on the subject of generation are limited. The Federal Power Act restricts to the states and leaves that residual power to choose generation to them. Our powers relate to ratemaking, and we have to ensure, as I said in my opening comments, that the price signals in our markets properly compensate generators to retain the ones that already exist and attract new investment for new generation. But we do not directly select the generators.

Senator Hoeven. So it is of no interest to you, grid resiliency is totally up to the states, it is of no interest to you. There is nothing you should do about it.

Mr. Danly. So Senator Hoeven, you and I have had this extended colloquy and you and I both agree that there is a problem here. I think that if we march ahead with the change in the composition of the generation fleet, as we have been, as it looks like we’re doing, I think that resilience and reliability will be very badly impaired. And I think there will be catastrophic consequences.

Senator Hoeven. I like that answer a lot better.

Mr. Danly. But that doesn’t mean that I believe that FERC has the power, sir.

Senator Hoeven. Well, I got that on the first question, or the first part of your answer.

Mr. Danly. Yes.

Senator Hoeven. I got that. The second part, I think is right on the money. Thank you for that, Commissioner.
Mr. DANLY. Yes, Senator.

Senator HOEVEN. Commissioner Christie.

Mr. CHRISTIE. Well, Senator, if a state is not in an RTO, of course, it is up to the state. The resource adequacy is up to the state and even in the RTO, it is up to the state. Now, Mr. Danly is right. In those RTOs that set rules for where their capacity markets are going to run, those markets need to be non-discriminatory, non-preferential, and they also have to make sure that the planning is done to make sure that they have sufficient dispatchable resources to meet the need. You cannot do it all with intermittent, but it is going to be a mix. And as we go through the transition, it is going to be a mix of both. But the RTOs have a much bigger role in that than, obviously, states that are not in RTOs.

Senator HOEVEN. Certainly, the RTO has a role, no question about it, but you would also share the concern that we have grid resiliency for efforts, for times it puts stress on the grid, for the well-being of state, region, and country. Wouldn't you agree with that?

Mr. CHRISTIE. Well, absolutely, I mean reliability means—here’s what it really means: it means the lights are on 24 hours a day, 7 days a week, 365 days a year. Anything less than that is insufficient. That’s not what Americans expect. And so, we have to have a generation mix that can produce that 24/7/365 standard.

Senator HOEVEN. Right on.

Also for you two, should developers expect to complete a full environmental impact statement for new projects moving forward?

Mr. CHRISTIE. You mean a transmission developer?

Senator HOEVEN. Yes.

Mr. CHRISTIE. You know, I do not think we have had a case where that came up where the NEPA required a transmission developer. So I really don’t want to comment on that since we haven’t had a—and here’s the thing, Senator—a transmission line is going to be permitted at the state level.

Senator HOEVEN. Well, it is my understanding that the Chairman now is requiring environmental impacts for a project to move forward.

Mr. CHRISTIE. Well, that’s for gas. I think that, you know, gas is under our jurisdiction. I think——

Senator HOEVEN. Okay, well, I’m sorry, I should have said, excuse me—for gas.

Mr. CHRISTIE. Yes, transmission is under state permitting, you know.

Senator HOEVEN. Yes, I’m sorry. For gas.

Mr. CHRISTIE. Well, that gets back to what the Natural Gas Act requires and also what NEPA requires and that’s an ongoing——

Senator HOEVEN. Should the FERC require an EIS for a gas pipeline?

Mr. CHRISTIE. I think FERC ought to require what the law requires. Now, whether an EIS is required in every case, I cannot give you a definitive answer on that because it is still, frankly, under——

Senator HOEVEN. So you are saying it is not up to FERC—they shouldn’t require an EIS for a gas pipeline.
Mr. Christie. I cannot say in every case that it is required because that’s something that’s under litigation right now.

Senator Hoeven. Thank you.

Commissioner Danly.

Mr. Danly. What is required under the implementing regs for NEPA is that if there is a significant impact, then an EIS is required, but an EA can do the initial review to determine the severity of the impact. And so, in conducting all NEPA under the CEQ regs, there is a rule of reason that compels the action of the agency and you do as little work as you possibly can to get the fastest answer from government you can get.

Senator Hoeven. Thank you, Commissioner. I appreciate that answer.

Chairman Glick.

Mr. Glick. I think Commissioner Danly is correct in terms of how we characterize the law. I think the problem is that the courts keep on telling us that we keep on getting it wrong and we’re not expediting things, what we’re doing is delaying things. Because every time we’re supposed to perform an EIS and we prepare an EA, we just ignore climate change altogether, the courts say you got it wrong. You have to do it all over again. That costs billions of dollars and extra time for these pipeline projects. And I think certainty is much more important than trying to decide whether we can do something quickly and do it on the cheap. Every time we do it on the cheap, the courts tell us we got it wrong.

Senator Hoeven. In that context then, I mean, it takes much longer now to permit these gas pipeline projects than it does to build them. Can you help expedite that? Because we have situations where it is in everybody’s interest, including better environmental stewardship, to build a pipeline. We have to be able to do it.

Mr. Glick. And we are attempting to expedite the process, Senator, and thank you for the question. You know, I think one of the things—we had a discussion about this several months ago—we were trying to prepare supplemental environmental impact statements where we see—as opposed to drafting a whole new big environmental impact statement on everything, we move forward as quickly as we can. Some of these projects are moving forward and we’ll be considering them very shortly. But again, if we cut corners, all the courts are going to tell us to do is go back to the drawing board.

Senator Hoeven. But it is your intent to try to get these things done as—I mean, properly—but as expeditiously as we can?

Mr. Glick. Everything before us as expeditiously as possible. That’s my motto.

Senator Hoeven. Thank you, I appreciate it.

Mr. Danly. Senator, can I say one thing on this subject, which is that there is a difference between a failure by an agency to properly conduct a NEPA review, which would be in the EA or the EIS, and a problem from the agency from an Administrative Procedure Act (APA) standpoint to properly explain the decisions that it made, partially informed by that NEPA document. In almost all of the cases where FERC has been, in one way or another, remanded, those cases are not because of failures in the NEPA document, they
are failures of reasoning under the Administrative Procedure Act. It is basically the court saying that you did not sufficiently explain the reason why you made this choice, connecting the choice made to the facts found. And so saying that we can fix that problem of APA violations by having different or more robust NEPA review is simply not the reality of the remands we have gotten from the courts. And I feel it is necessary to tell the Committee that. Thank you.

Senator Hoeven. Thank you, Commissioner Danly. Also, I have some questions for Commissioner Clements, but I'll submit the rest for the record in the interest of time, Mr. Chairman, and I do thank all of you for your responses. I appreciate it.

Senator Barrasso [presiding]. Thank you, Senator Hoeven. Just another number of quick questions.

Commissioner Danly, in my understanding, both private and public investors build and operate electricity and natural gas projects in accordance with a whole series of contracts, and you mentioned that earlier. These contracts determine how, whether, and when a project can be built, when it can be turned on, and continue to operate. So if Congress enacts this so-called Clean Electricity Performance Program, as House Democrats have proposed, what is the likely impact on existing contracts?

Mr. Danly. Thank you, Senator.

So you're asking about the current contractual relationships, right?

Senator Barrasso. Yes.

Mr. Danly. I alluded earlier to what I thought the consequences of this legislation would be for the markets, but for the entire rest of the country that isn't in markets, that's governed by a series of very complicated, interacting, bilateral and multilateral contracts, usually that are entered into for very long periods of time—decades. If the revenues that people can expect if they meet the performance standards or the penalties that they can expect if they fail to meet them then get applied to those contract holders, you are going to find that a huge number of parties and counterparties will either be unable to perform under the contract terms and then suffer the penalties specified, or they may actually find that rational breach of those contracts is in their business interests and then they will intentionally not fulfill those contracts because they have separate revenue streams that will be more lucrative to them. That is the ineluctable affect of the market forces that will be created.

Senator Barrasso. So then, it is fair to say that this legislation, which the Democrats are proposing in the House, would result in a tidal wave of disputes, lawsuits, and ultimately hurt American consumers and the economy?

Mr. Danly. As I said before, nobody has a crystal ball, but it seems like that can be expected. The point is, if the legislation goes into effect as written, the consequences are going to be profound, they are going to be disruptive, and at the moment, they are basically incalculable. And I think it is worth pointing out—and I do not want to make this sound like a plea for mercy—but even though we have virtually no role in implementing any of what's in that bill, FERC, as a practical matter, is going to be the forum in which all of those disputes are going to be adjudicated when it
comes to our jurisdictional contracts. I mean, there will be residual state contract issues, of course, but FERC is going to have to do a lot of the cleanup for what I think are the inevitable consequences of this.

Senator BARRASSO. Thank you, Mr. Danly.

Chairman Glick, I agree with you that safeguarding the reliability of the electric grid should be one of FERC’s top priorities. Enabling power plants to have access to plentiful supplies of natural gas is essential to electric reliability. So if FERC fails to permit new natural gas pipelines or upgrades of existing pipelines in a timely and a predictable manner, won’t that put electric reliability at risk?

Mr. Glick. Thank you for the question, Senator Barrasso. So first of all, I think that you can’t answer the question generally because you have to take these issues on a case-by-case basis, but there are several cases in which the courts, most recently on the Spiro case, in which the court told us a project is not needed. That’s one of our responsibilities. FERC is supposed to ensure that there’s sufficient natural gas and sufficient natural gas transportation capacity around the country, but one of the things the statute tells us, natural gas tells us is—is the project needed?

And so first of all, that’s what we have to determine—whether there’s a need for the project, and not based on some sort of contract between affiliates, whether there’s true need for the project—and in that case, I will, on a case-by-case basis, determine that if there is, in fact, evidence in the record to suggest that additional natural gas capacity is needed for reliability reasons, personally, I will conclude that the project is needed.

Senator BARRASSO. So Mr. Danly, recent events in California and Texas have shown that reliable, affordable natural gas is essential for families to heat and power their homes, their state, local governments to provide public services, and Americans to operate their businesses. Are you concerned that the Commission’s failure to act on pending applications for natural gas pipeline certificates will put reliable, affordable prices for electricity and natural gas services at risk?

Mr. Danly. Yes, Senator. And it is not only the fact that there is a delay in a handful of the cases pending, it is also the uncertainty created by the recent issuances by the Commission.

Senator BARRASSO. And then, Chairman Glick, again, I have a series of just general statements for you that do not pertain to any particular matter before you, but please just let me know if you agree or disagree.

Private sector investors, who put up their own money and expect a reasonable return, finance most long-term energy infrastructure in the U.S. Agree or disagree?

Mr. Glick. Agree.

Senator BARRASSO. Okay.

And the Commission’s obligation is to balance the needs and interests of investors and the public. Agree or disagree?

Mr. Glick. Agree.

Senator BARRASSO. Okay.

Investors need regulatory certainty. Agree or disagree?

Mr. Glick. Wholeheartedly agree.
Senator BARRASSO. And the Commission introduces uncertainty for investors if it calls into question its final orders, especially final orders which have been upheld on appeal.

Mr. Glick. If orders have been upheld on appeal that’s one thing. I think when the Commission—the Commission hasn’t ever done that. But if the courts question what the Commission has done and say it is not sufficient, the Commission didn’t do something sufficiently, whether it be a NEPA review or a need finding—we’re actually discouraging investors from investing in the market because they have no certainty. That’s why we need to do it right the first time.

Senator BARRASSO. And final question, Mr. Chairman.

Commissioner Danly, as you noted in your prepared remarks, the U.S. Supreme Court has said that the principal purpose of the Natural Gas Act is to encourage, “The orderly development of plentiful supplies of electricity and natural gas at reasonable prices.” The court has described the same purpose for the Federal Power Act. In your view, is the Commission doing all that it can to fulfill the purpose of these two statutes, and if not, what more should the Commission be doing?

Mr. Danly. I think, Senator, that the Commission is failing to properly oversee our markets to produce the correct signals that will incentivize the arrival of much-needed generation in various regions, and then also, I think that we are creating a climate of uncertainty that makes it impossible to rationally deploy capital to build out the natural gas infrastructure that the electric system and people need.

Senator BARRASSO. Thank you, Mr. Chairman. No further questions.

The CHAIRMAN [presiding]. Thank you, Senator.

My final two questions will be to whoever would want to respond on these, okay? I believe that all of you agree that more regional and inter-regional transmission lines will be needed to facilitate clean energy and to improve the grid’s resilience and reliability. The recently noticed rulemaking on transmission planning confirms that, but yet FERC recently reversed course and has proposed sunsetting after three years the return on investment—the adder transmission owners can access as an incentive to join their regional transmission organizations, the RTOs.

So the incentive adder was directed by Congress as part of the Energy Policy Act of 2005 as a compromise short of mandating RTO membership. That was the sweetener. Joining an RTO remains voluntary, but I know that PJM and other grid operators are concerned that eliminating this sweetener will mean transmission owners may elect not to join or not to stay in the RTO, which could significantly reduce the reliability benefits that RTOs can provide and do provide. Does anyone have that same concern that I have?

Yes sir. Chairman.

Mr. Glick. Mr. Chairman, if I can. So I think you’re exactly correct. The statute, which was enacted in 2005, tells FERC to give incentives to transmission owners that join RTOs and I think there are significant benefits with RTOs and consumer savings, reliability, resilience, all the rest. But the incentive is only to join, and if we provide incentive, 20 years later, if we just continue to pro-
vide the same 50-basis-point, 100-basis-point adder, 20 years later, that no longer becomes an incentive. We're also supposed to—you mentioned earlier, affordability. We have to guard and ensure that the consumers are adequately protected. I think if Congress wanted to amend the law and say they should provide an incentive for staying in an RTO and being in an RTO, that's one thing. But I think the way the statute is written currently, we have no choice but to cut off the incentive at some point.

Mr. DANLY. So Senator Manchin, the language of the statute is to give incentives to utilities “that join.” That is a demonstrative. It is not a “to join.” And further, the statute specifies that we're supposed to do as much as we can, I mean, it is very broadly written.

The CHAIRMAN. So hold on. You're saying “that join” or “to join?”

Mr. DANLY. “That join.” It says “that join”——

The CHAIRMAN. So that's all new. That's not existing. That's new.

Mr. DANLY. No, no, no. It means those that join should be given the incentive. And so, having this idea that it is appropriate to limit it, I do not understand. I dissented vigorously on this. If you want to have RTO membership—and what you, Congress, want to do is encourage it—it is worth keeping in mind two things: It is not only an inducement for people to join, but it is also an inducement for people to remain. And as long as the utilities have the privilege of exiting RTOs, the limit on the RTO adder is going to encourage an earlier exit, all things being equal. So I think it is very bad for the project of trying to encourage utilities to——

The CHAIRMAN. Do you think the language of the code needs to be changed?

Ms. CLEMENTS. Chairman Manchin, as a practical aspect of this, we have two responsibilities under the Federal Power Act. One is to retain reliability and one is to protect customers.

The CHAIRMAN. Right.

Ms. CLEMENTS. We should be incenting things that are hard to do. So that when we are building out our system, we're protecting customers in the process. As you described this RTO adder, a sweetener, it is not hard to join an RTO. In fact, RTOs have been saving customers billions of dollars after year after year for several decades now. We should be thinking about what are the things that are really hard to get done—what are the things that we need to help utilities do that require incentives? Once you have been in an RTO past some number of years, it is not hard to keep saving customers money. So what I think the important piece to talk about is how we get the hard things done.

The CHAIRMAN. Is there more incentive for them to move on? Is it more profitable for a transmission owner to move on to independence, basically, for profit reasons?

Ms. CLEMENTS. I wouldn't vouch to speak for any particular utility, but my guess would be no, and I think, certainly, the utility commissions and governors of states where those RTOs or utilities live might have something to say about that.

The CHAIRMAN. Commissioner Christie.

Mr. CHRISTIE. I would say this, Mr. Chairman, on the issue on whether the law actually requires an RTO adder as opposed to an incentive, I would agree with the Chairman on this. I do not think
it mandates an RTO adder, specifically. I think it is incentives, generally. And I would say this, there’s not a utility in America in an RTO that is not there because either (A) the state mandated it or (B) the utility went to their state regulators and asked to join, as our utilities in Virginia asked to join PJM.

So they made a decision to join the RTO and the problem I have got with it, with an adder, and I am not going to prejudge the case because it is actually still open, but an ROE is the cost of capital. It is the market cost of equity. And so an adder, by definition, is above the market cost of equity, and who pays that? Consumers pay that. And you know, in your opening remarks, you talked about the need to be sensitive to consumers and I take that very seriously. And I think that that is implicated here when you talk about an adder to an ROE because consumers are going to pay it.

The CHAIRMAN. Do you all have any consensus right now? You do not, but do you have a way to have a consensus around a language change, code change, things of that sort that would keep people in the RTO? I understand three of you do not believe transmission owners are going to leave the RTO?

Mr. CHRISTIE. Do not believe what, Senator?

The CHAIRMAN. That transmission owners are going to exit. They are not going to exit? Okay. Do you all three believe that that won’t happen because there’s too much incentive and benefits to the consumers?

Mr. DANLY. I do not agree with my colleagues. I think that there is a greater, ever-growing chance that RTOs will unravel and that the transmission owners will leave. I am not saying that’s going to happen imminently——

The CHAIRMAN. Yes.

Mr. DANLY [continuing]. But I think it is getting closer.

The CHAIRMAN. Let’s use Texas as the model of what we should be looking not to do, right? We all agree on that? That Texas being not——

Mr. CHRISTIE. I wouldn’t structure my energy market the way Texas does, no, sir.

The CHAIRMAN. No, I know that, but I am saying basically what happened with Texas with no reliability, no backup, not hooked in, no oversight—maybe we could have caught that, maybe we could’ve stopped that and prevented it.

Ms. CLEMENTS. This increasing new normal of extreme weather that hits all of our states.

The CHAIRMAN. Sure.

Ms. CLEMENTS. The idea of not being interconnected to your neighboring systems——

The CHAIRMAN. Right.

Ms. CLEMENTS [continuing]. Through coordinated integration that both allows for the sharing of resources that saves customers money and protects customers in these dangerous situations, is a really compelling reason to stay connected.

The CHAIRMAN. Commissioner Danly, then I would ask you, what would the incentive need to be then if all these risks are out there and if the sweetener goes away?

Mr. DANLY. Well, what would be the incentive for them to leave?

The CHAIRMAN. Right.
Mr. DANLY. It is that the burdens of being a transmission owner within an RTO are simply too high to justify remaining. They would have to pay a whole lot of money to leave. This we have seen before when utilities have left RTOs. But if RTOs are so great, and everybody wants to be part of them, why are there entire regions of the country that have simply refused to even consider the idea? I think we can see in front of us empirically that the promises of RTOs make sense for some regions and not for others. And to the extent to which Congress wishes to incentivize utilities to join them, it has to actually take action to, otherwise it would have happened.

Mr. GLICK. Mr. Chairman, if I may.

We only give the incentive to actual utilities that voluntarily join an RTO. If a state tells them to join an RTO, they are not eligible for the incentive, pursuant to court decision. And all the utilities that are required to——

The CHAIRMAN. When I was still Governor, I would tell my utilities that I am not mandating you, just go ahead and do it and get the money.

[Laughter.]

Mr. GLICK. But in some states, like Ohio, for instance, where the state requires you to participate in RTO——

The CHAIRMAN. Sure.

Mr. GLICK [continuing]. You do not see anyone leaving, I mean, basically——

The CHAIRMAN. Well, they can’t if you mandate them.

Mr. GLICK. Well, they can’t, but they also talk about all the benefits they get from participating in the RTO.

The CHAIRMAN. Sure.

Mr. GLICK. And I do not think we’d see anyone leaving.

The CHAIRMAN. It is a good discussion. And I can understand that your discussions could be lively. That is good. Maybe we need a fifth one here, huh, real quick?

Mr. GLICK. Absolutely.

The CHAIRMAN. Let me just thank you all. You all have been most professional and I appreciate it and I think most amicable. And I think there is a good collegial mix here. It really is, and that is good.

Mr. Danly, I know that you are kind of on the fringes—on the other side—and that is good, too. We need—and I mean that—trust me, I know how you feel.

[Laughter.]

The CHAIRMAN. So I am saying that with reverence.

Mr. DANLY. I appreciate that. Thank you.

The CHAIRMAN. But the bottom line is we have to find consensus and move forward. And I am concerned about the clean energy standard. I am not asking you to comment on it, I am telling you the concerns I have about paying utilities to do what I think they are going to do anyway. I looked at the transitions going on now and what has happened since 2000 to 2020—we have transitioned to a completely different delivery system and we did not pay the utilities to do it.

If they are going to do anything with utilities and transmission, I know a little bit about transmission, there is an awful lot of
money to be made in transmission, probably more money in transmission than there is in generation. And with that being said, if you want to build a line, you better share a little bit of the revenue. Do not tell me that “everyone is stopping you,” because I put in a procedure called Kilowatt Mile so we would share with the counties or the municipalities the line went through. That takes care of all the problems. Everybody benefits in that.

But for new lines, I said, I will give you a loan. The Federal Government should give a loan to go out in the desert for wind, solar, whatever it may be, until the time when that’s going to end up being profitable. I am taking all the risk away on the front end, but when it is interconnected and starts making money then the Treasury should get its money back. That is the only thing I have said. They want to give it just strictly as a grant up front, and that, to me, makes no sense whatsoever. And I just cannot, for the life of me, keep writing checks from our Treasury to publicly traded companies that have shareholders that are basically benefiting from the investments we are making with no return to the taxpayers. That is the biggest problem I have.

So I will be calling on you all to help me through this. If it is there and the customers are demanding it, then transmission lines will get built. I think, Mr. Christie, you made this statement, and I agree wholeheartedly, that if we pay utilities incentives to basically change their portfolio by 2030, reliability will be the loser. Reliability could be the big loser because we are moving faster than we should and I guarantee you, the utilities will take every dime you want to give them, but they will not commit and be held accountable for reliability. And then they are going to have to buy it somewhere and the consumer is going to pay. That is my problem. That is my big problem. And in my state, Mr. Christie, you hit it. Ninety-three percent reliant on coal——

The Chairman. That’s what I am saying. So our transition is going to be different, but I can tell you, the transition is going to happen and people in West Virginia realize that. Just do not leave us behind. There has to be something. We can do something.

So I am trying to get the legislature in West Virginia to change their code so we can build nuclear. I have the perfect platform for nuclear, basically where the old coal-fired plant was. Transmission and connectivity are there and we cannot even use the site for nuclear yet. So we have all got to get together, but you all can be tremendously helpful. You all have an extreme amount of knowledge on this and I think you have the desire, all of you seem to have that passion and desire. I see it coming out when everybody wants to jump up and that is all good. That is really good. And we hope
we can get you another FERC nominee as quickly as possible. There will be five of you; that will be a full, working FERC. So with that being said, I want to thank you all again, I appreciate it very much, and our members will have until close of business tomorrow to submit additional questions for the record. The Committee stands adjourned.

[Whereupon, at 12:19 p.m., the Committee was adjourned.]
APPENDIX MATERIAL SUBMITTED
Questions from Ranking Member John Barrasso

**Question 1:** In April 2020, in your Rehearing Dissent Regarding PJM Minimum Offer Price Rule (MOPR), you stated:

> The Federal Power Act (FPA) is clear. The states, not the Commission, are the entities responsible for shaping the generation mix. Although the FPA vests the Commission with jurisdiction over wholesale sales of electricity, as well as practices affecting those wholesale sales, Congress expressly precluded the Commission from regulating “facilities used for the generation of electric energy.” Congress instead gave the states exclusive jurisdiction to regulate generation facilities. (Emphasis added.)

In your testimony at the Committee’s hearing, you stated that “the Commission generally relies on competition to establish just and reasonable rates in wholesale markets. But this only works if there is true competition.”

If Congress enacts the so-called “Clean Energy Performance Program” (CEPP), as reported by the House Committee on Energy and Commerce, last month, it will have in effect dictated the generation resource mix of the electric grid.

- If the CEPP is enacted, how will FERC ensure competition and just and reasonable rates if the Department of Energy through a new FPA section effectively dictates the resource mix?

**RESPONSE:** The electricity resource mix has long been shaped in significant part by federal, state, and local public policies. As a technology-neutral regulator, the Commission’s role is neither to administer those policies nor to second guess them. Instead, the Commission must carry out its statutory role taking into consideration the relevant federal, state, and local policies.

- Would the proposed CEPP, which provides direct subsidies to wind and solar and penalizes fossil generators, have an adverse effect on competition?

**RESPONSE:** As noted above, the electricity resource mix has long been shaped by federal, state, and local public policies. In my view, the effect the CEPP would have on competition would not be meaningfully different than federal actions supporting other technologies, including nuclear power, fracked natural gas, and battery storage.

- How do you define “true competition”?

**RESPONSE:** Within the context of Commission-jurisdictional wholesale markets, true competition occurs when the resulting prices reflect supply and demand fundamentals and not anticompetitive conduct, such as market manipulation or the exercise of market power. It is the Commission’s role to ensure just and reasonable rates by preventing buyers and sellers from exercising their market power to raise prices above competitive levels or lower prices below competitive levels. But it is important not to conflate sellers or buyers exercising market power with federal or state governments taking actions to
shape the generation resource mix. With some rare exceptions, federal and state governments are not market participants. Their actions reflect an effort to address other considerations, such as the externalities inherent in electricity generation, not to raise prices above competitive levels or lower prices below competitive levels.

**Question 2:** Does the premature retirement of certain electric generating units lead to the degradation of electric grid reliability if sufficient electric generation is not approved to operate beforehand?

**RESPONSE:** In any marketplace, more efficient or cost-effective supply will displace less efficient resources, causing the latter to exit the market, in this case by retiring. Where that happens, retirement is not premature; instead, it reflects the market conditions. In general, the retiring resources will be replaced by new supply, preventing degradations in reliability. The exception would be if the market failed to procure necessary reliability services—which could, theoretically, impair grid reliability if the services provided by a retiring resource are not replaced by other resources. We have not seen evidence of that happening in practice.

The latest North American Electric Reliability Corporation (NERC) seasonal assessment states that all electric regions have sufficient reserve margins, indicating that they can meet forecasted peak demand and maintain a surplus above that level. Nevertheless, the grid is undergoing a significant transformation and, as always, change can come with new challenges. The Commission has opened an inquiry to examine whether the current wholesale markets are designed to procure the necessary services to maintain grid reliability as the resource mix evolves. We have also opened a separate proceeding to identify whether regions have necessary reliability services in light of extreme weather due to climate change, including sufficient transfer capacity between regions.

Finally, I would also note that in the organized wholesale electric markets that the Commission regulates (i.e., those operated by regional transmission organizations (RTOs) and independent system operators (ISOs)), the Commission has approved a safety valve for generator retirements. These provisions provide RTOs and ISOs with the authority to conduct studies of the reliability implications of generator retirements and if a generator planned for retirement is needed for reliability, the RTO and ISO can enter into a contract with that generator to keep it operational and ensure the reliable operation of the grid while an appropriate transmission solution is constructed to meet that reliability need.

**Question 3:** According to an article in Bloomberg that appeared on July 15, 2021, a “power trader who was under investigation over his role in a massive default on the largest U.S. electric grid took his own life in January, lawyers for his estate said in a legal filing that claims aggressive federal regulators drove him to his death.”

- Please identify the case to which the article referred.

**RESPONSE:** The article refers to the GreenHat Energy, LLC proceeding, which is currently pending before the Commission, in Docket No. IN18-9-000.
• What steps does FERC take to ensure the proper conduct of its investigators and their investigations? Please explain.

**RESPONSE:** Due to the highly sensitive nature of investigatory work and the serious consequences that can flow from investigations, Commission investigators are obligated to discharge their duties in a fair and impartial manner and with the utmost concern for ethical requirements, professionalism, and decorum. Management in the Commission’s Office of Enforcement and its Division of Investigations regularly reminds staff of these requirements. That management also supervises Commission investigators in the conduct of their cases and in the legal sufficiency and propriety of the alleged violations they assert. In addition, Commission investigators, like all Commission employees, are subject to statutory ethics obligations and receive mandatory annual ethics training on those obligations. Moreover, Commission investigators who are attorneys are bound by the ethical rules of his/her state bar. The Commission has processes in place to take prompt disciplinary action should a violation occur.

• What has been FERC’s track record resolving enforcement cases pending in federal court?

**RESPONSE:** Since passage of the Energy Policy Act of 2005, the Commission has filed nine enforcement actions in federal district court to enforce a penalty assessment. The Commission has resolved six of these cases through settlement. The other three of these cases are pending in federal district court. With regard to one of the pending cases, the Commission recently approved a settlement with three of the defendants (one individual and two related entities) and will seek to have all outstanding claims against those defendants in the federal court lawsuit dismissed with prejudice.

• How many enforcement cases is FERC litigating in federal court?

**RESPONSE:** The Commission currently is litigating three enforcement cases in federal district court.

• What is the range of time that these cases have been pending?

**RESPONSE:** The three cases have been pending in federal district court since July 31, 2015; July 27, 2016; and January 6, 2020, respectively.

• What is the practice concerning settlements of cases pending in federal court? How, if at all, are settlement offers communicated to Commissioners?

**RESPONSE:** Settlement is the Commission’s preferred means of resolving matters, whether investigations or litigated actions. To that end, the Commission has a practice of agreeing to settlement discussions, including court-sponsored mediation conferences, in its federal district court cases. This practice has led to settlements in six of the nine enforcement actions the Commission has filed in federal district court. The Commission’s Office of Enforcement staff come to any settlement discussion with an authorized settlement range and will accept good faith offers falling within that range, subject to the Commission’s approval. If settlement discussions while a case is pending in federal district court do not
result in an offer within Office of Enforcement staff’s authorized range, then staff will communicate the last-best offers as part of their regular communications with the Chairman and Commissioners.

**Question 4:** In a recent response letter to various state legislators regarding the benefits of Regional Transmission Organizations (RTO), you stated, “I agree that RTOs offer significant benefits, including lower energy prices and enhanced grid reliability.”

- What was the basis for your statement? Has FERC done analysis to support the assertion? If so, please cite it.

**RESPONSE:** I strongly believe that RTOs have provided tremendous benefits, including improving reliability, reducing costs to customers, and increasing access to and integration of innovative technologies. The Commission has conducted analyses to evaluate RTO and ISO performance and benefits. In response to a 2008 Government Accountability Office (GAO) report, the Commission initiated a Common Metrics initiative to track the performance and benefits of RTO/ISO markets. In response to a 2017 GAO report, the Commission expanded the initiative to improve the quality of the data collected and to address capacity markets. Commission staff produced the following reports under the Common Metrics initiative:
  - a 2010 report on ISO/RTO Performance Metrics;
  - a 2011 Report to Congress on Performance Metrics for ISOs/RTOs;
  - a 2012 report on Performance Metrics in Regions Outside ISOs and RTOs;
  - a 2014 report on Common Metrics; and


In addition to the Commission’s evaluation of RTO/ISO performance and benefits, several RTO/ISOs have conducted studies estimating the value of these benefits. For example, Midcontinent Independent System Operator, Inc. (MISO) estimated that, for 2020, it provided $3.5 billion in benefits to its region, including improved grid reliability and increased efficient use of generation resources ([MISO 2020 Value Proposition Detailed Calculation Description](https://www.miso.com)). Similarly, Southwest Power Pool, Inc. (SPP) estimated that, in 2020, it provided $2.14 billion in value based on four key functions: operations and reliability, including reliability coordination; markets; transmission; and tariff, scheduling and professional services ([SPP 2020 Annual Report](https://www.spp.org)). According to PJM Interconnection, L.L.C. (PJM), its operations, markets, and planning result in annual savings of $3.2-4 billion, which leads to less costs for consumers ([PJM Value Proposition](https://www.pjm.com)). As shown through the Commission’s reports, as well as the RTO/ISO annual reports, I strongly believe that RTOs will continue to provide benefits to customers.

- Does FERC have data on how RTOs generally, or a single RTO contribute to the retail cost of electricity in a region or regions served by RTOs? If so, is there data showing that retail costs of power are lower
in an RTO region or regions than in a region or regions not served by an RTO? Please provide any data that provides support for your answer.

**RESPONSE:** The Commission does not collect data on how RTOs affect the cost of retail electricity. The Commission has jurisdiction over RTOs/ISOs that operate wholesale electric markets that serve wholesale customers. States have jurisdiction over retail rates. For this reason, the Commission has limited ability to examine the rate impact of RTOs/ISOs on retail consumers.

Nevertheless, several states have commissioned studies examining the benefits of RTO membership. For example, in the Western Interconnection, Idaho, Colorado, Utah, and Montana conducted a joint study funded by the U.S. Department of Energy examining the benefits of RTO formation in the western United States. The study found that a West-wide RTO would have generated roughly $1.2 billion per year in cost savings relative to the status quo in 2020 and would generate roughly $2 billion per year in cost savings relative to the status quo by 2030. Also, Entergy Texas commissioned a study in 2015 that found it saved $25 million from participating in MISO beginning in 2013. Finally, the Missouri Public Service Commission is expected to publish a new study by December 31, 2021, but has pointed to a 2008 study which found that over 10 years, Ameren Missouri’s participation in MISO would generate between $346 million and $356 million in incremental benefits. Finally, several other studies show that organized markets deliver economic benefits to states. In a report dated April 2019, the Brattle Group estimated that the state of North Carolina would realize annual economic benefits approximating $600 million if Duke Energy were to become a member of an RTO.

- Does the Commission have plans to initiate a study of the reliability and cost benefits of RTOs? If not, why not?

**RESPONSE:** As described above, the Commission has conducted several studies on the performance and benefits of RTO/ISO markets and numerous other entities have performed similar studies. For that reason, we do not have a plan to conduct another study at this time.

**Question 5:** The Biden administration’s program to reduce U.S. emissions of greenhouse gases, as well as the bipartisan infrastructure bill currently pending in the House, envision hydrogen as a direct alternative to natural gas for electricity generation, industrial processes, and domestic uses. Many proposals anticipate the shipment of methane-hydrogen blends in existing natural gas pipelines in the near-term and the conversion of some existing natural gas pipelines to dedicated hydrogen shipment in the long-term.

- Could the prospect of future hydrogen carriage be considered as a potential offset to any near-term greenhouse gas emissions associated with a new pipeline project?

**RESPONSE:** The Commission has authority to site and regulate the rates for interstate natural gas pipelines, which includes pipelines where hydrogen may be blended in certain quantities with natural gas. To date, the Commission has not been presented with a project that includes features to accommodate transportation of hydrogen. Should that occur, the Commission would consider all evidence presented regarding near- and longer-term emissions.
Could the introduction of hydrogen into the interstate natural gas pipeline system have implications for the reliability of fuel supply for electric generation?

**RESPONSE:** In order for hydrogen to be shipped on an interstate natural gas pipeline blended with natural gas, it must be consistent with a pipeline’s gas quality standards and other tariff provisions approved by the Commission. The pipeline must also comply with Pipeline and Hazardous Materials Safety Administration regulations, including those requiring the physical composition of the pipeline to be compatible with the substance being transported. These requirements help address any negative reliability implications of fuel supply that may result for pipeline customers, including those that use natural gas for electric generation.

As the regulator of reliability of the bulk power system under the Federal Power Act, would bulk power reliability be a factor in FERC’s evaluation of interstate natural gas pipelines carrying hydrogen?

**RESPONSE:** With respect to transporting hydrogen blended with natural gas on an interstate natural gas pipeline, the Commission has rules in place to ensure the quality of the gas transported meets certain criteria that help mitigate any negative reliability implications of fuel supply that may result for pipeline customers, including those that use natural gas for electric generation. If a pipeline were to file a proposal with the Commission for a certain level of blending hydrogen with natural gas, then the Commission would consider, among many criteria, the impact on existing customers’ ability to offset the blend.

**Question 6:** During the hearing Commissioner Clements said, “RTO’s have been saving customers billions of dollars year after year after year for several decades now.”

- Has the Commission quantified customer savings attributed to Regional Transmission Organizations? If so, has done so on an annual basis? Whether on annual basis or otherwise, if the Commission has quantified the savings referenced by Commissioner Clements, please provide the results of the Commission’s analysis.

**RESPONSE:** Although the Commission has not quantified customer savings attributable to RTOs, as noted in the response to Question 4a above, the Commission has evaluated the performance and benefits of RTOs. In addition, individual RTOs/ISOs have performed their own analyses that demonstrate meaningful customer savings. For example, MISO estimated that, for 2020, it provided $3.5 billion in benefits to its region, including improved grid reliability and increased efficient use of generation resources (MISO 2020 Value Proposition Detailed Calculation Description). Similarly, SPP estimated that, in 2020, it provided $2.14 billion in value based on four key functions: operations and reliability, including reliability coordination; markets; transmission; and tariff, scheduling and professional services (SPP 2020 Annual Report). According to PJM, its operations, markets, and planning result in annual savings of $3.2-4 billion, which leads to less costs for consumers (PJM Value Proposition).

**Question 7:** During the hearing you responded to Senator Hoeven:
Commissioner Danly is correct in terms of how he characterizes the law. I think the problem is that the courts keep on telling us that we keep on getting it wrong. And we are not expediting things; what we are doing is delaying things because every time we're supposed to perform an EIS and we prepare an EA, we just ignore climate change altogether. The courts say you got it wrong, you've got to do it all over again. That costs billions of dollars and extra time for these pipeline projects. I think certainty is much more important than trying to decide whether we can do something quickly, and do it on the cheap. Every time we do it on the cheap, the courts tell us we got it wrong... We are attempting to expedite the process, Senator. Thanks for the question. I think one of the things, as we had the discussion several months ago, we were trying to prepare supplemental environmental impact statements, where we see holes. As opposed to drafting a whole new, big environmental impact statement on everything. We are moving forward as quickly as we can. Some of these projects are moving forward and we will be considering them very shortly. But again, if we cut corners, all the courts are going to tell us to do is go back to the drawing board.

Later, Commissioner Danly addressed Senator Hoeven as follows:

Senator, can I say one thing on this subject... which is that there is a difference between a failure by an agency to properly conduct a NEPA review, which would be in the EA [Environmental Assessment] or the EIS [Environmental Impact Statement], and a problem from the agency from an Administrative Procedure Act standpoint, to properly explain the decisions that it made, partially informed by that NEPA document. In almost all of the cases where FERC has been, in one way or another, remanded, those cases are not because of failures in the NEPA document. They are failures of reasoning under the Administrative Procedure Act. Basically, the Court is saying you did not sufficiently explain the reason why you made this choice: connecting the choice made to the facts found. And so saying that we can fix that problem of APA violations by having different, or more robust, NEPA review is simply not the reality of the remands we have gotten from the courts.

Please elaborate on your answer to Senator Hoeven and explain your reasoning.

RESPONSE: I strongly disagree with Commissioner Danly. Over the last few years, several Commission orders under the Natural Gas Act have been overturned or severely criticized on appeal. For example, beginning in the Sobal Trail case in 2017, the court found that the Commission’s NEPA analysis was deficient because it failed to consider reasonably foreseeable greenhouse gas emissions and vacated the NGA section 7 certificate on that basis. *Sierra Club v. FERC*, 867 F.3d 1357, 1371-72, 1379 (D.C. Cir. 2017). In the *Brickhead* case, the court criticized the Commission’s lackluster efforts to perform an adequate NEPA analysis regarding greenhouse gases, even as it dismissed the case on standing grounds. *Brickhead v. FERC*, 925 F.3d 510, 518-20 (D.C. Cir. 2019). More recently, in the *Vecino* case, the court found the environmental justice analysis in the Environmental Impact Statement deficient because it did not justify that the LNG export facilities at issue would not have disproportionate adverse effects on environmental justice communities. *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330-31 (D.C. Cir. 2021).
The Commission cannot just explain away such deficiencies in the subsequent orders. It is neither a durable strategy nor does it serve the long-term interests of any stakeholder, particularly project developers. The courts have made it clear through their decisions that the far better and more reliable course of action is to do the NEPA analysis right the first time, thereby meeting our obligations under the law and providing a fuller picture of a proposed project’s environmental impacts.

That is particularly true given the potential high stakes of losing in court. Twice already this year, courts have vacated Commission siting orders. See Envir. Def. Fund v. FERC, 2 F.3d 953, 961, 976 (D.C. Cir. 2021) (vacating FERC certificate to Spire STL natural gas pipeline), N.C. Dep’t of Envir. Quality v. FERC, 3 F.3d 655, 660 (4th Cir. 2021) (vacating FERC license to Bynum Hydroelectric Project). The stakes inherent in the Commission’s siting decisions are too high to gamble on a rushed environmental analysis or the Commission’s ability to defend or justify deficiencies down the road.

Questions from Senator Ron Wyden

Question 1: Chairman Glick, of the many responsibilities that fall under FERC’s jurisdiction, Oregonians care most deeply about the Commission’s review process used to build pipelines because it often involves the actual use of eminent domain, otherwise known as: taking a person’s property. In some cases eminent domain is not used but the long lingering threat of the use of eminent domain affects people’s lives for the years of the process. Some Oregonians I have spoken with have been living with the threat of eminent domain for more than 15 years while a private company attempts to build a liquefied natural gas pipeline across their property. This harms landowners’ ability to plan for the future of their property or their heirs’ interest in it, not knowing whether it will be encumbered with fossil fuel infrastructure.

How does FERC take this landowner uncertainty into consideration when deciding whether to issue a Certificate of Public Convenience and Necessity?

RESPONSE: The Commission recently issued Order No. 871 et seq., which preclude the commencement of pipeline construction while certain rehearing requests are pending as well as establish a policy of presumptively staying certificate orders, in certain circumstances, for a limited time. Staying a certificate order precludes a pipeline company from using eminent domain authority while the Commission considers rehearing requests, thereby preventing a certificate holder from going to court to condemn land before the landowner can go to court to challenge the certificate that is the basis for that condemnation action.

The Commission has also established the Office of Public Participation, which will assist landowners and other stakeholders with obtaining information about, and participating in, Commission proceedings.

Question 2: What recommendations does the FERC have for landowners to ensure that their concerns regarding private property rights are evaluated on an equal footing with impacts to the environment and market demand for infrastructure within the Commission’s jurisdiction? Can you provide three specific examples of where this has occurred and what that evaluation considered and the conclusions that were reached?
RESPONSE: As an initial matter, I agree that the Commission, until recently, has not sufficiently addressed the concerns of landowners who find themselves in the path of a proposed pipeline. In many cases, the Commission simply failed to adequately consider landowner impacts or provide landowners with a full and fair opportunity to contest Commission orders that impair their interests. That is simply unacceptable.

We are taking steps to right the ship. For example, as noted above, earlier this year the Commission issued Order No. 871-B, which, among other measures, provides that the Commission will presumptively stay certificates during the pendency of most landowner rehearing requests to ensure that a pipeline cannot go to court to condemn land before the owner of that land has the opportunity to go to court to contest the certificate that is the basis for that condemnation action. In addition, the Commission has also established the Office of Public Participation, which will help landowners navigate the Commission’s sometimes complex certificate proceedings. You have my commitment that the Commission will fully consider landowner interests on a going forward basis when it makes a public interest determination under the Natural Gas Act.

Questions from Senator James E. Risch

Question 1: There are efforts in some parts of the country to “electrify” the region’s natural gas system. These efforts are being advanced with the argument that we cannot achieve sufficient greenhouse gas emission reductions without the use of natural gas by industrial, commercial and residential consumers. In the Pacific Northwest, studies have shown that electrifying the natural gas industry in the region could cause the peak load of some electric utilities in the region to double, and pose risks to electric grid reliability and significantly increase costs to consumers. Does FERC have any concerns about the efforts of some states to eliminate the direct-use of natural gas and how that outcome can adversely impact grid reliability and consumer costs? If so, how can FERC engage to communicate or address those concerns?

RESPONSE: States, not the Commission, are responsible for energy resource decision-making in their respective jurisdictions. Actions taken by states to promote electrification will undoubtedly increase electricity demand. To that end, on April 29, 2021, the Commission held a technical conference to discuss issues related to electrification and is currently considering comments filed in that proceeding (Docket No. AD21-12-000). As states and regions pursue electrification, the Commission will continue to act to ensure the reliability of the bulk power system and that the rates charged for wholesale electricity remain just and reasonable and not unduly discriminatory or preferential.

Question 2: The cybersecurity of our nation’s energy systems has received a lot of attention recently. Does FERC believe it has the authority it needs to properly oversee the cyber security of our energy systems?

RESPONSE: Section 215 of the Federal Power Act gives the Commission certain authority to, among other things, approve and enforce mandatory reliability standards for the electric bulk power system, including reliability standards that address cyber security. There is not, however, a comparable statutory requirement for mandatory cyber security standards for the nation’s pipeline infrastructure. That is a major weakness in our cyber defenses, and I would be glad to work with you to address this issue, should Congress decide to take it up.
Question 3: FERC has scheduled its first federal-state transmission task force meeting for November 10. Recognizing that our country will need significantly more transmission to move power in the future, what do you hope to accomplish with the federal-state task force? What do you see as the biggest federal-state transmission tensions?

RESPONSE: Both federal and state regulators have authority over transmission-related issues, meaning that transmission developers must successfully navigate different federal and state regulatory processes. The development of new transmission infrastructure also often affects numerous different priorities of federal and state regulators. I hope that this federal-state task force can facilitate greater cooperation and coordination between federal and state regulators. By creating a direct line of communication, I hope that we can jointly identify the most challenging issues faced by the states and engage in a meaningful conversation about the best ways to address those issues to help get transmission built. In particular, I hope to better understand state perspectives on the issues under Commission authority, including how states can be better involved in the regional transmission planning and cost allocation processes, and I will encourage the Commission to use this information to help shape our efforts to reform our transmission regulations.

Question 4: On July 15, FERC issued an Advance Notice of Proposed Rulemaking (or ANOPR) on transmission issues, including regional transmission planning, cost allocation, and generator interconnection. All of these are significant issues that have proven to be impediments to building more transmission. Does FERC also plan to examine right-of-first-refusal issues as part of the ANOPR? What is your timetable for completing action on these issues?

RESPONSE: Through the ANOPR, the Commission is working to update its rules and regulations to ensure that we are meeting the Nation’s evolving transmission needs in a cost-effective and efficient fashion. The federal right of first refusal is among the issues under consideration. The Commission is currently reviewing the significant number of ANOPR comments that were recently filed, and the Commission has scheduled a technical conference for November 15, 2021. While I cannot provide a specific timeline for Commission action on reforms, this rulemaking is one of my highest priorities as Chairman.

Questions from Senator Mike Lee

Question 1: Chairman Glick, on September 9, President Biden announced a vaccine mandate for federal employers unless they request an exemption. Can you give us an assurance that FERC employees will be given clear and navigable instruction in receiving religious accommodations or other exemptions?

RESPONSE: The Commission has provided and will continue to provide employees seeking religious exemptions and other accommodations clear and navigable guidance informing them of their rights protected under law. The Commission will ensure that all employees legally entitled to exemptions or accommodations from the vaccination mandate receive them. The Commission is working in concert with the Office of Management and Budget, the Office of Personnel Management, and the Equal Employment Opportunity Commission to ensure employees’ civil liberties are protected while carrying out the requirements of the Executive Order noted in your question.
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Questions for the Record Submitted to the Honorable Richard Glick

Question 2: Can you tell us how FERC will implement its vaccine mandate?

RESPONSE: The Commission is strictly adhering to policy guidance issued by the Administration in implementing the requirements of the President’s Executive Order. Commission employees that are not legally entitled to an exemption due to religious beliefs or other accommodations are required to be fully vaccinated by November 22, 2021. Commission management has clearly communicated this requirement and will continue to work closely with employees to achieve compliance with the mandate.

Question 3: What are the bounds (if any) of the effects that FERC should consider under NEPA?

RESPONSE: The courts have held that the Commission is obligated under NEPA to consider all the reasonably foreseeable effects of a proposed project, including those that are later in time or geographically separated from the project. Sierra Club v. FERC, 867 F.3d 1357, 1371 (D.C. Cir. 2017). Effects are reasonably foreseeable if they are “sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision.” Earthjustice, Inc. v. FERC, 828 F.3d 949, 955 (D.C. Cir. 2016) (citation omitted).

Question 4: Should FERC consider “reasonably foreseeable” effects that are outside the agency’s jurisdiction and control? If so, why? And if not, why not?

RESPONSE: The Commission is required under NEPA to consider all reasonably foreseeable effects likely to result from the project under review in its environmental review. Doing so is necessary to comply with judicial precedent, including, for example, the U.S. Court of Appeals for the District of Columbia Circuit’s decision in the Sahel Trail case, Sierra Club v. FERC, 867 F.3d 1357, 1372 (D.C. Cir. 2017), as well as to inform the public and help the Commission in making its public interest determinations. Congress has broadly instructed the Commission to consider the “public convenience and necessity” when evaluating applications to construct and operate interstate natural gas pipelines. Because the Commission has the authority to deny a pipeline certificate on the ground that the project would be too harmful for the environment, the courts have repeatedly found that the Commission is a “legally relevant cause” of the direct and indirect environmental effects of the projects our agency approves. Sierra Club, 867 F.3d at 1373; Birkhead, 925 F.3d at 519. Accordingly, the Commission is not excused from considering all such environmental effects—even if our agency does not directly regulate such effects. For example, consider air quality: many federal agencies consider the impacts of a proposed federal action on air emissions, even though the U.S. Environmental Protection Agency has the authority to directly regulate air emissions.

Question 5: Is considering whether an effect is “reasonably foreseeable” analogous to considering “proximate cause” in tort law?

RESPONSE: Although the concepts are overlapping, I do not believe they are identical. The U.S. Supreme Court has held that, in determining causation for NEPA purposes, whether an effect is caused by another is to be judged under a standard akin to proximate cause in tort law. See Dep’t of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004). The Court has not made a similar pronouncement with respect to reasonable foreseeability.
and it is possible that an effect can be a reasonably foreseeable result of a particular action, even if it is not proximately caused by that action.

**Question 6**: Do you believe there is any difference between “proximate cause” and “reasonable foreseeability”?  

**RESPONSE**: Yes. A reasonably foreseeable result might or might not be proximately caused by the action under consideration, although I believe that any result that is proximately caused is almost by definition reasonably foreseeable.

**Question 7**: Does the Supreme Court’s decision in *Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004), impact your “reasonable foreseeability” analysis under NEPA? If so, how?  

**RESPONSE**: In *Sabal Trail*, the U.S. Court of Appeals for the District of Columbia Circuit found that, consistent with *Public Citizen*, the impacts of the downstream emissions from the burning of natural gas transported by Commission-approved natural gas pipelines were caused by the issuance of a certificate of public convenience and necessity under section 7 of the NGA and were thus reasonably foreseeable effects that must be considered by the Commission as part of its NEPA analysis. I am committed to complying with this and other applicable judicial precedent.

**Question 8**: While NEPA uses the terms “environmental impacts” and “environmental effects” it does not mention the term “direct effect” or an “indirect effect” in the statute. How would you approach the decision on whether to consider “indirect” or “direct” effects in a decision before FERC?  

**RESPONSE**: Until 2020, the regulations of the Council on Environmental Quality (CEQ) required agencies to examine direct, indirect, and cumulative impacts. In 2020, CEQ issued a rule revising the regulations to require agencies to consider “effects.” I believe that the identification of effects as “direct,” “indirect,” or cumulative is a helpful framework with which to assess the effects of a proposed project. Aside from the regulations themselves, there are multiple decisions in which courts have instructed the Commission very clearly that we are obligated under NEPA to consider all environmental effects likely to result from the project under review, which includes what CEQ has termed direct, indirect, and cumulative effects. *See, e.g., Sierra Club*, 867 F.3d at 1371.

**Question 9**: How do you reconcile the use of a “proximate cause” consideration with an “indirect” effect?  

**RESPONSE**: Under NEPA case law, an effect that is not a direct result of an action can nonetheless be proximately caused by the action. The Supreme Court has found that NEPA requires agencies to consider those effects that bear “a reasonably close causal relationship” to a proposed project or action and analogized that requirement to the proximate cause doctrine. *Dept of Transp. v. Pub. Citizen*, 541 U.S. 752, 768, 767 (2004); *Sierra Club*, 867 F.3d at 1371; *see also Birchhead v. FERC*, 925 F.3d 510, 518-20 (D.C. Cir. 2019).
Questions from Senator Steve Daines

Question 1: Chairman Glick, as a follow-up to my question during the hearing, how many Natural Gas Pipeline Certificates are still pending approval that were pending when my colleagues and I sent you a letter on April 29, 2021, requesting the Commission to take timely action on pipeline projects?

RESPONSE: As of October 14, 2021, there are 28 Natural Gas Pipeline Certificates still pending approval that were pending on April 29, 2021.

Question 2: Chairman Glick, how many Natural Gas Pipeline Certificates have been approved since my colleagues and I sent you a letter on April 29, 2021, requesting the Commission to take timely action on pipeline projects?

RESPONSE: Since April 29, 2021, the Commission has approved 11 Natural Gas Pipeline Certificates.

Question 3: Chairman Glick, what is the average timeline for the commission to approve a natural gas pipeline and how does that compare to average timelines in 2020 and 2019?

RESPONSE: For the 10-year period of January 1, 2011 to December 31, 2020, the average timeline for the Commission to approve a natural gas pipeline was 12.1 months. The average timeline for 2019 was 16.2 months. The average timeline for 2020 was 11.6 months. Since January 21, 2021, when I became Chairman, the Commission has certified 16 projects with an average timeline of 9.1 months.

Question 4: Chairman Glick, I have heard that pipeline approvals are taking longer than average. What are ways the Commission can speed up approvals in order to meet the national and international demand for natural gas?

RESPONSE: As noted above, the current timeline for action on pipeline certificate applications is not meaningfully different than the Commission’s historic average. In any case, I believe the more significant risk when it comes to meeting the national and international demand for natural gas stems from overly rushed analysis and decision making that raises significant legal risk. The prospect of siting decisions being overturned—and in some cases vacated—is a concern that should caution against hurried environmental analysis. The Commission can speed up the approval process by following the direction of courts and issuing decisions that are consistent with the Natural Gas Act and the National Environmental Policy Act, so that the decisions will be affirmed by the courts, thus providing certainty to the natural gas industry and to consumers. In short, the Commission must “get it right” the first time to ensure these decisions are less prone to being remanded and/or vacated by the courts. The Commission is currently reexamining its Pipeline Certificate Policy Statement, with an eye toward improving the efficiency and equity of the process.

Question 5: Chairman Glick, as you know, there were serious concerns and problems around jet fuel supply which resulted in flights being canceled and commercial travel being negatively affected. What steps can the Commission take to ensure that pipeline capacity and constraints are flexible and adaptive to ensure jet fuel shortages and supply chains can be addressed quickly and economically?
RESPONSE: Jet fuel supply is shipped on liquid fuel pipelines which at times can have more demand than the capacity of the pipeline. When this happens, the Commission requires that pipelines have a fair and non-discriminatory process for allocating capacity among shippers. Most pipelines allocate capacity among the different shippers based on historic use of the pipeline, often looking at the prior year of shipments. Due to the Covid-19 pandemic, airline demand for jet fuel was much lower in 2020 and as a result, when the pipelines have more demand than capacity and enter into pro-rationing, the airlines do not have the historic use from last year to support their shipment needs. This further aggravates the situation because, due to their inability to ship as much jet fuel as they had pre-pandemic, those airlines then are not building the historic use for next year’s use of the pipelines’ capacity allocation. I recognize the importance of ensuring that the allocation of capacity on pipelines for liquid products is fair and responsive to the needs of customers, including airlines. For this reason, I believe that it is important for the Commission to examine the impacts of anomalous conditions on pipeline capacity allocations and evaluate our policies in this area. While I do not have specifics on next steps at this time, I am committed to exploring this important issue and look forward to working with my colleagues on this matter.

Question 6: Chairman Glick, increasing the buildout of hydroelectric facilities will help reduce emissions, create jobs, and increase access to affordable, reliable baseload power. What actions can the Commission and Congress take to speed up permitting and approvals of new hydro-facilities?

RESPONSE: Hydropower licensing, which implicates a wide variety of resources and the interests of many stakeholders, is a complex process. The Commission makes every effort to work with parties to licensing proceedings, including licensees, federal and state agencies, Tribes, nongovernmental organizations, and local residents, to share information and act on license applications as quickly as possible. Unfortunately, many licensing delays are due in part to other agencies with mandatory authorities working to process their permitting actions. That being said, the Commission continues to work collaboratively with these federal and state agencies to set achievable schedules and avoid unnecessary delays. Commission staff also works with licensees to ensure complete applications so missing information does not derail the timing for license processing. I would be happy to work with Congress on any proposed statutory improvements.

Question 7: Chairman Glick, Europe and the United Kingdom are experiencing record high energy prices with LNG prices spiking to 500% over the previous year. The United States is blessed with an abundance of natural gas and hydraulic fracturing has resulted in the ability to access natural gas in a safe, reliable, and economic way. Do you believe that actions taken by the Biden Administration to eliminate natural gas development, transportation, and electric generation could lead to similar increases in energy prices for American consumers?

RESPONSE: I am not aware that the Administration is taking actions to eliminate natural gas development, transportation, and electric generation.

Question 8: Chairman Glick, with energy prices spiking in Europe and the United Kingdom the United States could play a role in providing U.S. LNG to meet European demand. What is the Commission doing or what can the Commission do to support the development of LNG export terminals and facilitate export of LNG to Europe?
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RESPONSE: The Commission makes every effort to act as promptly as possible on applications for LNG export terminals. The Commission has jurisdiction over only the physical export facilities, the U.S. Department of Energy has jurisdiction over applications to authorize natural gas exports. Four LNG export terminals became fully operational in 2020 with three others under construction. In addition, there are another 15 LNG export terminals that the Commission has authorized. Commission staff has issued 40 notices to proceed on LNG facility construction (32 on LNG export terminals, and 8 on LNG peak shaving facilities in New England area) since January 2021.

Question 9: Chairman Glick, do you believe the U.S. should play a role in supplying our allies with U.S. LNG?

RESPONSE: The Commission does not have a role in determining to which countries LNG is exported. Decisions made by the U.S. Department of Energy pursuant to its statutory authority more directly affect that issue.

Question 10: Chairman Glick, do you agree that the development and use of natural gas for electricity has helped lead to lower greenhouse gas emissions?

RESPONSE: I agree that natural gas generation has reduced greenhouse gas emissions in comparison to coal generators and, to the extent it replaces coal-fired generation in the energy mix, greenhouse gas emissions should be lower. Nevertheless, I would note that emissions associated with combustion are only half of the equation. If emissions associated with extraction and transportation, such as methane, are not limited, natural gas may not provide a significant greenhouse gas reduction benefit relative to other fuels, including coal.

Question 11: Chairman Glick, do you believe that it is the Commission’s role to affect the pace and adoption of energy transformation?

RESPONSE: The Commission is neutral as to which resources develop and when. The Commission’s role is to implement rules to create a level playing field within Commission-regulated markets so that all resources may compete fairly. Such actions may facilitate energy transformation and possibly increase the pace at which resources are developed, but that is not within our statutory responsibilities. I also note that the states, not the Commission, are responsible for directly shaping the generation mix within their respective borders.

Questions from Senator John Hoeven

Question 1: Recent actions seem to indicate that the Commission is moving to put carbon emissions reductions ahead of its traditional role of facilitating the reliable delivery of natural gas and electricity to consumers. For example, FERC is delaying or even reopening pipeline certificates, the latter which may be questionable under FERC’s authority under existing statutes, to further add carbon emissions considerations.

Moreover, the Clean Electricity Performance Program (CEPP), currently under consideration in the House of Representatives, would require a dramatic increase in the use of intermittent clean energy sources to generate electricity.
a. Is FERC jeopardizing the reliability and stability of energy supply and delivery in order to emphasize a focus on carbon emission impacts?

**RESPONSE:** I do not believe that the Commission is jeopardizing the reliability and stability of the nation’s energy supply. To the contrary, we are maintaining our longstanding focus on ensuring reliability through, for example, our shared responsibility with North American Electric Reliability Corporation over bulk power system reliability standards. In addition, we are working to address the emerging threats to reliability whether in the form of extreme weather, such as winter storm Uri earlier this year, or cyber threats, which are covered by the bulk power system reliability standards.

With respect to our permitting decisions, I believe that the Commission has threatened reliability and stability due to the litigation risk that the Commission—and project developers—face when we cut corners in our siting analysis. Under the National Environmental Policy Act (NEPA), we must consider all reasonably foreseeable effects of our decisions, and the courts have been clear that applies to reasonably foreseeable upstream and downstream greenhouse gas emissions. If the Commission fails to meet its obligations under NEPA and the Natural Gas Act, including its obligation to consider reasonably foreseeable greenhouse gas emissions, the associated energy infrastructure could be delayed or canceled.

To illustrate the point, this year, the Commission has already had multiple permitting decisions overturned on appeal. That includes its order granting an NGA section 7 certificate to the Spire STL pipeline, which was vacated this summer by the U.S. Court of Appeals for the D.C. Circuit. Following the vacatur, Spire has made repeated filings in the courts and before the Commission suggesting that the vacatur could endanger the reliable supplies of natural gas. Although the Commission has subsequently issued a temporary emergency certificate to address those concerns, the fact that we were forced to take that emergency action in the first place illustrates the potential risk to the reliability and stability of energy supply and delivery.

b. If the proposed CEPP were to be enacted, would a focus on carbon emissions regarding the approval of natural gas pipelines and the build-out of high voltage transmission lines come at the potential expense of reliability?

**RESPONSE:** The enactment of the proposed CEPP would have no impact on the greenhouse gas emissions the Commission is required to look at in consideration of its applications for natural gas pipeline certificates. Similarly, it also would not affect the emissions that the Commission is required to consider with respect to the siting of high voltage transmission lines—an area which the Commission has very limited authority.

c. Given the extreme weather events this year, which dramatically curtailed the delivery of electricity or resulted in large increases in electricity rates, should the Commission focus its primary responsibility to timely approve needed energy supply infrastructure, such as natural gas pipelines, and voluntary electric resource adequacy markets that will match supply to load?
RESPONSE: As we witnessed in Texas in February and in Louisiana in September, reliable electricity is a matter of life and death and must remain a top priority for the Commission. The Commission has already taken several steps to assess these issues. Recently, the Commission held a technical conference on Climate Change, Extreme Weather, & Electric System Reliability, which discussed many related issues, including the importance of electric and gas industry coordination during extreme weather events.

Question 2: We have heard from constituents regarding the Commission’s advanced notice of proposed rulemaking (ANOPR) pertaining to regional transmission planning and cost allocation (RM21-17). The ANOPR is seeking feedback on some 200 questions and proposals regarding complex transmission planning processes.

While transmission planning policies should be examined on a regular basis to ensure efficient transmission development, concerns have been raised that many of the proposals implied within the notice would interfere with existing, well-established processes currently in place within the regional transmission organizations.

Will you ensure that this proposed rulemaking will not impact grid resiliency, create unfair cost allocations, increase electric rates, or result in additional burdensome oversight in planning, siting, or constructing new transmission?

RESPONSE: As stated in the ANOPR, ensuring just and reasonable rates as the resource mix changes, while maintaining grid reliability, remains the Commission’s priority in the regional electric transmission planning and cost allocation and generator interconnection processes. In addition, the ANOPR asked for comment on how to appropriately identify and allocate the costs of new transmission infrastructure in a manner that satisfies the cost-causation principle such that costs are allocated in a manner that is at least roughly commensurate with estimated benefits. I commit to carefully reviewing the many comments that the Commission has received in response to the ANOPR, and to consider those comments as the Commission develops any proposals on these issues. Finally, I note that the Commission has only limited authority over the siting and construction of transmission, and therefore I do not expect that the ANOPR rulemaking will impact these issues.

Question 3: In recent months, natural gas prices in the U.S. have doubled, to over $5 per million Btu. Certain areas of the country, including New England, are at risk of even higher price spikes because of dependence on natural gas from foreign sources and competition from Europe, which faces a gas crisis of its own.

a. Are you concerned about regions like New England that have been reliant on imports of natural gas from Russia and other foreign countries to keep the lights on and heat their homes during the winter?

RESPONSE: The New England region relies on a mix of gas supply provided by interstate pipelines connected to domestic supply basins, pipelines providing access to Canadian imports, and LNG imported through terminals near Boston. However, I understand that LNG imports into the United States and New England have been predominantly from Trinidad and Tobago (approximately 80%) and...
95%, respectively, in 2020, with countries like Norway and Nigeria constituting most of the other LNG imports over the last five years.

b. Will you support more pipeline infrastructure to ensure states are better connected to our abundant domestic gas resources?

RESPONSE: I will consider each project on the merits and will support projects that satisfy the requirements of the NGA, NEPA, and other applicable laws.

Questions from Senator James Lankford

Question 1: Chairman Glick, you mentioned at the Energy & Natural Resources Committee hearing the focus on incorporating more renewable power generation onto the grid. What assumptions are you making about weather patterns as you review projects and determine whether they will be viable into the future? E.g., do you assume that wind and sun conditions in each region of the country will be the same as they are now 20 years into the future? 50 years into the future?

RESPONSE: The Commission does not have authority over siting electric generation facilities except for its responsibilities under Title I of the FPA with respect to the licensing of non-federal hydroelectric generation facilities. Instead, generation siting—including the considerations you outline in your questions—is generally carried out by the states. As the Commission does not plan for or site-specific generation (with the exception of licensing non-federal hydroelectric generation), the Commission does not analyze future weather patterns and their impact on renewable power generation.

Question 2: Chairman Glick, there is a lot of conversation around the need for enhanced cybersecurity for our energy infrastructure. As the Federal Energy Regulatory Commission reviews the state of our energy infrastructure’s cybersecurity, is it coordinating with other agencies that have a role in this policy area, like the Transportation Security Administration and the Department of Energy? If so, what steps has FERC taken to ensure coordination? Do you foresee establishing common standards and federal reporting?

RESPONSE: The Commission works both individually with other agencies such as the Transportation Security Administration and the U.S. Department of Energy, and in multi-agency forums such as the Interagency Policy Committees convened by the National Security Council, to enhance cybersecurity for our nation’s energy infrastructure. Through these interactions, the Commission ensures that its actions are consistent with and supportive of broader federal initiatives to address cyber threats.

The Commission’s authority over mandatory cybersecurity standards for the bulk power system does not lend itself to being used to develop common mandatory standards with other industry sectors. However, the National Institute of Standards and Technology Cybersecurity Framework can provide best practices to help ensure effective cybersecurity protection in any sector. On the topic of federal reporting, the Commission’s Order No. 848, issued on July 19, 2018, directed the North American Electric Reliability Corporation to develop modifications to its standards to improve the reporting of cybersecurity incidents. The resulting standards went into effect on January 1, 2021, and require utilities to report certain compromises and attempted
compromises of their grid cyber systems to the U.S. Department of Homeland Security and NERC. The Commission considers the effectiveness of its orders including those that mandate reporting on an ongoing basis.

**Question 3:** Chairman Glick, when you review pipeline projects, how do you determine whether the project is needed? For instance, do you consider the need for redundancy in our energy infrastructure system?

**RESPONSE:** In recent years, the Commission has relied almost exclusively on precedent agreements between the pipeline developer and would-be shippers when evaluating need for the pipeline. I believe that is too narrow a focus, especially where those agreements are between affiliates and thus not necessarily the product of arms-length negotiations. Instead, consistent with our 1999 Certificate Policy Statement, I believe we should consider all relevant evidence of need, including demand projections, potential cost savings to customers, regional assessments, and statements from state regulatory commissions or local distribution companies. The potential benefits of redundancy in our infrastructure is something we can consider as relevant evidence of need, depending on the actual record in any particular proceeding. As the pending Notice of Inquiry on this policy moves forward, I will be sure to consider comments submitted to the record that raise this practice.

**Question 4:** Chairman Glick, is it FERC’s role to affect the pace of the energy transition? If so, does this directive exist in statutory law?

**RESPONSE:** It is not the Commission’s role to affect the pace of the energy transition. Instead, our role is to ensure that jurisdictional markets do not discriminate against any technologies, including technologies that are part of the energy future.

**Question 5:** Chairman Glick, do you believe that natural gas exports can lower emissions by displacing other heating sources like wood and fuel oil?

**RESPONSE:** The Commission does not evaluate whether or not natural gas exports are needed or in the public interest. This is a matter for the U.S. Department of Energy to decide when it considers proposals to export gas.

**Questions from Senator Catherine Cortez Masto**

**Question 1:** As we discussed during the hearing, Nevada experienced the harmful impacts of jet fuel shortages this summer – particularly at Reno-Tahoe International Airport (RNO). Multiple factors – including the increased volume of air travel – strained supplies at airports throughout the West.

- Can you expand on your response and share some additional context regarding a different approach to fuel allocations?

**RESPONSE:** Jet fuel supply is shipped on liquid fuel pipelines which at times can have more demand than the capacity of the pipeline. When this happens, the Commission requires that pipelines have a fair and non-discriminatory process for allocating capacity among shippers. Most pipelines allocate capacity among the different shippers based on historic use of the pipeline, often looking at the prior year of
shipments. Due to the Covid-19 pandemic, airline demand for jet fuel was much lower in 2020 and, as a result, the pipelines have more demand than capacity and enter into pro-rationing, the airlines do not have the historic use from last year to support their shipments. Further, because of their inability to ship as much jet fuel as they had pre-pandemic, those airlines also are not building the historic use for next year’s use of the pipelines. I recognize the importance of ensuring that the allocation of capacity on pipelines for liquid products is fair and responsive to the needs of customers, including airlines. For this reason, I believe that it is important for the Commission to examine the impacts of anomalous conditions on pipeline capacity allocations and evaluate our policies in this area. While I do not have specifics on next steps at this time, I am committed to exploring this important issue and look forward to working with my colleagues on this matter.

b. What other actions is FERC considering to prevent future shortages?

RESPONSE: As noted in response to your preceding question, I believe that the Commission should explore this issue further. Although I do not wish to prejudge actions the Commission might take, I am committed to working with my colleagues on this important issue.

Question 2: As we look to deploy more Electric Vehicles (EV) on our nation’s roads and build out necessary charging infrastructure, researchers and industry groups are working to identify where new cyber vulnerabilities may arise.

With this in mind, I’ve pushed a package of bills to advance EV adoption – including an EJ Commission and National Strategy (S. 2040) that was included in the bipartisan infrastructure package. Federal agencies, along with the public and private sectors, must work together on a plan to effectively identify opportunities and barriers – such as bulk power and cyber threats – to properly make this transition in transportation.

a. What are FERC’s plans to ensure that the national electric grid can support EV charging for both public and private medium and heavy duty fleets?

RESPONSE: On April 29, 2021, the Commission held a technical conference to discuss issues related to electrification and is currently considering comments filed in that proceeding (Docket No. AD21-12-000). Additionally, in the Advanced Notice of Proposed Rulemaking (ANOPR) issued in July 2021 in Docket No. RM21-17-000, the Commission addressed planning for future transmission needs. In the ANOPR, the Commission is examining what factors should be considered in transmission planning processes, including factors such as federal, state, and local initiatives that may include electrification of transportation. I believe the ANOPR is a needed first step toward taking a holistic, proactive approach toward planning for future transmission needs, including the needs created by EVs.

b. Could an EV Commission help boost collaboration among federal agencies, as well as with local, state, and industry stakeholders, to help the grid withstand cyber threats in the future?

RESPONSE: I believe it is important that federal, state, and local agencies and industry stakeholders collaborate to address cyber threats against the electric grid that can be sophisticated and fast.
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moving. For this reason, the Commission works both individually with other agencies such as the Office of the Director of National Intelligence, U.S. Department of Homeland Security, and the U.S. Department of Energy (DOE) and in multi-agency forums with the states and industry, such as DOE’s Electricity Subsector Coordinating Council, sharing information about these threats as well as ways to address them. New initiatives such as an EV Commission could help to accomplish this purpose, in coordination with existing federal initiatives to address cyber threats

Question from Senator Bill Cassidy

**Question:** Chairman Glick, during our conversation in the hearing, you stated that permitting for natural gas pipelines and transmission under your chairmanship has occurred as quickly as it did in previous years.

- Can you please provide documentation that shows this is true?

**RESPONSE:** For the 10-year period of January 1, 2011 to December 31, 2020, the average timeline for the Commission to approve a natural gas pipeline was 12.1 months. The average timeline for 2019 was 16.2 months. The average timeline for 2020 was 11.6 months. Since January 21, 2021, the date when I became Chairman, the Commission has certificated 16 projects with an average timeline of 9.1 months.

Question from Senator Mark Kelly

**Question:** In June 2021, FERC issued a ruling that essentially prioritized the delivery of hydropower generated in the Pacific Northwest for California. Does this FERC ruling reward California for failing to plan for an adequate supply of electric at the expense of Arizona and other states?

**RESPONSE:** In the June 25, 2021 order to which you refer, the Commission accepted, subject to further compliance, revisions to CAISO’s Open Access Transmission Tariff to modify load, export, and wheeling priorities in the day-ahead and real-time market optimization process and establish related market rules. *California Independent System Operator Corporation, 175 FERC ¶ 61,245 (2021).* The order considered and addressed comments by various parties, including Arizona utilities, regarding potential impacts of the proposal. This matter remains pending before the Commission, and I am limited under the Commission’s *ex parte* communications rules from commenting on this contested, pending proceeding.

Questions from Senator Roger Marshall

**Question 1:** During the February cold snap, who made money and benefitted off the price spike crisis?

**RESPONSE:** According to public reports, three categories of companies were most profitable during the February 2021 cold snap: natural gas suppliers, such as BP, Kinder Morgan, Enterprise Products Partners and Energy Transfer; energy and commodity traders, such as Vitol; and financial institutions with commodity trading arms, such as Goldman Sachs, Bank of America, and Macquarie. See: e.g., [https://www.reuters.com/article/us-energy-texas-profit-idUSKBN2MT28N](https://www.reuters.com/article/us-energy-texas-profit-idUSKBN2MT28N).
Public reports also indicate that Energy Transfer saw positive earnings of an estimated $2.4 billion, Kinder Morgan and BP experienced gains of an estimated $1 billion, and Macquarie and CF Industries earned estimates of $210 million and $112 million, respectively. See https://www.bloomberg.com/news/articles/2021-05-06/energy-transfer-made-2-4-billion-gain-from-texas-winter-storm?refType=OpenGraph

**Question 2:** FERC has authority to investigate interstate natural gas issues, including market activities. Has FERC determined whether or not market manipulation occurred during winter storm Uri?

**RESPONSE:** The Commission’s inquiry into possible market manipulation of the wholesale natural gas and electricity markets during winter storm Uri remains ongoing and, therefore, the Commission has reached no conclusions at this time. I commit to keeping you informed as this Commission inquiry progresses.

**Question 3:** Does FERC have the regulatory authority to prevent another price spike and help in an emergency? How do we prevent another price spike crisis?

**RESPONSE:** The Commission has the regulatory authority to consider proposals that address price spikes in Commission-jurisdictional electric markets and continues to evaluate these issues. We do not, however, have authority to address price spikes in natural gas markets. To the extent price spikes are influenced by possible market manipulation in electric or gas markets, the Commission may investigate and address anticompetitive conduct. Should Congress consider whether to give the Commission authority to address natural gas price spikes, such as through a “circuit breaker” that would prevent gas trading above certain price thresholds under defined circumstances, I would be happy to work with you on such a measure.

**Question 4:** Were the prices of natural gas during the cold snap a sign of market failure? How can markets prevent or exacerbate such price spikes?

**RESPONSE:** The natural gas price spikes in February 2021 occurred because there were physical shortages of natural gas due to extreme cold weather that disrupted both the production and processing of natural gas supplies in the affected regions. Natural gas prices spiked to high levels, which is generally an expected market outcome in the event of physical supply shortages, and not in and of itself an indication of a “market failure.” However, it is not clear at this time whether other types of market failures occurred, such as anticompetitive behavior that could have contributed to natural gas and electricity price spikes. The Commission does not have jurisdiction over natural gas commodity prices but will act to address any anticompetitive conduct within its jurisdiction that occurred during this time period.

**Question 5:** FERC provided winterization recommendations for certain electricity generators to become more resilient to cold weather. Weatherization is not the entire answer. What other action do you recommend to ensure this crisis does not happen again?

**RESPONSE:** The preliminary findings and recommendations of the joint Commission/North American Electric Reliability Corporation (NERC)/Regional Entity inquiry into the February 2021 cold weather event identifies numerous recommendations to prevent recurrence of such an event. These recommendations include
improving generator performance in cold weather by recommending modification of the NERC reliability standards and requiring pre-season and pre-event generator inspections and maintenance of freeze protection measures;

identifying and protecting critical natural gas infrastructure loads from firm load shed to avoid adversely affecting bulk power system reliability and prohibiting the use of critical natural gas infrastructure loads for demand response;

implementing measures to protect natural gas facilities (production, gathering, treating, processing, pressurizing, storing, and transportation) against freezing and other cold-related limitations during a weather emergency;

establishing a state-federal forum to identify actions to improve the reliability of the natural gas infrastructure system necessary to support bulk power system reliability;

identifying and communicating to system operators the reliability risks of natural gas fuel contracts with generators; and

improving the accuracy of winter season anticipated reserve margins for extreme weather.

Fourteen additional recommendations cover issues including: effects of cold weather on mechanical fatigue, increasing the flexibility of manual load shedding, generator use of weather forecasts, coordination of protective relay settings, increase real-time monitoring of gas well-heads, emergency response centers for severe weather events, improving near-term load forecasts for extreme weather conditions, analyzing intermittent generation effects to improve load forecasts, rapidly-deploying demand response, additional load shed training for system operators, retail incentives for energy efficiency improvements, studies of large power transfers during stressed conditions, reducing the time for reporting generation or transmission outages, blackstart unit reliability, additional Electric Reliability Council of Texas connections, potential measures to address natural gas supply shortfalls, potential effect of low-frequency events on generators in the Western and Eastern Interconnections, and guidelines for identifying critical natural gas infrastructure loads.

The preliminary findings and recommendations presentation is available here. The final report is targeted for issuance in December 2021.
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Questions from Ranking Member John Barrasso

**Question 1:** At Secretary Granholm’s nomination hearing, I asked, in writing, if the Secretary agreed that electricity prices should reflect the proper value of dispatchable resources. She responded, “The ability of generation capacity to respond when called upon is one of many important attributes of performance that should be valued in markets.” I asked, in writing, the same question to Deputy Secretary Turk at his nomination hearing. He agreed with Secretary Granholm.

- Do you agree with Secretary Granholm that the ability of electric generation capacity to dispatch when called upon should be valued in wholesale markets?

**Christie Response to Sen. Barrasso Question 1:**

Under the Federal Power Act (FPA), FERC is required to be non-discriminatory and non-preferential towards various power resources; in other words, FERC cannot favor one resource over another and must be fuel-source neutral in its regulation of regional wholesale markets. Speaking generally, however, compensation in wholesale markets should be based on actual performance, including actual delivery of energy and capacity when needed. When compensation is paid in advance for promised or projected energy or capacity, it should be accurately valued and there must be performance penalties when resources fail to deliver as promised. Observing this principle is essential to maintaining reliability. This principle will also protect consumers from paying for resources that do not show up when or as needed.

**Question 2:** You expressed concern about resource adequacy in RTO markets during the Commission meeting and the hearing. Please elaborate.

**Christie Response to Sen. Barrasso Question 2:**

Please see answer to your question 1.

**Question 3:** During the hearing Commissioner Clements said, “RTO’s have been saving customers billions of dollars year after year after year for several decades now.”

- Please provide your own views on the matters discussed by Commissioner Clements.

**Christie Response to Sen. Barrasso Question 3:**

Whether RTOs/ISOs actually save consumers money is a complex, multi-faceted question. To be properly evaluated requires an answer to the seminal question when evaluating public-policy choices: “Compared to what?” The primary metric of consumer savings is comparing what consumers pay or would have paid for electrical power under alternative structures, and a good starting point is to look at the retail prices (rates) that consumers actually pay for power. Indeed, from the consumer perspective, retail prices for power are the most important metric of all. Retail prices are influenced, to varying degrees depending on the state regulatory
structure, by wholesale power costs. While FERC does not include retail rates as part of its RTO/ISO metrics, recent data from the U.S. Energy Information Administration (EIA) indicates that retail prices for power are significantly lower in many non-RTO states (for example, average retail price in cents/kWh: Alabama 9.83, Georgia 9.46, Idaho 7.99), North Carolina 9.45) [only a very small portion of U.S. is served by a utility that participates in an RTO]. Until 2024), compared to the national average of retail prices for power, and many RTO/ISO states have rates significantly higher than the national average, so any categorical claim that consumers do better in RTO states compared to non-RTO states is not supported by the EIA data on prices that consumers actually pay for power. That does not mean that consumers in one state may not be better off in an RTO construct compared to remaining in that same state’s existing regulatory construct, but that claim would depend on an analysis of the facts unique to that individual state. It would also require close examination of the details pertinent to how that RTO has structured its market constructs, and whether its market constructs are credibly competitive. Further, while it is true that power prices have fallen in RTO energy markets over the past decade and a half and that has saved money for consumers in RTO states, those savings are likely attributable to the dramatic drop in natural gas prices from approximately $15/mmBtu in the middle of the first decade of the century to less than $3/mmBtu on the eve of the pandemic. That huge drop in gas prices drove down energy prices in both RTO and non-RTO states and was not a result of RTO market constructs, but rather a result of the hydraulic fracturing (“fracking”) transformation of gas production which significantly expanded and lowered the cost of gas production (as well as significantly lowered carbon emissions as gas replaced more carbon-intensive fuels). In addition, just as important as costs, reliability must be considered when evaluating consumer welfare in RTO v. non-RTO states. The recent reliability crises in both the California ISO (CAISO) and in the Texas ISO (ERCOT) are well-known. To be clear, these two examples do not prove that outages and load shedding only occur in RTO/ISO states and can never occur in non-RTO states (they can and do), but they do further illustrate that any categorical claim that consumers always do better in RTOs compared to non-RTO states is unsustainable both in terms of costs and reliability. None of the answer above represents a conclusive argument that RTOs/ISOs can never theoretically benefit consumers. They could represent a better alternative for an individual state with extraordinarily high rate-based generation costs. If the RTO market constructs are structured properly to deliver true competition on a level playing field (a huge “if”) and if their transmission planning is done to deliver reliability at the least cost to consumers (another huge “if”), any claim of comparative RTO benefits would have to answer the question, “Compared to what?” It is also worth noting that there are alternative regional constructs available to states beyond the RTO/non-RTO dichotomy, that could benefit consumers depending on how they are structured. For example, several of the non-RTO Western states listed above participate in a regional energy imbalance market construct managed by CAISO.

Finally and importantly, the choice whether to enter a federally-regulated RTO/ISO – which reduces a state’s regulatory authority to protect its consumers – is exclusively the prerogative of state elected leaders to make and is not a decision for FERC to impose or push on states. The states are best equipped to determine whether entering an RTO/ISO, some other type of regional construct, or continuing their current regulatory models would benefit their consumers given that each state has unique characteristics, challenges, and needs.
Questions from Senator James E. Risch

Question 1: The federal government controls significant swaths of land in the West. In Idaho, over 60 percent of the state is federal lands, and it takes decades to build new transmission projects. This Administration is seeking to bring more renewables onto the grid, but developers looking to build new transmission lines routinely find themselves stuck in a lengthy and difficult federal permitting process. How does FERC plan to address the issue of federal permitting delays associated with developing infrastructure projects that is plaguing the West?

Christie Response to Sen. Risch Question 1:

Contrary to the rhetoric from advocates of federal pre-emptive siting authority, state utility regulators are not the primary barrier to building necessary transmission lines, both interstate and intrastate. Often it is federal agencies that are the barriers to progress on transmission. I know from experience as a state regulator that federal agencies are often the cause of lengthy delays, performing seemingly endless environmental and other reviews required by federal law or imposed by the agencies themselves, and/or mandating conditions that make construction of needed infrastructure more costly, if not infeasible. Those other agencies are part of the Executive Branch. FERC – an independent agency – has no authority over them.

Question 2: The cybersecurity of our nation’s energy systems has received a lot of attention recently. Does FERC believe it has the authority it needs to properly oversee the cyber security of our energy systems?

Christie Response to Sen. Risch Question 2:

FERC has varying degrees of cybersecurity authority for the infrastructure it regulates.

The Department of Homeland Security’s (DHS), Transportation Security Administration (TSA) has primary authority over cybersecurity for oil and natural gas pipelines. For Liquified Natural Gas (LNG) terminals, the Coast Guard has primary cybersecurity authority over the offshore terminals while the Department of Transportation (DOT) has this authority over the onshore terminals. FERC collaborates with, and advises, the TSA, Coast Guard, and DOT, supporting their actions to protect the cybersecurity of these facilities.

For hydropower facilities, FERC has authority under Part I of the Federal Power Act (FPA) over the issuance of licenses for the construction and operation of new and existing projects and the oversight of all ongoing project operations, covering dam safety and security inspections, and public safety which includes cybersecurity. For the Bulk Power System, under Section 215 of the FPA, FERC oversees the development and enforcement of mandatory reliability standards, which includes cybersecurity standards. These processes work well to establish foundational requirements to help protect against cybersecurity attacks.
The nature of national security threats to the U.S. by entities using cybersecurity attacks, however, may require additional authorities held by other federal agencies. DHS CISA and the Department of Energy (DOE), as the Sector Risk Management Agency for energy, are members of the intelligence community and are responsible for responding to such attacks. For example, under Section 213A of the FPA, DOE has the authority to order actions after a grid security emergency from cyber and other attacks. FERC collaborates with DOE and other federal agencies to support their actions and help ensure a coordinated and effective federal response.

Question 3: At the hearing, you stated the importance of consumers having access to reliable and affordable electricity. Nuclear energy plays a vital role in these efforts as both a baseload resource and as the nation’s largest source of carbon-free electricity. Unfortunately, we continue to see a number of nuclear reactors close prematurely. Are you concerned with the current trend of premature nuclear reactor closures and what that could mean for the reliability of the grid?

Christie Response to Sen. Reich Question 3:

Under the FPA, FERC is required to be non-discriminatory and non-preferential towards various power resources; in other words, FERC cannot favor one resource over another and must be fuel-source neutral. Consistent with fuel-source neutrality, however, compensation in wholesale markets should be based on actual performance and actual delivery of energy and capacity by resources when needed. Please see also my answer to Sen. Barrasso question 1. Nuclear, of course, has a very high capacity factor (based on actual performance), is a dispatchable resource, and should be compensated accurately.

Question 4: Under the Clean Electricity Payment Program (CEPP), utilities have to provide customers with increasing amounts of electricity that the scheme defines as “qualifying,” based on the rate of carbon emissions from its generation. Your testimony before the Committee indicated that you consider it likely that there rapidly will not be enough qualifying electricity.

In restructured electricity markets the price that generators are paid is the market clearing price. In other words, if the market needs 10,000 MW of power, the market buys the cheapest available power until the 10,000 MW need has been filled. If the least expensive power available to provide the last MW needed costs $35/MWh, all of the generators who are selected to meet the 10,000 MW required get paid $35/MWh, even if they bid in at $20/MWh.

If there is a $150/MWh payment to utilities for providing excess qualifying electricity, and, absent those payments, not enough qualifying electricity, why wouldn’t we expect that suppliers of the qualifying electricity will increase their prices substantially knowing there is high demand and limited supply? Would we see market prices approach $150/MWh in such circumstances? Would prices increase by the amount of the penalty, or $40/MWh above current market prices?

Can you please explain what the CEPP will do to consumer prices, particularly in restructured market areas?
Christie Response to Sen. Rich Question 4:

While I have not been asked to analyze any specific piece of legislation, speaking generally the problem with legislation that mandates “X percent” of specific resources by “Y” year is that mandated percentages and deadlines often bear no rational relationship to the actual state of technology. This disconnect between technological reality and legislative mandates can present a serious threat to reliability. It also represents a threat to rate costs to consumers because premature retirements of generating resources that are in rate base means two things: first, replacement power must be purchased, and second, resources in rate base must still be paid for even when shut down before the end of their depreciable lives. Consumers are the ones who will pay both for replacement power and the resources in rate base with remaining lives. Further, even in so-called “restructured” states served by independent (non-rate-based) generating resources, legislatively mandated intermittent resources (e.g., wind, solar) must still be backed up by dispatchable resources to ensure reliability. The North American Electric Reliability Corporation (NERC) has made this point crystal clear repeatedly. And, of course, consumers will end up paying both for the mandated intermittent resources as well as the necessary back-up resources. Further, if these back-up resources are located in other states, consumers will also pay for the transmission necessary to import power from these resources when needed (e.g., CAISO).

Questions from Senator Mike Lee

**Question 1:** What are the bounds (if any) of the effects that FERC should consider under NEPA?

**Christie Response to Sen. Lee Question 1:**

This question of law will likely come before the Commission, so I will refrain from expressing an opinion until it is presented in a specific case, I will say in general that the first place to look to determine the bounds of FERC’s authority is always the statutory text, followed by relevant decisions of the U.S. Supreme Court.

**Question 2:** Should FERC consider “reasonably foreseeable” effects that are outside the agency’s jurisdiction and control? If so, why? And if not, why not?

**Christie Response to Sen. Lee Question 2:**

Please see my response to your question 1.

**Question 3:** Is considering whether an effect is “reasonably foreseeable” analogous to considering “proximate cause” in tort law?

**Christie Response to Sen. Lee Question 3:**

The Supreme Court, in Dep’t of Transp. v. Pub. Citizen, 541 U.S. 752 at 754, 767 (2004) seems to have held that it is. Beyond that, I will refrain from expressing an opinion until the question is presented in a case.
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U.S. Senate Committee on Energy and Natural Resources
September 28, 2021 Hearing: A Review of the Administration of Laws
Under the Jurisdiction of the Federal Energy Regulatory Commission
Questions for the Record Submitted to the Honorable Mark C. Christie

Question 4: Do you believe there is any difference between “proximate cause” and “reasonable foreseeability”?

Christie Response to Sen. Lee Question 4:

Please see my responses to your questions 1 and 3.

Question 5: Does the Supreme Court’s decision in Department of Transportation v. Public Citizen, 541 U.S. 752 (2004), impact your “reasonable foreseeability” analysis under NEPA? If so, how?

Christie Response to Sen. Lee Question 5:

Where the Supreme Court has ruled on the construction of statutory language, that construction should prevail unless it is superseded by the Court itself, statutory amendments by Congress, or can be credibly distinguished.

Question 6: While NEPA uses the terms “environmental impacts” and “environmental effects” it does not mention the term “direct effect” or an “indirect effect” in the statute. How would you approach the decision on whether to consider “indirect” or “direct” effects in a decision before FERC?

Christie Response to Sen. Lee Question 6:

Please see my responses above to your questions 1-5.

Question 7: How do you reconcile the use of a “proximate cause” consideration with an “indirect” effect?

Christie Response to Sen. Lee Question 7:

Please see my responses above to your questions 1-5.

Questions from Senator Steve Daines

Question 1: Commissioner Christie, increasing the buildout of hydropower facilities will help reduce emissions, create jobs, and increase access to affordable, reliable baseload power. What actions can the Commission and Congress take to speed up permitting and approvals of new hydro-facilities?

Christie Response to Sen. Daines Question 1:

Hydro power is a very important source of carbon-free power supply and should be encouraged when applications for new facilities are consistent with governing statutes.

Question 2: Commissioner Christie, Europe and the United Kingdom are experiencing record high energy prices with LNG prices spiking to 500% over the previous year. The United States is blessed with an abundance
of natural gas and hydraulic fracturing has resulted in the ability to access natural gas in a safe, reliable and economic way. Do you believe that actions taken by the Biden Administration to eliminate natural gas development, transportation, and electric generation could lead to similar increases in energy prices for American consumers?

**Christie Response to Sen. Daines Question 2:**

Natural gas is an abundant, reliable, and relatively inexpensive fuel, as well as relatively low in carbon emissions compared to other thermal fuel sources. There is no question that curtailing or hampering the development of America’s natural gas resources would result in increased energy prices for American consumers. It is really not complicated: prices for any commodity are set by supply and demand. If actions by the Executive Branch and federal agencies such as FERC make gas supply more difficult and more costly to produce or to build infrastructure necessary to transport gas supply to consumers, then the price to consumers is going to go up, as we already see happening significantly in Europe and the United Kingdom.

**Question 3:** Commissioner Christie, do you believe the U.S. should play a role in supplying our allies with U.S. LNG?

**Christie Response to Sen. Daines Question 3:**

Congress has answered that question. This is reflected in § 3 of the Natural Gas Act, which provides that, when someone submits an application to export (or import) LNG, the Commission “shall” approve it unless it finds the application to be inconsistent with the public interest. See 15 U.S.C. § 717b(a).

**Question 4:** Commissioner Christie, do you agree that the development and use of natural gas for electricity has helped lead to lower greenhouse gas emissions?

**Christie Response to Sen. Daines Question 4:**

To the extent natural gas replaces more carbon-intensive fuels, yes.

**Question 5:** Commissioner Christie, do you believe that it is the Commission’s role to affect the pace and adoption of energy transformation?

**Christie Response to Sen. Daines Question 5:**

If the terms “energy transformation” or “energy transition” are defined to mean FERC favoring one type of resources over another, that would violate the Federal Power Act. FERC has no such authority. At the same time, there is a changing generation mix resulting from technological developments, market demands and state policies and FERC should regulate within its authority to ensure that reliability is maintained and consumers are not exploited as the generation mix changes to lower carbon-emitting technologies.
Questions from Senator John Hoeven

Question 1: Recent actions seem to indicate that the Commission is moving to put carbon emissions reductions ahead of its traditional role of facilitating the reliable delivery of natural gas and electricity to consumers. For example, FERC is delaying or even reopening pipeline certificates, the latter which may be questionable under FERC’s authority under existing statutes, to further add carbon emissions considerations.

Moreover, the Clean Electricity Performance Program (CEPP), currently under consideration in the House of Representatives, would require a dramatic increase in the use of intermittent clean energy sources to generate electricity.

a. Is FERC jeopardizing the reliability and stability of energy supply and delivery in order to emphasize a focus on carbon emission impacts?

b. If the proposed CEPP were to be enacted, would a focus on carbon emissions regarding the approval of natural gas pipelines and the build-out of high voltage transmission lines come at the potential expense of reliability?

c. Given the extreme weather events this year, which dramatically curtailed the delivery of electricity or resulted in large increases in electricity rates, should the Commission focus its primary responsibility to timely approve needed energy supply infrastructure, such as natural gas pipelines, and voluntary electric resource adequacy markets that will match supply to load?

Christie Response to Sen. Hoeven Question 1:

a. As I have repeatedly said, FERC should have two priorities: maintaining the reliability of the power grid and protecting consumers from paying unnecessary costs. FERC is an economic regulator not an environmental regulator, although we have duties under NEPA that must be fulfilled. FERC’s duties under the Natural Gas Act (NGA) are set forth very clearly in the statute and the NGA contemplates the development of the country’s natural gas resources. Please see also my responses to Sen. Burrass question 1, Sen. Risch questions 3 and 4, Sen. Lee question 1, and Sen. Daines question 2.


c. Please see answer to your question 1.a above and answer to Sen. Burrasso question 1.

Question 2: We have heard from constituents regarding the Commission’s advanced notice of proposed rulemaking (ANOPR) pertaining to regional transmission planning and cost allocation (RM21-17). The ANOPR is seeking feedback on some 200 questions and proposals regarding complex transmission planning processes.
While transmission planning policies should be examined on a regular basis to ensure efficient transmission development, concerns have been raised that many of the proposals implied within the notice would interfere with existing, well-established processes currently in place within the regional transmission organizations.

Will you ensure that this proposed rulemaking will not impact grid resiliency, create unfair cost allocations, increase electric rates, or result in additional burdensome oversight in planning, siting, or constructing new transmission?

**Christie Response to Sen. Hoeven Question 2:**

I share your concerns about the potential that the results of the AoNPR process could unnecessarily raise costs to consumers, impose unfair cost allocations and actually make building necessary transmission more difficult, not less. I can ensure I will work—as one member of the Commission—to prevent such negative outcomes from taking place.

**Question 3:** In recent months, natural gas prices in the U.S. have doubled, to over $5 per million Btu. Certain areas of the country, including New England, are at risk of even higher price spikes because of dependence on natural gas from foreign sources, and competition from Europe, which faces a gas crisis of its own.

a. Are you concerned about regions like New England that have been reliant on imports of natural gas from Russia and other foreign countries to keep the lights on and heat their homes during the winter?

b. Will you support more pipeline infrastructure to ensure states are better connected to our abundant domestic gas resources?

c. How can we improve and streamline the permitting process for new gas pipelines, and is this something Congress can also help address?

**Christie Response to Sen. Hoeven Question 3:**

a. Yes, I am very concerned about adequacy of natural gas supplies in ISO New England. Shortages could have very damaging effects on both reliability of power and consumer costs. The United States has abundant natural gas supplies and the NGA contemplates the development of domestic supplies. Except under the most extenuating circumstances, in general there is no reason for the United States to be importing gas supplies given our abundant domestic supplies and undoubted capability to deliver gas wherever it is needed to serve consumers, if the requisite infrastructure is built to transport the gas.

b. Consistent with the Commission’s responsibilities under the NGA, and speaking generally, I will support pipeline infrastructure where specific applications for certificates meet the statutory criteria governing the issuance of the certificate. The NGA contemplates the development of natural gas resources. See also answer to your question 3.a above.
c. The NGIA is not the barrier to permitting and constructing new natural gas infrastructure. NEPA environmental reviews have become more lengthy and costly, not due to specific statutory amendments to NEPA itself but largely due to changing FERC policies and judicial decisions, particularly in one circuit court, the D.C. Circuit. Statutory changes to NEPA are the exclusive prerogative of Congress, not federal agencies nor the courts.

Questions from Senator James Lankford

Question 1: Commissioner Christie, is it FERC’s role to affect the pace of the energy transition? If so, does this directive exist in statutory law?

Christie Response to Sen. Lankford Question 1:
Please see my response to Senator Deine’s question 5.

Question 2: Commissioner Christie, do you believe that natural gas exports can lower emissions by displacing other heating sources like wood and fuel oil?

Christie Response to Sen. Lankford Question 2:
Yes.

Questions from Senator Catherine Cortez Masto

Questions: As we look to deploy more Electric Vehicles (EV) on our nation’s roads and build out necessary charging infrastructure, researchers and industry groups are working to identify where new cyber vulnerabilities may arise.

With this in mind, I’ve pushed a package of bills to advance EV adoption – including an EV Commission and National Strategy (S. 2040) that was included in the bipartisan infrastructure package. Federal agencies, along with the public and private sectors, must work together on a plan to effectively identify opportunities and barriers – such as bulk power and cyber threats – to properly make this transition in transportation.

a. What are FERC’s plans to ensure that the national electric grid can support EV charging for both public and private medium and heavy duty fleets?

b. Could an EV Commission help boost collaboration among federal agencies, as well as with local, state, and industry stakeholders, to help the grid withstand cyber threats in the future?

Christie Response to Sen. Cortez Masto Question 1:

a. Electrification of the entire vehicle fleet, along with economy-wide electrification in general, would increase load, potentially by orders of magnitude. Such increased load will require building many more
generating resources to maintain reliability. FERC needs to do everything within its statutory authority to ensure that reliability is maintained and consumers are not exploited during this process.

b. With regard to the portion of your question relative to cyber threats, please see cybersecurity response to Sen. Stith question 2. Creating a new commission on the subject you mention is the prerogative of Congress and how it is structured, what authority it has, and other operational details will determine whether it will fulfill the goals you have.

Questions from Senator Cindy Hyde-Smith

Question 1: It is of the utmost importance that we have regulatory stability to ensure greater access to clean, safe, reliable and affordable power. Do you believe that states, rather than the federal government, are best-positioned to understand the local needs of the customers in their state? Are states the best arbiters to decide what transmission projects need to be built?

Christie Response to Sen. Hyde-Smith Question 1:

Yes. As a former state regulator, I recognize that state and local officials are far better positioned to understand local needs and concerns than federal officials. I deeply respect the role that state regulators play and will always be respectful of, and deferential to, the views of the states, subject of course, to any pre-emption that may be required by federal law and with the understanding that with 50 states, the views and policies of individual states often differ.

I believe state officials are much better prepared than federal ones to make decisions on siting and permitting of power lines and generating facilities, each of which has some uniquely local characteristics and impacts. State officials understand the specific challenges and needs of their own communities, including the effect of costs on consumers and the economic needs of communities. I would strongly advise against pre-empting the states’ siting authority and replacing it with federal siting authority. I do not think such pre-emption would facilitate the construction of needed transmission lines; on the contrary, it would likely make it even more difficult.

Question 2: FERC does not have authority to site new transmission projects. That authority lies with the states, and the consumers in those states who pay for the cost of transmission. FERC has recently created a joint state-federal task force on transmission. What other measures are being taken or considered by FERC that ensure state interests and authority are being taken into account?

Christie Response to Sen. Hyde-Smith Question 2:

Please see answer to your question 1 above.
Questions from Ranking Member John Barrasso

Question 1: At a hearing before this Committee in January 2018, you stated “With the DOE’s proposed [resilience] NOPR behind us, this committee should be wary of other […] proposals intended to sustain specific types of power generation.”

- In your judgment, is the proposed Clean Electricity Performance Program, as reported by the House Committee on Energy and Commerce, a “proposal intended to sustain specific types of power generation”? If not, why not?

The Federal Power Act requires the Commission to act in a technology neutral fashion. While I defer to this Committee and Congress’ perspective on whether to pass legislation focused on any particular resource type, my comment during this Committee’s 2018 hearing referred to proposals to the Commission that would require the Commission to deviate from its technology neutral approach.

Question 2: In an interview with Utility Dive that appeared on May 19, 2021, you said, in response to a question regarding the PJM Interconnection’s minimum offer price rule (MOPR), “I have a concern that these market designs are not compliant with the Federal Power Act’s approach to cooperative federalism — and that is to respect state policy choices.”

- Would any federal policy that in effect dictates the electric generation resource mix be consistent with cooperative federalism as outlined to date in the FPA?

Whether any federal policy is consistent with the Federal Power Act’s approach to cooperative federalism depends on the characteristics of that policy. It is difficult to determine the policy provisions that would constitute an “in effect” dictate in the abstract that would allow me to make a determination or prediction.

A critical distinction between any policy contemplated by Congress and rules and orders put forward by the Commission is that while Congress holds the power to enact and amend national legislation, the Commission must abide by those laws. It is the Commission’s responsibility to follow the existing jurisdictional parameters established by the Federal Power Act, as clarified by the United States Supreme Court and other federal courts.

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1 See Prepared Statement of Allison Clements, President, Goodgrid LLC Before the U.S. Senate Committee on Energy and Natural Resources, January 23, 2018, at 3 (“FERC’s decision to reject DOE’s proposed resilience rule rebuts the idea that the ‘baseload’ nature of older, irreplaceable fossil-fueled and nuclear units arm them with any particular resilience or reliability value. This Committee should be wary of other proposed in- or out-of-market proposals, including some underway in the Northeastern regional transmission organizations, intended to sustain income for specific types of power generation in contravention of FERC’s technology-neutral obligation and traditional approach.”).

Question 3: In your written testimony, you cite a Princeton University study which found that reaching a national net zero greenhouse gas emissions target would require roughly 60 percent more high voltage transmission infrastructure than exists today by 2030 and a tripling of such infrastructure by 2050.

- Hasn’t litigation been a primary factor in frustrating the development of high voltage transmission lines on existing a new rights-of-way?

The Commission has exercised jurisdiction over transmission siting only in very limited circumstances and therefore transmission siting-related litigation has generally not concerned the Commission’s actions.\(^3\) Appreciating that there are several barriers to transmission development that fall within the state public utility commissions’ jurisdiction and not that of the Commission,\(^4\) I am encouraged that the Commission has established a joint task force with the National Association of Regulatory Utility Commissioners to consider transmission infrastructure development more holistically.\(^5\) Success in deploying transmission infrastructure at the scale necessary to ensure reliability, resilience and facilitation of the changing resource mix will require cooperation between and among states, relevant federal agencies and stakeholders.

- What impact will FERC’s Office of Public Participation have on litigation concerning the build out of high voltage transmission facilities on the scale you referenced in your prepared remarks?

The Commission’s newly established Office of Public Participation is intended to provide access to Commission proceedings for landowners, impacted communities and other individuals. Since transmission siting is primarily regulated by state public utility commissions, supporting the public in transmission siting disputes will not be a focus of the Office.

Question 4: At the hearing, you said “variable energy resources like wind, solar, and other emerging technologies are proven to be reliable resources.” In light of your testimony, please evaluate The North American Electric Reliability Corporation’s (NERC) Summer Reliability Assessment, which asserts that “Variable energy resources, including wind, solar, and types of hydro generation, often contribute significantly less of their installed capability at the period of peak demand.” (Emphasis added.) And again, “The availability of reliable, flexible generation is important to balancing system needs with a high penetration of variable, weather-dependent generation.”

- What is your reaction to NERC’s assertion and how is it consistent with the view you expressed at the hearing?

The referenced statement from the 2021 NERC Summer Reliability Assessment was made in the context of calculating regional On-Peak Planning Reserve Margins. It comprises part of a discussion about how to count

\(^{3}\) 16 U.S.C. § 824(a)-(b)(6). See Piedmont En’r’s Council v. FERC, 558 F.3d 364, 310 (4th Cir. 2009) (“The states have traditionally assumed all jurisdiction to approve or deny permits for the siting and construction of electric transmission facilities.”).
\(^{5}\) See Docket No. AD21-15, Order Establishing Task Force and Soliciting Nominations (June 17, 2021).
the contributions of variable energy resources for resource adequacy purposes and does not speak to the reliability of such resources.

It is well understood that total installed capability is not a meaningful measure of a variable energy source’s performance. System planners account for the variability of wind and solar resources, which depends on the time of the day and weather conditions, when engaging in system planning and on a day-to-day basis. System operators are able to forecast changes in the weather patterns and assess the amount of capacity to expect from variable resources in any given hour. By and large, variable energy resources match this expected capability. For example, updated data from The Electric Reliability Council of Texas (ERCOT) from Winter Storm Uri shows that variable energy resources, especially solar, generally performed as expected during the cold weather event. I do agree that system flexibility, whether it come from supply resources, demand resources, storage, or geographic diversity, is important to balance system needs.

- What is or should be the proper standard for evaluating the reliability of variable resources?

Reliability standards for generation resources interconnected to the bulk electric system are intended to protect system reliability. They should only diverge from a technology neutral approach when a specialized standard is necessary to provide a meaningful reliability baseline for all resource types. For example, Standard MOD-025-2, which requires verification and data reporting of generators’ real and reactive power capability, appropriately recognizes the differences between synchronous and variable generating units and provides for different verification standards. In the resource adequacy context, variable energy resources should be evaluated against their expected output. This is typically done by developing capacity values specific to each resource. “Effective load carrying capability” (ELCC) is a commonly used statistical approach to developing capacity values.¹⁰

**Question 5:** During the hearing you said, “RTO’s have been saving customers billions of dollars year after year after year for several decades now.”

- Please provide citations for your assertion of benefits.

Depending on the region, RTOs provide customer benefits in the form of, among others, more efficient use of the existing transmission system; the need in some cases to avoid upgrades to the system; competition between

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and optimized dispatch of generation resources; reserves sharing; and enhanced system reliability. Estimates of
customer savings are available across individual RTOs, non-RTO markets, and third-party analyses, as well as in
various FERC filings. While it would be difficult to capture all documented benefits, the following citations
represent recent determinations and estimates by some RTOs:

- MISO: $3.5 billion in annual benefits, and $30 billion since 2009.\textsuperscript{7}
- PJM: $3.2 to $4 billion in annual savings;\textsuperscript{10}
- SPP: $2.14 billion in annual savings;\textsuperscript{11} and
- NYISO: $7.8 billion in fuel costs savings since 1999.\textsuperscript{12}

These estimates show that RTO/ISOs easily produce more than $10 billion in annual benefits for consumers.
The Western Energy Imbalance Market, which is not an RTO, but an optimization of some dispatch across
much of the West, has also produced $1.28 billion in savings since its inception in November 2014.\textsuperscript{13}

Questions from Senator James E. Risch

**Question 1:** The federal government controls significant swaths of land in the West. In Idaho, over 60 percent
of the state is federal lands, and it takes decades to build new transmission projects. This Administration is
seeking to bring more renewables onto the grid, but developers looking to build new transmission lines
routinely find themselves stuck in a lengthy and difficult federal permitting process. How does FERC plan to
address the issue of federal permitting delays associated with developing infrastructure projects that is plaguing
the West?

Currently, the Commission does not have jurisdiction over permitting of transmission projects on federal lands.
The Commission also lacks active jurisdiction of transmission siting across private lands. As a result, the
Commission has not been actively involved in federal permitting processes.

**Question 2:** The cybersecurity of our nation’s energy systems has received a lot of attention recently. Does
FERC believe it has the authority it needs to properly oversee the cyber security of our energy systems?

The Commission has the authority and responsibility to support the reliability of the bulk electric system and
has worked with the North American Electric Reliability Corporation (NERC) to develop a baseline set of
cybersecurity standards. Of course, the cyber threat evolves faster than regulation, and the Commission works

\textsuperscript{7} Julie Newland, *MISO Provides $3.5 Billion in Annual Benefits*, MISOMATTERS (Feb. 23, 2021),
http://www.misommatters.org/2021/02/miso-provides-3-5-billion-in-annual-benefits/.
\textsuperscript{10} Derek Wingfield, *SPP reports $2.14B in annual savings for members, urges new transmission and vision to board of directors*,
\textsuperscript{11} NYISO, *POWER TRENDS: NEW YORK’S EVOLVING ELECTRIC GRID* (2017),
https://www.nyiso.com/documents/20142/2723026/2017-Power-Trends.pdf/7baca3b-ca9c-93a6-2e54-4d94831e0c8d.
together with NERC, other federal agencies and industry to address emerging threats. The Transportation Security Administration (TSA) holds authority over the cybersecurity of the interstate pipeline system. While TSA’s recent Security Directive is an encouraging step forward, I continue to believe that mandatory cybersecurity standards should be required in the face of cyber and physical threats to the system.

Questions from Senator Mike Lee

**Question 1:** What are the bounds (if any) of the effects that FERC should consider under NEPA?

The bounds of the effects of any major federal action considered by the Commission depend on the facts in each case. Consistent with the National Environmental Policy Act and governing caselaw, the Commission should consider all reasonably foreseeable effects. The United States Court of Appeals for the District of Columbia Circuit has held that environmental “effects are reasonably foreseeable if they are ‘sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision.’”

**Question 2:** Should FERC consider “reasonably foreseeable” effects that are outside the agency’s jurisdiction and control? If so, why? And if not, why not?

Yes, the Commission should consider all reasonably foreseeable effects, including those it does not have authority to regulate. Courts have held that the Commission is the “legally relevant cause” of both the direct and indirect effects of projects that it authorizes. Considering these effects is necessary for a complete analysis under NEPA, including for assessing the relative impacts of the alternatives that NEPA requires FERC to consider. In addition, the information informs the Commission’s public interest determination under the Natural Gas Act. Finally, analyzing all reasonably foreseeable effects helps fully inform the public of the potential environmental consequences of a proposed action.

**Question 3:** Is considering whether an effect is “reasonably foreseeable” analogous to considering “proximate cause” in tort law?

The Supreme Court has held that NEPA requires a reasonably close causal relationship between an environmental effect and its alleged cause, using a standard similar to the doctrine of proximate cause from tort law. The Court has not spelled out the relationship between proximate cause and reasonable foreseeability under NEPA.

**Question 4:** Do you believe there is any difference between “proximate cause” and “reasonable foreseeability”?

To my knowledge, the Supreme Court has not explained whether there is a difference between proximate cause and reasonable foreseeability in the NEPA context. However, there may be circumstances where a foreseeable

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14 Sierra Club v. FERC, 867 F.3d 1357, 1371 (D.C. Cir. 2017) ([Subal Trail] (quoting EarthReport, Inc., v. FERC, 828 F.3d 949, 955 (D.C. Cir. 2016) (citation omitted)).

15 See [Subal Trail, 867 F.3d at 1371], [Birchfield v. FERC, 925 F.3d 510, 519 (D.C. Cir. 2019)].
effect would not be deemed to be proximately caused by the agency approval of a project because the agency is affirmatively prohibited from relying on that effect in deciding whether to grant the approval.\textsuperscript{16}

**Question 5.** Does the Supreme Court’s decision in *Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004), impact your “reasonable foreseeability” analysis under NEPA? If so, how?

It is my understanding that the Supreme Court did not address in detail reasonable foreseeability in *Department of Transportation v. Public Citizen*. However, the D.C. Circuit found in *Sabal Trail* that the reasonably foreseeable effects of approving a proposed natural gas pipeline included the greenhouse gas emissions from power plants that would burn the natural gas transported to them by the proposed pipeline.\textsuperscript{17} The court distinguished *Public Citizen*, finding that it “did not excuse FERC from considering these indirect effects.”\textsuperscript{18}

**Question 6.** While NEPA uses the terms “environmental impacts” and “environmental effects” it does not mention the term “direct effect” or an “indirect effect” in the statute. How would you approach the decision on whether to consider “indirect” or “direct” effects in a decision before FERC?

In accordance with NEPA and governing case law, the Commission is required to consider all reasonably foreseeable effects, irrespective of whether they are caused directly by the proposed action or indirectly. Thus, my focus is on whether the effect is reasonably foreseeable.

**Question 7.** How do you reconcile the use of a “proximate cause” consideration with an “indirect” effect?

Consideration of indirect effects is consistent with governing case law. In *Sabal Trail*, the D.C. Circuit held that “[t]he absence of a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a ‘legally relevant cause’ of the direct and indirect environmental effects of pipelines it approves.”\textsuperscript{19} In other words, approval of the pipeline was the proximate cause of the indirect effects of the pipeline.

**Questions from Senator Steve Daines**

**Question 1.** Commissioner Clements, increasing the buildout of hydroelectric facilities will help reduce emissions, create jobs, and increase access to affordable, reliable baseload power. What actions can the Commission and Congress take to speed up permitting and approvals of new hydro-facilities?

In April 2019 the Commission issued Order No. 858, establishing an expedited process for issuing original licenses for qualifying facilities at non-powered dam and closed loop pumped storage projects, as required by

\textsuperscript{16} For example, in *Sabal Trail*, the court explained that its earlier decision holding that FERC need not consider the environmental effects of LNG exports turned on the fact that FERC could not deny authorization of an LNG facility because the Department of Energy has the statutory authority to grant LNG import and export approvals and has delegated only “narrow” authority to FERC to decide on the approval of the construction and operation of the LNG import and export facilities themselves. 867 F.3d at 1373.

\textsuperscript{17} *Sabal Trail*, 867 F.3d at 1371-72.

\textsuperscript{18} Id. at 1373.

\textsuperscript{19} Id. (emphasis added).
the America’s Water Infrastructure Act of 2018. In October 2019 and in accordance with the same law, the Commission issued a list of existing nonpowered federal dams that the Commission and the Secretaries of the Army, Interior, and Agriculture agree have the greatest potential for non-federal hydropower development. These actions build on the Commission’s earlier action to establish an Integrated Licensing Process aimed at streamlining license application review. I support the Commission’s efforts to work with coordinating agencies and potential licensees, as well as interested stakeholders, towards further increasing efficiencies and acting on license applications in a timely manner.

I note that the U.S. Department of Energy’s 2021 Hydropower Market Report observes that 59% of projects in the development pipeline had an “issued authorization” (i.e., license, exemption, or qualifying conduit status) but had not yet started construction. The report states that key challenges identified by developers related to non-FERC permitting, technical design, increases in construction cost estimates, and securing property rights, financing, and power purchase agreements 29.

**Question 2:** Commissioner Clements, Europe and the United Kingdom are experiencing record high energy prices with LNG prices spiking to 500% over the previous year. The United States is blessed with an abundance of natural gas and hydraulic fracturing has resulted in the ability to access natural gas in a safe, reliable and economic way. Do you believe that actions taken by the Biden Administration to eliminate natural gas development, transportation, and electric generation could lead to similar increases in energy prices for American consumers?

I do not believe that the Biden Administration has sought to eliminate natural gas development, transportation, and electric generation. The factors that have led to higher natural gas and LNG prices in Europe and the United Kingdom are reportedly multifaceted and include an uneven global rebound in demand as economies recover from the effects of the COVID-19 pandemic, following extended extreme cold and extreme heat over the last year in Europe that depleted stored gas supply beyond expectations.

**Question 3:** Commissioner Clements, do you believe the U.S. should play a role in supplying our allies with U.S. LNG?

Congress has assigned responsibility to the U.S. Department of Energy to consider whether the export of U.S. LNG is in the public interest. The Commission’s role is limited to Section 3 of the Natural Gas Act, which requires the Commission to approve applications for construction and operation of LNG export (or import) facilities unless those facilities run counter to the public interest. The Commission would be stepping outside the bounds of its jurisdiction to weigh in on this question.

**Question 4:** Commissioner Clements, do you agree that the development and use of natural gas for electricity has helped lead to lower greenhouse gas emissions?

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Yes, in many cases the development of gas generation has replaced coal generation, which is generally understood to be a higher-emitting form of generation. However, an accurate emissions assessment for any given project would require measuring the upstream—i.e., production and transportation—emissions profile of the gas (or other fuel source) before it is burned at the generation site.

**Question 5:** Commissioner Clements, do you believe that it is the Commission’s role to affect the pace and adoption of energy transformation?

The Commission's roles under the Federal Power Act and Natural Gas Act are to ensure just and reasonable rates, avoid undue discrimination, and, under the Federal Power Act, to support reliability. The Commission's role is not to prefer any one resource type over any other, but the Commission's decisions with regard to electricity markets, rates, and planning necessarily impacts the pace of change in the electricity market. For example, the Commission has a responsibility to eliminate barriers to market access. Such actions may facilitate market entry by new, more competitive resources.

In carrying out its responsibility to ensure just and reasonable, non-discriminatory rates, the Commission must also not be blind to market preferences and policy choices driving energy system transformation, as these forces affect the manner in which resource-neutral regulation should be carried out. In the transmission system context, for example, plans must make assumptions about the future resource mix. More accurate projections about future supply and demand sources will translate into more cost-effective investments, to the benefit of consumers.

**Questions from Senator John Hoeven**

**Question 1:** Recent actions seem to indicate that the Commission is moving to put carbon emissions reductions ahead of its traditional role of facilitating the reliable delivery of natural gas and electricity to consumers. For example, FERC is delaying or even reopening pipeline certificates, the latter which may be questionable under FERC’s authority under existing statutes, to further add carbon emissions considerations.

Moreover, the Clean Electricity Performance Program (CEPP), currently under consideration in the House of Representatives, would require a dramatic increase in the use of intermittent clean energy sources to generate electricity.

a. Is FERC jeopardizing the reliability and stability of energy supply and delivery in order to emphasize a focus on carbon emission impacts?

No. The Commission’s responsibility under Section 215 of the Federal Power Act is to support reliability of the bulk electricity system. The Commission’s role under the Natural Gas Act is to consider applications for certifications of new interstate natural gas pipelines. The Commission is required to follow these statutes, NEPA, and binding court interpretations of them. As the D.C. Circuit has directed, the Commission is meeting its obligation to consider greenhouse gas emissions that may have a significant environmental impact. Meeting our legal obligations will not jeopardize the reliability or stability of energy supply or delivery but will instead help assure legally sound and durable decisions.
b. If the proposed CEPP were to be enacted, would a focus on carbon emissions regarding the approval of natural gas pipelines and the build-out of high voltage transmission lines come at the potential expense of reliability?

No. The Commission’s responsibility for bulk electric system reliability under Section 215 of the Federal Power Act requires the Commission to support system reliability as the resource mix changes. This responsibility would remain constant regardless of the Commission’s approach to natural gas pipeline certification and transmission system planning and regardless of whether the CEPP were to be enacted. On-the-ground experience and studies by the U.S. government and many other credible sources demonstrate that the U.S. electricity system can operate reliably and cost-effectively with high penetrations of variable energy resources so long as we plan for those changes.

c. Given the extreme weather events this year, which dramatically curtailed the delivery of electricity or resulted in large increases in electricity rates, should the Commission focus its primary responsibility to timely approve needed energy supply infrastructure, such as natural gas pipelines, and voluntary electric resource adequacy markets that will match supply to load?

The Commission should continue to work towards satisfaction of its legal obligations under the Federal Power Act and Natural Gas Act across all areas that contribute to reliability and affordability, including consideration of reliability standards, infrastructure certification and licensing, system planning requirements and market design. We should aim to quickly incorporate learnings about the impacts of unprecedented extreme weather events into regulation to protect against similar impacts in the future.

**Question 2:** We have heard from constituents regarding the Commission’s advanced notice of proposedrulemaking (ANOPR) pertaining to regional transmission planning and cost allocation (RM21-17). The ANOPR is seeking feedback on some 200 questions and proposals regarding complex transmission planning processes.

While transmission planning policies should be examined on a regular basis to ensure efficient transmission development, concerns have been raised that many of the proposals implied within the notice would interfere with existing, well-established processes currently in place within the regional transmission organizations.

Will you ensure that this proposed rulemaking will not impact grid resiliency, create unfair cost allocations, increase electric rates, or result in additional burdensome oversight in planning, siting, or constructing new transmission?

The goal of any action that the Commission takes as a result of comments provided on the referenced ANOPR should be towards satisfaction of the Commission’s responsibilities to ensure just and reasonable rates, avoid undue discrimination, and support bulk electric system reliability. I am committed to working with my

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colleagues towards satisfaction of these obligations. Core to that effort is supporting the Commission’s longstanding objective of promoting efficient, cost-effective transmission investment. While we are early in the referenced proceeding, I note that the record compiled to date suggests that a proposed rule could improve grid resilience, an increasingly important consideration as more frequent extreme weather events tax our energy systems in unprecedented ways.

**Question 3:** In recent months, natural gas prices in the U.S. have doubled, to over $5 per million Btu. Certain areas of the country, including New England, are at risk of even higher price spikes because of dependence on natural gas from foreign sources, and competition from Europe, which faces a gas crisis of its own.

a. Are you concerned about regions like New England that have been reliant on imports of natural gas from Russia and other foreign countries to keep the lights on and heat their homes during the winter?

New England relies more heavily than most regions on natural gas-fired generation, which in New England is fed both by connections to the interstate natural gas pipeline system and by some LNG import capacity. The cost of natural gas-fired generation is tied closely to sometimes volatile commodity prices, whether in the form of pipeline gas or LNG. Natural gas-fired generation may also compete with building heating needs in the winter. New England’s dependence on natural gas for electric generation and building heating makes it susceptible to natural gas supply disruptions that may occur during extended extreme cold weather. For these reasons, I am concerned about winter period energy adequacy in New England during such events. The Federal Power Act reserves for states authority over generation, so the Commission does not determine a region’s generation mix. However, the Commission does have a role to play in ensuring that New England’s electric capacity rates reflect an accurate assessment of the capability of generating resources to provide energy when needed, including during prolonged winter weather events. When evaluated accurately, market forces may yield more resource diversification that can aid electric reliability and may signal the value of interregional transmission capability that allows regions to assist each other during extended weather events, as we saw in the case of Winter Storm Uri in the south central U.S. in February 2021. I am committed to working with my colleagues and remaining focused on this important issue.

b. Will you support more pipeline infrastructure to ensure states are better connected to our abundant domestic gas resources?

I will support certification of new pipelines if they satisfy the requirements for certification under Section 7 of the Natural Gas Act, as provided in Commission regulations and interpreted by binding court precedent.

**Question 4:** On May 27, 2021, the Commission subjected several pending natural gas pipeline projects to additional environmental review despite completed final environmental assessments, further delaying a decision on these projects.

a. Why is the Commission now requiring an environmental impact statement (EIS), after the completion of final environmental assessments for these projects?
My understanding is that the Commission is now requiring completion of EISs for proposed interstate pipeline projects in response to court decisions requiring full consideration of significant impacts, including those from greenhouse gas emissions and impacts on environmental justice communities.

b. Should developers expect to complete a full EIS for new projects moving forward, and if so, what conditions would warrant an EIS rather than an environmental assessment?

Developers should anticipate the Commission will comply with its obligation under NEPA to prepare a full EIS for any project that can reasonably be expected to have a significant environmental impact.

Questions from Senator James Lankford

**Question 1:** Commissioner Clements, is it FERC’s role to affect the pace of the energy transition? If so, does this directive exist in statutory law?

The pace of the energy transition is driven by many factors, including market and policy factors outside of the Commission’s jurisdiction. The Commission’s role is to ensure just and reasonable rates, avoid undue discrimination, and establish reliability standards as the energy transition ensues. The Commission’s responsibility is to regulate in a resource-neutral manner, but in issuing resource-neutral regulations and orders, the Commission may influence the composition of resources that serve the system. For example, in eliminating unduly discriminatory barriers to competition, the Commission may facilitate entry of new participants into the market.

**Question 2:** Commissioner Clements, do you believe that natural gas exports can lower emissions by displacing other heating sources like wood and fuel oil?

To the extent that displacement occurs, yes, exported LNG may serve to decrease emissions. The U.S. Court of Appeals for the D.C. Circuit has made clear, however, that the Commission does not have a role in considering the environmental impacts of LNG exports. Since the Commission’s statutory authority extends only as far as whether the LNG facility itself runs contrary to the public interest, and the authority to consider whether export of LNG as a commodity is in the public interest remains with the U.S. Department of Energy, the Commission should not take a position on this question.

Questions from Senator Catherine Cortez Masto

**Questions:** As we look to deploy more Electric Vehicles (EV) on our nation’s roads and build out necessary charging infrastructure, researchers and industry groups are working to identify where new cyber vulnerabilities may arise.

With this in mind, I’ve pushed a package of bills to advance EV adoption – including an EV Commission and National Strategy (S. 2040) that was included in the bipartisan infrastructure package. Federal agencies, along
with the public and private sectors, must work together on a plan to effectively identify opportunities and barriers – such as bulk power and cyber threats – to properly make this transition in transportation.

a. What are FERC’s plans to ensure that the national electric grid can support EV charging for both public and private medium and heavy duty fleets?

While EV charging infrastructure generally connects to the distribution system regulated by the states, increased demand driven by the growth of EV purchases across the country can affect the need for investment in transmission infrastructure that falls within the Commission’s jurisdiction. The Commission recently issued an Advance Notice of Proposed Rulemaking to assess, among other things, whether regions are planning their transmission systems in a manner that yields efficient and cost-effective transmission investment, and thus just and reasonable rates. Among the questions the Commission will consider is whether transmission planning adequately accounts for changing supply and demand fundamentals, of which one example is changing demand due to transportation electrification. While it is too early to say what will emerge from this proceeding, the Commission has a role to play in ensuring that transmission investment is sufficient to support reliable electric service in the face of changing market dynamics.

b. Could an EV Commission help boost collaboration among federal agencies, as well as with local, state, and industry stakeholders, to help the grid withstand cyber threats in the future?

I believe that government leadership is essential to address the cyber threats facing the grid. While I defer to the will of this Committee and Congress, efforts such as the proposed EV Commission that facilitate communication between federal agencies, states, and industry stakeholders could comprise an important piece of that effort.

**Question from Senator Mark Kelly**

**Question:** Arizona is a leader in demand-response management. Last summer, when California was struggling with brownouts, Arizonans kept our lights on and air conditioners running during peak electricity usage by using networked thermostats that were remotely dialed down by utilities. Could more be done through FERC to stand-up Demand Response programs?

I firmly believe that system reliability will be highest and rates lowest when all resources have an opportunity to compete to serve customers. Demand Response has historically faced barriers to competing in the wholesale markets, and to being considered in transmission and reliability planning processes. The Commission has made significant progress in addressing these barriers, but more can be done. In 2008, the Commission issued Order No. 719 in order to eliminate barriers to demand response participation in the RTO/ISO markets, and last year issued Order No. 2222 to revise its regulations to remove barriers to the participation of distributed energy resource aggregations in the RTO/ISO markets. The Commission also issues a yearly “Assessment of Demand Response and Advanced Metering” report in accordance with section 1252(e)(3) of the Energy Policy Act of 2005.22 Questions remain regarding how the Commission could do more to ensure demand response is

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appropriately accounted for in planning processes, and to facilitate use of demand response to address reliability needs in both non-RTO and RTO regions. The Commission has a number of open dockets exploring these issues, including Docket No. AD21-10, examining resource adequacy in the evolving electricity sector, Docket No. AD23-13, examining climate change, extreme weather, and electric system reliability, and Docket No. RM21-17, considering the Commission’s Advance Notice of Proposed Rulemaking on transmission planning.
Questions from Ranking Member John Barrasso

**Question 1:** At last week’s FERC open meeting, you said the following, “I am perplexed by my colleagues’ reluctance to employ our section 206 authority to address the widespread failures of CAISO’s markets. How much more serious do the problems in California have to become for my colleagues to agree that we must take affirmative steps to address what is clearly a crisis?” And then you went on to say: “Do we require a total breakdown of the CAISO power system and markets before we will act?”

- Please elaborate on your comments regarding California markets. What course of action do you recommend?

**RESPONSE:**

I recommend a full Federal Power Act (FPA) section 206 investigation into the California markets to investigate evident problems those markets are suffering. Accurate price signals would attract and retain sufficient generation with the right attributes to ensure resource adequacy and system reliability. It would appear that the California ISO (CAISO) markets are failing to achieve that goal. Specifically, we should examine: 1) why CAISO suffers a chronic lack of sufficient generation capacity and has consequently needed to rely on imports of power from other states, 2) the effects of the price suppression in CAISO’s markets caused by state subsidies for intermittent generation, 3) the effect of, and justification for, CAISO’s wide-spread use of reliability must-run agreements which are meant to be rarely employed to relieve temporary reliability problems, 4) CAISO’s apparent over-estimation of the reliability benefits of intermittent and demand response resources; and 5) whether CAISO’s structure and tariff are capable of delivering just and reasonable rates and, if not, what replacement rate should be imposed.

**Question 2:** At Secretary Granholm’s nomination hearing, I asked, in writing, if the Secretary agreed that electricity prices should reflect the proper value of dispatchable resources. She responded, “The ability of generation capacity to respond when called upon is one of many important attributes of performance that should be valued in markets.” (emphasis added). I asked, in writing, the same question to Deputy Secretary Turk at his nomination hearing. He agreed with Secretary Granholm.

- Do you agree with Secretary Granholm that the ability of electric generation capacity to dispatch when called upon should be valued in wholesale markets? If so, how can FERC’s policies help or hinder.

**RESPONSE:**

The FPA clearly divides jurisdiction over the electric system between the states and FERC, reserving to the states the power to choose what type of generation is built within their borders. Our jurisdiction extends to the oversight of rates for wholesale sales of power in interstate commerce. Accordingly, observing that statutory
limit, FERC could accept a tariff filing that reflects the dispatch characteristics and reliability benefits in market prices. All of our organized markets should immediately consider reforms to their markets to take these attributes into account.

**Question 3:** In your testimony concerning the Clean Electricity Performance Program, as reported by the House Committee on Energy and Commerce, “when markets will fail to produce correct price signals as a result of the new price signals and penalties, they are going to fail to accomplish the resource adequacy goals that the markets have taken over from the states… when we fail to have proper resource adequacy achieved by the markets then the lights don’t turn on.”

- Please elaborate on your prior statement and provide examples.

**RESPONSE:**

The competitive bulk power markets are designed to provide reliable electric service at lowest cost. Locational marginal prices signal when and where generation and other investments are needed. These signals, when properly formed by the markets, provide the incentives necessary to attract needed new entry and continue to provide the incentive to retain needed existing generation resources. If Congress were to superimpose a new regime of penalties and subsidies upon our markets, it would profoundly distort these market signals. Generators offering into the market will have to consider not only their own costs, but the offering generators will also have to factor in their performance metrics under the CEP. These price distortions will warp the incentive structures that the markets rely upon to ensure resource adequacy. Worse yet, reliability will suffer. Under the CEP, intermittent resources will become more valuable under the payment and penalty scheme and, despite the fact that they are inherently less reliable, they will be preferred by developers over more reliable, dispatchable generation.

The inevitable result of the systemic market failures caused by subsidy programs such as the CEP is the failure to achieve resource adequacy and the reliability events that will ensue. We have seen such market failures most starkly in the recent reliability events in California. We will see more of them in different regions of the country as long as market prices are distorted by the entry of subsidized intermittent resources that can offer their capacity into the market at suppressed prices, driving the market clearing prices down, and depriving more expensive, dispatchable generation of the revenue needed to remain solvent.
U.S. Senate Committee on Energy and Natural Resources  
September 28, 2021 Hearing: A Review of the Administration of Laws  
Under the Jurisdiction of the Federal Energy Regulatory Commission  
Questions for the Record Submitted to the Honorable James Danly

Question 4: During the hearing Commissioner Clements said, “RTO’s have been saving customers billions of dollars year after year after year for several decades now.”

- Please provide your own views on the matters discussed by Commissioner Clements.

RESPONSE:

It is clear that RTOs have saved customers billions of dollars on electricity costs, but the all-in costs of electric service to customers have not dropped as much as is commonly believed. At the end of the day, what matters to ratepayers is the all-in bill that they receive. That bill includes both the cost of the electricity consumed and the cost of the transmission service required to get the electric power to the ratepayer. As the markets have expanded, transmission costs make up an ever-growing proportion of consumers' all-in energy bills. The Commission should not adopt policies that would encourage a rush to build transmission in the hope that ratepayers will benefit from inexpensive intermittent power without comprehensively studying the rate effects of the transmission service necessary to bring remotely produced intermittent power to ratepayers, and assuring itself that in every case in which transmission is built, that transmission provides economic or reliability benefits to the ratepayers who will ultimately bear the cost. Given the expense of transmission service, I am concerned that much-touted benefits of bringing intermittent power to ratepayers by means of a large-scale transmission build-out may prove illusory.

Commissioner Clements went on to state during the hearing that “RTOs have been saving customers billions of dollars year after year after year for several decades now[ ] [W]e should be thinking about what are the things that are really hard to get done… [O]nce you’ve been in an RTO past some number of years[,] it’s not hard to keep saving customers money.” 1 Her comments appear to imply that the value of RTO membership to the ratepayer is so self-evident that no public utility commission or utility would ever question the benefits of membership. If that, indeed, is the correct implication to be drawn from my colleague’s comments, I respectfully disagree. It is simply untrue that every state and utility believes that our organized markets deliver the best electric service for their citizens and ratepayers. Many regions of the country, like the Southeast, are not in an organized market and have made it clear that they do not want to be.2 We know that, as recently as

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1 Full Committee Hearing To Review Administration Of Laws Within FERC’s Jurisdiction Before the Senate Committee on Energy and Natural Resources, 117th Cong. (Sept. 28, 2021), Full Committee Hearing To Review Administration Of Laws Within FERC’s Jurisdiction… (senate.gov) (Comm’r Clements at 2:23:34-2:24:06).

2 See, e.g., Alabama Power Co., Docket No. ER21-1111-000, at 9 (filed Feb 12, 2021) (describing existing bilateral market and stating that as a result of the Southeast Energy Exchange Market “the bilateral market structure in the Southeast will remain relatively unchanged”), see also Ellie Potter, S&P Global Platts, *Low-cost renewable energy integration causes some experts to question RTO efficacy* (Jul. 23, 2021) (“While RTOs may work well in some regions, state-regulated, vertically integrated utilities are optimal for states like Georgia, said Tricia Pridemore, chairman of the Georgia Public Service Commission said [sic] during a July 22
last month, the Louisiana Public Service Commission began actively considering withdrawal from MISO. 

Dominion availed itself of the fixed resource requirement (FRR) option (thereby relieving itself of its 3-year forward obligation) before the last PJM auction, and one of its affiliates is a filing party in the recent Southeastern Energy Exchange Market submission. As transmission costs rise and price-distortive subsidies imperil resource adequacy and system reliability, I predict more utilities and public utility commissions will see recent reliability events like those in California as admonitions to be heeded.

Question 5: During the hearing Chairman Glick responded to Senator Hoeven:

Commissioner Danly is correct in terms of how he characterizes the law. I think the problem is that the courts keep on telling us that we keep on getting it wrong. And we are not expediting things, what we are doing is delaying things because every time we’re supposed to perform an EIS and we prepare an EA, we just ignore climate change altogether. The courts say you got it wrong, you’ve got to do it all over again. That costs billions of dollars and extra time for these pipeline projects. I think certainty is much more important than trying to decide whether we can do something quickly, and do it on the cheap. Every time we do it on the cheap, the courts tell us we got it wrong... We are attempting to expedite the process, Senator. Thanks for the question. I think one of the things, as we had the discussion several months ago, we were trying to prepare supplemental environmental impact
webinar hosted by the American Enterprise Institute... RTOs introduce more bureaucracy that increases costs for ratepayers, she added.

Amanda Durish Cook, RTO Insider, La. Regulators Threaten MISO Departure over Tx Costs (Oct. 21, 2021) (“Louisiana regulators this week said they will split with MISO if their ratepayers are forced to fund major transmission built in the northern reaches of the RTO’s footprint... Commissioner Eric Skrmetta said he favors giving MISO a one-year notice to remove Louisiana from membership if the transmission plan contains cost sharing between the RTO’s subregions. He also said he would authorize a motion to begin the exit process in November, if MISO moves forward with its provisional postage stamp allocation plan... “We have arrived at the moment where the cost of transmission is going to outweigh the value benefits provided under the market,” Skrmetta said. ‘We are going to be a member of an organization that is simply going to be burdening our ratepayers with costs.’”)

4 See 2021 Dominion Energy Integrated Resource Plan at 11 (“The Company has participated in the [Reliability Pricing Model (RPM)] forward capacity market since 2007, and has satisfied its capacity obligation through the RPM auction through May 31, 2022. In April 2021, the Company elected the FRR alternative, with a five-year commitment beginning June 1, 2022, based on its analysis that FRR would provide customer benefits.”), available at: https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/global/company/2021-de-integrated-resource-plan.pdf?la=en&rev=25df0466d4f49b3e2b81f359b09.

statements, where we see holes. As opposed to drafting a whole new, big environmental impact statement on everything. We are moving forward as quickly as we can. Some of these projects are moving forward and we will be considering them very shortly. But again, if we cut corners, all the courts are going to tell us to do is go back to the drawing board . . .

Later, you addressed Senator Hoeven as follows:

Senator, can I say one thing on this subject . . . which is that there is a difference between a failure by an agency to properly conduct a NEPA review, which would be in the EA [Environmental Assessment] or the EIS [Environmental Impact Statement], and a problem from the agency from an Administrative Procedure Act standpoint, to properly explain the decisions that it made, partially informed by that NEPA document. In almost all of the cases where FERC has been, in one way or another, remanded, those cases are not because of failures in the NEPA document. They are failures of reasoning under the Administrative Procedure Act. Basically, the Court is saying you did not sufficiently explain the reason why you made this choice: connecting the choice made to the facts found. And so saying that we can fix that problem of APA violations by having different, or more robust, NEPA review is simply not the reality of the remands we have gotten from the courts.

Please elaborate on your answer to Senator Hoeven and explain your reasoning.

RESPONSE:

My answer to Senator Hoeven was in response to Chairman Glick’s statement: “[W]hat we are doing is delaying things because every time we’re supposed to perform an EIS and we prepare an EA, we just ignore climate change altogether. The courts say you got it wrong, you’ve got to do it all over again.” I understand Chairman Glick to be saying that the Commission’s climate change analysis in EAs cannot survive legal review, and that he bases his statement on three issuances from the U.S. Court of Appeals for the D.C. Circuit: Vecinos para el Bienestar de la Comunidad Costera v. FERC (Vecinos), Birchhead v. FERC (Birchhead), and Sierra Club v. FERC (Sabal Trail).6

I respectfully disagree with Chairman Glick. First, in none of those cases did the court state the Commission was required to prepare an EIS, instead of an EA, when the Commission stated it could not determine whether the effects of a proposed project on climate change were significant. The cases Vecinos and Sabal Trail involved proceedings in which the Commission prepared an EIS. And while Birchhead involved a proceeding where the Commission prepared an EA, the court never suggested the Commission should have prepared an EIS. Instead, while upholding the Commission’s certificate order, the court discussed in dicta how the Commission should request information on upstream and downstream environmental effects to determine

6 See Chairman Glick September 24, 2021 Letter to The Honorable John Barrasso, M.D., at 2 nn.3-4 (citing Vecinos, 6 F.4th 1321 (D.C. Cir. 2021), Birchhead, 925 F.3d 510 (D.C. Cir. 2019), Sabal Trail, 867 F.3d 1357 (D.C. Cir. 2017)).
whether the Commission is required to consider those effects under NEPA. The court also stated in dicta, “Sierra Club hardly suggests that downstream emissions are an indirect effect of a project only when the project’s ‘entire purpose’ is to transport gas to be burned at ‘specifically-identified destinations.’”

Second, when the court did issue remands—in Vecinos and Sabal Trail—the court did so because of the Commission’s failure to properly explain decisions that it made as required by the Administrative Procedure Act (APA). For example, in Vecinos, the court stated “[o]n remand, the Commission must explain whether 40 C.F.R. § 1502.21(c) calls for it to apply the social cost of carbon protocol or some other analytical framework, as ‘generally accepted in the scientific community’ within the meaning of the regulation, and if not, why not.” Similarly, in Sabal Trail, the court stated, “[w]e conclude that the EIS for the Southeast Market Pipelines Project should have either given a quantitative estimate of the downstream greenhouse gas emissions that will result from burning the natural gas that the pipelines will transport or explained more specifically why it could not have done so.”

When a court remands for APA violations, the court in essence gives the agency an assignment to provide an adequate explanation of the connection between the choice made with the facts found. In the cases cited, the


See id. at 1329-30. See also id. at 1329 (“Because the Commission failed to respond to significant opposing viewpoints concerning the adequacy of its analyses of the projects’ greenhouse gas emissions, we find its analyses deficient under NEPA and the APA.”) (emphasis added) (citation omitted). Id. 1330 (“The Commission has offered no explanation as to why, in light of that finding, it chose to delineate the area potentially affected by the projects to include only those census blocks within two miles of the project sites for the purposes of its environmental justice analyses.”) (emphasis added).

See id. at 1374 (“FERC must either quantify and consider the project’s downstream carbon emissions or explain in more detail why it cannot do so.”) (emphasis added).
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court has not said that the agency has to conduct a new environmental review ab initio or arrive at a particular outcome.

Questions from Senator James E. Risch

**Question 1:** The federal government controls significant swaths of land in the West. In Idaho, over 60 percent of the state is federal lands, and it takes decades to build new transmission projects. This Administration is seeking to bring more renewables onto the grid, but developers looking to build new transmission lines routinely find themselves stuck in a lengthy and difficult federal permitting process. How does FERC plan to address the issue of federal permitting delays associated with developing infrastructure projects that is plaguing the West?

**RESPONSE:**

The Commission does not have jurisdiction over the permitting or siting of electric transmission lines. RTO markets have rules to coordinate regional transmission planning and cost allocation, but siting authority itself remains outside the Commission’s jurisdiction.

**Question 2:** The cybersecurity of our nation’s energy systems has received a lot of attention recently. Does FERC believe it has the authority it needs to properly oversee the cyber security of our energy systems?

**RESPONSE:**

No. As an economic regulator, the Commission has neither the statutory authority nor the requisite expertise to oversee the cybersecurity of our nation’s energy system. Such oversight responsibility is best left to other federal agencies that possess the necessary understanding of the subject matter and the resources to take action when necessary. We collaborate with other federal agencies, the states, and industry to identify cyber security threats and develop best practices for use by industry, but our jurisdiction over cybersecurity is limited to the approval of mandatory standards for reliability of the bulk electric system (BES) and non-federal hydropower projects. The development of reliability standards by the North American Electric Reliability Corporation (NERC) and their approval by FERC employs a deliberate, stakeholder-driven process that typically permits ample time for industry compliance. FERC is a five-member deliberative body without knowledge of the subject matter and is therefore ill-equipped to undertake a mission requiring fast, decisive action in the face of emergent threats.
Question 3: I’ve written to FERC in the past about the national security threat that other Huawei products—namely its solar inverters—pose to U.S. national security. Huawei voluntarily exited the U.S. solar inverter market in 2019, but nothing precludes them from remerging in the future. The U.S. has already taken steps to prohibit the use of Huawei equipment in our telecommunications systems. Has the Commission considered barring Huawei equipment, like its solar inverters, from being used on our electric grid?

RESPONSE:

Supply chain risks pose a significant threat to the reliability of the BES. On September 17, 2020, the Commission issued a Notice of Inquiry seeking comments on strategies to mitigate any potential risks to the bulk power system posed by telecommunications equipment and services produced or provided by entities identified as risks to national security. The NOI identified Huawei Technologies Company and ZTE Corporation as examples of such entities because they provide communication systems and other equipment and services that are critical to bulk power system reliability. To date, the Commission has not taken any action in that proceeding.

DOE, in its role as the Sector Risk Management Agency, issued a request for information in April 2021 on preventing exploitation and attacks by foreign threats to the U.S. supply chain and seeking recommendations on how it can inform and coordinate with regulators, including the Commission, as well as the utility industry. FERC and the DOE have enjoyed a longstanding collaboration on this subject and I have every expectation that our cooperation will continue.

Relatively, in 2018, we approved the first set of NERC CIP reliability standards regarding supply chain risk management that focused on four objectives: 1) software integrity and authenticity; 2) vendor remote access protections; 3) information system planning, and (4) vendor risk management and procurement controls. Order No. 850 also identified potential reliability gaps for NERC to address. In March 2021, we approved revisions to these reliability standards to expand the scope of the assets subject to supply chain cybersecurity requirements and related obligations.

11 E.g., cf. Equip. & Servs. Produced or Provided by Certain Entities Identified as Risks to Nat’l Sec., 172 FERC ¶ 61,224 (2020).
12 Id. P 3 & n.4.
Question 4: The Department of Energy and its national laboratories, including the Idaho National Lab, have very unique expertise and capabilities to test the security of products used on critical infrastructure. Does the Commission currently utilize the cyber expertise at our national laboratories, and do you think there are opportunities for better collaboration with these institutions to ensure the security of our electric grid?

RESPONSE:

While the Department of Energy (DOE) takes the lead role, FERC cooperates with the DOE and the national laboratories in their efforts to examine and better understand the risks to the reliability of the BES. FERC and the DOE have gained a great deal from our collaboration with the national labs and I expect our collaboration on cybersecurity matters to continue.

Question 5: There are efforts in some parts of the country to “electrify” the region’s natural gas system. These efforts are being advanced with the argument that we cannot achieve sufficient greenhouse gas emission reductions without the use of natural gas by industrial, commercial and residential consumers. In the Pacific Northwest, studies have shown that electrifying the natural gas industry in the region could cause the peak load of some electric utilities in the region to double, and pose risks to electric grid reliability and significantly increase costs to consumers. Does FERC have any concerns about the efforts of some states to eliminate the direct-use of natural gas and how that outcome can adversely impact grid reliability and consumer costs? If so, how can FERC engage to communicate or address those concerns?

RESPONSE:

Any policy that increases demand for electricity at the same time as it encourages increasing development and deployment of intermittent resources will inevitably have an adverse impact on system reliability. While so far, these non-dispatchable resources have been accommodated in most regions of the country in relatively large quantities, they have been integrated alongside equally large quantities of reliable baseload and dispatchable natural-gas fired generation. As the penetration of intermittent resources continues, and the percentage of total capacity delivered by intermittent resources rises, the stability of the system will become increasingly difficult to maintain. As explained at a recent FERC technical conference the “electric power sector . . . is increasingly dependent upon reliable natural gas service . . .”13 Policies that undermine the natural gas system by obstructing investment through regulatory uncertainty or which cause supply constraints will make the stability of the electric system ever more precarious. In my role as a Commissioner, I will continue to communicate these concerns in my separate statements. In its orders, FERC can address these concerns in two ways: first, by ensuring that our markets produce just and reasonable rates that properly compensate generators thereby ensuring resource adequacy. Second, by establishing clear, unambiguous policies for the review and assessment of NGA section 7 natural gas pipeline certificates in order to establish the regulatory certainty that

pipeline companies need to secure financing on reasonable terms and rationally allocate capital. This would help alleviate the chilling effect that the Commission’s recent actions have had on investment and spur the development of much-needed pipeline infrastructure.

**Question 6:** Under the Clean Electricity Payment Program (CEPP), utilities have to provide customers with increasing amounts of electricity that the scheme defines as “qualifying,” based on the rate of carbon emissions from its generation. Your testimony before the Committee indicated that you consider it likely that there rapidly will not be enough qualifying electricity.

In restructured electricity markets the price that generators are paid is the market clearing price. In other words, if the market needs 10,000 MW of power, the market buys the cheapest available power until the 10,000 MW need has been filled. If the least expensive power available to provide the last MW needed costs $35/MWh, all of the generators who are selected to meet the 10,000 MW required get paid $35/MWh, even if they bid in at $20/MWh.

If there is a $150/MWh payment to utilities for providing excess qualifying electricity, and, absent those payments, not enough qualifying electricity, why wouldn’t we expect that suppliers of the qualifying electricity will increase their prices substantially, knowing there is high demand and limited supply? Would we see market prices approach $150/MWh in such circumstances? Would prices increase by the amount of the penalty, or $40/MWh above current market prices?

Can you please explain what the CEPP will do to consumer prices, particularly in restructured market areas?

**RESPONSE:**

It is difficult to predict the exact price behavior of the markets should the CEPP (or any similar program) be implemented. That is the very problem. As you correctly point out, the CEPP contemplates large per-megawatt payments to generators that produce qualifying electricity and a smaller, though significant, penalty assessed on a per-megawatt basis for those utilities that fail to achieve stated performance metrics. The CEPP presents two distinct problems, both of which threaten resource adequacy and electric system stability. First, as utilities chase the incentive payment, intermittent resources, which provide minimal reliability benefits, will become more valuable and will be more likely to be financed and built. As more intermittent resources enter the electric system and displace traditional base load and dispatchable gas-fired generation, achieving system stability becomes increasingly difficult. Eventually, in the absence of sufficient dispatchable generation, reliability events become a near certainty. Second, the offer of incentives and imposition of penalties will skew the market prices we rely upon in the organized markets to produce the incentives to retain needed, existing generation and attract new generation. If the price signals are skewed, the orderly entry and exit of resources from the markets becomes impossible. Yes, it is likely that there will be price consequences for the ratepayer. Qualifying electricity, assuming no gamesmanship, will become valuable relatively quickly to the detriment of dispatchable generation. Nevertheless, I am less concerned about the consequences to rates qua rates, than I am about the effect this policy would have in undermining the markets we now rely upon to ensure resource adequacy.
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Questions from Senator Mike Lee

**Question 1:** What are the bounds (if any) of the effects that FERC should consider under NEPA?

**RESPONSE:**

The scope of the environmental effects that the Commission should consider pursuant to NEPA is limited by the Supreme Court case *Department of Transportation v. Public Citizen (Public Citizen)*\(^\text{16}\) and CEQ’s regulations.\(^\text{17}\) In *Public Citizen*, the Court held that NEPA limits an agency’s consideration of effects to those for which the agency is the legally relevant cause and has the discretion to prevent.\(^\text{18}\) The Court also said that “a ‘but for’ causal relationship is insufficient to make an agency responsible for a particular effect under NEPA and the relevant regulations.”\(^\text{19}\) Rather, the Court explained, “NEPA requires ‘a reasonably close causal relationship’ between the environmental effect and the alleged cause’ likened to the ‘familiar doctrine of proximate cause from tort law’ and that ‘courts must look to the underlying policies or legislative intent in order to draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not.’”\(^\text{20}\) The Court also explained that the “rule of reason” that is “inherent in NEPA” limits the scope of an agency’s review to information that is useful to the agency’s decision-making process.\(^\text{21}\)

Consistent with *Public Citizen*, CEQ’s regulations—as updated in 2020—define the “effects” of a proposed action as “changes to the human environment”\(^\text{22}\) that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action.\(^\text{23}\) CEQ’s updated regulations also clarify that “[a] ‘but for’ causal relationship is insufficient to make an agency responsible for a particular effect under NEPA. Effects do not include those effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.”\(^\text{24}\)

\(^\text{16}\) 541 U.S. 752 (2004).

\(^\text{17}\) The Commission complies with CEQ’s regulations “except where those regulations are inconsistent with the statutory requirements of the Commission.” 18 C.F.R. § 380.1.

\(^\text{18}\) See *Pub. Citizen*, 541 U.S. at 767-70.

\(^\text{19}\) Id. at 767.

\(^\text{20}\) Id. at 767 (quoting *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 & n.7 (1983) (*Metro. Edison*).)

\(^\text{21}\) Id. at 767 (citation omitted).

\(^\text{22}\) 40 C.F.R § 1508.1(g).

\(^\text{23}\) Id. § 1508.1(g)(2).
Question 2: Should FERC consider “reasonably foreseeable” effects that are outside the agency’s jurisdiction and control? If so, why? And if not, why not?

RESPONSE:

No. We are prohibited by CEO’s implementing regulations and by Supreme Court precedent from considering any environmental effects that FERC has no ability to prevent because the cause is outside our statutory authority to prohibit. CEQ’s regulations—which the Commission has expressly stated it follows—provide that agencies should not consider “effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.” Further, as in Public Citizen, the Commission’s consideration of effects that it has no ability to prevent would neither assist the Commission nor the public in the Commission’s decision-making process. Put differently, the consideration of effects that an agency has no ability to prevent fails NEPA’s rule of reason.

Question 3: Is considering whether an effect is “reasonably foreseeable” analogous to considering “proximate cause” in tort law?

RESPONSE:

The Court has likened the NEPA requirement that environmental effects have a “reasonably close causal relationship” to the proposed action to the doctrine of proximate cause in tort law. “Reasonable foreseeability” is an element of the proximate cause doctrine in tort law. Another element of proximate cause is whether there is an unbroken causal connection between the act and the effect—that is, whether there was a

24 See 18 C.F.R. § 380.1 (“The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission.”).

25 40 C.F.R. § 1508.1(g)(2).

26 See 541 U.S. at 767-70.

27 Id. at 767 (citation omitted).

28 See Milwaukee & St. Paul Ry. Co. v. Kellogg, 94 U.S. 469, 475 (1876) (“[I]n order to warrant a finding that negligence is the proximate cause of an injury, it must appear that the injury was the natural and probable consequence of the negligence or wrongful act, and that it ought to have been foreseen in the light of the attending circumstances.”); see also Foreseeability, Black’s Law Dictionary (11th ed. 2019) (“Foreseeability, along with actual causation, is an element of proximate cause in tort law.”).
superseding or intervening cause. Accordingly, there are limits to the upstream and downstream effects that FERC can properly consider in its NEPA analysis for section 7 pipeline certificate applications. It is not always possible to know what the ultimate source or destination of the gas that will be transported through a pipeline will be. Such uncertainty means the effects are not reasonably foreseeable and therefore do not fall within the scope of our NEPA analysis. Similarly, many of the sources and destinations of natural gas (like upstream production facilities or downstream manufacturing) have alternate supplies of natural gas and are subject to state, not FERC jurisdiction. In such a case FERC would not be the legal proximate cause of any effects caused by those facilities and FERC would be unable, under the Supreme Court’s decision in Public Citizen, to consider those effects.

**Question 4** Do you believe there is any difference between “proximate cause” and “reasonable foreseeability”??

**RESPONSE:**

Please see my response to your Question 3.

**Question 5** Does the Supreme Court’s decision in Department of Transportation v. Public Citizen, 541 U.S. 752 (2004), impact your “reasonable foreseeability” analysis under NEPA? If so, how?

**RESPONSE:**

The Supreme Court’s decision in Public Citizen states that the consideration of environmental effects is limited by the doctrine of proximate cause. The Commission’s consideration of environmental effects of the proposed projects therefore should be limited to those that are the natural and probable effects of the Commission action and where there is no independent, intervening cause between the Commission’s action and the effect.

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29 See Milwaukee & St. Paul Ry. Co. v. Kellogg, 94 U.S. at 475 (stating that the question for proximate cause is “was there an unbroken connection between the wrongful act and the injury, a continuous operation? Did the facts constitute a continuous succession of events, so linked together as to make a natural whole, or was there some new and independent cause intervening between the wrong and the injury?”).

30 See 541 U.S. at 767.
Question 6: While NEPA uses the terms “environmental impacts” and “environmental effects” it does not mention the term “direct effect” or an “indirect effect” in the statute. How would you approach the decision on whether to consider “indirect” or “direct” effects in a decision before FERC?

RESPONSE:

The Commission’s consideration of environmental effects should be consistent with CEQ’s implementing regulations and Public Citizen. In July 2020, CEQ issued its final updated regulations implementing NEPA to be effective September 15, 2020. CEQ’s updated regulations abandoned the categories of “direct” and “indirect” effects in order to “reduce confusion and unnecessary litigation.” Instead, CEQ’s updated regulations “simplified” the definition of environmental effects to “changes to the human environment from the proposed action… that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action.” The Commission’s regulations require the scope of environmental reviews that began on or after September 15, 2020, be consistent with CEQ’s updated regulations.

For environmental reviews that began before September 15, 2020, the Commission applies CEQ’s 1978 regulations (as amended in 1986). CEQ’s 1978 regulations defined “direct effects” as those “which are caused by the action and occur at the same time and place” and “indirect effects” as those “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” CEQ’s 1978 regulations also provided examples of an indirect effect: “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

32 Id. at 43,343.
33 Id.
34 40 C.F.R. § 1508.1(g).
35 See 18 C.F.R. § 380.1 (“The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission.”)
36 40 C.F.R. § 1508.8(a) (1978).
37 Id. § 1508.8(b).
38 Id.
Although CEQ’s 1978 regulations subdivided the term “environmental effects,” the scope of an agency’s environmental review under the prior regulations is the same as the current regulations. That is because Public Citizen held that an agency’s consideration of effects under NEPA are limited to those for which the agency is the legally relevant cause and has the discretion to prevent.\textsuperscript{39}

\textbf{Question 7:} How do you reconcile the use of a “proximate cause” consideration with an “indirect” effect?

\textbf{RESPONSE:}

Under NEPA, an agency’s consideration of environmental effects (including “indirect” effects under CEQ’s superseded implementing regulations) is limited to effects that have “a reasonably close causal relationship” between the environmental effect and the alleged cause.\textsuperscript{40} The Court has likened this limit to the “familiar doctrine of proximate cause from tort law,”\textsuperscript{41} meaning that an agency must be the legally relevant cause of the environmental effect. Put differently, FERC should only consider effects (including “indirect” effects for environmental reviews that began before September 15, 2021) for which there is no intervening actor and the agency had the statutory authority to prevent.

\textbf{Questions from Senator Steve Daines}

\textbf{Question 1:} Commissioner Danly, Europe and the United Kingdom are experiencing record high energy prices with LNG prices spiking to 500% over the previous year. The United States is blessed with an abundance of natural gas and hydraulic fracturing has resulted in the ability to access natural gas in a safe, reliable and economic way. Do you believe that actions taken by the Biden Administration to eliminate natural gas development, transportation, and electric generation could lead to similar increases in energy prices for American consumers?

\textbf{RESPONSE:}

Yes, recent Commission actions have created a great deal of regulatory uncertainty for the natural gas industry that will result in higher energy prices for American consumers. Natural gas pipelines require hundreds of millions of dollars to build and operate. Because natural gas pipeline companies no longer have clarity regarding the standards that will be applied in evaluating their project applications, the industry is now struggling to secure the capital necessary to pursue new projects or even upgrade existing projects. In a

\textsuperscript{39} \textit{See Pub. Citizen}, 541 U.S. at 767-70.

\textsuperscript{40} \textit{Pub. Citizen}, 541 U.S. at 767 (quoting \textit{Metro. Edison}, 460 U.S. at 774).

\textsuperscript{41} Id. (quoting \textit{Metro. Edison}, 460 U.S. at 774).
properly functioning market, higher prices should create incentives for producers to invest in increased production. I worry that—even with prices rising—producers will be unable to attract the capital necessary to make the investments that would ultimately result in price stabilization.

**Question 2:** Commissioner Danly, do you believe the U.S. should play a role in supplying our allies with U.S. LNG?

**RESPONSE:**

It is strategically critical for our allies to have access to LNG from the United States. Abundant, inexpensive energy imports relieve our allies of reliance on other energy sources. LNG exports benefit the American economy and American workers.

**Question 3:** Commissioner Danly, do you agree that the development and use of natural gas for electricity has helped lead to lower greenhouse gas emissions?

**RESPONSE:**

It is generally accepted that the shale revolution has contributed to the reduction in greenhouse gas emissions. As natural gas has become more plentiful, prices have dropped, and natural gas-fired generators have replaced generators that employ other fuels with different emissions profiles.

**Question 4:** Commissioner Danly, do you believe that it is the Commission’s role to affect the pace and adoption of energy transformation?

**RESPONSE:**

No. It is the Commission’s role is to carry out its statutory duty to ensure just and reasonable rates for wholesale power sales and transmission service, approve mandatory reliability standards, and to issue certificates to natural gas pipelines found to be in the public convenience and necessity. The Federal Power Act reserves to the states the right to determine the type and location of electric generators within their borders.
Questions from Senator John Hoeven

**Question 1:** Recent actions seem to indicate that the Commission is moving to put carbon emissions reductions ahead of its traditional role of facilitating the reliable delivery of natural gas and electricity to consumers. For example, FERC is delaying or even reopening pipeline certificates, the latter which may be questionable under FERC’s authority under existing statutes, to further add carbon emissions considerations.

Moreover, the Clean Electricity Performance Program (CEPP), currently under consideration in the House of Representatives, would require a dramatic increase in the use of intermittent clean energy sources to generate electricity.

a. Is FERC jeopardizing the reliability and stability of energy supply and delivery in order to emphasize a focus on carbon emission impacts?

**RESPONSE:**

Yes. I am concerned that the Commission’s recent focus on carbon emissions will jeopardize reliability. The Commission’s recent and anticipated actions in its natural gas certificate program have created a great deal of uncertainty and have the potential to dramatically increase the cost of transporting natural gas. These recent actions include those that I discuss below in response to your third question. Any increase in cost and interruption of the supplies of natural gas will have consequences for the reliability of the electric system because it depends upon natural gas-fired generation for system stability.

In addition, the Commission has taken actions, like the recent approval by operation of law of PJM’s Focused MOPR, that effectively encourage price-distorting subsidies for intermittent generation. As intermittent generation makes up an ever-growing percentage of the capacity in our electric system, and as long as our markets do not take full account of generators’ reliability attributes, ensuring the stability of the electric system will become increasingly challenging. We have already witnessed the consequences of such policies in the California reliability events of August 2020.

b. If the proposed CEPP were to be enacted, would a focus on carbon emissions regarding the approval of natural gas pipelines and the build-out of high voltage transmission lines come at the potential expense of reliability?

**RESPONSE:**

Yes, please refer to my answer to part (a) of this question. In addition, the build-out of transmission can have an effect on reliability. Assuming the transmission projects are justifiable, i.e., they reduce ratepayer costs or provide reliability benefits to the transmission system, transmission projects that deliver inexpensive intermittent generation could displace needed, dispatchable resources which provide the reliability attributes required to ensure system stability.
c. Given the extreme weather events this year, which dramatically curtailed the delivery of electricity or resulted in large increases in electricity rates, should the Commission focus its primary responsibility to timely approve needed energy supply infrastructure, such as natural gas pipelines, and voluntary electric resource adequacy markets that will match supply to load?

RESPONSE:

The Commission is required to expeditiously review natural gas infrastructure applications in accordance with the Natural Gas Act (NGA). As I have indicated, uncertainty and delays chill investment and drive up risk premiums, which in turn increases transportation costs. Such a result is contrary to the principal purpose of the NGA “to encourage the orderly development of plentiful supplies of . . . natural gas at reasonable prices.”

Further, unnecessary delays are inconsistent with the language in NGA section 7(e) that states the Commission “shall” issue certificates to proposed facilities that are in the public convenience and necessity.

In addition, I encourage all of our jurisdictional markets to consider tariff revisions that would recognize the actual reliability attributes of generation resources.

**Question 2:** We have heard from constituents regarding the Commission’s advanced notice of proposed rulemaking (ANOPR) pertaining to regional transmission planning and cost allocation (RM21-17). The ANOPR is seeking feedback on some 200 questions and proposals regarding complex transmission planning processes.

While transmission planning policies should be examined on a regular basis to ensure efficient transmission development, concerns have been raised that many of the proposals implied within the notice would interfere with existing, well-established processes currently in place within the regional transmission organizations.

Will you ensure that this proposed rulemaking will not impact grid resiliency, create unfair cost allocations, increase electric rates, or result in additional burdensome oversight in planning, siting, or constructing new transmission?

**RESPONSE:**

The Commission is still reviewing the comments submitted in the ANOPR proceeding, but maintaining reliability at just and reasonable rates is the Commission’s statutory responsibility.

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42 NAACP, 425 U.S. at 669-70.

43 15 U.S.C. § 717(f(e)).
The Federal Power Act does not confer upon the Commission the authority to regulate the planning, siting, or permitting of transmission facilities. The state public utility commissions bear responsibility for scrutinizing transmission projects, while the Commission’s authority is limited to approving or rejecting transmission service rate filings. Transmission rates are only just and reasonable if they follow the cost-causations principles articulated by the courts in which ratepayers can only be charged transmission rates that are “roughly commensurate” with the benefits they receive from that transmission. 44

**Question 3:** In recent months, natural gas prices in the U.S. have doubled, to over $5 per million Btu. Certain areas of the country, including New England, are at risk of even higher price spikes because of dependence on natural gas from foreign sources, and competition from Europe, which faces a gas crisis of its own.

a. Are you concerned about regions like New England that have been reliant on imports of natural gas from Russia and other foreign countries to keep the lights on and heat their homes during the winter?

**RESPONSE:**

As we witnessed last winter in Texas, reliable—affordable—supplies of natural gas are vital for the health, well-being, and prosperity of the American people. The Commission is charged with implementing the Natural Gas Act, which the Supreme Court said was enacted in order “to encourage the orderly development of plentiful supplies of . . . natural gas at reasonable prices.” 45

Commission staff recently issued the Winter Energy Market and Reliability Assessment 2021-2022 (Winter Assessment), which states, “[h]igh global LNG prices are likely to persist into the northern hemisphere’s winter, which has led to very high winter prices for the New England regional market, as it leans on LNG imports to meet peak season demand.” 46 The Winter Assessment also states, “LNG imports supplying New England limit the impact of pipeline capacity constraints in the region. These LNG imports include the Everett LNG terminal and the Northeast Gateway facility, both in Massachusetts, and the Canaport facility, located just north of the U.S.-Canadian border in New Brunswick. The expected high natural gas prices in New England this winter could encourage more imports into the region.” 47

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45 *NAACP*, 425 U.S. at 669-70.
47 Winter Assessment at 16.
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Even if there are more imports, the gas transportation constraints faced by New England put them in a precarious position. Supply constraints will cause gas (and electricity) prices to rise and an actual disruption of natural gas pipeline service will result in both electric reliability problems and natural gas shortages.

b. Will you support more pipeline infrastructure to ensure states are better connected to our abundant domestic gas resources?

RESPONSE:

Consistent with the mandate in section 7 of the NGA, I will vote to approve pipeline facilities that I find are in the public convenience and necessity.48 I also acknowledge that, as the Supreme Court put it, the principal purpose of the NGA is "to encourage the orderly development of plentiful supplies of . . . natural gas at reasonable prices."49

c. How can we improve and streamline the permitting process for new gas pipelines, and is this something Congress can also help address?

RESPONSE:

In my view, there are two ways that the permitting process for new natural gas pipelines can be improved. First, by the Commission complying with its statutory obligations under the NGA and the Administrative Procedure Act. Second, as you and twenty-four of your colleagues suggested, by not subjecting pending applications to a continually shifting regulatory terrain and newly contemplated considerations that are unnecessary, fall outside the current Certificate Policy Statement, or go beyond the Commission’s statutory authority.50

48 See 15 U.S.C § 717(f)(e) ("[A] certificate shall be issued to any qualified applicant therefor, authorizing the whole or any part of the operation, sale, service, construction, extension, or acquisition covered by the application, if it is found that the applicant is able and willing properly to do the acts and to perform the service proposed and to conform to the provisions of this chapter and the requirements, rules, and regulations of the Commission thereunder, and that the proposed service, sale, operation, construction, extension, or acquisition, to the extent authorized by the certificate, is or will be required by the present or future public convenience and necessity . . . \(\)") (emphasis added)

49 NAACP, 425 U.S. at 669-70.

Over the last nine months, the Commission has not met its statutory obligations and has unexpectedly changed its rules and process without explanation—creating regulatory uncertainty and unnecessary delay. I will highlight a few examples. First, in February the Commission reopened a final, non-appealable certificate order to consider imposing air quality and pipeline safety measures.\textsuperscript{51}

Second, in March, the Commission established an “eyeball test” to determine the significance of greenhouse gas emissions from the proposed project facilities.\textsuperscript{52} I dissented in this proceeding and equated the majority’s “eyeball test” to posting a speed limit with a question mark instead of a number, leaving it to the police officer to decide whether you were speeding.\textsuperscript{53}

Third, in May through July, Commission staff, under the supervision of the Chairman, announced it would issue supplemental Environmental Impact Statements (EISs) for seven project proposals for which it had issued Environmental Assessments (EAs).\textsuperscript{54} Four of those were published last year.\textsuperscript{55} Chairman Glick has stated that projects filed in good faith is contrary to the otherwise equitable application of the Policy Statement that all stakeholders expect. At a minimum, these projects should not be subject to newly contemplated considerations that fall outside the scope of the current Policy Statement or go beyond the Commission’s statutory authority.\textsuperscript{“”}

\textsuperscript{51} Algonquin Gas Transmission, LLC, 174 FERC ¶ 61,126 (2021).

\textsuperscript{52} See N. Nat. Gas Co., 174 FERC ¶ 61,189 (2021), Catherine Morehouse, \textit{Glick Danly spar over gas pipeline reviews as FERC considers project’s climate impacts for first time}, Utility Dive (Mar. 19, 2021), https://www.utilitydive.com/news/glick-danly-spar-over-gas-pipeline-reviews-as-ferc-considers-projects-climate-impacts/597016/ ("We essentially used the eyeball test," he said, adding that based on that analysis, "it didn’t seem significant in terms of the impact of those emissions on climate change.") (quoting Chairman Glick).

\textsuperscript{53} N. Nat. Gas Co., 174 FERC ¶ 61,189 (Danly, Comm’r, dissenting at P 16).


\textsuperscript{55} See ANR Pipeline Company et al., Environmental Assessment, Docket Nos. CP20-484-000 and CP20-485-000 (Dec. 4, 2020), Iroquois Gas Transmission System, L. P., Environmental Assessment, Docket No. CP20-48-000 (Sept. 30, 2020), North Baja Pipeline, LLC, Environmental Assessment, Docket No. CP20-
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these supplemental Environmental Impact Statements “ensure that our certificate orders are legally durable documents on which project developers can rely.” 56 Chairman Glick supports his statement by citing three opinions issued by the U.S. Court of Appeals for the D.C. Circuit. 57 None of those cases state that an EA is inadequate and an EIS is required where the Commission states it cannot determine the significance of a project’s impact on climate change.

Among the projects that have been delayed, five have had their Final EISs issued—and they reach the same conclusion that the EAs did: that FERC staff is unable to assess the project’s impact on climate change. 58 It should be recognized that the purpose of NEPA “is not to generate paperwork . . . but to provide for informed decision making and foster excellent action.” 59

This new practice affects all pending certificate projects. It is evident that the Commission currently has a de facto practice of preparing an EIS for proposed projects that add any incremental capacity or compression. Since issuing the notices, the Commission has issued only two EAs: 1) in the Mountain Valley Pipeline Amendment Docket No. CP21-57-000; 60 and 2) in the Texas Eastern Peruakack Compressor Units Replacement Project Docket No. CP21-31-000. 61 Notably, the Mountain Valley Project involves no changes to operations or service, 62 and the Texas Eastern Project is a replacement project that involves no incremental service and results in a decrease of greenhouse gas emissions. 63 Commission staff has announced no plans to issue other EAs


56 Chairman Glick September 24, 2021 Letter to The Honorable John Barrasso, M.D., at 2.

57 Id. at 2 nn 3-4 (citing Vecinos, 6 F. 4th 1321; Birchhead, 925 F. 3d 510; Sabal Trail, 867 F. 3d 1357).

58 See, e.g., Columbia Gulf Transmission, LLC, Final Environmental Impact Statement, Docket No. CP20-527-000, at 1 (Sept. 21, 2021) (“FERC staff continues to be unable to determine significance with regards to climate change impacts.”).

59 40 C.F.R. § 1500.1(a).


61 Texas Eastern Transmission, LP, Environmental Assessment, Docket No. CP21-31-000 (June 4, 2021).

62 See Mountain Valley Pipeline, LLC, Environmental Assessment, Docket No. CP21-57-000 at 3-4.

63 See Texas Eastern Transmission, LP, Environmental Assessment, Docket No. CP21-31-000 at 43-44.
before the end of 2021. Further, other than a proposal to abandon a project in place, none of the remaining pending projects have received a notice announcing Commission staff’s intent to prepare an EA or the schedule of an EA.

Prior to this change, the Commission’s predominantly issued EAs. It takes more than double the time to complete the EIS process than the EA process. Due to delays and uncertainty, two pipelines have withdrawn their applications.

On September 20, 2021, Eastern Gas Transmission and Storage, Inc. withdrew an application for a section 7 certificate which it filed nearly six months prior, requesting permission to build minor upgrades to three compressor stations in Pennsylvania and Virginia. It did so because, in their words, “[d]espite [the project’s] limited scope, the Commission has not taken action to prepare an Environmental Assessment . . . .”

More recently, on October 12, 2021, Adelphia Gateway, LLC (Adelphia) withdrew its request to install and operate an additional electric-motor-driven compressor unit at its already authorized Marcus Hook Compressor Station. It did so because “as a result of the extension of the environmental review through the supplemental EIS process and a prolonged Commission review process, the Project has been delayed well beyond Adelphia’s expectations and, more specifically, there is significant uncertainty regarding when an order will issue in this docket. In light of this, Adelphia has decided not to continue the development of the Project.”

I am concerned that more pipelines will similarly withdraw their applications because of these delays and uncertainty. Of the remaining six pending certificate applications that received a supplemental EIS, on average,

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65 The average number of months for completing the EAs process for NGA section 3 and section 7 in calendar years 2011 to 2016 was 9.4 months and from 2017 to 2021 was 10.5 months. In comparison, the average number of months for completing the EIS process in calendar years 2011 to 2016 was 21.4 months and from 2017 to 2021 was 26.1 months.


67 Id. at 1.

68 Adelphia Gateway, LLC, October 12, 2021 Withdrawal of Prior Notice, Docket No. CP21-14-000 (Accession No. 20211012-5713).

69 Id. at 2.
those applications were filed 18.3 months ago. 70 It is unclear how much longer the pipeline, its investors, and shippers can wait.

Questions from Senator James Lankford

Question 1: Commissioner Danly, at the Energy & Natural Resources Committee hearing, there was a discussion regarding the need to provide natural gas infrastructure project developers guidance on how FERC considers climate in the project review process. How will the social cost of carbon be utilized as you consider projects?

RESPONSE:

The Commission has explained in numerous orders that the use of the Social Cost of Carbon is not appropriate in project-level NEPA review, and cannot meaningfully inform the Commission’s decisions on whether a proposed project is in the public convenience and necessity. 71 The Courts have repeatedly upheld the Commission’s determination in this regard in the face of repeated challenges. Whether to use the Social Cost of Carbon is one of the many subjects at issue in the Commission’s pending Notice of Inquiry on the Certification of New Interstate Natural Gas Facilities. 72 My expectation is that, should the Commission reverse course and begin employing the Social Cost of Carbon in reviewing NGA section 7 certificate applications, the results of that analysis will be used either to determine what type and magnitude of mitigation to impose upon a project, or it will be used to inform the Commission’s determination as to whether the benefits of the project outweigh its harms. I am skeptical as to the legality of the imposition of such mitigation and without clear guidelines, the employment of the Social Cost of Carbon to determine project impacts may ultimately result in a series of arbitrary, ad hoc decisions which will further chill investment in much-needed infrastructure.


71 See, e.g., Mountain Valley Pipeline, LLC, 161 FERC ¶ 61,043, at P 296 (2017), order on reh’g, 163 FERC ¶ 61,197, at PP 275-297 (2018), aff’d, Appalachian Voices v. FERC, No. 17-1271, 2019 WL 847199, at *2 (D.C. Cir. Feb. 19, 2019) [“The Commission” gave several reasons why it believed petitioners’ preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.”).

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Question 2: Commissioner Danly, is it FERC’s role to affect the pace of the energy transition? If so, does this directive exist in statutory law?

RESPONSE:

No. It is the Commission’s role to carry out its statutory duty to ensure just and reasonable rates for wholesale power sales and transmission service, approve mandatory reliability standards, and to issue certificates to natural gas pipelines found to be in the public convenience and necessity. The Federal Power Act reserves to the states the right to determine the type and location of electric generators within their borders.

Question 3: Commissioner Danly, do you believe that natural gas exports can lower emissions by displacing other heating sources like wood and fuel oil?

RESPONSE:

Though the decision to export natural gas is outside of FERC’s jurisdiction, natural gas exports can have many benefits including the displacement of fuels with less desirable attributes. Access to affordable and reliable energy, like natural gas, also provides benefits by alleviating poverty and improving the quality of life.

Questions from Senator Catherine Cortez Masto

Questions: As we look to deploy more Electric Vehicles (EV) on our nation’s roads and build out necessary charging infrastructure, researchers and industry groups are working to identify where new cyber vulnerabilities may arise.

With this in mind, I’ve pushed a package of bills to advance EV adoption — including an EV Commission and National Strategy (S. 2040) that was included in the bipartisan infrastructure package. Federal agencies, along with the public and private sectors, must work together on a plan to effectively identify opportunities and barriers — such as bulk power and cyber threats — to properly make this transition in transportation.

a. What are FERC’s plans to ensure that the national electric grid can support EV charging for both public and private medium and heavy duty fleets?

RESPONSE:

Should electrification of transportation increase demand for electricity, FERC must ensure that the price signals in our organized markets create the correct incentives to attract and retain the generation needed for resource adequacy. Beyond our role in setting rates for interstate wholesale sales of electricity, FERC’s jurisdiction is limited. Most EV charging will happen at the distribution level, which is a subject matter that is reserved to the states to regulate.
b. Could an EV Commission help boost collaboration among federal agencies, as well as with local, state, and industry stakeholders, to help the grid withstand cyber threats in the future?

RESPONSE:

A deliberative body, such as a commission, is ill-suited to the task of responding to the continually evolving threat of cyber-attacks. To the extent government action is necessary, that responsibility should be placed in the hands of an executive branch agency that understands the subject matter and is able to respond to rapidly-developing threats.
Statement for the Record before the U.S. Senate
Committee on Energy and Natural Resources

Full Committee Hearing To Review Administration Of Laws Within FERC’s Jurisdiction

Tuesday, September 28, 2021
Submitted by the Niskanen Center

Introduction

Energy and Natural Resources Chairman Manchin, Ranking Member Barrasso, and Members of the Committee, thank you for holding this important hearing to assess how the Commission is meeting its goals.

The Niskanen Center represents landowners whose property is threatened by natural gas pipelines across the county in court and in FERC’s administrative proceedings, and is significantly involved in developing national policy options for the next generation of electrical transmission infrastructure. Niskanen appreciates this opportunity to bring to the Committee’s attention some specific concerns regarding two issues: (1) how poorly landowners are treated under the Natural Gas Act when pipelines seek to take their property for interstate natural gas pipelines, and (2) the need for Congress to create federal electric transmission siting authority. ²

FERC Should Properly Address Adverse Impacts to Landowners

FERC is engaged in three processes affecting landowners that deserve Congressional attention: creation of the Office of Public Participation, which FERC delivered to Congress the required

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¹ Submitted on behalf of the Niskanen Center by Shanna Fricklas, Government Affairs and Law Fellow (sfricklas@niskanencenter.org) and David Bookbinder, Chief Counsel (dbookbinder@niskanencenter.org). The Niskanen Center is a 501(c)(3) advocacy organization that works to change public policy through direct engagement in the policymaking process.
² Congress is considering both stand-alone and backstop federal transmission siting authority in the SITE Act (H.R.4971/S. 2651, To amend the Federal Power Act to establish a procedure for the siting of certain interstate electric transmission facilities, and for other purposes) and in H.R.3684, the Infrastructure Investment and Jobs Act (Section 40105, siting of interstate electric facilities).
report on in June; review of FERC’s Certificate Policy Statement, which describes how FERC performs the “public convenience and necessity” analysis required to certify new natural gas pipelines; and Order 871, clarifying the Commission’s rehearing process.

Landowners face something in FERC’s pipeline proceedings that no other stakeholder does: the potential permanent taking of their land, home, and/or livelihood. Despite these incredibly high stakes, landowners currently experience an overwhelming number of obstacles throughout FERC’s process, which is largely a rubber stamp exercise: FERC has denied only 6 certificates out of more than 1,000 proposals over the past 20 years, and has denied every single landowner appeal in the last 12 years.4

Office of Public Participation. Niskanen commends FERC for making the Office of Public Participation (OPP) a top priority following the Consolidated Appropriations and Covid Relief Act of 20205, and for giving affected landowners’ feedback and experiences serious consideration.6 FERC’s June 24th OPP report to Congress conveys that it generally understands the needs of various stakeholders, but the details of OPP operations are left to the Director’s discretion. The Commission’s plan for the OPP includes the appointment of a Director, staff, and brief timeline for growth over the next four years, but the report did not include any benchmarks for determinations of success, firm plans for stakeholder engagement, or any agenda or details on how the OPP would implement commenters’ proposed improvements in public participation in any of the Commission’s processes. If properly planned and staffed, the OPP could address many of the issues that arise from FERC’s authority under the Natural Gas Act, including the extraordinary power to confer eminent domain authority. Unfortunately, Section 4202 of H.R. 3684, the Infrastructure Investment and Jobs Act, amends the provision that originally called for the OPP enacted more than 40 years ago7, eliminating the four year term for the Director and granting the Chairman unilateral oversight over the role which effectively politicizes the position and constricts the OPP’s independence.

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Niskanen also believes that one of the OPP’s responsibilities should be providing notice to landowners. While the Constitution (and Natural Gas Act) require that FERC provide such notice, FERC instead delegates this task to the pipeline companies, the entities with the least possible interest in providing it effectively or with care. Even more troubling is that FERC has admitted that it does not bother to confirm whether pipeline companies ever provide any such notice, and the Commission has gone so far as to affirmatively deny that either the Fifth Amendment or the Natural Gas Act requires that the federal government be the one to inform landowners that a federal agency is considering whether to grant a pipeline the authority to take their property.

FERC should also use OPP as an opportunity to completely overhaul the information provided to landowners in such notices, as the current notice format is notoriously vague and confusing. Information provided must be clear; time between notice and the intervention deadline must be standardized and extended, and support provided for intervenors should be considerate of what they have at stake. Finally, FERC should grant automatic party status for affected landowners and streamline proceedings.

At a minimum, OPP should assist landowners in overcoming the continuous obstacles over the entirety of FERC’s multi-year proceedings. Assistance with filing, improving use of FERC’s eFiling system, elimination of overly burdensome service requirements, as well as providing some level of intervenor funding will be necessary for the OPP’s success. FERC will also need to undertake a rulemaking in order to provide the necessary intervenor funding that would enable landowners the opportunity to participate in those legal proceedings.

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9 15 U.S.C. 717f(c)(1)(B) (requiring FERC to provide notice to all “interested persons”).
10 18 CFR 157.6(d)(1) (delegating FERC’s landowner notice responsibility to certificate applicants);
11 18 CFR. 157.6(d)(3) (describing the information applicants are required to provide affected landowners).
12 Because “a pipeline applicant, not FERC, is the party that may ultimately have statutory eminent domain authority, and [sic] thus the notice obligations are the applicant’s.” Final Brief of Appellee, ECF No. 1897604, p. 48, Niskanen Center v. FERC, No. 20-5028 (oral argument scheduled held September 13, 2021). The only FERC oversight mechanism in place over the pipeline sending affected landowners notice is the requirement that Certificate applicants submit a list of the names and addresses of the landowners it allegedly notified. 18 CFR 157.6(d)(5). FERC has taken the position that these lists are “confidential” and not disclosable under FOIA, an issue now before the D.C. Circuit in Niskanen Center v. FERC. These lists should be made public and readily available to any interested party who requests a copy.
13 Niskanen OPP Comments at 3-6.
11 Id. at 7-10.
13 Id. at 11.
Certificate Policy Statement. FERC’s pending update of its Certificate Policy Statement will outline how the Commission will make future needs determinations for natural gas pipelines, and Niskanen hopes that it will give landowners appropriate consideration in this analysis. Niskanen also hopes that the Commission actually implements any such changes, because FERC’s historic practice has been to cite the current Policy Statement only when convenient. For example, the current Policy Statement warns against accepting precedent agreements as the sole evidence of market need and giving affiliate precedent agreements equal weight as precedent agreements with third parties; it also encourages FERC to look behind such affiliate precedent agreements to see whether in fact they show genuine market demand. Yet FERC routinely ignores each of these provisions, a practice that recently caught up with the Commission in Environmental Defense Fund v. FERC, 2 F.4th 953 (D.C. Cir. 2021).

Niskanen would also like to see a revised Policy Statement that articulates a coherent test to balance a pipeline’s public benefit against its impacts on landowners (as well as other adverse impacts, such as environmental concerns). It is impossible for the Commission to properly determine whether a pipeline is necessary for “the public convenience and necessity” if the Commission continues to ignore adverse impacts on landowners. This includes the Commission’s misguided belief that landowners who sign easements under duress (i.e., the threat of eminent domain), do so “voluntarily.” Furthermore, its policy of not considering how extensively a pipeline will use eminent domain, FERC elides in favor of its invented metric of “avoided adverse effects” on landowners; in other words, FERC’s analysis of impacts on landowners is limited entirely to “here’s how it could have been worse.”

Order 871. Niskanen applauds FERC’s recent Order 871 (and subsequent revisions in Orders 871-A through 871-C), which established that FERC will not allow pipeline certificate holders to exercise eminent domain or begin construction before landowners can seek judicial review of FERC’s certificate decision. Still, FERC has not defined what “construction” and “pre-construction” activities are, preferring to make this a pipeline-by-pipeline determination. This has resulted in including clear-cutting trees and digging pipeline trenches under the rubric of “pre-construction” activities. This practice causes unnecessary irreparable harm, particularly when FERC subsequently reroutes the project or the pipeline company abandons the project entirely, as has happened recently with the Constitution and Atlantic Coast Pipelines.

14 The Niskanen Center and Affected Landowners’ Motion to Intervene and Joint Comments on the Commission’s Renewed Notice of Inquiry on the Certification of New Interstate Natural Gas Facilities. 174 FERC 61,125. Docket PL18-1-000 (Feb.18, 2021).
As Chairman Raskin of the House Civil Rights and Civil Liberties Subcommittee stated, FERC is supposed to protect the people. Niskanen is glad to see so much Congressional attention, via a multitude of committee hearings and legislative proposals, focused on FERC and its pipeline review processes. Niskanen further hopes that this attention continues to better protect landowners as the Constitution, the Natural Gas Act, and fundamental fairness dictate as FERC implements the Office of Public Policy, its revised Certificate Policy Statement, and Order 871.

Transmission Siting

Expanding and updating America’s electric transmission system is critical to powering the 21st century economy. The difficulty of planning and siting interstate transmission is the largest issue facing the development of otherwise economically viable generation projects. High voltage transmission capacity delivering electricity over long distances is a critical and cost-effective mechanism in decarbonizing our electricity sector and modernizing the grid.

The changing energy landscape must include streamlining transmission siting and planning, as the decentralized siting and permitting process for transmission lines is the single most significant cause of project delays and cancellations. With FERC’s focus on reliability and economic value in decision-making, new technologies clearly can thrive but will only be able to do so when they are connected to end users. Clear and consistent guidelines and evaluation metrics can only come from a single governing agency, and would have the valuable impact in allowing transmission developers, utilities, and generators to gain the benefits of distributed energy resources available now and in the future.

The Energy Policy Act of 2005, now Sections 216 and 219 of the Federal Power Act, granted FERC “backstop” siting authority when State approval is withheld for a project within a National Interest Electric Transmission Corridor (NIETC, a region or regions identified by the Department

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14 Aaron Bloom et al., The Value of Increased HVDC Capacity Between Eastern and Western U.S. Grids: The Interconnections Seam Study, NREL/JA-6420-76580 (National Renewable Energy Laboratory, October 2020); Patrick Brown and Audun Botterud, “The Value of Inter-Regional Coordination and Transmission in Decarbonizing the US Electricity System,” Joule 5, no. 1 (December 2020): 115-134.
of Energy following a congestion study. This authority has been substantially undercut by the Fourth Circuit decision that “withheld” does not include denial, in effect neutering FERC’s ability to hold any power in navigating the dynamic and time-consuming requirements involved in interstate transmission coordination. Niskanen respects FERC’s and the States’ carefully balanced interests, as well as the Department of Energy’s authority to designate NIETCs in areas where it determines there are transmission constraints or congestion. Still, there are reasons Congress initially provided transmission siting authority in NIETCs to FERC, which has relevant siting experience in interstate natural gas pipelines, including coordinating various permitting requirements across agencies. Congress should reaffirm and strengthen this authority as well as exploring additional avenues such as new federal eminent domain authority for transmission siting, including characteristics of transmission lines that are primarily in the federal interest due to the regional nature of benefits provided. Establishing a clear authority and set of characteristics would alter the balance of State and Federal interests while still maintaining the appropriate State authority over local transmission projects. Were the Commission afforded expanded authority for transmission, either through backstop or plenary authority similar to what the Commission has for pipelines, Congress should also make sure to furnish landowners with protections such as those suggested in S. 2651, the Streamlining Interstate Transmission of Electricity Act.

Niskanen applauds FERC and the National Association of Regulatory Utility Commissioners for announcing the formation of a federal-state task force to address and identify barriers that inhibit planning and development of optimal transmission to achieve federal and State policy goals. This will be helpful in addressing these issues, as well as discovering new mechanisms to enhance federal-State coordination on new projects, but Niskanen still looks to Congress to help grant limited primary interstate siting authority to FERC as the solution to the current patchwork system. The highly variable interpretations of public necessity in State permitting and siting means there will never be enough coordination to target national needs in addressing this problem. FERC is clearly aware that national transmission needs are not sufficiently met, as demonstrated in its July 15, 2021 Advanced Notice of Proposed Rulemaking, the first time in

18 16 U.S.C. 824(p) and 16 U.S.C. 824(s). See Reed at p.7.
19 Piedmont Environmental Council v. FERC, 558 F. 3d 304 (4th Cir. 2009).
20 as proposed in H.R. 3684 Infrastructure Investment and Jobs Act
22 See Reed, p.11.
ten years that the Commission has considered large-scale changes to the regional transmission planning, cost allocation, and generator interconnection processes.

Niskanen strongly urges the Senate Energy and Natural Resources Committee to consider any and all opportunities available to assist FERC legislatively and collaboratively in taking on these important challenges facing landowners and the expansion of our energy grid, as well as continuing to evaluate FERC’s efforts in meeting its goals.