LEGISLATION ADDRESSING PIPELINE AND HYDROPOWER INFRASTRUCTURE MODERNIZATION

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

MAY 3, 2017

Serial No. 115–30

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C O N T E N T S

[1] The information has been retained in committee files and also is available at *http://docs.house.gov/meetings/IF/IF03/20170503/105916/HHRG-115-IF03-Wstate-TurpinT-20170503-SD071.pdf.*

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[2] The information has been retained in committee files and also is available at *http://docs.house.gov/meetings/IF/IF03/20170503/105916/HHRG-115-IF03-20170503-SD112-U1.pdf*.

[3] The information has been retained in committee files and also is available at *http://docs.house.gov/meetings/IF/IF03/20170503/105916/HHRG-115-IF03-20170503-SD114.pdf*.

LEGISLATION ADDRESSING PIPELINE AND HYDROPOWER INFRASTRUCTURE MODERNIZATION

WEDNESDAY, MAY 3, 2017

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in Room 2123, Rayburn House Office Building, Hon. Pete Olson (vice chairman of the subcommittee) presiding.

Members present: Representatives Olson, Barton, Murphy, Latta, Harper, McKinley, Kinzinger, Griffith, Johnson, Long, Bucshon, Flores, Mullin, Hudson, Cramer, Walberg, Rush, McNerney, Peters, Green, Castor, Welch, Tonko, Loebsack, Schrader, Kennedy, and Pallone (ex officio).

Staff present: Grace Appelbe, Legislative Clerk, Energy/Environment; Ray Baum, Staff Director; Mike Bloomquist, Deputy Staff Director; Zack Dareshori, Staff Assistant; Wyatt Ellertson, Research Associate, Energy/Environment; Adam Fromm, Director of Outreach and Coalitions; Tom Hassenboehler, Chief Counsel, Energy/Environment; A.T. Johnston, Senior Policy Advisor, Energy; Ben Lieberman, Senior Counsel, Energy; Alex Miller, Video Production Aide and Press Assistant; Brandon Mooney, Deputy Chief Energy Advisor; Dan Schneider, Press Secretary; Sam Spector, Policy Coordinator, Oversight and Investigations; Madeline Vey, Policy Coordinator, Digital Commerce and Consumer Protection; Jeff Carroll, Minority Staff Director; David Cwiertny, Minority Energy/Environment Fellow; Jean Fruci, Minority Policy Advisor, Energy and Environment; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Alexander Ratner, Minority Policy Analyst; Andrew Souvall, Minority Director of Communications, Member Services, and Outreach; Tuley Wright, Minority Energy and Environment Policy Advisor; and C.J. Young, Minority Press Secretary.

Mr. OLSON. The Subcommittee on Energy will now come to order. The Chair now recognizes himself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. PETE OLSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Welcome, everyone. Today the subcommittee will begin to review bills to modernize pipeline and hydropower infrastructure. We have

10 bills before us. Some have already been introduced while others are in discussion forum, but we already have an extensive record on these issues that these bills address.

We begin this Congress by picking up where we left off last year, with hearings on the challenges we face to expand hydro and pipeline infrastructure. We have heard from job creators, contractors, labor, Tribal interests, consumers, and private citizens. Then we will hear from the Federal Energy Regulatory Commission, otherwise known as FERC, the lead agency for these reviews.

As we move forward, we will continue to work with the States and other Federal agencies that have a role to ensure that we balance the need to modernize our infrastructure with the important safety, environmental, and consumer protections. We will also hear from stakeholders, both industry and citizen groups. I look forward to their input.

I suspect many of these witnesses will tell us what we have heard for a while now: Getting these projects done has become an incredibly difficult process. These projects need to be reviewed and they need to be safe, but once we have done our due diligence, foot dragging is malpractice. We need to fix this and get it right. Together, these 10 bills represent the beginning of an effort to modernize our energy infrastructure, improve access to affordable and reliable energy, and lower prices for consumers. I want to thank the witnesses for appearing today before us and look forward to their testimony.

[The proposed legislation appears at the conclusion of the hearing.]

Mr. OLSON. I now yield to the ranking member, Mr. Rush from Illinois.

Mr. RUSH. Good morning. Thank you, Mr. Chairman.

Mr. Chairman, before I begin, I just want to make a point. I am really concerned about Chairman Upton and our friend Representative Long. I understand that he is over at the White House, and I just wonder, is he OK? Shall we have a moment of prayer for him or a moment of silence?

Mr. OLSON. He is doing just fine. He is OK.

OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. RUSH. Well, I want to thank you, Mr. Chairman, for holding today's hearing on expediting the permitting process for natural gas pipelines and hydropower projects. Mr. Chairman, the legislation before us streamlining natural gas pipelines appears to suffer and to offer a solution in search of a problem. FERC data shows that between 2009 to 2015 over 100 million natural gas pipeline projects were approved spanning over 3,700 miles in 35 States for a total capacity of over 45 billion cubic feet per day, and an overwhelming 91 percent, Mr. Chairman, of applications were decided within 12 months.

More importantly, Mr. Chairman, without a quorum at FERC no new projects will get approved, so rather than proposing changes to a process that already works we should be reaching out to the administration and urging them to submit candidates for the Com-

mission as well as for the other departments that are under our jurisdiction that are still waiting to fill important vacancies.

Mr. Chairman, there may be some areas where we might be able to find bipartisan support and compromise such as streamlining the licensing process for hydropower infrastructure. However, Mr. Chairman, and as the April 27th letter submitted to you and Chairman Walden from myself, Ranking Member Pallone, and other colleagues indicated, it is critical for the subcommittee to hear from other important stakeholders who will be directly impacted by these changes including the States, resource agencies, and Native American Tribes.

Mr. Chairman, I also have concerns with the cross-border bill which would shift the burden of proof to opponents of a project to show that the project is not in the public interest. This bill also limits the scope of review for large transnational pipelines to only a tiny section of a project that physically crosses the border no matter how many communities, States, and properties a pipeline might actually traverse.

Mr. Chairman, as the recent Oroville Dam failure demonstrated, expediency must not trump safety. Public comment and engagement must continue to play a vital part of any permitting process. So Mr. Chairman, before moving forward on these bills, many which would make it easier for private companies to take control of the use of waters belonging to the people of the United States, it is vital that we hear from witnesses who can provide expert testimony on how taking authority away from other agencies and consolidating power and decision making authority solely within the FERC might impact the public interest.

Mr. Chairman, I want to thank you and I yield back the balance of my time. Mr. McNerney, I want to——

Mr. MCNERNEY. I thank the gentleman for yielding. While there are a number of bills under discussion today, I am going to focus my remarks on hydropower. We know that worldwide hydropower generates about six percent of electricity and about half of the renewable energy generation. Hydropower generation does not produce carbon emissions. As a Nation we must move away from harmful fossil fuels and continue to bolster our renewable and clean energy generation sources if we are to combat and mitigate the effects of climate change.

We also know that FERC will manage approximately 500 hydropower projects by 2030 that represent about 18,000 megawatts of generation. The current process clearly needs improvement, so what is it that needs to be done—the accountability of all stakeholders, timely decisions and the sharing of information, protection of our Nation's waterways, habitat, and environment.

Now the Federal Power Act has worked OK in many ways over the last 90 years, but I have heard from stakeholders over the entire spectrum that the process could be better. I have heard from FERC, from the resource agencies, from applicants, from Tribes, from States, from NGOs and others. I believe that we can find common ground, but we need to work on a bipartisan basis to enact real solutions. If one side or the other imposes its will on the other, the solutions won't work. I yield back.

Mr. OLSON. The gentleman yields back. The Chair calls upon the gentleman from North Carolina, Mr. Hudson, for 3 minutes.

OPENING STATEMENT OF HON. RICHARD HUDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. HUDSON. Thank you, Mr. Olson. I would like to thank Chairman Upton and Ranking Member Rush for holding today's hearing on improving America's hydropower systems. This issue resonates strongly with me because North Carolina has a rich history of hydropower. Our Catawba River was among the first rivers to be developed for hydropower. In North Carolina alone it generates enough electricity to power 350,000 homes each year.

This low-risk, high-reward technology could provide significant benefits, yet the potential remains uncaptured in part because of a prohibitive permitting process. I am pleased to continue working with my colleagues, Congresswoman DeGette, on promoting the Small Conduit Hydropower Facilities Act to build on this committee's successful legislative efforts and reduce the total review process time for small scale hydropower by 75 percent, from 60 days down to 15 days. Reducing regulatory burdens is a common sense way to increase our supply of clean and affordable electricity.

Thank you again, Mr. Chairman, for including our legislation on today's agenda. I look forward to working with you to advance this initiative through the committee, and I yield back.

Mr. OLSON. The gentleman yields back. The Chair now, in the spirit of bipartisanship, calls on anyone from the Democrat side for a 3-minute statement like Mr. Hudson.

Oh, I didn't see Mr. Pallone. I am sorry. Five minutes for the ranking member of the full committee, Mr. Pallone.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you. Thank you, Mr. Chairman, for holding the hearing on the ten bills addressing hydropower and pipeline infrastructure. Hydroelectric power is among the most mature generating technologies. It provides virtually carbon-free base load energy at low cost to our manufacturing sector and to residential and commercial consumers and hydroelectric power is an important asset we need to maintain. At the same time, it has major impacts on fish and wildlife populations, water quality, water supply management, and other important physical and cultural resources if poorly operated or cited.

While hydroelectric power licenses depend on rivers for free fuel, those rivers belong to all Americans not just those who sell or buy the power generated from it. Hydroelectric licenses have fixed conditions that generally remain unchanged during the 30 to 50 years that they are in force. Licenses also benefit from unlimited automatic annual extensions after their license has expired if a new license has not been issued and as a result, the impacts of these hydropower dams often go unaddressed for more than half a century.

For those facilities first licensed before enactment of the National Environmental Policy Act, the Clean Water Act, and the Endan-

gered Species Act in the 1970s, the licensing process certainly can be quite rigorous. Sometimes the necessity of addressing these complex issues also makes the process time consuming and expensive as new license conditions will require significant upgrades to old facilities to bring them in line with modern environmental laws and regulations.

So, Mr. Chairman, we want to work with you on hydroelectric licensing reform with the goal of expediting the process while maintaining the fundamental principles of balance in the process and this would allow us to maximize the benefits of hydroelectric power and expand it where it is most appropriate to do so.

Our hydro hearing in March was one of the most constructive we had and that was very encouraging. It was also incomplete because we did not hear from the other stakeholders who were central to relicensing. We didn't hear from Federal resource agencies, States, and Tribes, and this is something Members on our side feel strongly about, which is why we wrote to you.

And you, Mr. Chairman, and Chairman Walden, last week we wrote to you requesting a hearing because we understand more fully the challenges facing the hydropower industry and the rivers the industry relies upon before we update our policies, but we also gain a more thorough appreciation of the impacts of hydroelectric generation on others who use the rivers—Tribes, fishermen, farmers, boaters, and many more—to ensure their interests are treated fairly in the process

So I just wanted to turn my attention to the two nonhydro bills before us today. First, we have a discussion draft that amends the Natural Gas Act and resembles similar legislation we saw last Congress as well as proposals in prior years. The purported goal of the draft is to enhance agency coordination and speed up FERC's review of natural gas pipelines.

While I think we could all support the idea of making permitting more efficient generally, this bill like its predecessors remains a solution in search of a problem. The fact is that in the last 3 years FERC has approved more pipelines each year than the one preceding it, with roughly 90 percent of pipeline projects being certificated within 1 year.

And I will admit that, since President Trump took office, the number of approvals has taken a dive, but that has nothing to do with the permitting process. Instead, approvals are down because FERC has lacked a quorum for 3 months and the President has yet to nominate anyone to any of the three open slots. To make matters worse, FERC will soon have only one Commissioner when Commissioner Honorable's term expires at the end of June. What that means in terms of natural gas projects is that FERC has not approved a gas pipeline project since February 3rd.

So if the goal of my colleagues on the other side of the aisle is truly to speed up the FERC approval of gas pipelines, perhaps they should pick up the phone and ask President Trump to nominate at least a couple of new FERC Commissioners so they can begin to consider applications for these projects once again. Until then, I find any conversation about needing legislation to expedite pipeline approvals at FERC untimely.

The Cross-Border Energy discussion draft also looks very similar to legislation we debated at length last Congress. This proposal eliminates the current presidential permitting process for energy projects that cross the U.S. border, substituting it with a weaker environmental review process that in effect rubber-stamps applications.

With President Trump already approving the Keystone XL pipeline and signaling support for new pipelines and other energy projects around the country, it is unclear to me why Republicans feel it is necessary to strip the President of his approval authority. Do my colleagues on the other side of the aisle honestly not have confidence in President Trump to make rational decisions on major energy projects? While I certainly have many concerns and would certainly not fault my Republican friends for any trepidation on their part, I still believe that this authority should continue to rest with the President of the United States, regardless of whether his name is Obama or Trump.

So I want to thank our witnesses for coming today, particularly Ms. Danis, who is from New Jersey and is here representing, among others, the New Jersey Conservation Foundation. Thank you, Mr. Chairman.

Mr. OLSON. The gentleman yields back. We now conclude with Member opening statements. The Chair would like to remind all Members that, pursuant to the committee rules, all Members' opening statements will be made part of the record, and I want to thank our witnesses for being here today and taking your time to testify before the subcommittee.

Today's hearing will consist of two panels. Each panel of witnesses will have the opportunity to give an opening statement followed by a round of questions from the Members. Once we conclude the first panel, we will take a few minutes to set up the second panel.

Our first witness panel for today's hearing includes Mr. Terry Turpin. Mr. Turpin is Director of the Office of Energy Projects at FERC. And Mr. John Katz. Mr. Katz is a Deputy Associate General Counsel for the Office of General Counsel at FERC, as well. We appreciate you being here today. We will begin by recognizing you, Mr. Turpin, for 5 minutes to give an opening statement.

STATEMENTS OF TERRY L. TURPIN, DIRECTOR, OFFICE OF ENERGY PROJECTS, FEDERAL ENERGY REGULATORY COMMISSION, AND JOHN KATZ, DEPUTY ASSOCIATE GENERAL COUNSEL, OFFICE OF THE GENERAL COUNSEL, FEDERAL ENERGY REGULATORY COMMISSION

STATEMENT OF TERRY L. TURPIN

Mr. TURPIN. Thank you. Good morning, Vice Chairman Olson, Ranking Member Rush, and members of the subcommittee. My name is Terry Turpin and I am Director of the Office of Energy Projects at the Federal Energy Regulatory Commission. The Office is responsible for taking a lead role in carrying out the Commission's duties in siting infrastructure projects including non-Federal hydropower projects, interstate natural gas facilities, and liquefied natural gas terminals. Thank you for the opportunity to appear be-

fore you to discuss drafts of the Promoting Interagency Coordination for Review of Natural Gas Pipelines Act and the Promoting Cross-Border Energy Infrastructure Act.

As a member of the Commission's staff, the views I express in my testimony are my own and not necessarily those of the Commission or any individual Commissioner.

The Commission is responsible under Section 7 of the Natural Gas Act for authorizing the construction of interstate natural gas facilities, and under Section 3 of the Natural Gas Act for authorizing the construction of import/export facilities. The Commission acts as the lead agency for the purpose of coordinating all applicable Federal authorizations and as the lead agency for complying with the National Environmental Policy Act.

The environmental review is carried out through a process that allows cooperation from numerous stakeholders including Federal, State and local agencies, Native Americans, and the public. In order to maximize the engagement between the applicant and these various stakeholders, the Commission has developed its pre-filing review process.

The Commission's current approach allows for a systematic and collaborative process and has resulted in substantial additions to the Nation's natural gas infrastructure. Since 2000, the Commission has authorized nearly 18,000 miles of interstate natural gas pipeline totaling more than 159 billion cubic feet per day of transportation capacity, over one trillion cubic feet of interstate natural gas storage, and 23 facility sites for the import or export of LNG.

Over the past 10 years, the Commission has also issued 15 authorizations related to natural gas border crossing facilities. These results have been facilitated through the environmental analysis under the National Environmental Policy Act, which I believe has been improved through the Commission's approach through the pre-filing review phase of the project.

Regarding the discussion drafts, I note that many of the comments of previous office directors have been incorporated on similar past proposals and have been incorporated into these versions. As I explain in my testimony, the discussion draft on interagency coordination would alter the Natural Gas Act to include many of the existing practices the Commission currently uses successfully in its review process.

The discussion draft addressing cross-border energy infrastructure would add oil pipeline border crossings to the Commission's jurisdiction and would remove requirements for presidential permits for both oil and natural gas border crossings. Staff already has substantial expertise in analyzing natural gas pipeline border crossings and this could be extended to oil crossings under the final rules the Commission would be required to issue.

This concludes my remarks on the discussion drafts addressing interagency coordination and cross-border infrastructure. Commission staff would be happy to provide technical assistance as you move forward with your consideration of this legislation. I would be pleased to answer any questions you may have. Thank you.

[The prepared statement of Mr. Turpin follows:]

Testimony of

Terry L. Turpin
Director, Office of Energy Projects

Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC, 20426

Committee on Energy and Commerce
Subcommittee on Energy and Power
United States House of Representatives

"Hearing on Legislation Addressing Pipeline and Infrastructure Modernization"

May 3, 2017

Chairman Upton, Ranking Member Rush, and Members of the Subcommittee:

My name is Terry Turpin and I am the Director of the Office of Energy Projects at the Federal Energy Regulatory Commission. The Office is responsible for taking a lead role in carrying out the Commission's responsibilities in siting infrastructure projects including: (1) licensing, administration, and safety of non-federal hydropower projects; (2) authorization of interstate natural gas pipelines and storage facilities; and (3) authorization of liquefied natural gas (LNG) terminals.

I appreciate the opportunity to appear before you to discuss drafts of the "Promoting Interagency Coordination for Review of Natural Gas Pipelines Act" and the "Promoting Cross-Border Energy Infrastructure Act." As a member of the Commission's staff, the views I express in this testimony are my own, and not necessarily those of the Commission or of any individual Commissioner.

I. Background

The Commission is responsible under section 7 of the Natural Gas Act (NGA) for authorizing the construction and operation of interstate natural gas pipeline and storage facilities and under section 3 of the NGA for the construction and operation of facilities necessary to either the import or export of natural gas by pipeline, or by sea as LNG.

Authorizations for the import or export, from or to a foreign country, of the commodity of natural gas, including LNG, are issued by the Department of Energy.

As part of its responsibilities, the Commission conducts both a non-environmental and an environmental review of the proposed facilities. The non-environmental review focuses on the project's engineering design, market demand, costs, rates, and consistency with the Commission's regulations and policies. Under the NGA, the Commission acts as the lead agency for the purposes of coordinating all applicable federal authorizations and for the purposes of complying with the National Environmental Policy Act (NEPA). Congress has instructed each federal and state agency considering an aspect of an application for federal authorization to work with the Commission and to comply with the deadlines established by the Commission, unless a schedule is otherwise established by federal law. Commission staff establishes a publicly noticed schedule for all decisions or actions taken by other federal agencies and/or state agencies delegated with federal authority. This includes federal authorizations issued by both federal and state agencies under the Endangered Species Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, Coastal Zone Management Act, and other statutes.

The environmental review, pursuant to NEPA, is carried out through a process that allows cooperation from: numerous federal, state, and local agencies; Indian tribes; and with the input of other interested parties. The Commission employs several distinct phases in the review process for interstate natural gas facilities under the jurisdiction of sections 3 and 7 of the NGA:

- Project Preparation: the project sponsor identifies customers and markets, defines a proposed project, and identifies potentially relevant federal and state agencies

in the project area with permitting requirements, prior to formally engaging Commission staff;

- Pre-Filing Review: Commission staff begins working on the environmental review and engages with stakeholders, including agencies, with the goal of identifying and resolving issues before the filing of an application;

- Application Review: the project sponsor files an application with the Commission under NGA section 7 for interstate pipeline and storage facilities, and under NGA section 3 for import or export facilities. Commission staff completes and issues the environmental document, analyzes the non-environmental aspects of projects related to the public interest determination, and prepares an order for Commission consideration; and

- Post-Authorization Compliance: Commission staff works with the project sponsor and stakeholders, including agencies, to ensure compliance with conditions to the FERC approval during construction.

The Commission's current review processes are thorough, efficient, and have resulted in the timely approval of the facilities necessary for interstate natural gas pipelines as well as border crossings for the import or export of natural gas. Since 2000, the Commission has authorized: nearly 18,000 miles of interstate natural gas transmission pipeline totaling more than 159 billion cubic feet per day of transportation capacity; over one trillion cubic feet of interstate storage capacity; and 23 facility sites for the import and

export of LNG. Over the past ten years, the Commission has also issued 15 NGA section 3 authorizations and Presidential Permits for border crossing facilities.

II. Promoting Interagency Coordination for Review of Natural Gas Pipelines Act

Commission staff is committed to the timely review of proposed interstate natural gas facilities. The Commission's current approach process allows for a systematic, efficient, and collaborative process, and has resulted in substantial additions to the nation's natural gas infrastructure. These results have been facilitated by a thorough environmental analysis under NEPA, which I believe has been improved through the Commission's approach in Pre-filing Review and Application Review.

The discussion draft would alter the NGA to include many of the existing practices the Commission has successfully used during the Pre-Filing Review, Application Review, and Post-Authorization Compliance phases. The draft language requires early outreach to permitting agencies to ensure identification and potential resolution of issues. This outreach would ensure that agencies with responsibility for permits, opinions, or other approvals required under federal law are aware of the proposed project at the earliest possible time, while also requiring the project sponsor to account for the various application processes in developing the project schedule. This also would allow those agencies to have input into the development of the project and identification of potential of project issues, when their advice is most valuable. I believe this statutory revision would formalize existing Commission practice and would encourage agency participation.

The discussion draft would also allow the use of third-party contractors in assisting with environmental review. This practice is already a feature of Pre-Filing Review and Application Review for the Commission. Accordingly, I see value in formalizing existing Commission staff practice, and I fully support third-party contractor use in permitting evaluations for other agencies that may be overburdened or understaffed. This may also aid with early input, engagement, and cooperation by agencies that do not have the resources to commit to participation while a project is still in a conceptual phase.

However, some of the proposed NGA modifications would alter the Commission's role from one of collaboration with its fellow agencies to an oversight role, monitoring other agency execution of their Congressionally-mandated duties. I am concerned that this will require the use of Commission resources that could be better spent analyzing the proposed projects and could lead to unproductive tension between the agencies involved in the review process.

Lastly, the Commission has undertaken significant efforts to implement its responsibilities under Title 41 of the Fixing America's Surface Transportation Act (FAST-41), enacted in December 2015. FAST-41 provides for enhanced coordination efforts with permitting agencies, and the development of publicly available permitting timetables for each federal permit. Because the discussion draft would cover all Commission jurisdictional natural gas projects, not just those the larger and complex projects that volunteer for coverage under FAST-41, I recommend that the Commission not be required to maintain duplicate efforts under both statutes.

I will now offer comments on the specific sections of the discussion draft.

A. NGA Section 15(c)(2)

The proposed changes to NGA section 15(c)(2) would not alter the current authorities and responsibilities of the Commission as the lead federal agency for coordinating all applicable federal authorizations and for the purpose of NEPA compliance. However, the proposed changes do reflect the Commission's efforts to implement the Energy Policy Act of 2005 through the establishment of a 90-day authorization deadline.

Staff's experience has shown that agencies often have different timing requirements related to the information needed for their decisions, which results in differing review periods. Information that an agency considers vital to its determination may not be available until after the FERC environmental review is complete and the Commission has issued an order.

Providing agencies with timely and complete information necessary to perform Congressionally-mandated project reviews is the single most crucial step in ensuring process accountability and efficiency. This information encompasses not only environmental data for the project area, but also information about project design and construction. This is the responsibility of the project sponsor and is often outside of the control of permitting agencies. Commission staff and other agencies often struggle to receive complete information. During the Pre-Filing Process, project design has often not progressed enough to provide sufficient information for Commission staff or agencies to provide guidance on anticipated issues.

After receipt of an application, Commission staff routinely needs to issue requests for additional information to assess stakeholder and environmental concerns that are inadequately addressed in the project sponsor's application. These information requests most commonly seek information regarding alternative routes, mitigation measures to reduce impacts, and clarifications on inconsistently reported data. Once Commission staff has received complete information to address these issues, it can develop a schedule for completion of the NEPA document. I recommend that any statutory revision setting a deadline for the issuance of federal permits be based on the project sponsor providing complete information, related to both environmental data and project design and construction.

B. NGA Section 15(c)(4)

The proposed text of NGA section 15(c)(4) would require permitting agencies to give deference to the Commission's opinion on what matters need to be addressed in the NEPA review. To the extent possible, Commission staff constructs the NEPA document so that it can be adopted by all cooperating agencies. During coordination activities, Commission staff considers these agencies' opinion of the scope of environmental review needed to satisfy their NEPA obligations, as they are best equipped to determine what information satisfies their statutory mandates. However, each agency must decide independently if it has sufficient information to act, and I am not certain how efficient it would be for FERC to try to make that determination for other agencies.

C. NGA Section 15(c)(5)

Section 15(c)(5) requires that agencies provide Congress and the Commission notification of the reasons why a schedule cannot be met, and an implementation plan to complete the proceeding. Having to report to Congress on an agency's failure to meet the schedule and provide an implementation plan would provide accountability; however it could also have the unintended consequence of agencies providing stricter permitting conditions than would have been the case if they had more time. Further, it is not clear what value would be gained by also requiring that this information be provided to the Commission, as the Commission will not be in a position to review or alter the agency plans regarding policies or resources.

D. NGA Section 15(d)

As discussed above, providing agencies with timely and complete information necessary to perform Congressionally-mandated project reviews is the single most crucial step in reducing uncertainty in a review schedule. Proposed changes in new NGA section 15(d) would allow agencies to accept aerial or remotely gathered data, to be later field verified, for conditional approval of a federal authorization.

Aerial or remote surveys can be a useful tool for developing project routes and making initial determinations of resources that may be affected by a proposed project. Currently, Commission staff accepts remote survey data where ground access is not available during the Pre-Filing and Application Review processes. However, most project applications include ground surveys for a significant portion of the right-of-way.

I do have some practical concerns with the use of remote data for pipeline projects. Some resources are either difficult or impossible to assess remotely. For example, remote surveys would have little value for identifying below-surface cultural resources such as archaeological sites (which constitute the majority of cultural resources identified in FERC proceedings). National Wetland Inventory maps, which are based on remote sensing, are useful for identifying some types of wetlands, but are less accurate for other types, such as forested wetlands. Confirming the presence of federally listed plant and animal species often requires field surveys.

Waiting to verify large amounts of remote data until late in the project development process, or after issuance of an authorization, could pose difficulties in some cases. For example, if it was not discovered until the pre-construction stage that a project might affect sensitive resources, such as those I just described, a project sponsor could be required at a late stage to amend its approved route or to conduct additional mitigation, which could delay construction and add additional unanticipated expense.

E. NGA Section 15(f)

New NGA section 15(f) would require that the Commission track and make publicly available the schedule and status of any federal authorization. In particular, this would require the Commission to create a public tracking system on its website for every federal permit required for each project. As previously discussed, the Commission publicly issues a notice of schedule alerting all stakeholders, including federal and state agencies acting pursuant to delegated federal authority, of the date the final environmental document. Similarly, the project sponsor is already required to disclose the status of any required

federal permits. Specifically, the Commission's regulations require all applications to include: each federal authorization the project will require; the agency responsible for that authorization; and the requested issuance date of that authorization. In addition, the Commission's regulations require the project sponsor to indicate the date it submitted the federal authorization request. In cases where the permit request has not been made, the project sponsor must provide an explanation for the delay and provide a date by which it intends to make the required submission. If a project is approved, the applicant must again provide updates to the Commission on the status of both applications for and receipt of federal authorizations.

Placing the Commission in a position of more direct oversight over other agencies through the tracking of their actions in permitting, reviews, and other actions will impose additional administrative requirements on the Commission that will divert resources away from our own duties in application processing. This is particularly true for the majority of section 7 projects, which are smaller and scope and can be completed in short timeframes.

Through efforts in implementation of FAST-41 for large and complex projects over the past year, Commission staff have been required to perform additional work to gather and post the permitting information from other agencies. While expanding these tracking and website posting requirements to all Commission jurisdictional natural gas project applications may improve transparency, I am concerned that it may also result in a significant burden on Commission staff resources and time.

III. Promoting Cross-Border Energy Infrastructure Act

The discussion draft addressing Cross-Border Energy Infrastructure requires the Commission to issue a certificate of crossing for any border-crossing facility engaged in the import or export of oil or natural gas, unless the facility is determined as not being in the public interest of the United States. This certificate is to be issued no later than 120 days after completion of the environmental assessment or impact statement required under NEPA. The draft also states that no Presidential Permit is needed for oil or natural gas pipeline facilities crossing any border. Further, the discussion draft states that no certificate of crossing or Presidential Permit would be needed for: reversals of flow direction; changes in ownership or flow volume; or the addition or removal of interconnections, pumps or compressor stations for oil or natural gas pipelines currently operating or already possessing a Presidential Permit or a certificate of crossing. Within one year of the passing of this act, the Commission must issue final rules revising its regulations regarding cross-border oil and natural gas pipelines.

As I previously indicated, Commission staff is well versed in evaluating natural gas pipeline infrastructure, including border crossings. The Commission may need to develop additional staff, resources, and expertise on issues related to oil pipelines as it will be a new sector of infrastructure for which the Commission currently has no siting jurisdiction. As we have seen with natural gas pipeline border crossings, I would expect that it will not be the oil border-crossings themselves that would be the subject of significant public concern. Under NEPA, the Commission would need to coordinate with other agencies in the

evaluation of both oil border-crossing pipelines and the associated indirect or cumulative impacts for any needed additional pipeline extending to receipt or delivery points.

Regarding section 2(e) of the discussion draft, the definition of a modification includes: reversal of flow direction, change in ownership, change in flow volume, and addition or removal of an interconnection. In my experience, the majority of these modifications are unlikely to result in adverse impacts to the environment. However, allowing a change in flow volume without any notification or authorization from any federal agency could limit the ability to track the volumes of gas and oil entering or leaving the country. The discussion draft's definition of a modification also includes the addition of pumping or compressor stations. The Commission has found that these types of facilities often result in some adverse impacts on the environment and are routinely the subject of public concern.

IV. Conclusion

This concludes my remarks on the discussion drafts addressing Interagency Coordination for Review of Natural Gas Pipelines and Cross-Border Energy Infrastructure. Commission staff would be happy to provide technical assistance as you move forward with your consideration of this legislation. I would be pleased to answer any questions you may have.

Mr. OLSON. Mr. Turpin, thank you very much.

The Chair now calls upon Mr. Katz. You are recognized now for 5 minutes for an opening statement.

STATEMENT OF JOHN KATZ

Mr. KATZ. Thank you Mr. Chairman, Ranking Member Rush, members of the committee, it is a pleasure to be here before you today, and thank you for the invitation to testify. My name is John Katz. I am a member of the staff of the Federal Energy Regulatory Commission, and as such my comments represent my own opinions and not necessarily those of the Commission or of any individual Commissioner. I am going to focus on the bills that involve hydro aspects.

The Commission regulates over 1,600 hydro projects which involve more than 2,500 dams. The projection of these hydro projects is some 56 gigawatts which is over half of the hydro capacity of the United States. The United States does a little bit better than the figure Mr. McNerney quoted for the world, hydro is eight percent of U.S. capacity.

Hydro is a renewable resource. It affects many other resources including irrigation, flood control, water supply, fish and wildlife, and recreation, and these are matters that Congress has asked the Commission to balance when it issues licenses. The key thing in getting a hydro project licensed quickly is probably site selection. This is a matter within the control of the developers, so good development is what is going to carry the day not the Government, not the other interested parties.

The community needs to be involved. Stakeholder involvement is very key. Issues need to be identified early and developers need to work with the community and the stakeholders to try and resolve matters so that things can be done in quick manner. A good example of this is the 400-megawatt Gordon Butte Project. It is a pumped storage project in Montana. That project was licensed in 14 months and the developer of the project recently appeared at a workshop at the Commission.

And while on the one hand he was very complimentary of the efforts of Commission staff, he said that the key to getting it done in time was that the Commission had essentially turned him loose to allow him to develop a process that worked for him and his stakeholders, and that is something that the Commission does on a regular basis.

The Commission does its best to be efficient and effective. Since 2003, the Commission has issued 82 original licenses, and of those about 25 percent have been licensed in 2 years or less with about a 1.4-year median processing time at the Commission.

Congress has done a lot to help the Commission in carrying out its job. In the 2013 Hydropower Regulatory Efficiency Act, Congress provided that certain qualifying conduit projects could be completely exempt from Commission regulation. The Commission has approved or signed off on 83 of those projects since then.

Congress also allowed the Commission to consider small projects at an increased level. They used to be limited to five megawatts and Congress increased that to ten megawatts. There have been seven such projects filed since the passage of that act. Finally, Con-

gress allowed the Commission to extend the time of preliminary permits which are what an applicant gets to study a project, and the Commission has approved 57 extensions or permits since that time.

Commission staff supports the goals of the legislation before you to the extent that they improve efficiency, enable the development of new infrastructure, support balanced decision making, and reduce duplicative oversight. We are concerned only to the extent that additional bureaucracy would add to the process. Commission staff and other agencies are not in my experience looking to do additional processes or things that will slow down development, but rather want to pare back these processes to the extent we possibly can.

Finally, I want to note that there are several bills that provide extensions of the commencement of construction deadlines for certain projects and those bills are all consistent with Commission policy. Thank you very much and I would be happy to answer any questions you may have.

[The prepared statement of Mr. Katz follows:]

Testimony of

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Committee on Energy and Commerce
Subcommittee on Energy and Power
United States House of Representatives

Hearing on Legislation Addressing Pipeline and Infrastructure Modernization

May 3, 2017

Chairman Upton, Ranking Member Rush, and Members of the Subcommittee:

My name is John Katz and I am Deputy Associate General Counsel for Energy Projects at the Federal Energy Regulatory Commission. The Office of the General Counsel provides legal and policy advice to the Commission's Office of Energy Projects, which takes a lead rule in carrying out the Commission's responsibility for siting infrastructure projects including: (1) licensing, administration, and safety of non-federal hydropower projects; (2) authorization of interstate natural gas pipelines and storage facilities; and (3) authorization and safety of liquefied natural gas terminals.

I appreciate the opportunity to appear before you to discuss discussion drafts of the Hydropower Policy Modernization Act of 2017; the Promoting Hydropower Development at Existing Non-Powered Dams Act; the Promoting Closed-Loop Pumped Storage Hydropower Act; the Promoting Small Conduit Hydropower Facilities Act of 2017; the Supporting Home Owner Rights Enforcement Act; and a Bill to Reinstate and Extend Deadlines for Commencement of Construction for the Jennings Randolph Project No. 12715. I will also address H.R. 446 -- a bill to extend the deadline for commencement of construction for the Gathright Project No 12737 -- and H.R. 447 – a bill to extend the deadline for commencement of construction of the Flanagan Project No. 12740.

As a member of the Commission's staff, the views I express in this testimony are my own, and not necessarily those of the Commission or of any individual Commissioner.

I. The Commission's Hydropower Program

A. Background

The Commission regulates over 1,600 non-federal hydropower projects at over 2,500 dams, pursuant to Part I of the Federal Power Act (FPA). Together, these projects represent about 56 gigawatts of hydropower capacity, which is more than half of all the hydropower capacity in the United States. Hydropower is an essential part of the Nation's energy mix and offers the benefits of an emission-free, renewable, domestic energy source. Public and private hydropower capacity together total about 8 percent of U.S. electric generation capacity.

Under the FPA, non-federal hydropower projects must be licensed by the Commission if they: (1) are located on a navigable waterway; (2) occupy federal land; (3) Use surplus water from a federal dam; or (4) are located on non-navigable waters over which Congress has jurisdiction under the Commerce Clause, involve post-1935 construction, and affect interstate or foreign commerce.

The FPA authorizes the Commission to issue licenses for projects within its jurisdiction, and exemptions (a simpler form of license) for projects that would be located at existing dams or within conduits as long as these projects meet specific criteria. Licenses are generally issued for terms of between 30 and 50 years, and are renewable. Exemptions are perpetual, and thus do not need to be renewed.

Congress has established two types of exemptions. First, section 30 of the FPA allows the Commission to issue exemptions for projects that use, for generation, the

hydroelectric potential of manmade conduits that are operated for the distribution of water for agricultural, municipal, or industrial consumption, and not primarily for the generation of electricity. Conduit projects can have a maximum capacity of 40 megawatts and are not subject to National Environmental Policy Act of 1969 (NEPA) review. Second, in section 405(d) of the Public Utility Regulatory Policies Act, as amended by the Hydropower Regulatory Efficiency Act of 2013, Congress authorized the Commission to grant exemptions for small hydroelectric power projects having an installed capacity of up to 10 megawatts. To qualify for this type of exemption, a project must add hydroelectric capacity to and be located at an existing dam that does not require construction or the enlargement of an impoundment, or must add hydroelectric capacity that uses the hydropower potential of a natural water feature, such as a waterfall. Both types of exemptions are subject to mandatory fish and wildlife conditions provided by federal and state resource agencies.

Under the provisions of the Hydropower Regulatory Efficiency Act of 2013, a qualifying conduit facility does not need a license or exemption from the Commission if the facility meets the following requirements: (1) the non-federally owned conduit on which the facility is located operates for the distribution of water for agricultural, municipal, or industrial consumption, and not primarily for the generation of electricity; (2) the facility generates electric power using only the hydroelectric potential of the conduit; (3) the facility has an installed capacity that does not exceed 5 megawatts; and (4) the facility was not licensed or exempted from the licensing requirements of Part I of the FPA on or before

the date of enactment of the 2013 Act. To date, 83 projects have qualified under these provisions.

The Commission has established three licensing processes, and allows applicants to request the process that it believe to be best suited to its individual proceedings. The integrated licensing process (ILP) frontloads issue identification, and decisions on information needs to the period before an application is filed, and is suited to complex or controversial cases. The alternative licensing process (ALP) allows participants significant flexibility in tailoring the licensing process in a manner that can work well in individual cases. The traditional licensing process (TLP) typically works best for less complex or controversial projects, and is the process used for exemptions. The Hydropower Regulatory Efficiency Act of 2013 required the Commission to investigate the feasibility of a two-year licensing process, from the beginning of pre-filing to Commission action on the license application. Two applications were filed under this provision for this program and one qualified -- an application for the 5-megawatt Kentucky River Lock and Dam No. 11 Project. The two-year process for the project began in May 2014 and the Commission issued a license for the project on May 5, 2016. The Commission held a workshop to review the two-year process on March 30, 2017, and Commission staff is preparing a final report on the two-year process, due to Congress May 29, 2017.

The Commission's hydropower processes give stakeholders the opportunity to participate in collaborative, transparent public proceedings, where all significant issues are identified and studied. Commission staff develops a detailed, thorough environmental

analysis that addresses matters of concern to interested entities and gives stakeholders numerous opportunities to provide the Commission with information, comment, and recommendations. While the Commission's regulations establish detailed procedures, Commission staff retains the ability to waive the regulations or to revise the procedures where doing so will lead to the more efficient and cost-effective processing of an application

It is important to note that in many instances, it is applicants, federal and state agencies, and other stakeholders that determine project success, and control whether the regulatory process is short or long, simple or complex. For example, where a developer picks a site that raises few environmental issues and works early to build a rapport with stakeholders, and where agencies and other stakeholders commit to fully and timely engaging in the regulatory process, project review can move very quickly. In these instances, licenses can be issued in two years or less.

The location of a proposed project and its mode of operation may be at least as significant as project size: a small project that alters the natural flow of a river in a sensitive area may be harder to license than a larger, run-of-river project on a site where there are few environmental issues.

Sections 4(e) and 10(a) of the FPA require the Commission, in making licensing decisions, to consider and balance many competing developmental and environmental interests. Each licensed project will have among its authorized purposes a variety of

beneficial public uses. Among the project purposes specified in Section 10 (a) (1) and Section 4 (e) are: waterpower development, the adequate protection, mitigation, and enhancement of fish and wildlife, irrigation, flood control, water supply, recreation, and energy conservation.

When a license is issued, a project boundary is established to include the lands, waters, works, and facilities that the Commission identifies in the license as composing the licensed project. Fee title to lands within the boundary can be owned by someone other than the licensee, such as federal, state, and private entities, as long as the licensee holds sufficient property interests (e.g., flowage easements) to carry out project purposes. The issuance of a license and the establishment a project boundary do not change existing property rights.

Statutory requirements give other agencies a significant role in the licensing process, thus limiting the Commission's control of the cost, timing, and efficiency of licensing. For example, if a project is located on U.S. lands, such as a national forest, section 4(e) of the FPA authorizes the federal land managing agency to impose mandatory conditions to protect those lands. Further, section 18 of the FPA gives authority to the Secretaries of the Departments of the Interior and Commerce to prescribe fishways. For exemptions, section 30(c) of the FPA allows federal and state agencies to impose conditions to protect fish and wildlife resources. In addition, section 401(a)(1) of the Clean Water Act precludes the Commission from licensing a hydroelectric project unless the project has first obtained state

water quality certification, or a waiver thereof, and requires the Commission to adopt all conditions contained in a certification.

The Commission also must ensure compliance with other statutes, each containing its own procedural and substantive requirements, including: the Coastal Zone Management Act, the Endangered Species Act, the Wild and Scenic Rivers Act, and the National Historic Preservation Act.

Compliance with these requirements can involve a variety of processes ancillary to licensing, and may be outside of the Commission's control, thus lengthening the time required to obtain a license. Even after the Commission staff has completed analysis of a hydroelectric project and is ready to take final action on the application, the case may be delayed, sometimes for years, until the issuance of a water quality certification under the Clean Water Act, or a biological opinion pursuant to the Endangered Species Act. Over a third of all pending hydropower re-license applications before the Commission are awaiting these approvals from other agencies. By contrast, only a few applications for original licenses are delayed for this reason. Further, mandatory conditions, which the Commission may find to be inconsistent with the public interest, can result in increased costs or reduced power production and significantly affect the economic viability of a project.

In addition to licensing and relicensing projects, and issuing exemptions, the Commission is also responsible for ensuring compliance with license and exemption

conditions during the life of regulated projects, and maintains a strong, effective program of inspecting jurisdictional dams to ensure that human life and property are kept safe.

B. Project Relicensing and License Administration Workload Through FY 2030

Commission staff currently has a full workload processing original license, relicense, and exemption applications, as well as its compliance and dam safety work. The relicensing workload, in particular, has started to increase and will continue to remain high well into the 2030s. Between FY 2017 and FY 2030, about 480 older projects, which represent about 45 percent of our licensed projects and one third of licensed capacity under Commission jurisdiction, will begin the pre-filing consultation stages of the relicensing process. Once new licenses are issued, the license implementation phase begins. Currently, the Commission's license compliance and administration division is processing about 4,000 license and exemption-related filings per year. This will substantially increase commensurate with the increased relicensing workload.

Many projects now beginning relicensing were first licensed in the early to mid-1980s, prior to enactment of modern environmental standards, including those of the Electric Consumers Protection Act of 1986, which directed the Commission, when issuing licenses, to give equal consideration to power and development, energy conservation, fish and wildlife, recreational opportunities, and other aspects of environmental quality.

Commission staff is dedicated to making the regulatory process as timely and cost-effective as possible, especially in consideration of the number of projects that will be undergoing the relicensing process for the first time. Staff is concerned that adding

additional complexity and required procedures to the Commission's review could hinder the timely processing of this large workload.

II. Hydropower Policy Modernization Discussion Draft

The discussion draft of the Hydropower Policy Modernization Act of 2017 has the commendable goals of improving administrative efficiency, accountability, and transparency; promoting new hydropower infrastructure; requiring balanced, timely decision making; and reducing duplicative oversight. Shared decision-making in the regulation of hydropower projects has complicated the Commission's efforts to timely and efficiently process applications, in particular, large, complex relicense applications in certain regions. Therefore, I support efforts to streamline the hydropower review process. I will now comment on specific sections of the discussion draft.

A. Discussion Draft Section 2. Hydropower Regulatory Improvements

Section 2 sets forth the sense of Congress that hydropower is an essential renewable resource and modifies section 203 of the Energy policy Act of 2005 to include hydropower in the definition of renewable energy. Hydropower development has been adversely effected by the fact that hydropower is not always defined as renewable. I therefore support this provision.

i. Preliminary Permit Terms

Section 2 would amend FPA section 5 to increase the maximum term of a preliminary permit from three to four years, to increase the allowable extension of a permit

term from two additional years to four additional years, and to allow a second four-year extension if the Commission determines that extraordinary circumstances warrant doing so.

The purpose of a preliminary permit is to preserve the right of the permit holder to have the first priority in applying for a license for the project that is being studied. For new projects, the Commission's pre-filing license application processes generally take one to three years to complete. While a permittee holds a permit for a site, any other interested entity is barred from filing a license application for a project at the site. For this reason, the Commission expects permittees, during the course of the permit, to diligently carry out prefiling consultation and study development leading to the development of a license application, and where the permittee is not ready to begin preparing the license application due to unfavorable economic or other conditions, to release the site for possible development by others or for other purposes. The public interest in competition generally precludes allowing developers to "site bank." However, there are instances in which a developer cannot move forward with a project for reasons beyond its control. Accordingly, allowing the Commission to extend permit terms where doing so is warranted will give the Commission additional flexibility.

ii. Commencement of Construction Deadlines

Section 2 would allow the Commission to extend the deadline for the commencement of project construction for eight years. Section 13 of the FPA currently allows the Commission to grant such an extension for no more than two years. If a licensee does not timely commence construction, section 13 requires the Commission to terminate

the license. As discussed with respect to preliminary permits, while the public interest generally favors prompt development of hydropower sites, there are times when a developer cannot meet the statutory deadline for reasons it cannot control. The proposed revision would give the Commission the flexibility to deal with such cases, and would avoid licensees having to seek relief from Congress, as is currently their only option.

iii. Consideration of Relicensing

Next, Section 2 would amend FPA section 15(e) to require the Commission when determining the license term on relicensing, to consider project-related investments by the licensee over the term of the existing license, including any annual licenses, that resulted in new development, construction, capacity, efficiency improvements, or environmental measures, but which did not result in the extension of the term of the license by the Commission.

The Commission is aware that this issue is a matter of concern for hydropower licensees, and has issued a notice of inquiry seeking public comment on the Commission's policy for setting license terms. The Commission received 42 comments in response to the notice, and is currently reviewing them.

iv. Mandatory Conditions

Finally, section 2 of the discussion draft would amend FPA section 33 of the Federal Power Act to tighten the standards under which the Secretaries of the Interior, Agriculture, and Commerce establish mandatory conditions and to delete administrative requirements regarding those conditions. As these proposed amendments to section 33 relate to other

portions of the discussion draft dealing with trial-type hearings regarding mandatory conditions, I will address these matters below.

B. Discussion Draft Section 3. Hydropower Licensing and Process Improvements

i. Section 34 – Process Coordination

Section 3 of the discussion draft would amend the FPA to add section 34 establishing the Commission as the lead agency for purposes of: (1) coordinating all applicable federal authorizations; and (2) complying with NEPA for hydroelectric project licensing, license amendments, and exemptions under part I of the FPA. The new section would among other things, require the Commission, in consultation with federal, state, and local agencies and Indian tribes with applicable federal authorization responsibilities, to establish a process for setting a schedule following the filing of an application under part I of the FPA for the review and disposition of each federal authorization. Once established, the Commission would use the process to establish individually and in consultation with said agencies and Indian tribes, a schedule for each application submitted under this part. The schedule, among other things, would have to be consistent with any federal and state deadlines established under federal and state law for the federal authorizations.

FPA section 34 would further: (1) require all other federal and state agencies and Indian tribes considering an aspect of an application for federal authorization to coordinate with the Commission and comply with deadlines established by the Commission; (2) require that the Commission identify any federal or state agency, local government, or Indian tribe that may consider an aspect of an application for federal authorization, and

provide them with the opportunity to participate in the process of reviewing an aspect of an application for a federal authorization; (3) require the notified agencies and Indian tribes to submit a response acknowledging receipt of the notice to the Commission within 30 days; and (4) require the notified agencies and Indian tribes to, as early as possible, share with the Commission and applicant, any issues of concern relating to the federal authorization that may delay or prevent the granting of such authorization, including any issues that may prevent the agency or Indian tribe from meeting the Commission-established schedule. For purposes of coordinating the federal authorizations for each project, the section would require the Commission to consult and make recommendations to the agencies and Indian tribes on the scope of the environmental review. Finally, under certain conditions, the Commission could grant an agency or Indian tribe request for an extension of time of no more than 90 days after the deadline set forth in the schedule.

I support the goal of this section to bring certainty and timeliness to the licensing process. As I discussed earlier, federal authorizations that most commonly delay the Commission's ability to make a licensing decision in a timely manner are Clean Water Act water quality certifications and Biological Opinions under the Endangered Species Act. Both statutes include deadlines for agency action, which the Commission would have to incorporate into its schedule. Unfortunately, these deadlines can be extended by the federal authorizing agency and the applicant, as when an applicant for the federal authorization withdraws and refiles its request for the purpose of resetting the clock or where the federal agency delays the start of the clock by stating that existing information is inadequate for it

to make its decision. It is worth noting that the majority of the cases that are delayed for lack of required mandatory conditions are relicense applications for large, complex projects.

I am concerned that proposed new FPA section 34 could increase the complexity and length of the licensing process, while giving the Commission the added responsibility of policing other entities' compliance with statutory deadlines, without giving the Commission the authority to enforce the schedule that it establishes. This could have the unintended consequence of limiting the staff's ability to expedite the processing of applications for new projects in order to comply with the proposed additional administrative procedures. I also note that the Commission already serves as the lead agency in virtually all hydropower proceedings and sets schedules for those proceedings.

It also may be the case that the procedures contemplated by this section are not appropriate for license amendments and for exemptions, which tend to be simpler matters. The vast majority of amendments are processed in less than six months, and often less, although more complex amendments, such as those that significantly increase project capacity, may take additional time, given the breadth of potentially-affected resources and agencies and other stakeholders. Thus, should any amendments be included in the final bill, we recommend that it be limited to capacity amendments to avoid adding complexity and time to most of the amendments. Like amendments, exemptions are typically simpler and take much less time than licenses to process. In consequence, Congress could consider limiting the proposed new procedures to relicenses and capacity amendments.

C. Section 35 – Trial-type Hearings

Section 3 of the discussion draft would add to the FPA a new section 35, dealing with trial-type hearings regarding mandatory conditions and fishways imposed under sections 4(e) and 18, respectively. These hearing are currently the responsibility of the agencies that impose the conditions: the draft would shift that responsibility to the Commission.

As Commission staff testified regarding the prior discussion draft, licensing stakeholders, including licensees, have informed us that trial-type hearings under the FPA in its current form require substantial time, money, and staff resources. For these reasons, parties have instead chosen to forego the hearings in favor of negotiating alternative terms, conditions, or prescriptions. Shifting oversight of these trial-type hearings to the Commission would not eliminate the substantial expense associated with such hearings, but could encourage the proliferation of them. This could not only result in additional expense and delay, but could also divert Commission resources from processing applications to dealing with hearings, with a negative impact on efficiency.

As an alternative, Congress could consider eliminating trial-type hearings, thereby returning to the agencies the responsibility of supporting their conditions with substantial record evidence.

D. Section 36 – Licensing Study Improvements

The discussion draft would amend the FPA to add a new section 36 requiring the Commission, in consultation with federal and state agencies and interested members of the

public, to compile and maintain a record of studies representing the full range of environmental effects of a hydropower project and reflecting the most recent peer-reviewed science. The Commission, other federal, state, and local governments, and Indian tribes would be required, to the extent practicable, to use the study record to support their actions on their associated federal authorizations. If the agency or Indian tribe would require an applicant to perform an alternative study, the agency or Indian tribe would be required to demonstrate that the study would not be duplicative of an existing study on the record.

The Commission is required to base its decisions on substantial evidence, which generally includes studies performed by applicants, as well as those put into the record by other parties, and peer-reviewed material gathered by Commission staff. Commission staff accepts studies performed in other proceeding or regarding other projects, where it is clear that those studies are applicable to the project under review. I am uncertain whether additional, more formal procedures will improve this process.

Section 36 would also require that the Commission, in consultation with federal, state, and local agencies and Indian tribes, develop comprehensive plans, at the request of project applicants, on a regional or basin-wide scale in basins or regions in which there are multiple projects and applications for projects. The Commission would be required to conduct or arrange for the conduct of regional or basin-wide environmental studies, with the participation of at least two applicants. Any study conducted under this section would only apply to a project for which the applicant participates.

The Commission has a policy of, wherever possible, coordinating the review of projects located in a river basin and conducting appropriate cumulative effects analyses as part of its NEPA responsibility. However the Commission itself does not have the resources or funding to conduct basin-wide studies and, given that the Commission's budget is funded by charges to regulated entities, performance of studies by the Commission could add significant new costs to be borne by licensees and, ultimately, ratepayers. If the Commission is required to implement this provision, additional direction from Congress on the type of comprehensive plan and basin-wide studies it envisions would be helpful.

E. Section 37 -- License Amendment Improvements

The discussion draft would amend the FPA to add a new section 37 requiring two rulemakings related to license amendments. The first rulemaking, under section 37(a), would create a new class of amendments called "Qualifying Project Upgrades" and the second rulemaking, under section 37(b), appears to address all other license amendments. Qualifying Project Upgrades could include capacity increases, efficiency improvements, and other enhancements to hydropower generation, as well as environmental protection, mitigation, or enhancement measures to benefit fish and wildlife, cultural resources, and recreation. Qualifying Project Upgrades would be limited to those amendments that are unlikely to adversely affect threatened or endangered species or critical habitat; are consistent with comprehensive plans; have insignificant or minimal cumulative adverse effects; and are unlikely to adversely affect water quality and water supply. Section 37(a)

sets forth specific steps and timelines that the Commission and other federal agencies, state agencies, and Indian tribes would have to follow to determine if an amendment meets specified criteria and for issuing public notices, providing comments, and issuing any other needed federal authorizations. Section 37(b) does not specify specific steps and timelines but instead, gives the Commission broad authority (after soliciting public comments) to develop the most efficient and expedient process for approving amendments for different categories of amendments.

Regarding the provisions in 37(b), Commission staff currently adapts the processing of amendments according to the scope of the proposal, potential impacts, and other relevant factors. This flexibility has facilitated the expeditious nature of the vast majority of amendments. Developing new procedures for specific categories of amendments could be difficult and could reduce the existing flexibility.

The defined steps and schedules required by the proposed section 37(a) are in significant part currently commonly used in Commission proceedings. However, the defined schedules in the draft document could present some challenges. For example, while the draft requires the Commission to make a preliminary determination of qualification within 15 days, that determination must be based upon consultation under the Endangered Species Act consultation, which can take up to 135 days (and, as discussed above, often much longer). Moreover, the proposed procedures could add to processing time for minor amendments, such as requests to add a new boat ramp, modify a transmission line to make the line raptor-safe, or rewind the project's generators. These

minor amendments can often be processed in two to four months, but might be "qualified" under section 37(a), and thus take longer to resolve. As discussed above, Congress may wish to limit this provision to capacity amendments, which generally take longer. It is also the case that these more complex amendments would have potential significant environmental consequences, and thus not be eligible for treatment as "qualified." Further, the requirements of Clean Water Act, National Historic Preservation Act, Coastal Zone Management Act, and Endangered Species Act, may not be consistent with the proposed process. Finally, I note that the standard for amendment conditions other than those necessary for public safety (a condition must be reasonable, economically feasible, and essential) sets a high bar, and the resources that may be protected do not include irrigation, flood control, historic properties, and recreation, matters that Congress has otherwise directed the Commission to consider.

III. Promoting Hydropower Development at Existing Dams Act

The discussion draft proposes adding a section to the FPA allowing the Commission to, after consultation with certain federal and state agencies and Indian tribes, issue exemptions for qualifying hydroelectric facilities to be located at existing, non-powered dams. The exemption would include any terms and conditions that the Commission determines are (1) necessary to protect public safety and (2) reasonable, economically feasible, and essential to prevent loss of or damage to, or to mitigate adverse effects on, fish and wildlife resources directly caused by the construction and operation of the qualifying facility. In order to qualify, the facility must, among other things: (1) be constructed,

operated, and maintained for electric generation; (2) be located at a qualifying non-powered dam that is operated for the control, release, or distribution of water for various purposes other than electric generation and has been certified by an independent consultant approved by the Commission as complying with the Commission's dam safety requirements; and (3) not change the existing flow release regime at the qualifying non-powered dam. The jurisdiction of the Commission under the exemption for the qualifying facility would be limited to the qualifying facility exempted and any associated primary transmission line, and would not extend to any conduit, dam, impoundment, shoreline or other land, or any other project work associated with the exempted qualifying facility. Annual charges for such facilities would be established within 180 days of enactment of this section after notice and opportunity for public comment.

The development of hydropower at existing, non-powered dams is a laudable objective, because such projects present the opportunity to development a renewable resource with relatively small environmental impacts, a goal shared by many stakeholders. I am concerned, however, that the fact that the bill contemplates that the Commission's jurisdiction would not extend to the dam and impoundment at qualifying facilities would leave the Commission without the ability to ensure that the public was not at risk for hazards arising from project dams or reservoirs. Further, limiting the environmental conditions to those that provide for the protection of fish and wildlife resources would leave unaddressed potential impacts on other resources, including irrigation, flood control, water supply, recreation, and other matters. In addition, the discussion draft appears to

contemplate that the Commission treat such projects as it treats those projects at federal facilities where the Commission only licenses the facilities added to facilitate hydropower generation and the federal owner is responsible for the safety of the dam. If that Congress' intent, it might be appropriate to limit this provision to projects at dams owned by state agencies with an established dam safety programs.

IV. Promoting Closed-Loop Pumped Storage Hydropower Act

Pumped storage projects offer the opportunity to store energy for use when it is needed. This makes these projects a valuable potential resource, one that can balance generation from other renewable projects, as well as traditional projects. Closed-loop projects, which do not regularly require the intake of or supply of water, can have fewer operational effects than other types of pumped storage. The goal of making the process of reviewing closed-loop projects as efficient as possible is a positive one.

The discussion draft would prohibit the inclusion of conditions in licenses for closed-loop pumped storage projects other than those necessary to protect public safety or are reasonable, economically feasible, and essential to protect fish and wildlife. As with the previous draft, I note that conditions relating to resources such as irrigation, water supply, recreation, and other considerations would be precluded. I also note that the most recent pumped storage project that the Commission licensed, the 400-MW Gordon Butte project, was processed in 14 months.

In addition, the new section would allow applicants, even those that claimed municipal preference, to add other entities to preliminary permits and to transfer licensees

to non-municipal entities. This would reverse, as to closed-loop pumped storage projects, the Commission's policy against "hidden hybrids." This policy was established to prevent municipalities, which have a statutory preference over non-municipalities, from manipulating the licensing process by using municipal preference to obtain a license or permit in competition with a non-municipal entity, and then transferring the license or permit to a third party. Should Congress wish to allow the addition of new entities to permits or licenses without disadvantaging non-municipal competitors, Congress could eliminate municipal preference as to closed-loop pumped storage projects, thereby leveling the playing field.

V. Promoting Small Conduit Hydropower Facilities Act of 2017

As discussed above, pursuant to the Hydropower Regulatory Efficiency Act of 2013, a qualifying conduit facility can be exempt from Commission jurisdiction if it meets specified criteria. The qualifying conduit facility program has been effective.

Under the 2013 Act, not later than 15 days from the date of a notice of intent for a qualifying conduit, the Commission must make an initial determination as to whether the facility meets the qualifying criteria, and if so, publish public notice of the notice of intent. If no entity contests whether the facility meets the qualifying criteria within 45 days, the facility is deemed to meet the criteria. If the qualifications are contested, the Commission makes a prompt determination.

The discussion draft would add provisions to Section 30(a) of the Federal Power Act for projects that meet the same criteria, but do not exceed 2 megawatts. For such projects,

there would be no public notice provisions, and the facility would be deemed to qualify upon the affirmative determination by Commission staff, or the failure of the Commission to act, within 15 days of the notice of intent. The current provisions would remain applicable for facilities between 2 and 5 megawatts.

Since the 2013 Act, 83 projects have qualified and not been required to be licensed or exempted by the Commission. The entire process has on average taken just over 2 months, including the required 45-day public notice period. The Commission has rarely received comments that have bearing on whether the facility qualifies. The provisions in the discussion draft would expedite some projects, but might cause confusion because there would be two qualifying conduit provisions. To provide benefits to a greater range of projects, Congress should consider shortening the 45-day notice period for all qualifying projects, rather than creating two classes. Congress may also wish to consider whether larger conduit projects should be eligible for exemption from Commission jurisdiction.

VI. The Supporting Home Owner Rights Enforcement Act

The Supporting Home Owner Rights Enforcement Act would amend section 4(e) of the FPA to add "minimizing infringement on the useful exercise and enjoyment of property rights held by non-licensees" to the list of matters to which the Commission must give equal consideration, and would amend FPA section 10(a)(1) by adding a similar provision in the listing of matters that the Commission must consider in determining that a project is consistent with comprehensive development. The act would also add a new provision requiring licensees, in developing recreational resources, to consider private land ownership

as a means to encourage and facilitate private investment and increased tourism and recreational use.

The Commission includes in licenses only those lands that are necessary for project purposes: those on which project structures are located, those on which project operation, such as flowage, occur, and those that are needed to carry out project purposes, such as public recreation. The issuance of a license or approval of a shoreline management plan does not change property ownership, and there are many private landowners who own property that is within a project boundary, just as there are privately-owned "islands" within some national forests. In the absence of a deeded property right of some kind, a licensee cannot enter into or interfere with private lands.

In addition, standard license conditions authorize licensees to allow private landowners to use licensee-owned lands, so long as the use is consistent with project purposes. Thus, for example, many licensees allow homeowners to maintain walkways across the licensee's land or to build private boat docks. A licensee cannot allow a private landowner to use the licensee's lands in such a way as to preclude the fulfillment of project purposes, as by building a fence along a walkway on the licensee's land that would prevent the public from entering the project shoreline. The Commission encourages its licensees to be good neighbors to landowners, local communities, and other stakeholders.

VII. Commencement of Construction Extension Bills

As noted above, section 13 of the FPA allows the Commission to set a deadline for the commencement of the construction of a licensed hydropower project no later than two

years from licenses issuance, and allows the Commission to grant a single two-year extension. If a licensee does not timely commence construction, the Commission must terminate the license. When this occurs, licensees must turn to Congress for relief. The Commission has a long-term policy that bills that allow the Commission to extend to deadline no more than 10 years from the date of license issuance are consistent with the Commission's policy against site banking. As noted above, the Hydropower Policy Modernization Act of 2017 would allow the Commission to extend the deadlines for start of construction of hydroelectric projects for up to eight years, thus obviating in many cases the need to seek legislation like the bills I discuss below.

A. H.R. 446

On March 13, 2012, the Commission issued an original license for Jordan Hydroelectric Limited Partnership, Virginia's proposed 3.7-megawatt Gathright Dam Hydroelectric Project No. 12737, to be located at the U.S. Corps of Army Engineers' Gathright Dam, on the Jackson River, near Falling Springs, in Alleghany County, Virginia. The license required the company to commence project construction within two years of the date of the license, or by March 13, 2014. At the licensee's request, the Commission granted the maximum allowable two-year extension of the commencement of construction deadline, thus making the deadline March 13, 2016. The licensee did not commence construction by the extended deadline. Commission staff understands that the licensee has been working with the U.S. Army Corps of Engineers to obtain a 408 permit, which is needed before construction can begin.

H.R. 446 would authorize the Commission to extend, for six years from the date of expiration of the extension issued by the Commission, the commencement of construction deadline for the Gathright Dam Project, thus extending to 10 years from the date of licensing, and to reinstate the project license, if necessary. The bill is consistent with the Commission's policy.

B. H.R. 447

On January 27, 2012, the Commission issued an original license for Jordan Hydroelectric Limited Partnership, Virginia's proposed 3.0-megawatt Flannagan Dam Hydroelectric Project No. 12740, to be located at the U.S. Corps of Army Engineers' John W. Flannagan Dam and Reservoir, which is on the Pound River, near the Town of Clintwood, in Dickenson County, Virginia. The license required the company to commence project construction within two years of the date of the license, or by January 27, 2014. At the licensee's request, the Commission granted the maximum allowable two-year extension of the commencement of construction deadline, thus making the deadline January 27, 2016. The licensee did not commence project construction by the extended deadline. Commission staff understands that the licensee has been working with the U.S. Army Corps of Engineers to obtain a 408 permit.

H.R. 447 would authorize the Commission to extend, for six years from the date of expiration of the extension issued by the Commission, the commencement of construction deadline for the Flannagan Dam Project, thus extending to 10 years from licensing, and to reinstate the license, if necessary. This bill is also consistent with Commission policy.

C. H.R. 2122

On April 30, 2012, the Commission issued an original license for Fairlawn Hydroelectric Company, LLC's proposed 14-megawatt Jennings Randolph Hydroelectric Project No. 12715, to be located on the Corp's Jennings Randolph Dam and Lake, on the North Branch Potomac River in Garrett County, Maryland, and Mineral County, West Virginia. The license required the company to commence project construction within two years of the issuance date of the license, or by April 30, 2014. At the licensee's request, the Commission granted the maximum allowable two-year extension of the commencement of construction deadline, thus making the deadline April 30, 2016. On September 22, 2016, the Commission granted a two-year stay of the commencement of construction deadline of the license, or until April 28, 2018. Commission staff understands that the licensee is working with the Corps to obtain construction authorization under section 14 the Rivers and Harbors Act of 1899.

H.R. 2122 would authorize the Commission to extend, for up to three consecutive two-year periods from the date of expiration of the extension issued by the Commission, the commencement of construction deadline for the Jennings Randolph Project, 10 years from license issuance, and to reinstate the license, if necessary. This bill is consistent with Commission policy.

VIII. Conclusion

This concludes my remarks on the draft hydropower bills drafts. Commission staff would be happy to provide technical assistance as you move forward with your consideration of this legislation. I would be pleased to answer any questions you may have.

Mr. OLSON. Thank you, Mr. Katz, for your testimony, and we will now move to the question-and-answer session of the hearing. I will begin the questioning by recognizing myself for 5 minutes. Again, welcome, Mr. Turpin and Mr. Katz from Texas 22.

I am very concerned about the lack of a quorum at FERC and the negative impact it could have on pending pipeline projects. The administration and the Senate have to make this a priority. My question is how is the Commission handling the workload? What types of actions have been delegated to staff which requires sign-off from the Commissioners? Mr. Turpin?

Mr. TURPIN. Thank you. The workload in a large part for the things that are delegated, such as the need for reviews and the processing of applications, continues unabated. Staff is working as hard as it ever has even when there was the quorum. Issues, there are issues related to gas projects where the offices don't have a lot of delegated authority and staff is preparing those drafts for consideration when there is a quorum.

And on the hydro side, there is a bit more delegated authority and there are more orders and decisions that can be made on uncontested cases.

Mr. OLSON. Thank you, sir. Another question for you, sir, Mr. Turpin. A few years ago, GAO analyzed major pipeline projects. They found that you can take up to 2.5 years for a FERC certificate. It averaged 568 days. Actually that is about the study in the hearing last Congress.

So if you haven't read the study, the report, recently, I would like to know even if you haven't, what are the biggest sources of friction there are for pipeline approval, and number two, what have you all changed in recent years to make this process faster?

Mr. TURPIN. I haven't read that study. In looking back at the data for all issuances for the Commission since 2009, on average it is 88 percent of the projects get issued within 1 year. Of course that encompasses a lot of the projects that are very small in scope and therefore move faster. The larger and more complex a project the more time it tends to take just as a function of the higher number of stakeholders that are engaged and the more complex issues that are raised.

In terms of what are the points of friction, in general really it is the development of the information. As Mr. Katz alluded to with hydro, a site selection on that is a major determining factor and it is the same for pipelines. The route selection is a very large factor and which is why the Commission developed the pre-filing process. It allows the applicants to come in and engage the stakeholders well before they have sort of finalized the route to get input on where the best route may be that addresses all the issues. And that allows them then, once they do file the application, to move forward.

But it is the development of that information along the route as well as the information related to the construction and design of the facilities that usually are the stumbling block for the regulating agencies.

Mr. OLSON. Thank you. Mr. Katz, I am not going to leave you out of the questioning. What are the opportunities to expand the

Nation's hydropower capacities, specifically what is the greatest impediment to installing power generators on nonpowered dams?

Mr. KATZ. I think there are significant opportunities and I think as you alluded to the greatest opportunities or at least the simplest opportunities are adding capacity to nonpower dams including Government dams, those operated by the Bureau of Reclamation and the Army Corps of Engineers. I think that the greatest impediment to that are failures to obtain consensus among the various stakeholders where people are comfortable.

And for example, we have recently licensed a project in Pennsylvania where everybody was very comfortable with the project, they felt it was good for the environment and good for the energy distribution in the area and that was able to go through very quickly. Where you have stakeholders who are not comfortable and raise issues, whether it is State agencies, Federal agencies, or other entities, that can slow down the process radically.

Mr. OLSON. Further question: What types of technologies are being developed to improve safety, efficiency, and lessen the environmental impact of hydropower, and what can Congress do to help further innovation?

Mr. KATZ. I am not an engineer, so I am not expert in the types, but I know there are——

Mr. OLSON. Me neither.

Mr. KATZ. Mr. Turpin knows more about engineering generally than I do, but I think Mr. Leahey and perhaps some of the witnesses who come later may be able to give you more detail. But I know that there is development ongoing, some of which has been funded by the Department of Energy to help develop fish-friendly turbines and other types.

There is one new project that is using what is called the Archimedes' screw technology which is brand new. Folks have been looking into wave and tidal energy projects. These are all new, promising technologies that can continue to be explored.

Mr. OLSON. Thank you. My time has expired and I now I call upon the ranking member of the subcommittee, Mr. Rush, for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman. To Mr. Turpin, a recurring theme in all of these bills is that the environmental protection concerns are given a backseat in order to expedite applications for both natural gas pipelines and hydropower licenses. In your opinion, does FERC staff have the necessary expertise to determine the scope of environmental review needed to satisfy NEPA obligations for natural gas permits?

Mr. TURPIN. Thank you. Thank you, sir. I think for the purposes of determining the Commission's NEPA obligations, yes. Commission staff is well versed in that. We have a large staff in the Office of Energy Projects that are archeologists, engineers, biologists, environmental protection specialists, and with that staff we can very well do that job for the FERC's needs.

However, the NEPA, you know, even though NEPA applies to all Federal agencies, being a process-based statute is the process we all have to comply with, but different agencies with other jurisdictions might have different obligations or jurisdictional coverage and FERC staff is not versed in those statutes for other agencies.

Mr. RUSH. In regards to hydropower licensing does FERC have any statutory mandate to protect water quality, wildlife, or access to public lands as in the case for some of the other agencies that are made subordinate to FERC with this bill?

Mr. KATZ. The Commission has the obligation under the Part 1 of the Federal Power Act to consider all aspects of the public interest. Did I answer your question, sir?

Mr. RUSH. No, you didn't.

Mr. KATZ. I am sorry.

Mr. RUSH. Do you have any statutory mandates?

Mr. KATZ. Yes, we do. The Federal Power Act requires the Commission to consider all aspects of the public interest.

Mr. RUSH. All right.

Mr. Turpin, in your opinion, does FERC currently work effectively with the other agencies throughout the natural gas application process and would altering FERC's role from one of collaboration with other agencies to, quote, policeman, end of quote, role of overseeing and monitoring other agencies' congressionally mandated duties to improve coordination and would this result in faster application decisions?

Mr. TURPIN. As noted in my testimony, the FERC pre-filing process is collaborative. We engage a lot of agencies. It is the whole point of the approach and I think we are very effective at doing that. Most agencies are very willing to participate and to engage with staff, but they have their own resource constraints, they have their own statutes they have to meet, and it is those that drive their needs more so than the Commission's schedule that is put out.

Mr. RUSH. Well, an extension of that question is are there ever instances of a natural gas permitting application being delayed because an applicant has not submitted all of the necessary information, and if so, how would this legislation help expedite the process in those cases where agencies are not provided with timely and complete information necessary to perform congressionally mandated project reviews? And if you have any recommendations I would like to hear them in order to address this issue.

Mr. TURPIN. The best thing in terms of generating the information is the early engagement of all the stakeholders. The earlier agencies can get involved and define what information needs they might need for their mandates the better, because that gives the applicant enough time to go out and find that info, develop those studies.

So, you know, the pre-filing process allows that. The legislation encourages that same early engagement and I think that is the best path forward for trying to address those issues.

Mr. RUSH. Thank you, Mr. Chairman. I yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from Ohio, Mr. Latta, for 5 minutes.

Mr. LATTA. Well, thanks, Mr. Chairman, and thank you very much to our witnesses for appearing before us today.

Mr. Katz, if I could ask maybe a follow-up from your earlier statement. You had mentioned that there was a project out in Montana, a hydro project, and there is also because of the area of where it was and with the selection of the site that I believe that

you said that the individual said that they were turned loose to get this project done.

How often does that happen that folks out there can actually do something like that? And when they say get turned loose, how fast can that happen in the permitting and everything else to get a project done?

Mr. KATZ. Sure. It is hard to give an exact time because it really depends on what information is provided and what the issues are. What I meant by that was the Commission has three licensing processes. Two of them, the integrated licensing process and the traditional license process, have fairly specific timeframes and details of things you have to do.

There is another process called the alternative licensing process which allows the stakeholders to essentially set up their own licensing process the way they want to do it, and the Commission is always open to allowing people to do that if that is something that they can agree upon it. In this instance, the developer was very forward-looking and positive and took the reins in his own hands and got a lot done very quickly.

Mr. LATTA. So how often can somebody do that alternatively? Is that a very frequent, infrequent?

Mr. KATZ. It is less frequent than the other two processes, but it is always available. I think it is a question of what the parties think will work best. For example, the traditional process tends to work best for smaller projects because it sets forth more exact deadlines but has less of the collaborative, sort of going out there and meeting and doing a lot of stakeholder involvement, so it can be less expensive and easier for smaller projects and those by developers with less funding.

The alternative process, however, can be shaped in any way that the stakeholders think is appropriate provided that they give the Commission a complete record at the end of the day. And in the Gordon Butte case that is exactly what they did.

Mr. LATTA. OK. Let me follow up with you again, Mr. Katz. How did the permitting timelines for hydropower compare to other types of renewable energy developments such as wind and solar projects?

Mr. KATZ. I think they are significantly longer.

Mr. LATTA. Do you believe that the permitting process could be improved to level that playing field, and how?

Mr. KATZ. Absolutely.

Mr. LATTA. OK. And how would that be permitted, how would we level that playing field?

Mr. KATZ. I don't have exact prescriptions. I think some of the things in the legislation before us would go a ways towards doing that. Whatever we can do to reduce duplication to get everyone on the same page at the same time will help. What tends to slow things down are if one agency is not finished at the same time another agency is or if it feels it needs to do additional environmental work or other things so that then things are not sequential, or things are sequential—I am sorry—rather than being done at the same time to the extent that it can be one process that is run in an orderly and efficient manner that will cut down the time.

Mr. LATTA. Would you say there is a lot of duplication in the Federal process then between agencies who have that duplication?

Mr. KATZ. There is some, yes.

Mr. LATTA. Let me ask also, not to pick on you, Mr. Katz, when there are disputes about a potential condition, the licensing stakeholders are entitled to a trial-type hearings on the facts and the evidence. It is clear that the current process under the Federal Power Act has not worked as it has been intended. It requires so much time, money, and staff resources it is rarely used if ever. How many types of these trial-type hearings have been conducted to your knowledge?

Mr. KATZ. Again Mr. Leahey may know exactly, I suspect he does. To my knowledge it is in the area of five or six. It is not a lot. Those are not conducted before the Commission. To this point they have been conducted before administrative law judges designated by the agencies that impose the mandatory conditions that are the subject of the hearing, so the Commission doesn't have detailed knowledge about them.

Mr. LATTA. When you say five or six, is that five or six a year or five or six over time?

Mr. KATZ. I think total. Again I hesitate to look over at Mr. Leahey. He will know the number, but it is not a large number.

Mr. LATTA. OK. And then, the Commission is responsible for assessing whether it would be responsible include conditions in the project license. Shouldn't the Commission take the lead with these trial-type hearings?

Mr. KATZ. It is possible. The bottom line though is that those conditions are mandatory and the Commission has no authority to not include them in the license. So the question whether the trial-type hearings do anything that the Commission can act upon at the end of the day, because as long as they are mandatory whether the trial is at the Commission or not it doesn't change the result.

Mr. LATTA. Thank you very much. And Mr. Chairman, my time has expired and I yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from California, Mr. McNerney, for 5 minutes.

Mr. MCNERNEY. I thank the chairman. Mr. Katz, California and FERC entered into an Memorandum of Understanding regarding hydropower. Can you point to any significant benefits that have resulted from this MOU as it relates to hydropower licensing and relicensing?

Mr. KATZ. I think that the efforts there were made to sort of process things in a sequential time. I know California has had budgetary difficulties so that the State agencies have not had the resources that they would like to be able to devote to all of the hydropower projects. And the sense, I think, of the MOU was to get things done in an orderly and sequential fashion. I think it has done some good in that regard.

Mr. MCNERNEY. So it is mostly to benefit the State processes?

Mr. KATZ. Yes, I think so. I mean, it also, I believe the MOU called upon to the extent possible for the environmental reviews of the State and the Commission to be sequential. I am sorry, I keep saying sequential—to be done at the same time and California did not have to do extra work at the end of the day, but ultimately that is a call for the State to make.

Mr. MCNERNEY. OK. You did use the word sequential before, but you meant concurrent?

Mr. KATZ. Exactly, in this instance, yes. Concurrent reviews are always more efficient than sequential reviews.

Mr. MCNERNEY. So FERC currently attempts to complete studies on a concurrent basis. The Hydropower Modernization Act draft language more or less requires concurrent studies prior to, or concurrent with preparation of the FERC environmental requirements from the NEPA. Is this a good approach, or what is the best approach we can take to get concurrent studies?

Mr. KATZ. I think it is a reasonable approach. The bottom line is, however, that both as to State agencies and other Federal agencies, they have their statutory mandates which they need to satisfy and there is nothing in the current Federal Power Act or in the draft legislation that would preclude those agencies from taking the time they need and from performing additional reviews if that is what they feel they need to satisfy their statutory mandates.

Mr. MCNERNEY. So you feel that concurrent requirements aren't going to throw environmental protections aside or blunt them to some degree?

Mr. KATZ. I did not see anything in the idea of concurrent reviews that would undercut environmental protection.

Mr. MCNERNEY. Well, what are the areas of improvement under the integrated licensing process?

Mr. KATZ. I am sorry. Could you ask the question again?

Mr. MCNERNEY. What are areas of improvement under the ILP?

Mr. KATZ. There is probably a variety of improvements. I think mainly they involve on the ground aspects rather than necessarily regulatory or statutory changes. I think getting people on the same page and getting them to reach agreement on what sort of studies need to be done and what the work is that is necessary to develop a full understanding of a hydro project is key. And in some instances folks reach that agreement and proceed very quickly and other instances they greatly disagree and I am not sure that there is really much that can be done by statute or regulation to force people who have different statutory authorities to agree.

Mr. MCNERNEY. OK. How often do the licensees have to utilize the FPA's authority for automatic year-to-year license extensions?

Mr. KATZ. It is not a question of something that a licensee can use. What the statute provides is that if a license expires and the Commission has not yet been able to issue a new license then what is called an annual license is automatically issued, and I can't give you a percentage. I would be glad to get that information back if you want it, but it is not unusual.

Mr. MCNERNEY. Moving on, I have heard from a lot of stakeholders who say that agencies can improve with information sharing. Could you describe the information sharing process as it relates to the study process?

Mr. KATZ. Sure. I mean the Commission believes in a very transparent and an open process. There is no secret information on hydro projects. As studies are done they are filed with the Commission. They are available to all stakeholders. Often there are study review meetings under the ILP, for example, where everybody sits down and goes over the study, discusses its merits, its demerits,

whether there is further information done. So transparency is an absolute key to the hydro licensing process.

Mr. MCNERNEY. Well, could there be any value to having stakeholders support a person to person type manager dedicated to particular bases throughout the country to facilitate the processes?

Mr. KATZ. I am not certain about that. I would have to know more about the proposal.

Mr. MCNERNEY. OK, all right. My time has expired, Mr. Chairman. I will yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from Pennsylvania, Dr. Murphy, for 5 minutes.

Mr. MURPHY. Thank you, Mr. Chairman.

Mr. Turpin, the Natural Gas Act requires a Commission review whether a proposed interstate pipeline is necessary or desirable in the public interest. It also requires the Commission to set rates charged for interstate pipeline service to be just and reasonable. So let me ask another area here, does the Commission take into account jobs and economic impact as it reviews the public interest?

Mr. TURPIN. Well, the criteria that the Commission considers—and it is a decision by the five, or when there are five, sitting Commissioners—are laid out in the 1999 certificate policy statement. My office is really focused on generating the environmental impacts associated with construction of a project and in gathering the data from the application that the applicants put forward on——

Mr. MURPHY. Are jobs considered at all, impact upon employment?

Mr. TURPIN. I can't say what each individual Commissioner considers.

Mr. MURPHY. What about you?

Mr. TURPIN. I don't have a say in that. I generate the information and I pass—the NEPA document is not a decisional document.

Mr. MURPHY. But in terms of the information generated, you don't put down impact upon jobs, employment, those things?

Mr. TURPIN. In the NEPA document there are socioeconomic analyses that looks at construction jobs, looks at impacts to the area for lodging, traffic, for those localized impacts.

Mr. MURPHY. OK, thank you. How often has the Commission used its authority under Section 5 of the Natural Gas Act to review the rates and require prospective changes when the rates are no longer just and reasonable?

Mr. KATZ. The Commission does not often do that. The Commission has in recent years proposed to look at a couple of pipelines under Section 5, but it is not something that occurs very often.

Mr. MURPHY. Why is that?

Mr. KATZ. I think the Commission has not seen instances where pipelines appear to be charging excessive rates. Certainly if people complain about it and come before the Commission and say you need to look at this pipeline rate because it is excessive that is something Commission staff would look at. As I said that is not Terry and my area of expertise, but I am not aware that it occurs very often.

Mr. MURPHY. Are you aware in your areas of expertise looking at any of the things of impact, economic impact and employment issues too?

Mr. KATZ. If you are asking me, yes. Terry said yes, the Commission looks at all the information that is provided to it. In a case of if information is concerning increased employment, yes, the Commission would have that information before it to consider.

Mr. MURPHY. If it is there, you are saying?

Mr. KATZ. Yes. I mean the Commission is not in the best position to determine how many people a pipeline company is going to hire. The company is in the best position to know that and if it provides that type of information to the Commission then it is in the record for Commission consideration.

Mr. MURPHY. But that is not something you necessarily request. If they provide, it you have it; if they don't, you don't?

Mr. KATZ. I am not aware of the Commission's specifically requesting that.

Mr. MURPHY. So what I am concerned about here is, of course, that these are jobs, they are good-paying jobs where people are building pipelines whether they are the engineers, the operating engineers, the welders, whatever that might be, those are pretty valuable jobs that have initial impact upon employment longer term, I would say, than its maintenance of the pipeline, but the same thing for hydroelectric power, too.

I mean, we look at those things as important to make sure we are reviewing those. Well, it is something I believe we should be looking at as well and hope we can get to that future. Mr. Chairman, I will hold off on other questions for now and wait for the next panel. Thank you. I yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from California, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman. Thank you very much for being here. You know, as someone who—one of the reasons I ran for Congress was to deal with climate change, and I am excited to be on this committee. I am new to it. I don't understand why more people on our side of the aisle aren't flipping out about how long it is taking to do hydro. It is one base load that is carbon-free and I just, I am interested in understanding kind of what the obstacles are.

Let me say that one thing that I thought was interesting about your response to the chairman about what the obstacles are, Mr. Katz, is that you talked about stakeholders not environmental issues and that the obstacle was getting stakeholders to agree. In my mind as a former environmental attorney that is an extremely subjective kind of standard to try to reach. It is something that can vary greatly depending on the group of people you get in the room and it is also something that has got to scare the heck out of investors who are looking for some sort of certainty at the end of the day.

I am not going to be able to—I am just really interested in working the problem, and again I am not going to be able to do that in my 3 minutes and 49 seconds with you. But I just would say that it seems to me that maybe we could identify some more objective criteria so that we protect rivers, we protect fish and wildlife, but in a way that is more objective and I think that would help us. Just instinctively it seems to me that that would help us save some time.

One thing you did say about in reaction to some of the materials before us is that you are concerned that some of it would add bureaucracy. And I would like to know now what in here would actually add to the bureaucracy? What is your concern that might actually slow us down?

Mr. KATZ. Sure. And let me say in addition in response to your initial comments that I think it is difficult to have objective environmental criteria since every hydro site is different, but I agree with you that being as objective as you can is a good goal. And one of the things in the hydro area is that there is what we tend to call shared decision making. So this is not a matter where the Commission gets a hydro proposal, it reviews it, it approves it or doesn't approve it and it is done.

There are instances where other Federal agencies have the right to impose mandatory conditions; the States have the right to impose mandatory conditions under the Clean Water Act, so those are the things when I talk about the stakeholders. The stakeholders include those agencies that have a right to participate in the proceeding and to affect the ultimate licensing, and it is really necessary to get them on the same page to be effective.

Now in terms of the specifics of the act, I would be glad to work with you and your staff on those in the future. Some of the things, for example one of the things that struck Commission staff in looking at these was for the provisions regarding amendments. And the provisions there seemed to require for all amendments that there be a schedule established and perhaps a Memorandum of Understanding undergone, and it has been Commission staff's experience that 87 percent of amendments are approved within 6 months because they are usually minor matters.

So while the provisions regarding the process might very well be very useful for larger what we call capacity amendments where someone is greatly increasing the capacity of a project, they would not necessarily be helpful in terms of the smaller work. So it is those sorts of things where everything is not one-size-fits-all, and we would want to be sure that whatever processes are created will be applied to those proceedings in which it makes them quicker, but would not be applied to those proceedings in which it would slow them down.

Mr. PETERS. Let me just ask one other specific question. Is there a way we could speed up the relicensing of existing facilities that may be wearing out? Is there some reason why that takes as long as it does?

Mr. KATZ. I honestly don't have a magic answer. I don't know that anyone else does or it would have been done long since. I know Congress—all of the stakeholders have been concerned about this for years. I think part of the problem is just the statutory structure where you need to do a thorough environmental review and then there are a number of authorities that have the right to impose conditions.

It is very hard to do a set process. For example, under the Clean Water Act the Commission can't issue a license unless it has gotten either a waiver of certification or a certification from the States. And there are some instances where the Commission has been completely done its work on a project and has been sitting for more

than a decade waiting for a State to act under the Clean Water Act and there is just flatly nothing the Commission can do about that.

Mr. PETERS. Great. I understand.

Mr. KATZ. Congress could change that if it wanted.

Mr. PETERS. I was going to say fortunately we are talking about statutory authority right here in this room, so you are probably talking to the right people. And I appreciate the constraints that the Commission has and your answers have been very helpful to me.

Mr. Chairman, thanks for the hearing, and I yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from Mississippi, Mr. Harper, for 5 minutes.

Mr. HARPER. Thank you, Mr. Chairman, and thanks to you both being here and look forward to additional info on this very important issue. Mr. Katz, if I can ask you a couple of questions. You know the ownership and regulatory environment for hydro is very complex. Where do you see the greatest opportunities for streamlining the process to improve that transparency and efficiency?

Mr. KATZ. Again, I think that the greatest opportunities are making all decision making as concurrent as possible. Any time you get into sequential decision making it slows things down, often radically slow.

Mr. HARPER. OK, can you identify a place or places where you see the greatest amount of duplicative or unnecessary work, something that comes to mind?

Mr. KATZ. I can't say as sort of an across the board matter, but some States and some agencies in some cases decide that they need to do their own environmental review in addition to what the Commission does and that can take time. Also some of those entities do not time their decision making so that it syncs up with when the Commission is ready to act and those matters can radically delay——

Mr. HARPER. So would it help, Mr. Katz, to have FERC act as a lead agency to maybe issue a schedule and enforce deadlines?

Mr. KATZ. The devil is in the details. I mean, the Commission always is the lead agency and the Commission's regulations and in giving cases specific orders do set schedules. It is the enforcing the schedules that is hard. And that is kind of a two-edged sword, because on the one hand the Commission might like to be able to say you will hand in your State authorization by date X; at the same time States have sovereignty and to the extent that they are told they need to do something by a certain time, if they feel not ready they could always deny certification or load up on very burdensome conditions because they felt they didn't have the time necessary to do their job. So it is a real difficult chicken-and-egg problem.

Mr. HARPER. And do you wind up with a lot of conflict in those situations where that happens on a regular occasion?

Mr. KATZ. I don't know if it is open conflict. It is more like the Cold War. I know again, I hate to keep referring to Mr. Leahey, but I think he will tell you that there are licensees that are very frustrated because they have done all that they can and in many instances are satisfied that the Commission has done all it can, but projects are not ready to go forward because other entities are not ready to act.

Mr. HARPER. And those other entities would be State entities?

Mr. KATZ. Some State entities, sometimes it is other Federal agencies.

Mr. HARPER. OK, which if we were trying to decide between the two would it be primarily more responsibility on State agencies or other Federal agencies that you see just in generalities?

Mr. KATZ. That is hard to say. I would suspect that Clean Water Act certifications are the greatest incidents of delay, but Endangered Species Act consultation also delays a number of projects.

Mr. HARPER. You know, almost everybody would agree that you know, hydropower, it is clean, renewable, abundant, and I believe affordable. What many people don't realize is that it does also improve the reliability of the electric grid. How does hydro help integrate intermittent renewables like wind and solar?

Mr. KATZ. Hydro can play a very significant role in doing that because hydro has what is called black start capacity, so you can have the hydro sitting there and it turns on instantly as soon as you let the water flow and turn the turbines. So when you are pairing it with something like wind, which is intermittent, it can play a major role in balancing the grid.

Mr. HARPER. Well, how about when there is an outage? Does hydro do the same to bring the grid back on line?

Mr. KATZ. Yes, it can serve in that capacity as well.

Mr. HARPER. All right. And how does hydro compare to other energy sources in terms of its environmental impact?

Mr. KATZ. That is a subjective matter. But as a general matter it is carbon neutral so it does not have air quality impacts. There are those who are concerned about the impacts on aquatic resources, but with proper management and proper conditioning hydro can be a very benign resource.

Mr. HARPER. So what would you say, Mr. Katz, what the greatest impediment to attracting capital to invest in new hydropower projects what would that be?

Mr. KATZ. Again that is not my area of expertise so much as it is the industry, but I would say uncertainty in the time the licensing process takes.

Mr. HARPER. OK, great. With that I will yield back, Mr. Chairman.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman and Ranking Member. I want to thank our witnesses for being here.

Mr. Turpin, it is clear from today's hearing that FERC has a whole lot on your plate and currently, pipelines, LNG permitting, hydropower, electric reliability all fall under FERC. In addition, there are many in the House who would like to expand FERC's permitting authorities to include oil pipelines. In your position as the director of the Office of Energy Projects most of these fall within your office.

Mr. Turpin, if FERC receives a request for a natural gas pipeline permit within the United States, could you please describe the review process to receive a certificate of public necessity?

Mr. TURPIN. Sure. For a line of any length, if it is especially complex or a large scope, we would encourage the applicant to follow

the pre-filing process. It is voluntary for pipelines. During that process, the Commission staff would try to engage the other agencies and stakeholders.

Mr. GREEN. What other agencies is it on the Federal level?

Mr. TURPIN. Any agencies issuing a Federal permit whether that is a Federal agency or a State agency, I think, on federally delegated authority. We would also reach out to State and local agencies to bring them into the process as well. The idea is to get as many folks under the tent at the beginning of the process when the applicant is still trying to design the route rather than wait, and by that have the greatest influence on easy changes to accommodate all the issues rather than wait until the applicant spends a significant amount of time and money in coming up with a project that then is harder to change.

So that process at a minimum can take 6 months, but it really is set by the applicant. As long as they want to stay in pre-filing they can, and during that pre-filing process staff would engage in its environmental scoping processes and would be seeking comment from the public and any interested stakeholder about what environmental issues need to be addressed in looking at the project.

Those issues are to be addressed by the applicant in 13 resource reports that must be filed with the Commission. Each of the reports covers a different resource area such as water quality or——

Mr. GREEN. But FERC is responsible for doing the National Environmental Policy Act enforcement; is that correct, NEPA?

Mr. TURPIN. We are the lead agency for constructing the NEPA document. Yes, sir.

Mr. GREEN. OK. What about when it crosses a U.S. border—Mexico, Canada?

Mr. TURPIN. It is the same. Pre-filing likely would not be used in those cases because they are usually smaller scope projects.

Mr. GREEN. Does FERC coordinate with the Department of State or Department of Defense when issuing a cross-border natural gas pipeline?

Mr. TURPIN. Currently, yes. The Commission reaches out to both of those agencies to get their concurrence that there is not a national security interest.

Mr. GREEN. If FERC were granted the authority to permit oil pipelines would the Commission follow similar procedures?

Mr. TURPIN. I think that would be determined by the Commission. They will have to set the policies that my office would follow. We do have the existing program that we do for natural gas, so, you know, a good guess is that it would parallel that but again that would be set by the Commission.

Mr. GREEN. Does the Office of Energy Projects possess the resources to handle that additional responsibility and activity, and do you anticipate additional needs if you permitted oil pipelines?

Mr. TURPIN. We do have the expertise. We do have the staff. There haven't been a tremendous amount of those border crossings. As I said in my testimony, I think over the last 10 years, we have done 15. I had staff look at potentially how many oil crossings there might be. I think we found there is somewhere in the neighborhood of 20 to 30 existing ones. So I don't think it is a tremendous workload. I think we would have to have some additional ex-

pertise for the unique aspects that are different from natural gas lines.

Mr. GREEN. Oftentimes that oil pipeline is in the same easement that a natural gas pipeline or some other product.

Mr. Katz, connected action has been legally defined as an action that is interdependent parts of a larger action. Mr. Katz, under NEPA regulations FERC is required to review connected actions of a pipeline project; is that correct?

Mr. KATZ. That is correct.

Mr. GREEN. If a cross-border pipeline project cannot proceed without a certificate of crossing as described in the legislation would FERC consider this a connected action?

Mr. KATZ. Connected to what, sir?

Mr. GREEN. If a cross-border pipeline project cannot proceed without a certificate of crossing as described in this legislation we are considering, would FERC consider this a connected action?

Mr. KATZ. It could be a connected action to the remainder of the oil pipeline, yes.

Mr. GREEN. Is FERC required to consider the cumulative impacts of a pipeline project?

Mr. KATZ. Yes, it is, of all projects it reviews.

Mr. GREEN. OK. I am out of time, and thank you, Mr. Chairman. But obviously coming from Texas we are trying to sell as much natural gas as we can to northern Mexico and I know there are processes now that are in place, but again crossing the international borders presents other issues and that is what this legislation is about. Thank you, Mr. Chairman.

Mr. OLSON. The gentleman's time has expired. The Chair now calls upon the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you very much, Mr. Chairman, for scheduling this meeting.

Mr. Katz, if I could go quickly with you because I want to spend more time with Mr. Turpin, but do you think, in your opinion, with the H.R. 446, 447, and 2122 that we are going to be talking about today for the construction of hydroelectric projects in Virginia and West Virginia, do you think the Commission has any problem with getting additional flexibility so that it doesn't take an act of Congress?

Mr. KATZ. No. One of the bills before you indeed would give the Commission the authority to extend the commencement of construction deadline and I think I indicated in my testimony that Commission staff supports that concept.

Mr. MCKINLEY. Thank you.

Mr. Turpin, I want to take a larger view, maybe perhaps take it from 30,000 feet on this issue of permitting because I know from the testimony and what we have read that FERC has a responsibility to coordinate these projects in the timeline, but the agencies often break from the mold and so it drags out.

I am trying to understand if we are moving in the right direction with this, because if we look back over it now, over time we have developed now there are 15 different permits have to be achieved to build a pipeline from ten different agencies and the timeline for

each of those agencies can be as long as 2 years or longer if they should so choose to do that.

But we are talking just of those we have the FERC transporter, the FERC certificate of public convenience, the Pipeline and Hazardous Materials Safety Administration permit, NEPA, an EPA permit, the Army Corps dredge permit, the Section 10 permit, the right of way permit for the Army Corps, the Federal levy right of way permit, the Fish and Wildlife incidental take permit, the Fish and Wildlife right of way, the Bureau of Land Management right of way, the Bureau of Indian Affairs right of way, the U.S. Forest Service public use permit, the U.S. Department of Agriculture easement, the Bureau of Land Reclamation, all of these I guess what I am wondering, are we really better off for having these permits? Because we look back at the track record when they built Hoover Dam, the permitting was less than 2 years to accomplish and I wonder whether or not did we cause havoc to the people in Colorado and along the Colorado River by building the Hoover Dam?

The Alaska Pipeline now have been 9 years trying to get a permit, because in addition to these 15 permits we have seen politics come into play with this. The Trans-Alaska Pipeline as controversial as that might be it took less than 1 year to get the permit and now we have the advantages that occurred.

So I am saying with all this progress or process of additional paperwork, are we better off for it? Can you tell me from FERC that this is—we have improved the system by delaying projects for 10, 15 years to do this? Think what I just said about the Hoover Dam. The permit was less than 2 years, but for 10 years we are trying to build a low-head dam in West Virginia and we can't get the permit, after 10 years. Who is right? Were the people back in the '40s and '50s and '60s and '70s, were they smarter than we are? That is to you, Mr. Turpin.

Mr. TURPIN. Thanks. I think a lot of that depends on the perspective. I mean all these agencies, all those permits, many of which you read are actually crossing of Federal lands and that is the easement that the pipeline company must get, all have come about through congressional action. I think it is whatever, you know, Congress directs these agencies on what they need to execute and we execute on what we are told to do.

Mr. MCKINLEY. So in your opinion, Mr. Turpin, are we moving in the right—I am sorry to keep—are we moving in the right direction by adding delays, because you know from construction—I spent 50 years in the private sector—delays cost money. The time value of money when you start something that maybe takes $10 million, even they are saying the licensing process for a new hydropower development project can last over a decade and would cost over tens of millions of dollars.

Are we better off for doing it that way or should we rely on the courts to see that they are upheld and let the construction begin? Because if we are truly after construction and we are trying to get jobs for people, wouldn't it be better to put them to work or to use paperwork? Who is benefiting from this, the unelected bureaucrats in Washington?

Mr. TURPIN. It sort of doesn't feel like a benefit to us. I think the answer is that it depends on what Congress determines is in the

public interest. I mean the bureaucrats have to execute the laws that are passed.

Mr. MCKINLEY. Thank you very much. I yield back my time.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the star center fielder of the Congressional Women's Softball Team, Ms. Castor, for 5 minutes.

Ms. CASTOR. That is right, the third week in June, the Congressional Women's Softball game against the evil women of the Press Corps. Mark it down on your calendars.

Thank you, Mr. Chairman, for calling the hearing today. One of the bills before us today aims to expedite FERC review of natural gas pipelines. Roughly 90 percent of FERC natural gas pipeline projects receive their certificate within 1 year, but nevertheless I do understand that it is important to promote efficiency in all Government review processes.

But this is why just a year and a half ago the Congress passed an important part of the FAST Act, and I had to go back and remind myself of all this and I encourage my colleagues to do the same. The FAST Act set up a new entity, the Federal Permitting Improvement Steering Council, FPISC, to bring Federal agencies together including many that have been mentioned today—the Army Corps of Engineers, the Bureau of Land Management, Fish and Wildlife—to improve timeliness, predictability, and transparency of Federal environmental review and authorization projects for major infrastructure projects which includes interstate natural gas pipelines.

The Council spent 2016 getting off the ground and is now overseeing permitting for 32 major infrastructure projects including seven interstate natural gas pipeline projects. These projects will benefit from enhanced coordination including establishment of a lead agency for the project, the establishment of recommended performance schedules and project review timelines and greater transparency at all levels. In fact, the Business Roundtable just wrote a letter recently to the White House to say can we move forward with getting FPISC off and moving; I think it is still waiting for another appointment.

So it is a bit confounding why we are here discussing an entirely new scheme for review of natural gas pipelines when we recently sent up an entirely new entity to do just that. And at a minimum we should have FPISC here to testify about their progress and I would respectfully request that we do that in a future hearing.

So Mr. Turpin, in your testimony you state that FERC has undertaken significant efforts to implement its responsibilities under the FAST Act. Can you elaborate a bit on your efforts?

Mr. TURPIN. Sure. When the FAST Act, I think within 6 months of its passage all the subject agencies had to post existing projects. For FERC I think we had the most significant number of projects that went up on the dashboard. And most of the efforts were at that point those projects had been through the FERC pre-filing process, had already had a lot of the coordination and FERC was the lead agency for those.

So a lot of that effort was at going back to document the things we had already done and put up coordinated project plans not as sort of a prospective plan but as a historical, you know, acknowl-

edgment of the things that the agency has already been through. We found that it did take a lot of time to coordinate the various agencies' data, some agencies would be unwilling to commit to schedules, and it does take quite a bit to kind of ride herd on the data that has to get posted. So that is the bulk of the work that we did in trying to set up.

Ms. CASTOR. So do you think it will help now when you have this interagency coordination when everyone is sitting at the table and maybe some agencies can look at others and say why aren't you adhering to the schedule and timeline?

Mr. TURPIN. And that is essentially what I think we have tried to do through the pre-filing process as well. I mean, as the lead agency we try to bring those folks to the table and try to get them the information they need so that they can advise us of the schedule they need.

Ms. CASTOR. And you also state that some of the provisions in the discussion draft would duplicate efforts. How so?

Mr. TURPIN. That is predominantly the tracking of everyone's project schedules. I mean that is what happens on the FPISC dashboard and then it would be a duplicate effort at the Commission.

Ms. CASTOR. Well, it is clear we need to hear more from FPISC to understand what it has achieved in the year-plus that it has been in operation already and I fear that we are simply setting up a duplicative process with this proposal, so I have serious concerns with the discussion draft today. I think we need to have FPISC here. And remember, this is only a year and a half old and it was the Congress' intention to promote greater efficiency by bringing that interagency group together. I yield back my time.

Mr. OLSON. The gentlelady yields back. The Chair calls upon the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you very much, Mr. Chairman. I do appreciate it and I appreciate the witnesses being here.

Mr. Katz, I was pleased to read in your testimony and then to hear in one of the earlier questions that you all are fine with H.R. 446 related to the Gathright Dam and H.R. 447 related to the Flannagan Dam and I appreciate that very much. Thank you. I am also interested in, you know, not only electric generation but making sure that we have jobs in my district. One of the great concerns in the coalfields has been is that production has been down and folks have said you all need to reinvent yourselves. We think coal has a long future, but at the same time we want to make sure that we are looking for new ways.

A couple of my friends in the Virginia General Assembly got a bill passed this last year. I had mentioned in a previous hearing that there were some folks interested in doing some things related to pump storage projects and what they are trying to encourage with the Virginia language is to see if they can't entice somebody into putting a pump storage facility inside an exhausted or abandoned coal mine making it a closed loop system.

And I appreciate your written testimony on those issues as well. One of the questions that you raised and I would like for you just to do some explaining for me, is you felt like there was because of the add-ons or, and I am probably using the wrong language, but the additional energy items like solar or wind to help pump the

water up that there was a problem in the draft language that we have floating around, at least the way I interpreted it, with municipals, maybe adding on nonmunicipals. Could you explain that to me?

Mr. KATZ. Sure. It is kind of a historical artifact, but years ago back in the '80s there were instances before the Commission—well, I should——

Mr. GRIFFITH. Way back in the '80s.

Mr. KATZ. Yes, when I was a youngster. I guess I should drop back five yards. I mean, in the Federal Power Act, Congress provided that a municipality would get a preference over a private entity in obtaining a preliminary permit or a license. So if they—all things being equal, if a city applies and a private company applies, the city wins.

And at some point in the '80s, the Commission discovered that municipalities were applying and saying I am a muni, give me preference, but then as soon as they got the license or the permit or even during the process they would turn around and sell it to another private entity, not the one that was trying to compete with them but somebody else. And so the Commission decided that was not fair competition and it was not appropriate to put private entities at a disadvantage.

So the concern that I expressed with regard to that portion of the bill was it would appear to allow a municipality to outcompete a private entity in the first instance, and then do what the Commission has hitherto precluded agencies from doing, turn around and sell it to a different private entity so that the private entity that was trying to develop the project, and indeed it might have been the entity that was out there in the field first, would be placed at a disadvantage. That is something for Congress to consider.

Mr. GRIFFITH. OK, and I appreciate that. And so it is not really a concern over this closed loop pump storage, but a concern that that and then perhaps the solar, the wind might be transferred as you just described; is that correct?

Mr. KATZ. Yes. It is not specific to closed loop, it is just that is, I believe, the only one of the bills in which that language appears so that is why I raised it in the context. But no, it is not something that is in the nature of closed loop pump storage projects.

Mr. GRIFFITH. And otherwise in regard to the draft language on closed loop hydro pump storage you all feel fairly comfortable that we are headed in the right direction on that?

Mr. KATZ. I think it has a lot to commend it. Again we would be happy to work with committee staff just to make sure that there are no duplicative areas or things put into the statute that make things take longer or are repetitive other agency actions.

Mr. GRIFFITH. Because as some of the other witnesses on both sides of the aisle have pointed out, you know, when you are using hydro that is a very clean source of energy. In the case of using a captive water source inside of an abandoned mine, you really don't have a whole lot of problems as long as initially it is structurally sound of course. But we believe that we have a number of those sites in southwest Virginia, maybe some in my friend Mr. McKinley's district over in West Virginia as well.

But we believe that this is one way that we can continue our region's longstanding history working in energy and at the same times create jobs in a field and an area where jobs have disappeared as a result of some downturns in the economy and some regulations that we are going to try to work on.

Mr. KATZ. Yes, if I may, I will say——

Mr. GRIFFITH. Yes, please.

Mr. KATZ [continuing]. The Commission approved a project of that type in California, the Eagle Crest Pump Storage Project, of which is using an abandoned mine and is currently under development, so those kinds of things can indeed make sense.

Mr. GRIFFITH. All right, I appreciate it very much and I see my time is gone. I yield back.

Mr. OLSON. The gentleman yields back. The Chair calls upon the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair. Mr. Turpin, welcome. I have a few questions concerning the interagency coordination discussion draft. Do you believe that aerial or remote surveys have limitations?

Mr. TURPIN. At this time, I do. I think, you know, the Commission and its staff has had a long history of accepting remote data in terms of looking at the initial environmental impacts, but then they need to be truthed up, you know, after an authorization before construction can start. There just simply are limitations. You can't always count on that to get the species counts. There are certain kinds of wetlands that aren't able to be delineated aerially.

Mr. TONKO. Thank you. And can aerial survey data be unreliable regarding the presence of endangered species, historic properties such as archeological sites and characterization of wetlands?

Mr. TURPIN. Yes.

Mr. TONKO. OK. Does the draft before us include any standards or methodology requirements that must be met in order for an agency to be required to consider data from remote surveys?

Mr. TURPIN. No. I did not see anything about minimum standards.

Mr. TONKO. OK, thank you. And so there would be no quality control requirements that might consider the degree of accuracy, of scale, of elevation, of vegetation strata and density, soil profiles, or many other factors that could vary widely depending on the geographic region and methodology deployed in that survey?

Mr. TURPIN. Again, I saw nothing of that in the bill and I took that to mean that that would be left up to the individual agencies.

Mr. TONKO. Does this discussion draft require applicants to attempt to conduct ground surveying before using remote surveying?

Mr. TURPIN. Not that I read, sir.

Mr. TONKO. And in which case applicants would not be required to make a good faith attempt to gain access to perhaps private property owners' land and in so doing help to make an important stakeholder aware that this project is being developed potentially through their property. There may be streamlining we can consider in the application process, but I really do believe that any attempts to skirt the rights of landowners especially when the outcome is less than perfect data would be a step in the wrong direction. Is that a concern that I should have?

Mr. TURPIN. I think the Commission's stance in the past has been that the best course of action is to get the best available data for the NEPA analysis. And the Commission has encouraged the pipeline companies to go out and actually seek, you know, pipeline right of way access to develop that data. But if it can't be achieved, then Commission staff has relied on remote and aerial data.

Mr. TONKO. I would also recommend that the committee receive more feedback on this provision from other Federal and State agencies to understand how inadequate data might affect their review process and the associated regulatory requirements.

Mr. Turpin, in your testimony you state the Commission's current review processes are thorough, efficient, and have resulted in the timely approval of the facilities necessary for natural gas pipelines. Generally speaking, how long does it typically take for a pipeline permitting process or permitting application to go through FERC's process?

Mr. TURPIN. It can vary pretty widely, so there is not a really great typical time. As I mentioned earlier, for the full spectrum of projects filed at the Commission for pipelines 88 percent of them are issued within 1 year and that does go from very small projects. Usually, once you begin to increase the length of the line and the complexity of the project, the time does tend to stretch out because there are simply more stakeholders engaged, more issues to consider, and more agencies to have at the table.

Mr. TONKO. But in general within a year?

Mr. TURPIN. Eighty-eight percent within a year. Yes, sir.

Mr. TONKO. Which seems to be, you know, given the importance of the review seems to be a fairly expedited process done thoroughly. So with that Mr. Chair, I will yield back.

Mr. OLSON. The gentleman yields back. The Chair calls upon the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman. And gentlemen, thank you for joining our panel this morning.

Mr. Katz, this committee received testimony some time back from a developer that had difficulty with a project on an existing nonpowered dam under the Army Corps of Engineers' jurisdiction. Apparently, they had to perform two separate NEPA analyses, one for the FERC license and a separate analysis triggered by the Clean Water Act for the Army Corps. I understand that you have an MOU with the Army Corps, but what could FERC do to prevent this type of duplicative application of NEPA in the future?

Mr. KATZ. Well, sorry to give this answer, but ultimately there is not anything we can do, we don't control the Corps. But as you noted we have——

Mr. JOHNSON. Your MOU doesn't address that, that kind of collaboration?

Mr. KATZ. Yes, the MOU does. The MOU seeks to have the Corps and the Commission act concurrently to the extent possible and that is as far as we have gone. But as a legal matter we have no authority over the Corps, so if the Corps decides it needs to do more environmental work we can't prevent that.

We also have a number of instances in which we have issued licenses for projects at Corps dams and the Corps decides it needs to take a certain amount of time whether it is to review the phys-

ical characteristics of the dam or to issue permits such as the ones that you refer to and the Commission does not have any authority to do anything about that.

Mr. JOHNSON. Do you have a personal opinion as to the waste and the duplication of having both the Army Corps and FERC requiring NEPA studies on the same project?

Mr. KATZ. My opinion is that agencies do need the studies they need in order to carry out their statutory mandates, but I don't think there should be duplicative studies and ideally they would be done concurrently so that there is as little use of time as possible.

Mr. JOHNSON. Now you would think that if you did one you could use the same application for both agencies and do it one time. I mean, I am a plowboy so common sense kind of reigns——

Mr. KATZ. Yes. That would be hoped. And often the Corps is a cooperating agency with the FERC when FERC does its NEPA document and then the Commission can do its best to make sure that everything is in the NEPA document that the Corps might need.

Mr. JOHNSON. All right. I understand that one important project parameter left unresolved until very late in the permitting process is the water quality standard, which as you know determines the amount of water that will ultimately be available to pass through the turbines in a dam, a power dam. Currently, the Corps may prescribe different water quality standards from the FERC and the State standards, beginning in some cases in the 6th or 7th year of the Federal permitting process. This can cause significant problems from both a commercial and a planning perspective.

Would you care to comment on this issue? Is that part and parcel of the same kind of deal we are dealing with, with the NEPA analyses?

Mr. KATZ. It may be to some extent. I think that those issues only arise where a project is located at a Corps dam. The Corps can't prescribe water quality standards if it is at a non-Corps dam. But yes, if a project is at a Corps dam, the Corps essentially has the ability to require the licensee to do whatever it is that the Corps sees fit to do.

Mr. JOHNSON. Having the ability is one thing, but this is another example of duplication and in my opinion it appears to be Government waste and wasting the time of the businesses and those that are trying to get these projects done; would you agree?

Mr. KATZ. It can be. Our experience is that different Corps districts behave different ways. Some Corps districts are very welcoming to hydro and try and do everything they can to promote hydro being built at Corps dam. Other districts don't seem to favor hydro at their dams.

Mr. JOHNSON. That is kind of—I appreciate that comment. Different Corps districts behave in different ways. Wouldn't it be great if they all were kind of talking to one another and doing things the same way?

Mr. KATZ. Yes, I think it would. I mean, one of the things FERC is lucky about is that we are a small agency, so if the chairman wants to know what I am up to she can walk down the hall and look me in the eye as opposed to I am located out in, you know, some far region of the country. And I think it is harder for folks in Corps headquarters to control all their aspects.

Mr. JOHNSON. OK. Lastly, for how many licenses issued or pending before the Commission has the FERC and the Army Corps MOU been employed to unify the NEPA review process, and how many of those instances has the Corps used a FERC generated NEPA review when approving a project? So has there been any crossover that you can recall where one agency used a NEPA from the other?

Mr. KATZ. There certainly have been in the past prior to the MOU. The MOU is fairly recent so I am not certain whether it has come into play in any cases where we have actually issued licenses.

Mr. JOHNSON. Can you provide us with the language around the NEPA analyses that is in the MOU? I would like to see that. I would like to see how much discussion actually went into it. Mr. Chairman, I yield back.

Mr. KATZ. Yes, I would be happy to do that and we also can let you know if there are any instances in which the MOU has been applied.

Mr. JOHNSON. Thank you very much.

Mr. WALBERG [presiding]. Thank you. The gentleman's time has expired. I now recognize the gentleman from Oregon, Mr. Schrader.

Mr. SCHRADER. Thank you very much, Mr. Chairman. I appreciate that.

I guess, Mr. Turpin, Mr. Katz and others have talked about the concurrent review process. Do you have any, see any problems particularly with accelerating a more concurrent review process by all the different agencies?

Mr. TURPIN. No. Concurrent reviews are what is desired. I think the rub becomes if the information needed by those other agencies can be developed at the same time as we are doing our review.

Mr. SCHRADER. That would hopefully be established whatever process would be set up to begin with. The States would be an outlier though as I understand. They are not subject to any Federal regulatory authority in terms of when they get their act together and decide to approve something?

Mr. TURPIN. The States that are acting under—it is their own authority would be preempted by the Federal permits, but the State agencies acting on federally delegated authority for Federal permits carry the same weight as the Feds.

Mr. SCHRADER. So that is something we will have to figure out going forward it looks like.

Mr. Katz, do you agree that the bill dealing with cross-border approvals, the new cross-border approval process that is being suggested combines the permit process to just the segment on the border and doesn't allow any discussion of the entire project?

Mr. KATZ. I am not certain that it does that. The Commission would have to do whatever NEPA review is appropriate, and I don't think that the bill precludes the Commission from looking at other impacts.

Mr. SCHRADER. OK, OK. That would be my read of the bill actually, also. While the bill says there is no cross-border review for modifications of an existing cross-border facility, with regard to cross-border authority are there other agencies or regulatory authorities and permitting processes that someone trying to modify a facility would need to abide by?

Mr. KATZ. I am not aware of any. I defer to Mr. Turpin. DOE, if there is a change in the commodity level DOE might have to approve it, but again I defer to Mr. Turpin for a further discussion.

Mr. TURPIN. It is going to depend on what equipment is needed for that modification. If it is a compressor station for the case of a natural gas pipeline it will have to comply with the Clean Air Act. I don't know enough about pump stations for liquid lines because we don't currently deal with those.

Mr. SCHRADER. What about an expansion of the footprint of the facility?

Mr. TURPIN. That again it would depend on what exactly the equipment is being installed as to if there would be Federal oversight or not.

Mr. SCHRADER. OK, but not any additional land being taken into the facility would not be an issue then. It is just the type of equipment that would be there?

Mr. TURPIN. I mean current, it is usually the installation of additional features and increasing the footprint that drive most of the environmental issues.

Mr. SCHRADER. OK. Then there is a 30-day approval, you know, deadline for export-import of natural gas cross-border. Do you see that hampering public input or the ability to get the permitting process done, the approval process?

Mr. TURPIN. As I read the bill the 30 days was applicable to the DOE commodity determination and so I don't think that would affect the FERC process.

Mr. SCHRADER. All right, very good.

Mr. Katz, in the legislation about promoting hydro development in existing nonpowered dams I am not that familiar with some of the current regulatory framework. It is being proposed to switch to that which is necessary to protect public safety or reasonable economic feasibility and prevent damage to fish and wildlife. How is that language different than what the current regulatory authority is?

Mr. KATZ. The language is different to the extent that it could be read to preclude the Commission's considering some other resources that it now considers like flood control, irrigation, recreation, historic preservation. The standard is also different. The standard as I read the bill was that measures had to be economic and essential for fish and wildlife and that is a higher bar than currently exists.

Mr. SCHRADER. OK, very, very good. And with that I will yield back, Mr. Chairman. Thank you.

Mr. WALBERG. I thank the gentleman and I recognize the gentleman from Texas, Mr. Barton.

Mr. BARTON. Thank you. We have out in the audience, Mr. Chairman, Andy Black. Andy Black is a former personal staffer of mine and a former staffer of the committee and also former senior official over at FERC, and he just lost his dad and I think just got back from the funeral yesterday. So half of the committee and me personally we are with you in your time of sorrow. I never met your father, but I heard nothing but great things about him. So, and we look forward to your testimony on the next panel.

Mr. Chairman, I just have a couple of questions. Under current law we handle permitting for oil pipelines domestically and gas pipelines differently. Is there any real reason to do that other than that is the way we have always done it?

Mr. KATZ. I am not sure if that was addressed to me, but no, not particularly. I mean, the same thing is true with electric power lines. Congress sets up whatever scheme of regulation it sees fit to do.

Mr. BARTON. So it is just kind of the way it happened, but if we are going to do a pipeline reform bill is there any reason we couldn't use the same regulatory authority and permitting process for oil and gas pipelines?

Mr. KATZ. No, Congress has the authority to do that if it wishes.

Mr. BARTON. Good. In the Energy Policy Act back in 2005, we tried to give your agency, the FERC, the authority to oversee the various other agencies it had to do all the various pipelines that Mr. McKinley was talking about earlier. That doesn't seem to have worked too well, the delays have gone up not down. What went wrong and what do we do to fix it? Do we need more incentives or do we need more penalties or do we just need better people at the FERC? What is going on? You don't think the latter is the case.

Mr. KATZ. I would never want to say that our Commissioners—the staff is less than perfect, but the Commissioners are perfect. I don't know that there is anything that Congress did wrong in the bill. I think that what has happened since then—and I will defer to Mr. Turpin if he wants to speak to it—is that there has been an increasing emphasis on public interest in the pipelines and opposition to pipelines, concerns about environmental effects, you know, the type of production methods that are used, so that back in the day pipeline regulation approval was a fairly sleepy part of the Commission's business.

Now it is something that a lot of people are interested in and very vocal about, and I think that is more what is taking more time than anything that Congress is responsible for having done.

Mr. BARTON. Mr. Turpin?

Mr. TURPIN. I would agree. I would also say staff is pretty good too. But I think that is a large part of it is the increased public interest, I mean from a very wide audience in the U.S. And as with the current approach, fundamentally the Commission can engage these agencies. The Commission staff can do the work, but all these agencies have to comply with their own congressionally directed mandates and it is that sort of not that I think ends up, we all end up tripping over.

Mr. BARTON. Well, I am not the chairman of the committee, I am the vice chairman, but I think we are going to do a pipeline permitting reform bill and we would really like your agency's input. I think it is good to have more public input. I don't think that is a bad thing, I think that is a good thing.

But having said that you still need, once you get that input you need to make a decision. You need to live within the guidelines. You need to live within the deadlines. If our deadlines are too strict maybe we need to expand them a little bit.

But we are going to need a lot more energy infrastructure in the next 20 to 30 years and pipelines are going to be a big part of that.

And so if we didn't quite get it right 10 or 15 years ago in the Energy Policy Act of 2005, let's get it right this time in the Energy Infrastructure Review Act of 2017 or 2018. With that Mr. Chairman, I yield back.

Mr. WALBERG. I thank the gentleman and I recognize the gentleman from Indiana, Mr. Bucshon.

Mr. BUCSHON. Thank you, Mr. Chairman.

Mr. Katz, in my district and nearby there are multiple dams that currently don't produce hydropower but potentially could, as you are aware. In 2013, Congress directed FERC to investigate the feasibility of a 2-year licensing process and develop criteria for nonpowered dams and closed loop pump storage.

I guess you had a pretty good experience at the Kentucky Lock and Dam project, and what elements of a 2-year pilot program should Congress make permanent based on FERC's experience with the 2-year pilot?

Mr. KATZ. I don't want to get ahead of the Commission staff because we are right now compiling a report that Congress directed us to do in the 2013 statute.

Mr. BUCSHON. OK, so we have to wait for the report.

Mr. KATZ. Yes. As I said earlier though, even in the absence of any kind of regulatory or statutory changes, some 25 percent of the original licenses that the Commission worked on in the last 13 years or so have been permitted in 2 years or less, so it can happen.

Mr. BUCSHON. Understood. And for these two type of projects, would these type of projects raise the same environmental and wildlife issues as traditional hydro or——

Mr. KATZ. The same issues get considered, but they are generally considerably less in scope because the existing dam has already had a certain impact.

Mr. BUCSHON. So it might have an impact on the timeline then if it was easier because of that?

Mr. KATZ. Such projects tend to be easier, not as an absolute rule but they tend to be easier.

Mr. BUCSHON. Would the draft legislation relating to nonpowered dams and pump storage in any way alter the FERC's environmental analysis under NEPA?

Mr. KATZ. I believe I answered an earlier question.

Mr. BUCSHON. Probably did.

Mr. KATZ. It looks as though it would in that it only calls out fish and wildlife resources and doesn't call out flood control, irrigation——

Mr. BUCSHON. OK, that is what——

Mr. KATZ [continuing]. Water supply and other things, and also it seems to set a higher standard for the conditions that would be imposed, a higher bar.

Mr. BUCSHON. How about the Clean Water Act or the Clean Air Act, any differences there on these type of projects?

Mr. KATZ. Clean Air Act issues are almost never implicated in hydro projects. The Clean Water Act, the legislation does call——

Mr. BUCSHON. Does the draft legislation have any impact on that?

Mr. KATZ. I don't think it would, but it is conceivable. We would have to study that.

Mr. BUCSHON. OK. I yield back, Mr. Chairman.

Mr. WALBERG. I thank the gentleman and I recognize the gentleman from Texas, Mr. Flores.

Mr. FLORES. Thank you, Mr. Chairman. Mr. Chairman, thank you for holding today's hearing. America's shale energy revolution has dramatically improved our energy security here at home. The U.S. is now one of the top producers of oil and gas in the world, yet there are still existing infrastructure challenges to deliver those resources to consumers. Modernizing our infrastructure to efficiently and safely bring energy resources to consumers helps to create jobs and brings lower energy prices for hardworking American families.

So with that I would like to get into my questions. Some of these were partially asked by Mr. Rush, Mr. Green, and Ms. Castor. Mr. Turpin, I understand that the Commission does what it can to encourage the participation of other permitting agencies today to identify issues and work to resolve them. Unfortunately, at times the other Federal agencies have chosen to not take the responsibility seriously. They may simply choose to just not act on a permit. In your experience, why do some agencies choose to go that route to not work with you?

Mr. TURPIN. I think it is from a global perspective of agencies working with us it is fairly rare for somebody to refuse to participate in the FERC pre-filing process or in coordination with staff. Whether they choose to be, you know, a cooperating agency under NEPA is a different question. They have their own interests to protect in terms if they want to be an intervener in the FERC process later.

I think in large part the rubs come down to them having different criteria for the data they need to do their permit as well as their own resource constraints. We are a sole purpose agency. We look at this infrastructure. Other agencies have multiple mandates and they have to balance their needs as best they can.

Mr. FLORES. When you look at the legislation that places the mandate on the agencies to carry out their obligation concurrently in accordance with the schedule established by the Commission, do you think that legislation goes far enough or should we try to go farther to compel coordination and timely coordination?

Mr. TURPIN. I think that is a difficult question. Trying to compel the timely coordination requires—well, the language always has in it the caveat of unless otherwise mandated in other laws or unless an agency can't meet its other obligations, and it has been in all the versions I have seen. And so that is sort of the Gordian knot, and having the Commission in charge of all of those mandates for these other agencies seems a bit inefficient from our perspective.

Mr. FLORES. Are you aware of strategies by pipeline opponents like the Sierra Club and others to block access through land for route surveys?

Mr. TURPIN. I have heard of landowners blocking access, you know, not granting survey access to pipeline companies, but not NGOs or any kind of other organization.

Mr. FLORES. OK. To the extent they do though I mean it is pretty obvious, but can you tell the committee what impact that has on you doing your job?

Mr. TURPIN. As I said earlier, the Commission staff prefers to have the best information, you know, from the ground data in the ground surveys in the application, but without it we can move to desktop data, we can move to remote data, and we can move forward with our analysis that does have to be truthed up later before construction. And so sometimes there are potential implications that certain protected features won't be discovered until after the application and then the applicant has to do an expensive re-route or some lengthy adjustment.

Mr. FLORES. OK. The permitting dashboard in the draft legislation would consolidate the information from your agency as well as the coordinating agencies into a simple, easy to use and easy to access Web site. You admit it would improve transparency, but you also say in your testimony that it would burden staff resources and time. How do we balance the need for transparency with scarce Government resources?

Mr. TURPIN. Good question. I am still trying to figure that one out in my role here. I think that is always the rub. We don't have a lot of excess staff sitting around with a lot of excess capacity. You know, we are all technical specialists and we try to use everybody to their full capacity. So adding on, sort of riding herd on these other agencies just does dilute that effort, so I mean we can do it.

Mr. FLORES. And with respect to this permitting dashboard, again coming, stand out of the weeds, if the FERC didn't collect this information who would or should or could? I mean, you are the lead agency for permitting pipelines; aren't you the logical owner for this project?

Mr. TURPIN. Yes, we are. And as the current process we have it is the applicant that is going out and filing for these permits and engaging those agencies that is responsible for collecting that data and reporting it into the record.

Mr. FLORES. OK. Mr. Chairman, I yield back.

Mr. WALBERG. I thank the gentleman. I now recognize the gentleman from North Dakota, Mr. Cramer.

Mr. CRAMER. Thank you, Mr. Chairman. Thanks to the witnesses. I want to hone in a little bit on some statements that were made earlier and see if we can't find some common ground, because I appreciate what Mr. McNerney said earlier about, you know, we will never solve this if one side imposes its will on the other. I agree.

I think Ms. Castor makes a relevant point admonishing us to see how the FPISC process works. We do have some pretty successful pilots and I think they could be even more successful if the interagency collaboration was more, I guess cooperated by more agencies on Federal lands where we have seen some permitting activity actually create efficiencies by actually co-locating some agencies even in field offices.

But what I am wondering about on the interagency issue here is can we find ways or even substantiate that interagency collaboration and cooperation can accomplish two goals. One, to streamline the permitting process so that those of us who want to see the proc-

ess shortened can be satisfied as well as find synergies, not just efficiencies but synergies among the agencies where there is even greater environmental oversight and scrutiny in that short of timeframe so that there doesn't have to be a loser but rather two winning sides?

Is that too much to hope for or can that be substantiated? And I would ask either or both of you for your experiences.

Mr. KATZ. No, I would say that what you say makes a lot of sense and indeed is a viable and very positive goal.

Mr. CRAMER. Do we have any experiences where that can be demonstrated or——

Mr. KATZ. The Commission participated a kind of ex-officio because it wasn't any of our projects in the interagency task force that you talked about, which I think primarily related to getting transmission lines on Federal lands permitted. And our impression watching it a little bit from afar was that the agencies did a very good job of working together and doing things concurrently and trying to solve everybody's problems at once.

And in some projects that come before the Commission that happens and things go very well. Other times it doesn't. I guess the question of getting it to be consistent and to be the rule rather than exception is perhaps the difficult thing.

Mr. CRAMER. And perhaps that is more a matter of the will than it is policy. However, Mr. Turpin, I don't know if you have anything to add to that but is there a way to incent that within the agencies? In other words, I think the natural tendency is to slow-walk things if you are just the bureaucracy doing your things sequentially, right, and you have 90 days, generally it takes 90 days. If you hadn't noticed, Congress usually extends their deadlines so that we can take longer.

So what I am wondering is, is there a way to properly incent that behavior that we seek in an actual streamlining process without violating the integrity of oversight and scrutiny?

Mr. TURPIN. I think it comes back to sort of setting the priorities for the agencies. I mean they are given multiple mandates. Again we are a single-focus agency so it is easy for us to stay on the track. Other folks who have very widely different missions to carry out have to do that balancing act and so having that priority set for them would go a long way.

Mr. CRAMER. I do wonder sometimes if we couldn't harmonize some of that again while maintaining the integrity, but that is beyond obviously your agency's responsibility and scope.

Since I have time, with regard to the presidential permits in cross-border on the oil side, which is the difference maker, right, from natural gas on international pipelines, this national interest determination which is what the President ultimately has to make on a, where a presidential permit is determined, if I understood I think your answer to a previous question, you, while consulting the national security in Homeland Security and other agencies, State Department, you are in essence not neglecting the national interest especially on the security side in your process with gas pipelines; would that be accurate?

And I don't know whether the determination or the standard for the permit is the same, but it seems that the considerations are the same. Is that fair?

Mr. TURPIN. Yes. I mean with a natural gas process, you know, under NGA Section 3 we do the environmental review, we look at the facility's installation, and under the executive orders for the presidential process we reach out to State and Defense to get their concurrence on impacts that areas that they oversee.

Mr. CRAMER. Thank you for your work and for your testimony. I yield back.

Mr. WALBERG. I thank the gentleman. I recognize myself now for 5 minutes of questioning. Mr. Katz and Mr. Turpin, thank you for being here. Mr. Katz, the discussion draft would designate hydropower as renewable energy under the Energy Policy Act of 2005. How has hydropower development been adversely affected by the fact that it is not always considered renewable?

Mr. KATZ. That is one, again, that I would more have to defer to the second panel who deal with it on a day-to-day basis. But certainly there are Government programs, tax credits, other things that have not been available to the hydro industry when it is not considered to be a renewable resource.

Mr. WALBERG. Seems to make sense, so I guess we will wait for that second panel. Let me ask you, as you know the small conduit hydropower plays an important role in our Nation's energy mix. It is a great option to add renewable generation to existing infrastructure, it is installed almost anywhere even in remote places. The Hydropower Regulatory Efficiency Act of 2013 created a streamlined process for qualifying conduit facilities. What has been your experience since then?

Mr. KATZ. Our experience has been that that process has gone very smoothly. We have almost never had any comments when someone proposed to have a qualifying project, so it has gone very quickly. In terms of the new legislation which would cut the comment period back to 15 days, Commission staff supports that.

Indeed, we are not certain why it might be limited to projects of two megawatts as opposed to the five megawatt projects that are already covered by the act, and indeed I will go further to say the Commission staff has previously testified to Congress that it very well would be appropriate to exempt all conduit projects from Commission regulation given that the conduits themselves are subject to whatever appropriate environmental regulation goes on when a conduit is built and that they very rarely, if ever, have additional environmental impact.

Mr. WALBERG. So you would be supportive of Congress shortening the time period at the very least?

Mr. KATZ. We see no downside to that.

Mr. WALBERG. OK, OK. Let me ask this question and both could respond. How does the current FERC process hinder hydropower projects upgrades such as those that would increase deficiency capacity and output of existing plans?

Mr. KATZ. I think it can vary from project to project. Again if you have a fairly simple project that stakeholders are comfortable with and doesn't have significant environmental impacts it can go forward very quickly. If it is a major project that brings into play the

Endangered Species Act, the Clean Water Act and other regulations that can significantly delay consideration of that amendment.

Mr. WALBERG. OK, thank you. I yield back my time and now recognize the gentleman from Oklahoma, Mr. Mullin.

Mr. MULLIN. Thank you, Mr. Chairman. And first of all, I want to thank my colleague across the aisle, Gene Green, for working with me on this issue and working together with us on so many different issues. We have worked together in the past and I look forward to doing it again.

Mr. Turpin, as you know the process for reviewing cross-border infrastructure is established through a series of executive orders, and I think you know where I am going with my questioning here. In fact, Congress has never weighed in and there are no current laws on the books. The draft legislation before us today would be the first to establish a uniform and transparent process in authorizing cross-border energy infrastructure. Would the draft legislation change the Commission's existing process for reviewing cross-border gas pipelines?

Mr. TURPIN. I do not believe it would.

Mr. MULLIN. Would you have any concerns with that? When I say you don't believe it would I just want to clarify that.

Mr. TURPIN. Well, let me add to that. I don't believe it would change the review of the facilities, you know, the environmental review that we do, the current reviews that we do under the Natural Gas Act. Under the bill of course we would not be reaching out and coordinating with State and Defense.

Mr. MULLIN. So it would basically be you would follow the same process kind of like what Mr. Cramer was saying?

Mr. TURPIN. Right.

Mr. MULLIN. Does the Commission have the technical capacity to take on the new responsibility?

Mr. TURPIN. In terms of adding oil pipelines, I mean pipelines to a large extent are pipelines.

Mr. MULLIN. Agreed.

Mr. TURPIN. There will be some uniqueness to the product in it that we haven't had to deal with before, but we can get that expertise.

Mr. MULLIN. Uniqueness by?

Mr. TURPIN. Natural gas, I mean as a siting matter transport of oil is something we have not had to look at. So there will be considerations for spills, considerations for that sort of thing.

Mr. MULLIN. Would FERC treat oil pipelines like gas pipelines with respect to identification for the jurisdiction purposes?

Mr. TURPIN. I don't know. That would have to be set, the policy for that would have to be set by the Commission, which is I think what would be done in that yearlong rulemaking, and then Commission staff would act on whatever policy the Commission comes up with.

Mr. MULLIN. Do you have a problem with the timeframe to which we put forth with approving the permit?

Mr. TURPIN. As I read it, it is 120 days after the final NEPA document and that is not an issue.

Mr. MULLIN. Not an issue. Would the draft legislation have any effect on the NEPA or a shortcut to the Commission's environmental review in any way?

Mr. TURPIN. I do not believe so.

Mr. MULLIN. OK, real quick that was all I had. I just wanted to clarify some concerns that we have heard about this. So Mr. Turpin, appreciate it and Mr. Chairman, I yield back.

Mr. WALBERG. I thank the gentleman and I recognize the gentleman from Missouri. Welcome back, Mr. Long.

Mr. LONG. Thank you, Mr. Chairman. And Mr. Turpin, the Promoting Interagency Coordination for Review of Natural Gas Pipelines discussion draft requires early outreach to permitting agencies. How does this help FERC and other agencies coordinate to make sure their input and concerns are addressed?

Mr. TURPIN. I think it allows the applicant to get out to those agencies at the earliest possible time before they have developed the routes, before they develop the projects so that the agencies can identify what data needs they have, can influence what the applicant does in the design to mitigate any impacts, and give the applicant the most notice on what sort of studies might be needed for when the applications are filed.

Mr. LONG. OK. Can you discuss the ways that we could reduce the uncertainty in the review schedule to make sure the reviews are completed in a timely manner?

Mr. TURPIN. I think the largest, single most crucial factor in doing that is developing the data needed by all the different agencies for their mandates.

Mr. LONG. OK.

Mr. Katz, you mentioned in the next 15 years almost half of licensed projects will begin the relicensing process. How can we make sure that the relicensing projects are completed in a timely manner?

Mr. KATZ. It is a difficult ask given that there are statutory mandates that allow other agencies to in effect set the timeframe. I think that some of the efficiencies that are being proposed in the current act will help.

Mr. LONG. Say that again, you think that what?

Mr. KATZ. I think that some of the measures provided in the acts before us will introduce efficiency and help the Commission move ahead to do things in as timely a manner as possible. And I think the Commission staff and the Commission itself will be committed to getting those licenses done as quickly as possible, but we don't have complete control given the exercise of authority under Federal law by State and other Federal agencies.

Mr. LONG. All right. Currently FERC can grant an extension of just 2 years from the commencement of the project construction. Could you expand on how the discussion draft gives FERC flexibility on cases that require additional time to begin construction?

Mr. KATZ. Yes, the discussion draft would allow the Commission to extend the commencement of construction deadline for several additional years and that might help certain projects that are having trouble sort of dotting there is and crossing their Ts before they get started. So it would be a help to some projects.

Mr. LONG. Ok. And Mr. Chairman, that is all I have, and I yield back.

Mr. OLSON [presiding]. The gentleman yields back.

Seeing there are no further members wishing to ask questions for the first panel, I would like to thank both you, Mr. Turpin, and you, Mr. Katz, for being our witnesses today. This will conclude our first panel, and we will now take a few minutes to set up for the second panel.

[Recess.]

Mr. OLSON. Welcome back, and thank you for your patience and for taking your time to be here today. We now move into our second panel for today's hearing. We will follow the same format as the first panel. Each witness will be given 5 minutes for an opening statement followed by a round of questions from our members.

For the second panel we have the following witnesses: Mr. Jeffrey Soth, he is a legislative director and political director at the International Union of Operating Engineers; Mr. Jeffrey Leahey, the deputy executive director of the National Hydropower Association; Mr. William Robert Irvin, president and CEO of American Rivers; Ms. Jennifer Danis, the senior staff attorney at the Eastern Environmental Law Center; Mr. Donald Santa, president and CEO of the Interstate Natural Gas Association of America; and Mr. Andrew Black, president and CEO of Association of Oil Pipe Lines.

We appreciate you all being here today. We will begin this panel with Mr. Soth, and you are now recognized for 5 minutes to give an opening statement.

STATEMENTS OF JEFFREY SOTH, LEGISLATIVE AND POLITICAL DIRECTOR, INTERNATIONAL UNION OF OPERATING ENGINEERS; JEFFREY LEAHEY, DEPUTY EXECUTIVE DIRECTOR, NATIONAL HYDROPOWER ASSOCIATION; WILLIAM ROBERT IRVIN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMERICAN RIVERS, INC.; JENNIFER DANIS, SENIOR STAFF ATTORNEY, EASTERN ENVIRONMENTAL LAW CENTER; DONALD F. SANTA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA; AND ANDREW BLACK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF OIL PIPE LINES

STATEMENT OF JEFFREY SOTH

Mr. SOTH. Thank you, Vice Chairman Olson, Ranking Member Rush, members of the subcommittee, it is an honor to join you at your first legislative hearing to the 115th Congress. My name is Jeffrey Soth. I am legislative and political director of the International Union of Operating Engineers. The Union represents almost 400,000 men and women in the United States and Canada. In short, we build and maintain the cranes, bulldozers, and backhoes that build North America.

Members of the Operating Engineers are some of the most highly skilled, highly trained construction craft workers in the world. We deliver training at over 86 facilities in the United States where we employ 550 instructors. The IUOE and its employers invest over $128 million annually in local apprenticeship and training pro-

grams, and I want to point out here, at no cost to the public. That is exclusively, privately financed.

In addition to the training of local unions, the IUOE conducts specialized national training in coordination with the Pipe Line Contractors Association in the pipeline sector. We invest over 5 million annually in that work to ensure the safe installation and construction techniques in the pipeline industry making it the safest in the world. The pipeline training program has historically been delivered at locations around the country where there is a large project or regional demand for pipeline training.

What I am pleased to share with the committee that the IUOE is building a new home for its pipeline training in Crosby, Texas. In spring 2018, the IUOE will open our international training and education center, $150 million training center in the heart of the Gulf Coast. I have attached a rendering of the facility and a site plan of the project where you can see just how much of that property is dedicated to pipeline training. And again this facility is being built at no cost to the public. There are no public resources, no taxpayer dollars whatsoever associated with the $150 million investment.

Let me turn now to employment and wages in the construction sector and in the pipeline industry in particular. The construction industry has the highest unemployment rate of any industry sector at 8.4 percent. Employment in the oil and gas pipeline sector of the construction industry is near a 5-year low. Please see the chart attached to my testimony.

As you can tell from it, we are down about 20 percent of total jobs in the sector since the summer of 2015. I should point out that these are good, family sustaining jobs. Production and nonsupervisory workers make over $30 an hour in the pipeline industry, and compare that to $21.90 in all private sector payrolls.

After that description and background of the IUOE's role in training and our look at labor market information, let me turn to the legislation before the committee and two pieces of legislation in particular related to pipelines.

Regulatory uncertainty and procedural delays during environmental review are hindering the growth of these good jobs and the other benefits that go along with this domestic energy production. Congress needs to update and streamline the permitting and regulatory framework to ensure that the domestic oil and gas industry flourishes in a safe and predictable way. To put it simply, it is time to modernize the Federal code for energy infrastructure.

That is why they IUOE supports the Cross-border Energy Infrastructure Act and the Promoting Interagency Coordination for Review of Natural Gas Pipelines Act. The cross-border legislation in particular takes the important step of codifying the process to permit a project that crosses the border. Now that there is not a controversial project under consideration it is the right time to make this move away from the ambiguity of an executive order.

Frankly, it is time to legislate regarding cross-border permits. The State Department's inspector general described the problem in a special report in February of 2012 when it reviewed the Keystone XL permit process. It determined that the limited expertise and experience of State Department officials with respect to NEPA and

environmental reviews frustrated and delayed the permitting process for KXL, perhaps even leading to a need for a whole supplemental EIS and adding 11 months to that process.

It is time to place responsibility for cross-border permits in an experienced environmental agency like FERC. The interagency coordination bill makes important reforms to natural gas pipeline permitting. The bill will give FERC additional tools to identify potential issues that can hinder State and Federal agencies from conducting timely reviews.

It is an important evolution from the simple 12-month limit legislation that has been considered in past Congresses and it is time to more closely address, that this legislation more closely addresses the real problems associated with permitting delays. The IUOE encourages you to pass these two pieces of legislation and we look forward to working with the committee to enact them in this 115th Congress. And thank you, Vice Chairman Olson, for the opportunity. It was a pleasure to join you today.

[The prepared statement of Mr. Soth follows:]

Submitted by

Jeffrey Soth
International Union of Operating Engineers

to the

Energy and Commerce Committee
Subcommittee on Energy

Hearing on

"Legislation Addressing Pipeline and Hydropower Infrastructure Modernization"

10am
May 3, 2017
2123 Rayburn House Office Building
Washington, DC

One Page Summary of Major Points

Operating Engineers and the Pipeline Industry

- Members of the Operating Engineers are some of the most highly trained and skilled construction workers in the world
- IUOE conducts specialized training on skills specific to the pipeline industry
- The IUOE trains tens of thousands of apprentices and journey-level workers at over 86 facilities around the country that are focused on construction at no cost to the public
- The IUOE employs over 550 highly-rated instructors at our construction training facilities

Employment and Wages in Construction and the Pipeline Industry

- The construction industry has the highest unemployment rate of any industry sector at 8.4%
- Employment in the Oil and Gas sector has hit a five-year low
- IUOE members' skill set allow them to demand the highest wages and benefits of any workers in the occupation

Energy Infrastructure Modernization in the Federal Law

- Regulatory uncertainty and procedural delays during environmental reviews have hindered the growth of jobs related to the pipeline industry
- There needs to be an updated, streamlined permitting and regulatory framework ensuring that the domestic oil and gas industry flourishes in a safe predictable way
- An anachronistic regulatory structure inhibits the development of the industry and family-sustaining jobs that go along with it
- The IUOE supports the "Cross-Border Energy Infrastructure Act" and the "Promoting Inter-agency Coordination for Review of Natural Gas Pipelines Act"

Thank you for the invitation to join you this morning, Chairman Upton and members of the subcommittee. It is an honor to join the committees for its first legislative hearings of the 115th Congress, particularly as you try to address the critical need to modernize the federal law in relation to the nation's energy infrastructure.

My name is Jeffrey Soth. I am the Legislative and Political Director of the International Union of Operating Engineers (IUOE), AFL-CIO. The union represents almost 400,000 men and women in the United States and Canada. Every day across the United States, thousands of IUOE members are building the nation's pipelines, power plants, and other vital energy infrastructure. Tens of thousands of members of the IUOE are mechanics and heavy-equipment operators in the construction sector. In short, we operate and maintain the cranes, bulldozers, and backhoes that build North America.

To perform this work safely and productively on some of most sophisticated, technical construction projects on the globe, members of the Operating Engineers union receive extensive craft training through an on-the-job apprenticeship model.

There are key benefits to the training model for the worker, the employer, and the general public. For workers, the apprenticeship training (typically a three- or four-year duration) delivers the following:

- nationally-recognized, portable credentials upon completion
- regularly scheduled, progressive wage increases connected to experience and skill-development
- higher earning potential and greater financial security
- more opportunities for future training and advancement
- college credits offered through many programs

For employers, the apprenticeship model delivers skilled workers trained to industry specifications and needs. Employers jointly manage the programs with members of the union, developing the curriculum to ensure that the skills that workers possess are the same skills the employers demand on the job. The system of apprenticeship provides a pipeline of new skilled workers for employers, and perhaps most importantly, the system delivers reduced costs due to worker productivity and safety. The system serves as a model for delivering industry-driven training in the construction sector and beyond.

The general public also receive extensive benefits from the apprenticeship and training model of the Operating Engineers. The risk to life, property, and the environment is minimized through extensive worker training by the IUOE. It is not just the workers "under the hook" who are exposed to risk from a tower crane accident, for example. Neighboring buildings and passersby can also be in danger. Similarly, pipeline infrastructure that is designed to last more than fifty years needs to be installed in the safest possible way, and that is the commitment of the IUOE. It is training that introduces the latest techniques, technology, and equipment to members of the IUOE in its effort to construct the world's safest pipeline network. The public does not bear any of the cost of the privately-funded training. And the family-sustaining wages and benefits that skilled workers earn supports the communities in which they live.

Through this system that combines on-the-job experience and classroom training, the apprenticeship model delivers the skills necessary for Operating Engineers to excel in their careers. Generally, Operating Engineers' training programs within the construction industry are regulated by the Department of Labor's Office of Apprenticeship (or through State Apprenticeship Councils), and are governed by a Board of Trustees comprised of an equal number of contractors' representatives and labor representatives.

The International Union of Operating Engineers, in partnership with employer-contractors, trains tens of thousands of apprentices and journey-level workers at over 86 facilities around the country that are focused on construction. In 2015 alone, these programs invested over $128 million annually to meet employers' needs for a skilled workforce (IUOE Census Survey, 2016). Those numbers do not include national training programs like the Pipeline Training Fund, which will be discussed below. With over 550 construction instructors at the IUOE's training centers, the union possesses extensive workforce-development capacity and expertise. The work opportunities for Operating Engineers in the pipeline industry, however, require specialization within the craft.

IUOE Local Union
Construction Training Activity
2008-2015

Average Annual Number of Apprentices Enrolled	**6,057**
Number of Apprentice Completions	**10,328**
Total Number of Journey Workers in Upgrade Programs	**412,328**
Total Number of Journey Level Training Hours	**9,789,651**

Operating Engineers and the Pipeline Industry

Members of the IUOE play an essential role in the pipeline industry. The IUOE is signatory to the National Pipeline Agreement, along with the Laborers International Union of North America (LiUNA!), International Brotherhood of Teamsters (IBT), and the United Association of Journeymen and Apprentices in the Plumbing and Pipefitting Industry in the United States and Canada (UA). The pipeline industry is a key segment of the construction sector for Operating Engineers. In many ways, it is at the heart of IUOE members' work opportunities.

The pipeline industry has a unique set of skill requirements and Operating Engineers are perfectly suited to what the industry demands -- the safest, most productive workforce available.

Roughly one-quarter of the worker hours on a pipeline project for Operating Engineers is derived from operating a sideboom, a piece of equipment unique to pipeline construction. Specialized training is necessary to operate other heavy equipment in the pipeline industry, too. That is why, in addition to the broad craft training that a member of the Operating Engineers receives from his/her local union's joint apprenticeship and training fund, the IUOE privately operates a training partnership with the Pipe Line Contractors Association to meet the specific needs of the pipeline sector. Under the collective bargaining agreement negotiated between the Pipe Line Contractors Association and the IUOE, 75-cents an hour is contributed to training. These hourly contributions combine to allow the labor-management Pipeline Training Fund to invest over $5 million in 2015 alone, with no public resources whatsoever.

Historically, the Pipeline Training Fund has delivered on-demand mobile training in specific areas around the country where there was extensive pipeline work, or a large, anticipated project. Within a year the Pipeline Training Fund will find a new home in Crosby, Texas.

The IUOE is constructing the International Training and Education Center (ITEC) on 225 acres in the Gulf Coast area, just outside of Houston. Not coincidentally, billions of dollars of private investment in the oil and gas industry is projected in the region. The private project will cost roughly $150 million and is slated for completion in Spring 2018. Not only will the ITEC house specialty pipeline training, the facility will be the new home to specialty crane training and the regional Stationary Engineers Apprenticeship and Training Trust (SEATT), a new training partnership in the Gulf Coast petrochemical industry.

After that summary of who we are and how we fit into the sector, let me turn to the broader industry dynamics of the construction sector and the pipeline industry group, with a look at the publicly-available labor market data from the Bureau of Labor Statistics (BLS).

Employment and Wages in Construction and the Pipeline Industry

The employment situation in construction is dramatically improved since the depression-era levels of unemployment experienced during the Great Recession – unemployment reached over 27% in February of 2010. Yet it is also true that the construction industry still has the highest unemployment rate of any industry sector in the American economy at 8.4% (not seasonally adjusted), approaching a rate that is twice the national average, according to the most recent data available (March 2017).

You can see the low point in construction employment in January 2011. (Discrepancies between the unemployment rate and number of persons employed in the industry can be attributed to the different surveys used by BLS.) As you can see in the graph attached to my testimony, the sector is still down over 700,000 workers from when the Great Recession started in December 2007.

Now let us focus more closely on the pipeline sector. In the second chart attached to my testimony, you can see employment in the oil and gas industry group within the construction industry.

While employment in the pipeline industry group reached an all-time high less than two years ago in June 2015, a concerted attack on new pipeline infrastructure has taken its toll on the permitting of new projects and the industry's workers – Operating Engineers, in particular – have paid the price.

According to the most recent data available from the Bureau of Labor Statistics, employment in the oil and gas industry is close to a five-year low. There has been a 20% decline in employment in less than two years.

There can be little doubt that persistently depressed oil and gas prices have had a bearing on the decrease in pipeline activity, but the antiquated regulatory framework has also delayed projects. Some other projects have been denied outright – the Pacific Connector in Oregon, the Constitution Pipeline in New York, and the list goes on.

It is important to consider that jobs in the oil and gas pipeline construction industry group create high-quality jobs. Wage estimates for production and nonsupervisory workers in the oil and gas pipeline industry are over $30.50 an hour, according to the most recent data from the Bureau of Labor Statistics. That compares to $21.90 an hour for production and nonsupervisory workers in all of the private sector.

Energy Infrastructure Modernization in Federal Law

In order to capitalize on the opportunity presented by this abundant American natural resource, Congress must update its anachronistic regulatory structure, which inhibits the development of the industry and the jobs that go along with it. Fully realizing the opportunities associated with America's natural resources requires an update and overhaul of the federal law. Congress should modernize our pipeline infrastructure policy. Legislation before the subcommittee gives us an opportunity to turn around the gloomy outlook of the pipeline industry described above, just as the Administration has signaled a new approach to pipelines and the forecasters suggest that oil prices may be on the rise.

The Energy Equipment and Infrastructure Alliance (EEIA) has identified 33 major pipeline projects that have either been announced or are under construction. These projects represent an estimated investment of $60 billion and are expected to require 9,300 miles of large diameter pipeline. An IHS Global study finds that $8 billion a year could be invested in just gathering pipelines, not including distribution and transmission, for both the oil and gas industry.

It is essential that the American energy policy support the development of this domestic resource by keeping pace with the dramatic innovations that are occurring in the sector. In a number of cases, the growth in the industry has simply outpaced the nation's regulatory framework, and that is why legislation before the subcommittee is so desperately needed by Operating Engineers and other workers in the industry. Unfortunately, regulatory uncertainty and procedural delay during environmental reviews have hindered the growth of jobs related to the natural-gas industry, as you can see in the dramatic decline in jobs since the Summer of 2015 in the attached chart. Congress should establish sound, transparent policies to guide domestic natural-gas and oil development in order to maximize the economic opportunities associated with this abundant American resource. A new approach is needed, and two pieces of legislation before the subcommittee, in particular, help move the country in the right direction.

The International Union of Operating Engineers previously endorsed the natural-gas permitting legislation introduced by then-Chairmen of the subcommittee Congressman Whitfield and now CIA Director Pompeo, H.R. 1900, a bill that would have limited the Federal Energy Regulatory Commission's (FERC or Commission) environmental review to twelve months. While FERC Commissioner Moeller testified at the time that the timeline was achievable, if the clock began to tick only after the agency had received a completed application, it became clear that, frankly, FERC is not necessarily the problem (assuming at least there is a quorum of commissioners). Rather, FERC needs tools to herd the other federal cats involved in the permitting process. That is precisely what the "Promoting Interagency Coordination for Review of Natural Gas Pipelines Act" seeks to accomplish.

This legislation, while combating much the same problem identified in H.R. 1900, makes an important evolution in addressing it. Frankly, the bill more specifically attacks the problem.

The new legislation requires agencies to establish a transparent plan by which they assist FERC in meeting its obligations. The legislation establishes concurrent review of the state or federal agencies with a role in the permitting of a natural-gas pipeline under the National Environmental Policy Act (NEPA) – a move that also has been made in federal law with respect to the permitting of public water and transportation infrastructure. The legislation requires agencies to submit regular updates to FERC identifying its progress in reviewing an application. And, importantly, the legislation demands that state and federal agencies responsibly identify issues of concern that may delay a decision or prevent the Commission from issuing a timely authorization.

The IUOE supports the Cross-Border Energy Infrastructure Act. The IUOE has a long history in relation to the Presidential Permit process and the approval of projects under its terms. In our view it is the right time to update the federal approach to cross-border permitting, while there is not a high-profile project under consideration. It is time to for Congress to codify the process, taking it out of the uncertainty of an executive order and embedding it in the federal law.

Perhaps one of the most important assessments of the existing permit process can be found in the "Special Review of the Keystone XL Permitting Process" conducted by State Department's Office of Inspector General in February 2012. While the Special Review basically dismissed concerns raised by Members of Congress regarding conflicts of interest between the third-party contractor obtained by the State Department and the applicant, TransCanada, the Office of Inspector General identified problems within the State Department in conducting environmental review under the National Environmental Policy Act that should be addressed by this Congress.

In the report the Office of Inspector General says, "The Department's limited technical resources, expertise, and experience impacted the implementation of the NEPA process." The State Department's lack of competency and capacity to manage NEPA processes can negatively affect

their environmental review. In fact, the Office of Inspector General asserts that, "...had the Department had more expertise in NEPA and more knowledge of the information and analysis needed for an EIS, the Department may have been able to avoid the Environmental Protection Agency's poor rating of the draft EIS and the need for a supplemental EIS... the Department issued a supplemental EIS in April 2011 and ended the public comment period in June 2011, which prolonged the EIS process by 11 months." (Special Review, page 20-21).

Given the long history of FERC in processing environmental reviews under NEPA, it is the logical federal agency to manage the cross-border permit process, despite its lack of familiarity with crude oil pipelines. The Commission possesses extensive expertise in energy markets and in managing environmental reviews for natural gas pipelines, LNG export facilities, hydro-electric projects, as the subcommittee is well aware. Updating the antiquated process for cross-border energy infrastructure is overdue, and the IUOE looks forward to working with you to enact into law during this 115th Congress.

Conclusion

Members of the International Union of Operating Engineers, because of the significant contributions of employers and the union's leadership, are the highest-skilled, best-trained, and best-compensated workers in the pipeline industry. These dramatic private investments in training help maximize the safety of the industry.

An antiquated federal code inhibits growth and employment in the construction of America's infrastructure. Oil and gas pipeline employment is near a five-year low, in part due to the regulatory impediments that hinder jobs and growth.

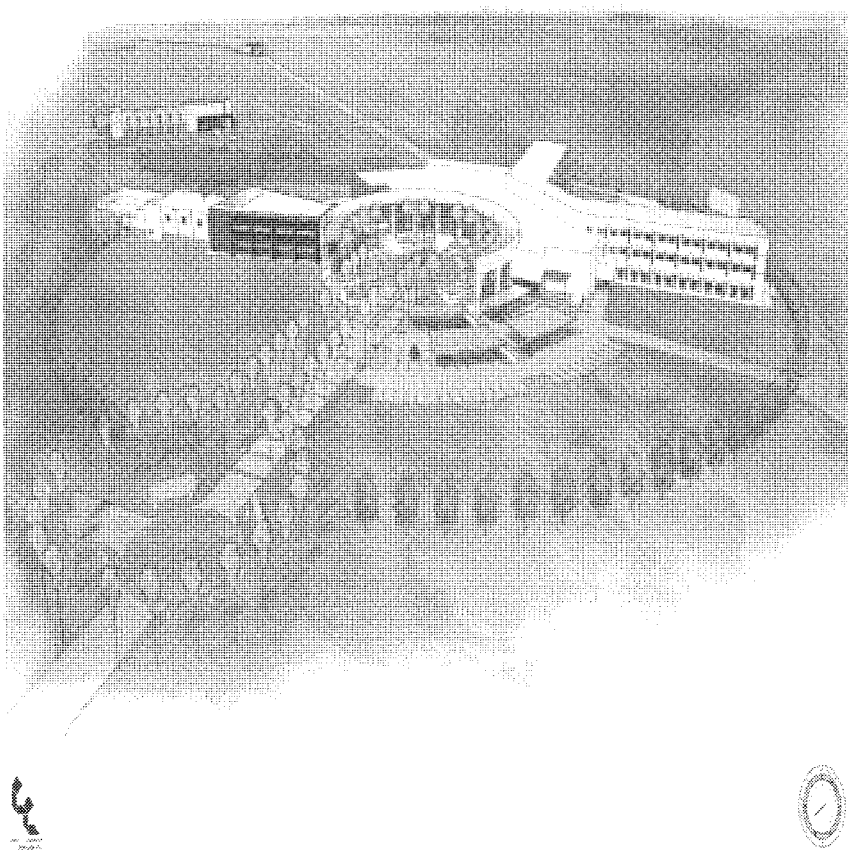
You have the opportunity through legislation before the committee to turn around the gloomy outlook in pipeline employment by codifying the cross-border permit process and by updating the

natural-gas pipeline permitting process at FERC, giving the agency more tools to coordinate their environmental reviews with state and federal agencies and tribes.

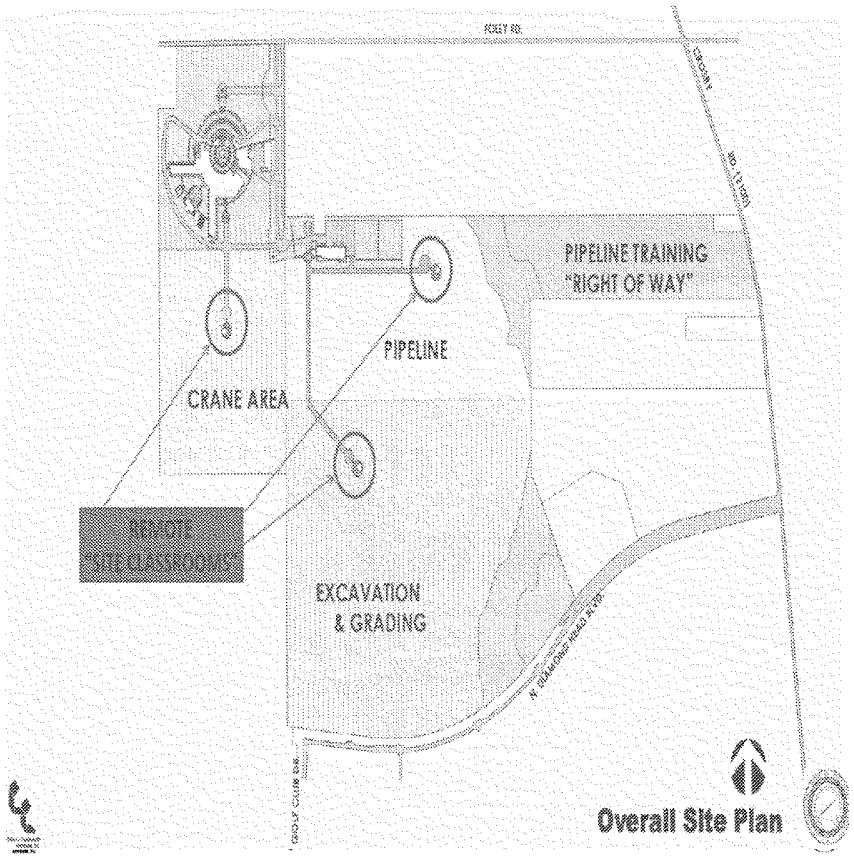
Thank you for the opportunity to testify, Chairman and members of the subcommittee. I am happy to take any questions.

Attachments

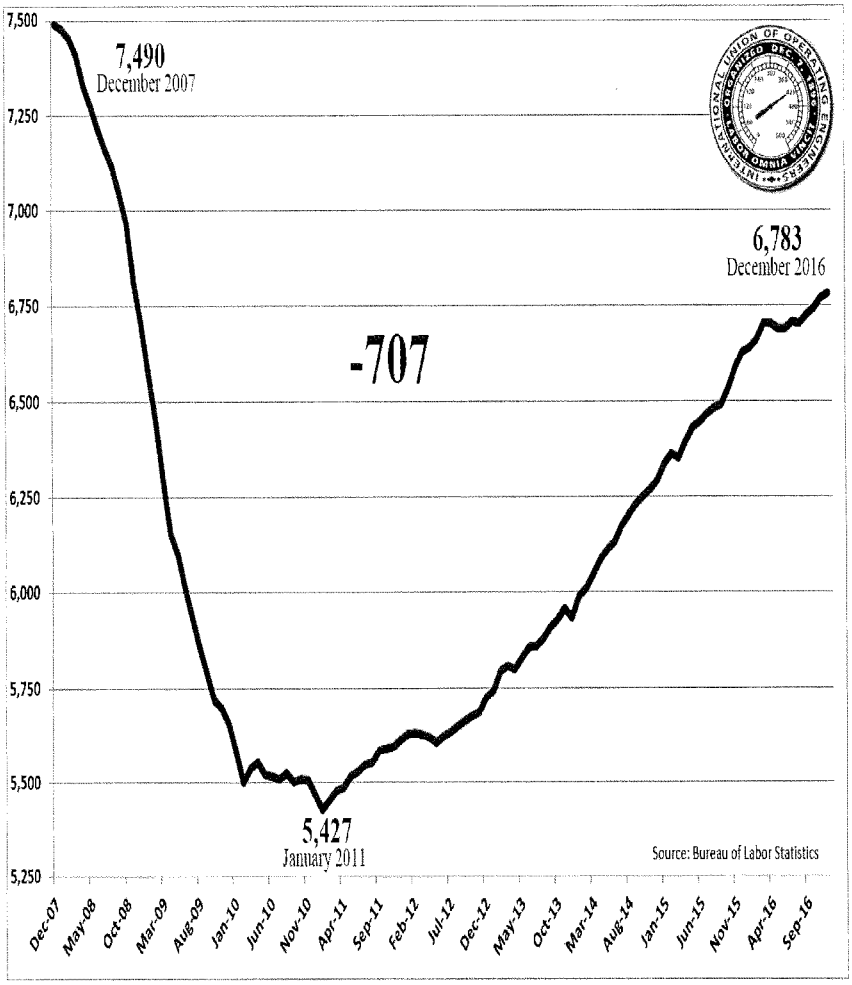
International Union of Operating Engineers
International Training and Education Center



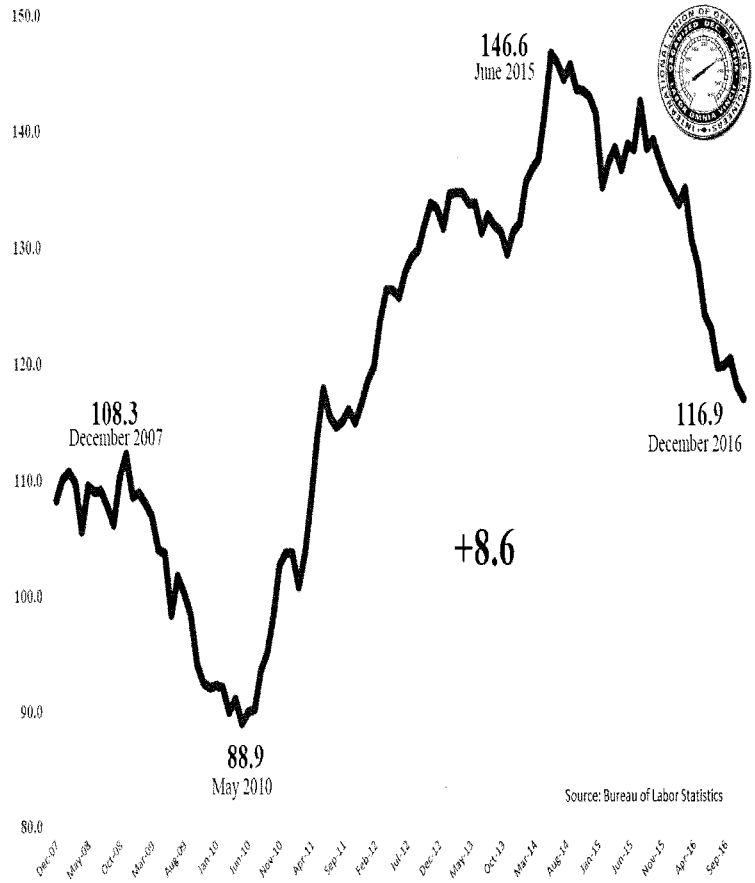
International Union of Operating Engineers
International Training and Education Center



Construction Employment



Oil and Gas Pipeline Construction Employment



Mr. OLSON. Thank you, Mr. Soth.

The Chair now calls upon Mr. Leahey for 5 minutes for an opening statement.

STATEMENT OF JEFFREY LEAHEY

Mr. LEAHEY. Vice Chairman Olson, Ranking Member Rush, and members of the subcommittee, thank you. I am pleased to be here to discuss the importance of hydro to the electric system, its untapped growth potential, the challenges that impede growth, and bills before the subcommittee today.

Hydro provides six to seven percent of all electricity generation and nearly half of all renewable generation, making hydro the largest provider of renewable electricity. Another 42 pump storage plants make up almost all, 97 percent, of energy storage. This system contributes to cleaner air and provides other benefits, including river management for fish and habitat protection, flood control, drought management, water supply, irrigation and more.

Hydro also provides many grid benefits: base load power, peaking generation, load following, reliability. With the growing need for these services, hydro has increased capacity by nearly two gigawatts since 2005.

Hydro infrastructure also brings many economic benefits. The industry employs a work force of almost 150,000 and access to low-cost, clean, reliable power attracts many high tech firms and manufacturers. But hydro can do even more. The myth is that hydro is tapped out. But that is not the case and I direct the subcommittee to the 2016 Department of Energy Hydropower Vision Report. This report with input from industry, environmental groups, and State and Federal agencies outlines 50 gigawatts of growth potential by 2050.

Let me highlight two prime examples, pump storage and building on existing infrastructure nonpowered dams and conduits, the focus of three of the bills today. Pump storage can rapidly shift, store, and reuse energy until there is corresponding system demand while facilitating the integration of variable generation. As more intermittent and renewable generation is added to the grid and other base load generation is lost, the need for pump storage is increasing particularly in the West.

Of the 80,000 U.S. dams, only 3 percent generate electricity highlighting the potential in the nonpowered dam sector. Many of these opportunities are located in regions some may considered unexpected, such as the Southeast and Rust Belt States. Conduit opportunities are also available across the country where power generating equipment can be added to tunnels, canals, and pipes. However, projects are not being deployed due to the uncertain, duplicative, and lengthy overall regulatory process.

NHA member company, Missouri River Energy Services, reports that their new project at a Corps of Engineers dam in Iowa will come on line in 2018, having started the development process in 2005, 13 years ago. I cannot overstate how crucial it is to enact process reforms immediately. The Nation could access huge amounts of reliable low-cost power without sacrificing other values.

Existing project owners are also expressing concerns. With well over 400 projects up for relicensing by 2030, NHA is already hear-

ing from owners particularly in the Northeast that the time and cost for licensing may render projects uneconomic and result in license surrenders. Congress must address the challenges both asset owners and developers face.

Over the last 5 years, this subcommittee has developed an extensive record on the problems experienced by industry. The message has been clear and consistent. Licensing takes years to complete, requires substantial up-front costs, and contains too much uncertainty and risk, all of which for a developer creates a significant barrier to securing financing or capital and for a utility makes it difficult to justify project economics.

Turning to the bills before the subcommittee today, NHA strongly supports policies to address inefficiencies and improve the coordination in the project approval process which we believe will promote the hydropower resource while also protecting environmental values. I have included specific comments on all of the bills in my written statement and ask permission to include for the record additional letters of support that are submitted following this hearing.

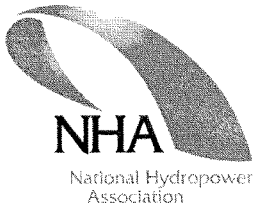
Focusing on the Hydropower Regulatory Modernization Act, it incorporates bipartisan proposals that NHA supports and which were included in legislation in last Congress. It is a crucial first step to address the barriers to developing hydropower's untapped potential and the problems experienced in relicensing.

Empowering FERC as the lead agency to coordinate the schedule, requiring FERC and agencies to coordinate, facilitating concurrent decision making, early identification of issues, and elevating disputes to leadership are improvements that should increase transparency and accountability and eliminate delays. However, NHA also believes improvements to the bill are needed as the language appears to rescind important provisions under current law.

This includes the requirement for agencies to give equal consideration to developmental and nondevelopmental values when crafting mandatory conditions, and the opportunity for discovery and cross examination as part of the trial-type hearings process. These received bipartisan support when adopted and were backed by industry and stakeholders alike.

Finally, NHA believes continued work through last year on some of these provisions resulted in new language that provides further clarity and direction and should be adopted. And we believe this hearing creates an opportunity for further dialogue on issues documented in the record but for which solutions were not advanced. And with that I will conclude my testimony and I look forward to answering your questions.

[The prepared statement of Mr. Leahey follows:]



Written Testimony of

Jeffrey Leahey
Deputy Executive Director

On behalf of

The National Hydropower Association

Before the

House Energy and Commerce Committee
Subcommittee on Energy

Hearing on Legislation Addressing Pipeline and Hydropower Infrastructure Modernization

May 3, 2017

Executive Summary

1. In the last several years, hydropower has provided approximately 6 percent of all U.S. electricity generation and nearly half of renewable generation. By 2030, approximately 400 projects representing 18,000 MW of capacity of the existing system will be up for relicensing.
2. Hydropower has significant untapped growth potential, particularly at existing infrastructure and with low impact projects, such as capacity additions at current hydropower facilities, adding generation to non-powered dams, and closed-loop pumped storage, among others. The Department of Energy's recent Hydropower Vision Report estimates that close to 50 GW of new capacity is available by 2050, with the right conditions and policy support in place.
3. New hydropower project development, as well as the relicensing of existing projects, faces a variety of obstacles, with one of the most challenging being the complex, time consuming and costly regulatory process. NHA strongly supports policies to address regulatory inefficiencies and to improve coordination in the overall hydropower project approval process, which we believe can be done in ways that promote the hydropower resource while protecting environmental values.
4. Hydropower has a critical role to play in meeting our nation's energy, environment, and economic objectives. The benefits from this resource are many – low-cost, reliable, base load renewable electricity, along with additional ancillary grid services (load following, frequency response, energy storage, etc.).
5. As the Congress works to address our energy and infrastructure needs, whether through hydropower-specific legislation, a national infrastructure program, or an energy bill, policies that improve the regulatory environment and provide greater certainty and predictability must be included. A greater recognition that our hydropower infrastructure is incredibly valuable is needed, and continued investment and re-investment in the system is critical to our energy future and national security.

Introduction

Good morning Chairman Upton, Ranking Member Rush, and members of the Committee. I am Jeffrey Leahey, Deputy Executive Director of the National Hydropower Association (NHA). I am pleased to be here to discuss the importance of hydropower to the U.S. electric system, its untapped growth potential, the challenges that impede growth, and the discussion drafts and bills before the Subcommittee that aim to address these impediments.

As background, NHA is a nonprofit national association dedicated to promoting clean, affordable, renewable U.S. hydropower – from conventional hydropower to pumped storage to marine energy to conduit power projects. NHA represents more than 220 companies, from Fortune 500 corporations to family-owned small businesses. Our members include both public and investor-owned utilities, independent power producers, developers, equipment manufacturers and other service providers, and academic professionals.

U.S. Hydropower Statistics

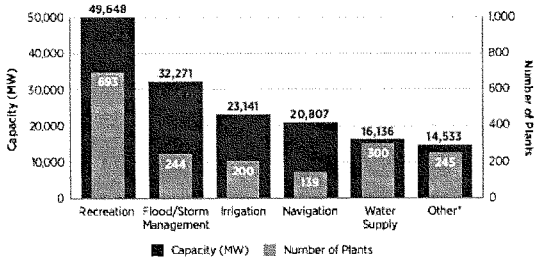
Currently, the U.S. conventional hydropower fleet is made up of almost **2200 individual plants** with a total capacity around **80 GW**. In the last two years, these plants provided approximately **6 percent** of all U.S. electricity generation and **almost half** of all renewable electricity generation – making hydropower the single largest provider of renewable electric power in our country. Looking over the long term, hydropower has supplied a cumulative 10 percent of U.S. electricity generation over the past 65 years (1950-2015), and 85 percent of cumulative renewable power generation over the same time period. [1]

[1]

In addition to the conventional hydropower system there are an additional **42 hydropower pumped storage plants** with approximately **22 GW** of capacity – projects that make-up almost all, **97 percent**, of energy storage in the U.S. today.[2]

Hydropower generation is a clean air resource and avoids millions of metric tons of carbon emissions each year. In fact, regions that rely on hydropower as a primary energy source (like the Northwest) reap the benefits of significantly cleaner air with some of the lowest carbon intensity rates in the country.

In addition to this clean and renewable energy, hydropower infrastructure provides other important benefits, including managing river flow for aquatic species and habitat protection, flood control and drought management, water supply, irrigation and more, as the chart below illustrates.[3]



Note: The use categories are not mutually exclusive; a given dam can be associated with more than one category. The data include only operational dams. See Oak Ridge National Laboratory et al., 2016 [2].

Figure 2-11. Total capacity and number of plants for six separate uses (illustrated by the blue bars) of existing hydropower dams and reservoirs

The next map below was developed by the Department of Energy (DOE) through Oak Ridge National Laboratory (ORNL) and provides a visual representation of the size and location of projects for both the federal and non-federal hydropower systems. Existing hydropower assets are located in all but

[2] 2016 Hydropower Vision Report, Department of Energy, Office of Energy Efficiency and Renewable Energy, Wind and Water Power Technologies Office, Executive Summary P. 9. https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-Executive-Summary-10212016.pdf

[3] Hydropower Vision Report, Chapter 2, Page 83.

two states (Delaware and Mississippi), though every state receives the benefit of the clean renewable generation that these projects provide.

The contributions of the existing hydropower fleet to the electric grid are many (baseload power, peaking generation, load-following, energy storage, reliability and more). With the need for more of these benefits and services as the nation strives to become more energy independent, NHA has seen the hydropower industry grow and expand in recent years.

In fact, the United States experienced a net capacity increase of 1.4 GW[4] from 2005 to 2013, enough to power over half a million homes[5]. FERC has reported an additional 260 MW of capacity being placed in service since then, with even more projects in licensing or in the construction phase today. And

[4] 2014 Hydropower Market Report, Executive Summary P. VI.
[5] An Assessment of Energy Potential at Non-Powered Dams in the United States, Department of Energy, Office of Energy Efficiency and Renewable Energy, Wind and Water Power Technologies Office and Oak Ridge National Laboratory, April 2012, Executive Summary P.VII, Footnote 1. http://nhaap.ornl.gov/sites/default/files/NHAAP_NPD_FY11_Final_Report.pdf

this number could significantly increase with a modernized regulatory approval process that currently takes years longer than that of other renewable resources – in some cases licensing can take 10 years or longer.

In addition, hydropower projects bring multiple economic benefits to the communities in which they are located and those that they serve. To start, the industry itself currently employs a sizable workforce. 143,000 jobs are created just from the continued operation and maintenance, as well as upgrades, of the existing system, with additional employment opportunities gained in the pursuit of new project development and deployment.[6]

One recent example that demonstrates the jobs benefit is AMP Public Power Partners of Ohio. AMP is building 4 new hydropower projects on existing Corps of Engineers' dams on the Ohio River (3 are completed and 1 is still under construction). The company reports that approximately 1800 construction jobs were created over a 4 year construction window, with the operation of the projects providing an additional 50 permanent jobs. Another example is Missouri River Energy Service's Red Rock project on the Des Moines River near Pella, Iowa, currently under construction at a Corps of Engineers dam. The company estimates that 250 workers will be needed on site through 2017-2018.

On top of this, the access to low-cost, reliable clean power is attracting many companies to regions with hydropower. For example, major high-tech companies like Google, Facebook, and Yahoo require large, energy-intensive data centers to drive their businesses. Specifically, in September 2010, Yahoo opened a new facility in Lockport, New York to utilize hydropower provided by the New York Power Authority. And again, in 2013, New York officials cited the importance of low-cost hydropower in Yahoo's decision to expand the Lockport facility.[7]

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[6] Vision Chapter 2, Page 203-204. https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-Chapter-2-10212016.pdf
[7] http://www.nypa.gov/Press/2013/130322.pdf

Another example of hydropower supporting economic development and new job creation partnerships is BMW. Access to low-cost and reliable hydropower along with other renewables lured the company to Moses Lake, Washington. Breaking ground on its $200 million manufacturing facility in July 2010, the plant, a joint venture with SGL Automotive Carbon Fibers, was built to supply parts for BMW's line of high performance cars. In fact, the company in 2014 announced it would fund a $100 million expansion of the facility – again citing access to affordable hydropower along with other renewables.[8]

Growth Potential

One of the largest misconceptions of the hydropower industry is that any growth potential is "tapped out". In its new report issued in 2016 titled, Hydropower Vision: A New Chapter for America's 1st Renewable Electricity Resource, the Department of Energy smashes that myth. The Vision analysis finds that U.S. hydropower could grow to nearly **150 GW by 2050**. This would represent close to a **50 percent** increase in capacity.

The report identifies opportunities for **13 GW** of new hydropower capacity by adding generating facilities to existing non-powered dams and canals, upgrades to existing hydropower facilities, and limited development of new stream reaches. It also finds the potential to add up to **36 GW** of new pumped storage capacity.

Looking to the benefits of this potential, the report finds $148 billion in cumulative economic investment. $58 billion in savings in avoided mortality, morbidity and economic damages from air pollution. Cumulative 30 trillion gallons of water withdrawals avoided for the electric power sector. 5,600,000,000 metric tons of CO_2 emissions reductions with $209 billion in avoided global damages. And over 195,000 hydropower-related gross jobs spread across the nation in 2050.[9] These are quite substantial benefits for our country. A brief analysis of the growth opportunities follows below.

[8] http://www.seattletimes.com/business/bmw-plans-big-expansion-of-moses-lake-carbon-fiber-plant/
[9] Hydropower Vision, Executive Summary P. 7 and 23.

Adding Generation to Non-powered Dams

One of the prime areas of growth in the hydropower industry is on existing infrastructure, such as non-powered dams and conduits. Of the approximately 80,000 dams in the U.S. today only **3 percent** have electric generating facilities. Put another way, **97 percent** of our dams do not produce power and were built for other purposes such as water supply, flood control, irrigation, navigation and recreation.

NHA recognizes that not every existing dam may be a suitable candidate to add power generating equipment, as many factors come into play in development decisions: project development costs and revenue opportunities; energy generation potential; natural resource considerations; transmission needs; dam safety; etc. However, this statistic shows the large untapped universe of potential opportunities – and that are not being developed in significant part because of the concerns about the uncertain, duplicative and lengthy regulatory process.

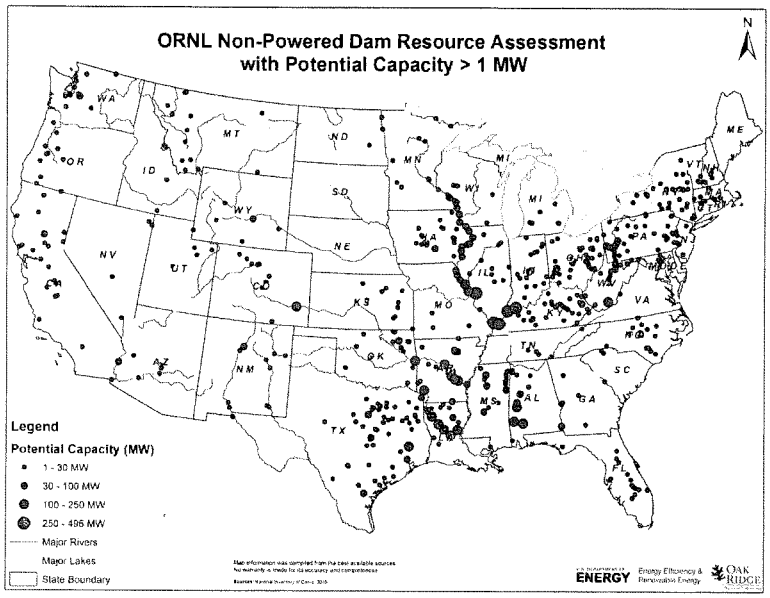
Those dams that are prime candidates for hydropower development are infrastructure that will continue to exist, operate and release flows for the other purposes for which they were originally constructed – regardless of whether hydropower facilities are installed. It is good public policy to take advantage of these existing releases to capture the energy currently untapped at these sites to add to our portfolio of renewable, carbon-free resources.

The U.S. Department of Energy recognized this opportunity and in 2012, through the Oak Ridge National Laboratory, released an assessment of potential capacity at non-powered dams for projects greater than 1MW. The map below on the following page depicts the size and location of the top projects of that survey with capacity greater than 1 MW.[10]

It is noteworthy that many of these opportunities are located in parts of the country that some may consider unexpected, such as the Southeast and Rust Belt states. These are parts of the country for which

[10] http://www.energy.gov/eere/water/hydropower-resource-assessment-and-characterization

conventional wisdom says there are not as great renewable energy and for which local economic development opportunities are needed and being sought.



The results of the study show that over **12 GW** of potential exist across the existing system with **8 GW** of potential available at the top 100 sites.[11] Also of interest, **81 of the top 100** sites were located on federal facilities, in particular, Army Corps of Engineers dams.[12]

These types of projects are some of the lowest impact new developments in the energy sector. No new dams need to be built and the projects aim to utilize existing flows through the projects. This water is already moving through the system, what better way to maximize the benefits of this infrastructure by also generating clean, renewable power with them.

[11] 2012 Non-Powered Dams Report, Executive Summary P.VII and VIII.
[12] 2012 Non-Powered Dams Report, Executive Summary P.VIII.

Capacity Additions/Efficiency Improvements at Existing Hydropower Infrastructure

The potential for new hydropower generation is not only about adding new capacity at non-powered dams. Existing facilities are also expanding through upgrades and efficiency improvements. In fact, since EPAct of 2005 and the inclusion of hydropower as an eligible technology in the production tax credit (PTC), over **150 projects** have received certification. These projects have seen, on average, about a **9 percent** gain in generation.[13] These 150 projects represent a small fraction of the hydropower fleet, so there are even further gains to be had if more projects undertake these kinds of power infrastructure upgrades.

And in many instances with these upgrades, the project realizes not only an increase in capacity or generation, but also an increase in environmental performance. The Wanapum Dam Turbine Replacement Project by Grant County Public Utility District in the state of Washington illustrates this. The project includes replacing the original turbines and replacing or refurbishing generating equipment at the dam. The advanced equipment is designed to be 3 percent more efficient. It will also reduce wear on the equipment and improve passage of juvenile salmon.[14]

NHA also notes from an infrastructure perspective that there is tremendous opportunity for re-investment in the federal hydropower system. Almost half of the U.S. hydropower generation comes from the federal system, with the bulk owned and operated by the U.S. Army Corps of Engineers, the Bureau of Reclamation and the Tennessee Valley Authority. The median age for federal hydropower projects is 50 years.[15] Turbine and other equipment refurbishments (including repairs, replacements and upgrades) are available and can improve the project performance from both an energy and environmental perspective.

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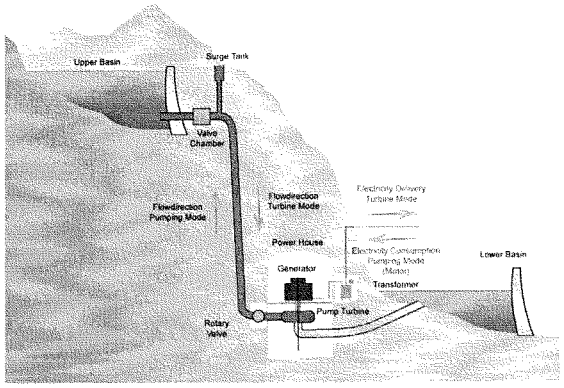
[13] Federal Energy Regulatory Commission data.
[14] http://www.grantpud.org/your-pud/projects/wanapum-dam-turbine-and-generator-replacement-project
[15] Hydropower Vision, Chapter 2, Page 147.

Hydropower Pumped Storage

Pumped storage is a modified use of conventional hydropower technology to store and manage electricity. As shown below, pumped storage projects store potential electricity by circulating water between an upper and lower reservoir.[16] Electric energy is converted to potential energy and stored in the form of water at an upper elevation. Pumping the water uphill for temporary storage "recharges the water battery" and, during periods of high electricity demand, the stored water is released back through the turbines and converted back to electricity like a conventional hydropower station. See illustration below.



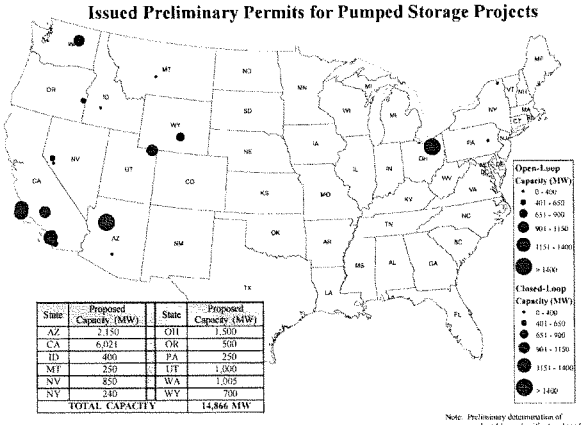
Pumped storage projects able to rapidly shift, store, and reuse energy generated until there is the corresponding system demand and for variable energy integration. This energy shifting can alleviate transmission congestion, which helps more efficiently manage the electric grid, and can reduce the need for costly new transmission projects, as well as to avoid potential interruptions to energy supply.

As more intermittent generation is added to the grid, particularly in the West, the need for the services that pumped storage provides is increasing. As a result, we are seeing a significant renewed interest in these projects, including closed-loop project proposals, which are the subject of one of the draft

[16] Illustration provided by GE Renewable Energy.

bills for this hearing today.[17] As the map below shows, there are currently close to **15,000 MW** of proposed new pumped storage projects before FERC with preliminary permits right now.

Issued Preliminary Permits for Pumped Storage Projects



State	Proposed Capacity (MW)	State	Proposed Capacity (MW)
AZ	2,150	OH	1,500
CA	6,021	OR	500
ID	400	PA	250
MT	250	UT	1,000
NV	850	WA	1,005
NY	240	WY	700
TOTAL CAPACITY			14,866 MW

Source: FERC Staff, January 12, 2017

Note: Preliminary determination of open vs. closed-loop classification based on preliminary permit application.

Again, NHA recognizes that not all of these projects may be developed, however, they clearly rebut the proposition that hydropower is a "tapped out" resource.

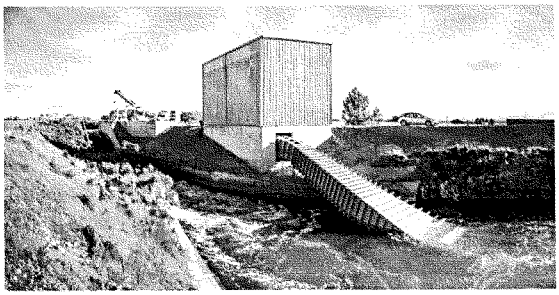
Conduits

Conduit projects utilize existing tunnels, canals, pipelines, aqueducts and other manmade structures that move water. These are fitted with electric generating equipment and are often small projects able to extract power from the water without the need for additional infrastructure or a reservoir.

One of the prime opportunities in this sector is at Bureau of Reclamation infrastructure. In a recent study, Reclamation identified 373 potential sites with a capacity of 103 MW, enough to power 33,000

[17] Closed loop pumped storage projects are physically separated from existing river systems. They present minimal to no impact to existing river systems because after the initial filling of the reservoirs, the only additional water requirement is minimal operational make-up water required to offset evaporation or seepage losses.

homes.[18] In addition, as a result of the expedited review of non-federal conduit projects under the Hydropower Regulatory Efficiency Act of 2013, the Federal Energy Regulatory Commission (FERC) has approved dozens of small conduit projects across the country.[1920]



Also, in 2013, legislation was passed focusing on similar small conduit development at Bureau of Reclamation infrastructure and changes to its lease of power privilege (LOPP) program. Reclamation continues to see increased interest in these project opportunities as well.[21]

New Stream-Reach Development

Lastly, the DOE has also recently conducted a study of potential new greenfield projects. The assessment concluded that the technical resource potential is 85 GW of capacity. When federally protected lands—national parks, national wild and scenic rivers, and wilderness areas—are excluded, the potential is about 65 GW of capacity.[22] Not all of these new hydropower opportunities are likely to move forward once site-specific considerations are taken into account. Site selection will be an important factor.

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[18] Site Inventory and Hydropower Energy Assessment of Reclamation Owned Conduits (Final Report - March 2012). https://www.usbr.gov/power/CanalReport/

[19] https://www.ferc.gov/industries/hydropower/indus-act/efficiency-act/qua-conduit.asp

[20] Picture of Natel Energy, Monroe Hydro Project, a 250 kw hydroelectric plant located in an irrigation canal, in partnership with Apple.

[21] https://www.usbr.gov/power/LOPP/index.html

[22] http://www.energy.gov/eere/water/downloads/new-stream-reach-hydropower-development-fact-sheet

Additionally, the industry and the DOE are investigating innovative new technologies and operational regimes to see where some of this potential can be realized, while also minimizing potential impact.

Challenges in the Hydropower Federal Licensing Regime and Impacts on Applicants

Hydropower has the longest, most complex development timeline (for existing project relicensing or new project approvals) of any of the renewable energy technologies, with some projects taking **10 years or longer** from the start of the licensing process through construction to being placed-in-service.

NHA is appreciative of the work this Committee has conducted over the past several years to examine the problems experienced by industry regarding the federal hydropower licensing process. An extensive record has been developed on these issues. Since 2012, the Committee has held multiple hearings and received testimony from project owners and developers across the sector from all across the country. These include:

- Andrew Munro, Grant County Public Utility District (WA), on May 9, 2012. *The American Energy Initiative: Hearing on the Hydropower Regulatory Efficiency Act of 2012.*
- Kurt Johnson, Colorado Small Hydropower Association (CO), also on the May 9, 2012 hearing.
- Marc Gerken, AMP Public Power Partners (OH), on March 6, 2013. *Hearing on American Energy Security and Innovation: The Role of a Diverse Electricity Generation Portfolio*
- Randal Livingston, Pacific Gas and Electric Company (CA), on May 13, 2015. *Hearing on Discussion Drafts Addressing Hydropower Regulatory Modernization and FERC Process Coordination under the Natural Gas Act.*
- John Suloway, NHA Past President, also on the May 13, 2015 hearing.
- Jeffrey Leahey, NHA, on February 2, 2016. *Hearing on Eight Energy Infrastructure Bills – Hydropower Extension of Commence Construction Deadlines*
- Ramya Swaminathan, Rye Development (MA), on March 15, 2017. *Hearing on Modernizing Energy Infrastructure: Challenges and Opportunities to Expanding Hydropower Generation.*

This record is supplemented by additional substantive hearings on the challenges and opportunities to modernize the hydropower licensing process held in the House Committee on Natural Resources and by those in the Senate Committee on Energy and Natural Resources.

Throughout these hearings, the message has been consistent. The federal hydropower licensing process contains many challenges – it takes years to complete, requires substantial upfront costs, and contains too much uncertainty and risk – all of which, as a developer, creates a significant barrier to securing capital, or, as a utility, is difficult to justify project economics and receive internal approvals. As Ramya Swaminathan testified in March of this year,

> "Private investors in the power generation space find the length and complexity of hydropower's timeline difficult to manage. As a result, hydropower development becomes expensive due to compounding of interest costs over long periods coupled with the unclear risk profile. When faced with these factors, many investors choose to invest in other forms of generation with far shorter timelines and clearer risk assessments."

This was echoed by Randal Livingston in his testimony in 2015,

> "…the process to relicense existing hydroelectric projects requires extensive consultation with multiple State and federal agencies, consistently takes at least seven years, and frequently lasts more than ten years.
>
> Meanwhile, the cost to PG&E customers to obtain a license renewal has routinely exceeded $20 million per license, and some current proceedings will exceed $15 million. When, and if, a license is approved and received, implementing the conditions of the license also routinely costs tens-of-millions of additional dollars.
>
> …the cost and duration associated with licensing is typically far greater than any other established electric generation technology."

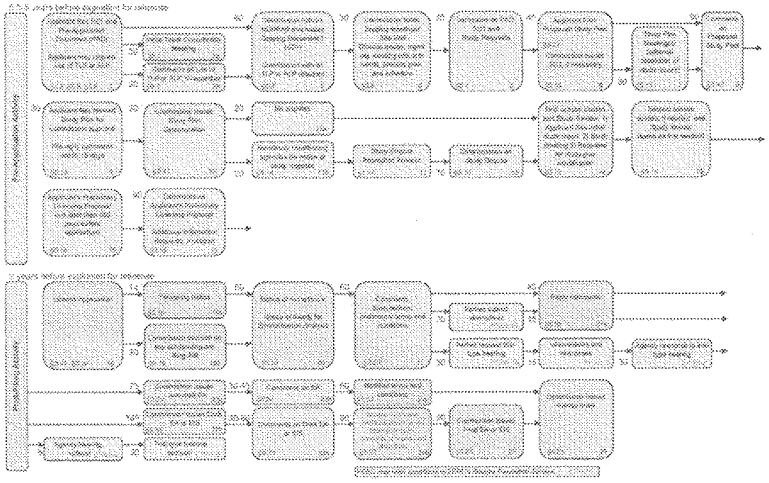
The Department of Energy itself has recognized the problem noting in the Hydropower Vision Report that

> "[n]avigating the complex system of federal and state regulations to secure project approvals creates hurdles for renewable energy developers. Uncertainty regarding the duration and outcome of the permitting process can be a deterrent for investment in clean energy and can delay construction of renewable energy and related transmission projects."[23]

The chart below outlines the integrated licensing process or ILP, the default process, of several, for authorizing hydropower projects.

[23] DOE Hydropower Vision Report p. 53.

Integrated Licensing Process
(Section 241 of the Energy Policy Act of 2005)



*Section 241 of the Energy Policy Act of 2005 in pink

A multitude of federal and state agencies, as well as the public and other stakeholders, play a major and important role in the process. And in the chart above, additional authorizations such as those required by federal dam owners if building on their infrastructure, are not included. These decisions and authorizations have tended to come at the end of the timeline after the FERC issuance of the license.

The following is a list by FERC of the pertinent federal laws related to non-federal hydropower project development. They include:

- Federal Power Act (FPA)
- Rivers and Harbors Act of 1899
- U.S. Bureau of Reclamation Statutes
- National Environmental Policy Act (NEPA)
- Clean Water Act (CWA)
- Endangered Species Act (ESA)
- Fish and Wildlife Coordination Act

- National Historic Preservation Act
- Coastal Zone Management Act
- Magnuson-Stevens Fisheries Conservation Act
- Marine Mammal Protection Act
- Wild and Scenic Rivers Act
- Pacific Northwest Power Planning and Conservation Act

This does not include other state or local statutes or permits that may also be required in the course of developing a project. Water is a public resource and NHA and the industry recognize the necessity for, and value of, thorough review of project applications. However, redundancies and sequential reviews contained in the overall process are key reasons for delays.

For example, for projects adding generating facilities to non-powered federal dams, FERC may issue a license, yet that project cannot commence construction until it has received additional approvals from the federal owner of the dam (Corps of Engineers or Bureau of Reclamation). If there are unanticipated delays for those additional needed approvals, no work can commence.

Marc Gerken's experience in this area proves illustrative. In his 2013 testimony he stated,

> "The regulatory process plays a critical role in a project schedule and ultimately can drive whether or not a project comes to fruition.
>
> A developer must have significant capital (millions of dollars in many cases) to cover the cost of the hydropower project through permitting, including: design, subsurface core drilling, hydraulic model studies, design and initial payments for equipment with long lead times. Long-term financing is unlikely until a developer has all the required permits in hand, which can drive when you can access the market and the cost of money."

This statement proved prophetic as AMP now reports that the delays on their Willow Island hydropower project (adding generation to a Corps of Engineers dam) due to the permitting process had a substantial dollar impact on the project. The delays affected when the company could go out to the market for its bonds for financing, costing it approximately 2 basis points.

It is a similar case for state issuances of CWA Section 401 water quality certifications and biological opinions under the ESA. A license cannot be issued, nor work commenced, until these approvals are issued. Herbie Johnson, the current President of NHA, will testify later today before the House Natural Resources Committee, Subcommittee on Water, Power and Oceans. In his testimony, he will highlight an example from a recent Duke Energy relicensing, where the company experienced delays in both the CWA and ESA authorizations they sought as part of their relicensing. The following cites the company's experience with the ESA for one of their projects,

> "Delayed biological opinions under Section 7 of the Endangered Species Act also greatly extends relicensing time. Biological opinions are required by regulation to be completed in 165 days; however they routinely take years to prepare (e.g., the Sturgeon Biological Opinion for Duke Energy's Catawba-Wateree Hydro Project took four years to develop.)"

At the same hearing later today, David Montagne, Executive Vice President and General Manager of the Sabine River Authority of Texas, will testify to the costs associated with the recent relicensing of the Toledo Bend project stating,

> "...costs will increase the Project's total operating costs by more than $7 million each year over a 50-year license term. These relicensing costs substantially increase the Project's total operating costs by nearly 44% annually..."

Reviewing FERC data on current relicensings, NHA is aware of close to 3 dozen projects where the Commission has completed its NEPA analysis, but for which another agency approval is delayed (e.g. Clean Water Act Section 401 certification by the state; Endangered Species Act biological opinion by Fish & Wildlife Service or National Marine Fisheries Service). In some of these cases, the delay on the needed approval is years overdue - a handful still waiting for a decision after 10 years.

This result not only negatively impacts the license applicant through increased costs and uncertainty, but it also postpones the implementation of environmental, natural resource and other

mitigation and improvement measures that are included as part of the final license, which is a no-win scenario for the industry and the environment.

NHA believes the time, cost and risks associated with licensing hydropower projects are not commensurate with the impacts, particularly when compared with other forms of generation – conventional or renewable. As former NHA President John Suloway testified in 2015, because of this, when faced with the choice of what type of generation to install, there is less risk in choosing a simple cycle turbine or a combined cycle plant that burns natural gas or low-sulfur oil, than building a hydropower plant.

And this is not just an issue for new project deployment, but also for existing projects that are undergoing relicensing. In fact, by 2030, **approximately 400 projects**, representing **18,000 MW** of capacity, will be in or have gone through relicensing. NHA has already begun to hear from owners of smaller projects, particularly in the Northeast, but across the country, that the process costs for licensing may render projects uneconomic and result in the surrender of licenses. As states continue to press for more clean and renewable energy resources, it would be unfortunate to lose the many benefits these existing hydropower projects provide.

NHA believes that Congress and the Administration should seek to reduce uncertainties in the hydropower licensing and relicensing processes, eliminate unnecessary and/or duplicative studies or other requirements, create discipline in the schedule, and reduce the time for obtaining federal and state approvals. In doing so, policymakers would be recognizing the value of hydropower as a critical component in the nation's energy supply portfolio. In addition, NHA believes process improvements can maintain the substantive ability of federal and state regulators to appropriately protect, mitigate and enhance natural resources.

Comments on the Hydropower Discussion Drafts

NHA strongly supports policies to address regulatory inefficiencies and to improve coordination in the overall hydropower project approval process, which we believe can be done in ways that promote the hydropower resource while protecting environmental values. Today's hearing on the 8 hydropower discussion drafts and introduced bills is important as it initiates a focused dialogue on both the problems with the federal hydropower licensing process and advances consensus, common-sense solutions. My testimony will touch on both the discussion drafts and the bills to extend the deadlines for the commencement of construction of the individual projects:

- Hydropower Policy Modernization Act of 2017
- Promoting Hydropower Development at Existing Non-Powered Dams Act
- Promoting Closed-Loop Pumped Storage Hydropower Act
- Promoting Small Conduit Hydropower Facilities Act of 2017
- Supporting Home Owner Rights Enforcement Act
- H.R. 446, H.R. 447, and H.R. 2122, To extend the deadline for commencement of construction of a hydroelectric project

Hydropower Policy Modernization Act of 2017

To begin, the Hydropower Policy Modernization Act incorporates a series of bipartisan proposals that were included in either House or Senate legislation in the 114th Congress. It is a crucial first step to address the barriers to developing our nation's untapped hydropower potential, particularly with proposed improvements to the licensing and administration of the nation's non-federal hydropower resources, both existing projects and new development.

My comments will focus on some of the key regulatory improvement provisions that NHA believes are needed as part of any hydropower licensing bill. For example, the discussion draft empowers FERC as the lead agency to coordinate the schedule for all of the federal authorizations required as part of the hydropower licensing process. FERC is also required to consult with other agencies and the other agencies are required to coordinate with the Commission. The draft also seeks to facilitate concurrent

decision-making amongst all agencies and calls for early identification of issues that could impact the schedule, while also elevating disputes to the Secretary level in order to reach resolution.

As discussed earlier, the main cause for uncertainty and delay in the federal licensing process is the lack of adherence to, and predictability with, the schedule. All of the aforementioned provisions should result in a process that increases coordination, transparency and accountability, and eliminates delays.

NHA also commends the provisions on study improvements, requiring the compilation and increased accessibility of studies and data, as well as encouraging the greater use of existing applicable information. Having to replicate information for multiple agencies on the same issue can significantly increase costs due to the unnecessary duplication of work and effort, and cause delays, particularly if certain studies are dependent on the time of year for their execution.

NHA also supports the license amendment improvements. This new expedited process would unlock the industry's ability to proceed with project upgrades. The qualified upgrades would include capacity additions and efficiency improvements, but also environmental enhancements, and improvements to public recreation. As discussed above, these are a tremendous growth opportunity for the industry and represent opportunities for a win-win result for both power production and the environment.

At this time, NHA would also like to point out areas of needed improvement in the discussion draft. For example, the language appears to rescind important existing provisions under the law that were adopted in EPAct of 2005. The first of these is the current legal requirement under Section 33 of the Federal Power Act directing mandatory conditioning agencies to give "equal consideration" to developmental and non-developmental values when crafting their mandatory conditions. Prior to EPAct of 2005, only FERC was required to provide such "equal consideration" in its review of license applications. The adoption of the provision for the resource agencies then ensured all of the government

participants in the licensing process were subject to the same standard. By proposing to strike subsections (a)(4) and (b)(4) Of Section 33, the discussion draft bill would eliminate a necessary improvement to the hydropower licensing process. NHA requests that the "equal consideration" requirement be added to the bill when introduced.

The second way in which the discussion draft appears to eliminate important advances gained in EPAct 2005 concerns the trial-type hearings on critical factual disputes regarding agencies' mandatory conditioning authorities. While NHA supports the discussion draft bill's provision that would move all of these hearings to administrative law judges at FERC, the legislative text that makes this change drops a critical aspect of these hearings: the opportunity for discovery and cross-examination of witnesses. These foundational components of any fact-finding hearing were included in EPAct 2005 and are required under existing law under FPA sections 4(e) and 18. These requirements were omitted in the discussion draft bill when creating the proposed new Section 35 of the FPA. NHA requests that the bill, when introduced, add these pivotal provisions back to the legislative text to avoid losing a fundamental improvement, which would otherwise undercut the effectiveness and purpose of the trial-type hearings.

These existing requirements received bipartisan support when adopted, and were also backed by the industry and stakeholders alike. As such, we believe they must be retained and the discussion draft amended to do so. NHA also notes that for some other provisions in the draft (e.g. license terms and credit for early action) that continued dialogue on the issue has resulted in new language that provides further clarity and direction that should be adopted into the draft bill.

Finally, NHA believes the dissemination of the discussion drafts creates an opportunity for further engagement and renewed dialogue on issues that were not included in the draft (e.g. the use of final conditions or other federal authorizations to circumvent the trial-type hearing and alternative conditions processes). We look forward to continued conversation with the Subcommittee and other stakeholders to

further examine issues that have been raised in the past and documented in the record, but for which provisions have not been advanced.

Promoting Hydropower Development at Existing Non-Powered Dams Act

As discussed earlier, there are significant opportunities to add generation to existing non-powered dams. Yet, project deployment has not progressed as far as expected considering that potential and the fact that these projects have lower costs and lower impacts as they utilize existing infrastructure.

We support the Committee's work to create a new regulatory review process for these projects, which would maximize the public benefit of this infrastructure. One of the main issues is that dam owners fear that by allowing hydropower development at their facility, irreparable changes will be forced on them to the detriment of the original purposes for which the dam was built.

The exemption process detailed in the draft is an innovative solution to this problem by prescribing FERC's jurisdiction to the hydropower facility itself, together with any associated transmission line. This approach is consistent with the treatment for conduit facilities, as well as FERC's licensing policies for non-federal hydropower facilities located at Federal dams. This exemption program just extends that program to non-powered dams as well—but only for proposals that would not seek to change the existing flow regime.

NHA also notes that the draft includes a provisions designed to support basin-wide environmental improvements by creating a new annual charge for environmental enhancement activities in the watersheds that these new projects would be located. And finally, there is a provision that recognizes the importance of dam safety by requiring, as a qualifying criterion, that a project be certified by an independent consultant approved by FERC as complying with the Commission's dam safety requirements.

Promoting Closed-Loop Pumped Storage Hydropower Act

NHA supports the Committee's work to promote the increased use of closed-loop pumped storage. In helping to balance grid operations, pumped storage facilities reduce overall system generation costs and provide ancillary services to the grid, including frequency regulation and voltage support. They also support the integration of variable generation, like wind and solar, helping to avoid or minimize stability issues due to over-generation. The DOE Hydropower Vision Report finds no greater growth opportunity in the hydropower sector than pumped storage. But again, despite the benefits, value, and potential, project deployment is proceeding at a slow pace, including closed-loop projects that do not have a permanent connection to a navigable waterway and do not influence such river flows.

Similar to the Promoting Hydropower Development at Existing Non-Powered Dams Act, this draft creates an innovative new licensing process for this lower-impact subset of pumped storage projects. It recognizes the specialized purpose of these pumped storage projects. Unlike conventional hydropower projects, these facilities are not conducive to supporting public recreation. And, because they have no continuous connection to navigable waters, they do not present a fish passage barrier, affect water quality, or impact the riverine environment.

Again, like the draft bill for non-powered dams, this draft bill contains a dam safety provision requiring FERC to assess the safety of existing dams and other structures related to the project.

Promoting Small Conduit Hydropower Facilities Act of 2017

As stated by Kurt Johnson of the Colorado Small Hydropower Association in 2012, the regulatory costs for small projects, such as the conduits at issue in the draft, are particularly burdensome and can potentially exceed the costs of the hydropower generating equipment itself.

The discussion draft builds on the Hydropower Regulatory Efficiency Act of 2013 (HREA) – at the time, the first energy bill enacted into law in 4 years – and for which NHA was a strong supporter. The HREA has been a successful program with over 80 small conduit project approvals secured for projects throughout the country. The draft would restructure this process for very small projects of 2 MWs or less on existing conduits, which would be a further positive inducement for these developments.

NHA understands that the vast majority of similar projects under the current HREA process have received approvals and that few, if any, concerns have been raised as part of those reviews. As such, and as these are some of the lowest impact developments, NHA supports creating this more simplified review process for this subset of projects.

Supporting Home Owner Rights Enforcement Act

NHA recognizes that shoreline management is an important issue for both asset owners and for landowners adjacent to hydropower reservoirs or within project boundaries. Many issues come into play – project operations, property rights, recreation opportunities and more.

NHA and the hydropower industry believe when it comes to the safe operation and management of project facilities, the protection of lives and property are the top priority. As such, NHA would need more time to review and vet with our membership the discussion draft to better understand any potential effects on project operations before the association could express a view on the draft. Therefore, NHA takes no position at this time, but looks forward to further discussions with the Subcommittee on the substance of the bill.

H.R. 446, H.R. 447, and H.R. 2122

New small hydropower projects, such as these, have a critical role to play in meeting our nation's energy, environment, and local economic development objectives and will add to our portfolio of renewable, clean energy resources. As I testified to previously in 2016, hydropower projects can face a

variety of obstacles that push back construction timelines. These include delays in necessary post-licensing construction approvals, additional environmental permits, refinements in final project design, continuing negotiations on power purchase agreements, securing financing, and others.

NHA notes that the draft of the Hydropower Policy Modernization Act of 2017, also before the Subcommittee today, specifically aims to address the problem at hand for these hydropower projects. It contains a provision for an applicant to receive an extension from FERC of the commence construction deadline for up to an additional 8 years. This would alleviate the need for individual project developers to get these congressionally-approved extensions. NHA supports the efforts by Congress to address this issue, which requires projects to expend considerable additional time, money and effort on individual congressional legislation.

Conclusion

Both the existing system and new hydropower projects have a critical role to play in meeting our nation's energy, environment, and economic development objectives and much is at stake for hydropower and the families, businesses and communities that rely on its low-cost, reliable, renewable generation.

NHA and the hydropower industry stand ready to help meet our common clean energy goals and we look forward to working further with Congress and the Administration to find pathways to address the important policy issues to fully maximize and unlock the potential of the hydropower resource.

As the Congress works to address our energy and infrastructure needs, whether through hydropower-specific legislation, a national infrastructure program, or an energy bill, policies that improve the regulatory environment and provide greater certainty and predictability must be included. A greater recognition that our hydropower infrastructure is incredibly valuable is needed, and continued investment and re-investment in the system is critical to our energy future and national security.

I thank the Committee for this opportunity to testify and I look forward to answering questions.

Mr. OLSON. Thank you, Mr. Leahey.

The Chair now calls upon Mr. Irvin for a 5-minute opening statement.

STATEMENT OF WILLIAM ROBERT IRVIN

Mr. IRVIN. Vice Chairman Olson, Ranking Member Rush, members of the subcommittee, thank you for the opportunity to testify today on the hydropower bills being considered by this committee. My name is William Robert Irvin. I am president and CEO of American Rivers, a national conservation organization that works to protect wild rivers, restore damaged rivers, and conserve clean water for people and nature. I also served as a member of the senior peer review group for the Department of Energy's Hydro Vision Report which was issued last year.

Let me begin by stating very clearly that while we are pro-rivers, American Rivers is not anti-hydropower. Hydropower is and will remain a key part of our Nation's energy portfolio. Our staff has participated in hundreds of FERC proceedings resulting in the generation of thousands of megawatts of electricity and improved environmental performance at those generating facilities. In addition, we have supported legislation to incentivize sustainable hydropower projects.

American Rivers also recognizes that when cited and operated responsibly, hydropower can be beneficial as a low-carbon, renewable energy source. It is certainly better for the climate than burning fossil fuels, but it is not carbon-free due to the methane emissions from reservoirs. Nevertheless, when sited and operated irresponsibly, hydropower can do great harm to rivers and the wildlife and communities that depend on them.

By changing the flow of rivers, hydropower dams have harmed fish, mussels, and other aquatic species, and pushed some to the brink of extinction. Hydropower can have toxic effects on water quality. Hydropower dams can de-water stretches of river and have in the past been built with callous disregard of Native American sacred sites and ancestral lands. To prevent these harmful impacts, we have laws in place to protect endangered species and clean water and to give States, Tribes, and Federal resource agencies a meaningful seat at the hydropower licensing table.

Accordingly, in evaluating any proposed changes to the hydropower licensing process, American Rivers, and indeed the larger environmental community, will vigorously oppose any effort to limit the application of the Endangered Species Act or the Clean Water Act to hydropower dams to infringe upon State water law and State authority to manage water rights, to limit the protections afforded to Native Americans and the Native American Tribes in hydropower licensing, to limit the ability of the United States to protect federally managed fisheries and taxpayer-owned public lands, or to limit the authority of State agencies to protect fish, wildlife, and other natural resources within their State.

Regrettably, as I have described in my written testimony, the draft bills before the subcommittee fail these tests. At the heart of each of these bills is the flawed principle that FERC should be elevated above other Federal, State, and Tribal agencies in the licens-

ing process and be able to limit Federal, State, and Tribal authorities over rivers.

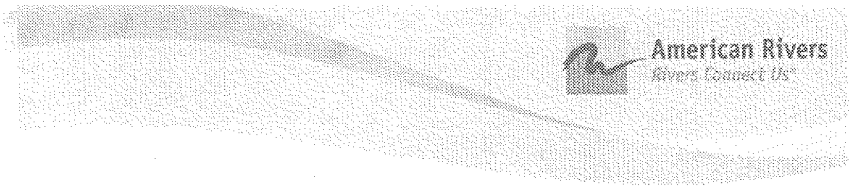
Giving FERC the power to decide questions of fisheries biology makes as much sense as giving the National Marine Fisheries Service the authority to decide interstate electricity tariff cases. Giving FERC the authority to decide questions of Native American treaty rights makes as much sense as giving the Bureau of Indian Affairs the final say over reliability standards for interstate, high voltage transmission. And giving FERC the final say over matters of State water law upends the prior appropriation doctrine in the West and challenges riparian water law that goes back to colonial times in the East.

The draft bills before you will not improve licensing or promote environmental protection. Instead, these bills will lead to legal gridlock and environmental degradation. I hope that rather than rushing these bills forward, the committee will instead work with stakeholders, including American Rivers, to develop legislation to facilitate responsible hydropower development while protecting healthy rivers, wildlife, and communities.

In my written testimony I provided some common sense approaches to improving the licensing process without harming the environment. If the committee chooses to convene a stakeholder process to develop licensing reform that maintains protection of rivers, I can assure you that American Rivers will roll up our sleeves and get to work with all the interested parties.

Thank you for the opportunity to testify today and I look forward to answering any questions you may have.

[The prepared statement of Mr. Irvin follows:]



Testimony of Wm. Robert Irvin

President and Chief Executive Officer

American Rivers, Inc.

Hearing: "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization"

Subcommittee on Energy

Committee on Energy and Commerce

United States House of Representatives

May 2, 2017

Thank you for the opportunity to testify today on hydropower legislation before the Subcommittee. My name is William Robert Irvin, and I am President and CEO of American Rivers. In addition, I recently served as a member of the Department of Energy's Senior Peer Review Group for the Department's Hydropower Vision Report.

American Rivers is one of the leading national conservation organizations involved in hydropower. Our staff have been involved in hundreds of new and original license proceedings since our founding, and we have seen the best and worst that the federal licensing process has to offer. Since 1973, American Rivers has protected and restored more than 150,000 miles of rivers through advocacy efforts, on-the-ground projects, and an annual America's Most Endangered Rivers ® campaign. Headquartered in Washington, DC, American Rivers has offices across the country and more than 250,000 members, supporters, and volunteers.

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My testimony will be confined to those pieces of legislation related to hydropower, specifically: Discussion Draft: Hydropower Policy Modernization Act of 2017; Discussion Draft: Promoting Hydropower Development at Existing Non-Powered Dams Act; Discussion Draft: Promoting Closed-Loop Pumped Storage Hydropower Act; Discussion Draft: Promoting Small Conduit Hydropower Facilities Act of 2017; H.R. 1538, Supporting Home Owner Rights Enforcement Act; H.R. 446, To extend the deadline for commencement of construction of a hydroelectric project; H.R. 447, To extend the deadline for commencement of construction of a hydroelectric project; and H.R. 2122, To reinstate and extend the deadline for commencement of construction of a hydroelectric project.

Following the conclusion of my comments on the aforementioned legislation, I will offer some thoughts on how to constructively improve the hydropower licensing process.

Before I begin discussing the specifics of each bill before the Committee today, let me lay out some core principles of American Rivers with respect to hydropower and legislation to improve the permitting and licensing process. First, American Rivers is not anti-hydropower. We have supported and promoted legislation that promotes the development of sustainable hydropower projects. We also participate in FERC relicensing proceedings that result in the continued generation of hydroelectricity at existing facilities while improving the environmental performance of hydropower dams. Hydropower is and will remain a key component of the United States' energy portfolio. And while hydropower is not carbon free energy due to emissions of methane gas from reservoirs, it is low carbon, particularly when compared to fossil fuel generation.

When sited and operated responsibly, hydropower can have enormous benefit. When sited and operated irresponsibly, hydropower can have enormous adverse consequences.

Hydropower dams have extirpated species, and many continue to push endangered fish to the brink of extinction. Hydropower dams can have toxic effects on water quality. Hydropower dams can dewater stretches of river, and they have in the past been built with callous disregard of Native Americans who rely on a healthy river systems; Native American sacred and ancestral lands have been inundated by dams, and fisheries with great economic and spiritual value have been devastated.

Hydropower dams disrupt flows, degrade water quality, block the movement of a river's vital nutrients and sediment, destroy fish and wildlife habitat, impede migration of fish and other aquatic species, and eliminate recreational opportunities. Reservoirs slow and broaden rivers, making them warmer. The environmental, economic, and societal footprint of a dam and reservoir may extend well beyond the immediate area, impacting drinking water, recreation, fisheries, wildlife, and wastewater disposal.

Therefore, American Rivers, the Hydropower Reform Coalition, and indeed the entire environmental community will vigorously oppose:

- Any effort to limit the application of the Endangered Species Act or the Clean Water Act to hydropower dams;
- Any effort to federalize or otherwise infringe upon state water law and state authority to manage water rights;
- Any effort to limit the protections afforded to Native American tribes' territory, religious liberty, and reserved rights in hydropower licensing;

- Any effort to limit the ability of the United States to protect federally managed fisheries;
- Any effort to limit the ability of the United States to protect taxpayer owned public lands and waters, including the recreational use of those lands;
- Any effort to deny the United States Army Corps of Engineers the ability to protect Congressionally authorized infrastructure during the construction of hydroelectric projects at a Corps facility;
- And any effort to limit the authority of state agencies to protect fish, wildlife, or other natural resources within their state.

Unfortunately, H.R. 8, passed by the Committee in the last Congress, failed all of these tests, which is why we strongly opposed that legislation. Many of the bills before the Committee today also fail these tests. We hope that rather than moving these bills forward, the Committee will instead work with stakeholders, including American Rivers, to develop legislation to address those concerns of the hydropower industry which are legitimate and which can be solved in an environmentally responsible manner.

Please find, below, detailed thoughts on each of the hydropower bills before the Committee today.

Discussion Draft: Hydropower Policy Modernization Act of 2017

First, let me preface my remarks by saying that the Diseussion Draft is improved when compared to H.R. 8 from the previous Congress. However it still fails two key tests: first, it undermines

key protections provided within the Federal Power Act, Clean Water Act, and Endangered Species Act for fish, wildlife, water quality, public lands, Native American trust and treaty obligations, and state water rights. Second, it creates an unrealistic and confusing rule-making and schedule process that would substantially complicate the licensing process while potentially preventing states, tribes, and federal resource agencies from making scientifically based and legally defensible oversight actions.

The broad reworking of the current licensing process would lead to an endless cycle of litigation because it upends often in confusing fashion, more than forty years of court decisions and settled case law, not to mention the 97-year history of the Federal Power Act. This legislation would do fail its stated purpose to to improve the licensing process while increasing costs to utilities and taxpayers and putting hydropower licenses first in line to use waters Congress has recognized as belonging to all Americans.

Since its passage in 1920, the Federal Power Act (FPA) has contained two critical resource management charges. Section 4(e) directs the Secretaries of Agriculture, Commerce, and the Interior to ensure that no federal reservations (anything from a national forest to an American Indian reservation) are negatively impacted by the construction or operation of a hydroelectric project. Section 18 of the Federal Power Act instructs the Secretaries of Commerce and the Interior to ensure that proper fish passage exists at a proposed or existing hydroelectric project, so that fish species inhabiting more than one stretch of a river, or migratory species such as salmon, herring, and some trout species are able to migrate between rivers and the ocean to complete their life cycle.

The Clean Water Act, enacted by Congress in 1973, recognized the inherent right of states to manage their water quality, and provided a mechanism for them to protect their resources in hydroelectric licensing via section 401 of that Act. A section 401 Water Quality Certification is employed by states to ensure enough water is in the river for fish, wildlife, recreation, human consumption, and project operation. The United States Supreme Court, in *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology (511 U.S. 700 (1994))*, affirmed that states issue both the standards and the mechanisms by which to enforce them. The Clean Water Act Amendments of 1987 recognized Native American tribes' right to manage water on their reservations, and enabled them to issue certifications as well.

To our knowledge, at no time since the Federal Power Act was passed in 1920, has the Federal Energy Regulatory Commission (FERC), or its antecedent agencies, placed conditions on a license more protective than those proposed by a mandatory conditioning agency. It is true that FERC can limit the construction or operation of a project in order to preserve or restore environmental quality, and it does, simply not as often or as vigorously as federal, state, and tribal resource agencies. In fact, over decades, FERC has acted to limit the Secretaries of Agriculture, Commerce, and the Interior from exercising their statutory responsibilities and has sought to prevent states and tribes from executing their sovereign rights. More often than not, the courts have ruled that FERC has overstepped its bounds and upheld the authority of federal natural resource agencies, states, and tribes. This is largely because Congress has never imbued the Commission with an environmental stewardship or resource management mission nor does the Commission have the same statutory obligations as the conditioning agencies. What the courts have repeatedly refused to do could now be accomplished by enacting legislation such as the Discussion Draft.

The Hydropower Reform Coalition, of which American Rivers is a co-founder and permanent Steering Committee member, testified before this subcommittee in March and identified five ways in which hydroelectric licensing could be improved. They are:

- Presumptive inclusion in FERC study plans of study requests submitted by federal, state, and tribal resouree management agencies;
- Promotion of memoranda of understanding (MOU) between FERC tribes, and states to improve coordination and prevent unnecessary delay;
- Increasing appropriations to federal resource management agencies to fund the staff positions allowing for efficient and thorough evaluation of hydroelectric licenses;
- Delegation of §§4(e) and 18 authority to technically qualified and capable tribes;
- Improved coordination between FERC and the U.S. Army Corps of Engineers (ACE) to expedite the powering of non-powered dams owned and operated by that agency.

Each of these policy suggestions are intended to increase communication and cooperation between applicants, FERC, and resource agencies. Each preserves existing authorities while decreasing confusion and ensuring the availability and sharing of information necessary to complete environmental reviews. By comparison, the Discussion Draft elevates FERC's power above that of every co-ordinate federal, state, and tribal oversight agency, potentially sacrificing substantive environmental protections and responsible resource management.

I would like to address some of the most worrisome portions of this draft legislation:

Expanding FERC's Jurisdiction

The proposed new §34 of Part I of the Federal Power Act would enlarge the jurisdiction of FERC by adding to the definition of "federal authorization" (now understood to be mandatory conditions and prescriptions under §§4(e) and 18 of the FPA, §401 of the Clean Water Act, and the Endangered Species Act) , "any permits, special use authorizations, certifications, opinions, or other approvals as may be required under federal law to approve or implement the license, license amendment, or exemption under this part." Whereas currently FERC manages—but does not control—the licensing process with respect to conditions placed onto a license under §§4(e), 18, and 401 and the ESA, it does not have the ability to manage the ancillary aspects of access and operation. In other words, FERC manages the Forest Service's review of a license and the Secretary of Agriculture's placement of a condition to preserve the function and purpose of a national forest, but FERC does not manage the local forest's road use rules, which it potentially could if this language were to become law. In another context, if the Solicitor of the Department of the Interior issued an opinion stating that, due to the wording and history of a particular treaty with a Native American tribe, sufficient protection of its reservation requires specific language to be included in a condition or prescription inserted into the license under the Secretary's §§4(e) or 18 authority, , this definitional expansion may mean that FERC would have authority over the DOI Solicitor's opinion.

Resolving Disputes Between FERC and Agencies

The proposed new FPA §34 creates a dispute resolution process that, while perhaps well-intentioned, is almost certainly guaranteed to unnecessarily complicate and prolong a licensing review while not providing for an actual resolution. As proposed, the proposed FPA §34(c) sets out that FERC shall set a schedule for evaluation of a license under every applicable statute (please see below), and instructs each state, tribal, and federal agency that would have a problem

adhering to that schedule for a given project inform FERC and the applicant of such. Currently, the most protective condition or prescription placed on a license supersedes the less protective conditions (if for instance, the Secretary of the Interior's condition requires a particular amount of in-stream flow/water be kept in the stretch river and the state requires more for a different purpose, the state's flow requirement overrules the Secretary's). FERC has no ability to overrule a state, tribe, or Secretary, and the individual Secretaries do not necessarily coordinate on which conditions or prescriptions they place on a license. Some applicants (and often FERC) seek to have the least restrictive condition adopted, arguing that what is good enough for the Secretary of Commerce, for instance, should be good enough for the State Department of the Environment, regardless of the fact that the oversight entities have differing responsibilities.

Under proposed FPA new §34(b)(2)(D)(ii), "the Commission may forward any issue of concern…to the relevant state and federal agencies for resolution." It is possible that this language is an attempt to ensure that conflicts between agencies are referred to the relevant individuals in those agencies, but it is not clear. It is a mechanism where FERC, and not the Secretaries, states, or tribes, wish to resolve a 'conflict.' Following FERC's referral of issues of concern to relevant states and federal agencies, FERC and the agency would enter into a memorandum of understanding (MOU) "to facilitate interagency coordination and resolution of such issues of concern as appropriate." It appears that the intention of this section is to resolve disputes in such a way as to prevent the most protective condition from automatically becoming the controlling language. . It is necessary to note that this is not a single MOU per agency, or per licensing, this is a single *MOU per issue in a given licensing.*

For contrast, the Hydropower Reform Coalition has suggested that MOUs be executed as soon as practicable to ensure proper communication, cooperation, and transmission of expectations

between FERC and the coordinating oversight entities. What this draft legislation proposes to do is have the agencies with differing conditions on related issues negotiate and execute MOUs for every issue of concern, mid-licensing and under FERC's schedule. It is unlikely that a schedule promulgated by FERC via rule in order to improve "discipline" and "ensure[s] expeditious completion of all proceedings required under federal and state law, to the extent practicable" is going to leave a lot of time for attorneys from federal and state agencies to negotiate and execute a legally binding agreement for each issue of concern. The Hydropower Reform Coalition's suggestion, to execute the MOU up front, and to let the most protective condition or prescription control, seems more likely to allow the licensing to proceed at a steady pace.

Additionally, this subsection does not allow Indian tribes with treatment as state (TAS) under the Clean Water Act engage in the same sort of consultation or MOU adoption as the states and federal agencies. They are simply not consulted. Instead, FERC may forward issues identified by the Indian tribe to the Secretary of the Interior or "the federal agency overseeing the delegated authority," presumably the Environmental Protection Agency. It is important to note that the EPA does not currently have a role in water quality evaluations carried out by states and tribes. This draft legislation brings the EPA into a process in which it does not have experience. Additionally, issues that are raised by state agencies operating through the CWA and state and local agencies operating under other federal law would be forwarded to the agency 'overseeing' that law, potentially involving agencies who have never participated in a licensing and have no current authority to inform a state CWA certification. A relevant example here is culverts used in transportation planning. A project upstream of a culvert through which water, fish, and wildlife pass, may have, as a part of its Clean Water Act certification, requirements to keep instream flows at a level sufficient to enable passage. If the construction of the culvert requires a higher

instream flow in the river so a fish may pass through it than if the culvert were not present in the river, would the U.S. Department of Transportation, which provided funds to the state to build the road, become implicated in the hydroelectric license review?

Setting a Schedule

American Rivers opposes an enforceable schedule set by FERC for state, tribal, and federal resource agencies to exercise their statutory authority. American Rivers has taken this position because in the 97 years since the Federal Power Act became law, FERC (and its antecedent agencies) has consistently sought insufficient environmental protections and declined to pursue recovery measures necessary to restore fisheries and limit unnecessary damage to resources. This is because FERC's mission is, and always has been, to ensure for the delivery of energy into the wholesale market. FERC is not qualified to carry out the responsibilities of state, tribal, and federal resource management agencies and has declined at almost every opportunity requests to assist them in collecting necessary information and offering sufficient protections.

Subsection 3(c) of the draft bill instructs FERC to establish a rulemaking to set a schedule for the evaluation of each *statute* that is relevant to processing an application. That is one schedule to evaluate an application under the Magnuson-Stevens Act, a separate schedule under the Marine Mammal Protection Act, a separate schedule under the Coastal Zone Management Act, etc. This would replace the single timeline employed by the Department of Commerce, etc. for the total review each Department, state, and tribe currently employs. It is unclear how FERC would overlay these schedules, or how the final schedule would track which statutory evaluation was completed at which point by which agency. For a draft bill that is attempting to eliminate

bureaucratic review and uncertainty, requiring an agency to keep track of FERC's schedule for every statute under which it—but not FERC—operates, seems like an incredible distraction.

As previously stated, as FERC has never had the same responsibilities for natural resources as states, federal resource agencies and tribes, it is inappropriate to allow FERC the ability to set deadlines for those oversight entities' evaluations. The greatest impediment to an expeditious evaluation is *not* the absence of an enforceable schedule; rather it is the lack information necessary for agencies to provide scientifically based and legally defensible conditions on hydroelectric licenses. In order to ensure that the agency's findings cannot be overturned in court for being arbitrary or capricious, the agency needs to show that it based its findings in science and followed a legally defensible process. Due to miscommunication—and occasional intransigence—agencies are sometimes denied the information they need to conduct such an evaluation in a timely manner.

Because FERC requires only the minimal amount of information required to conduct its analysis under its authority, it does not request information states, federal, and tribal agencies will need to conduct their analyses. As a result, some licensees—especially those new to hydroelectric development or operating in a new jurisdiction—may be surprised when, following the completion of FERC's evaluation of a license, a state, federal, or tribal resource agency instructs them to collect new information. While the Hydropower Reform Coalition seeks to prevent this confusion and surprise by promoting MOUs and having FERC include agency study requests (which are generally provided to FERC before FERC issues its study plan to an applicant) in FERC's study plan, this draft legislation seeks to provide a finite amount of time during which the information can be evaluated and, if it cannot be, for no prescription or condition to result. It trades concerns about water quality, fish, and wildlife for the certainty of a license.

The deadlines enacted under this subsection would be applicable to the federal, state, and tribal agencies, the applicant, the Commission, and other participants in a proceeding (although these "other participants" are not permitted to participate in setting the deadlines). While requiring FERC and the applicant to conform to the deadlines is an improvement over the schedule language in H.R. 8 (which only applied to the resource agencies), it is an insufficient improvement to save the concept. It must also be noted that only those agencies that submitted acknowledgement of notification from FERC of their ability to participate in a licensing under proposed new FPA section 34(b)(2)(C) would be permitted to participate in the consultation preceding of the schedule. More process, more deadlines, more work.

A single deadline-extension of 90 days could be granted by FERC, although if a natural event, such as a drought or a super storm, upends the evaluation of the environmental impact—or if the applicant fails to provide the information from one season to an agency conducting the standard two-season study, 90 days is of little help.

Finally, the ambiguity contained in this section will lead to substantially more litigation by eliminating the certainty decades of court decisions have provided in hydroelectric licensing. For example, by the language of this draft bill, it is unclear what will happen if a state, federal, or tribal resource agency is unable to place its condition or prescription on a license within the timeframe set out by FERC. If events beyond the control of the agency, such as a severe weather event, insufficient information provided by the applicant, or insufficient appropriations to maintain necessary staffing at the agency, prevent the issuance of a license within the FERC schedule, the agency is entitled to a single 90-day extension (if it sufficiently demonstrates its need to FERC and requests and extension more than 30 days prior to the deadline). It is a certainty that following the missed deadline, a less environmentally conscious applicant would

sue should the agency subsequently attempt to place its condition on the license, that the agency would sue to ensure it has not forfeited its authority, or that an external stakeholder would sue to preserve oversight authority. If the condition that is implicated is one allowing for tribal fishery protection, or of a Native American reservation's protection, for example, a tribe, the tribal fishing commission, or the United States may also sue. They would sue for the clarity that enacting this draft bill would erase. More litigation means more costs for utilities, their ratepayers, federal, state, and tribal taxpayers, and interested parties, including American Rivers. The outcome of legislation to improve the licensing process should not be more time consuming process, longer and more expensive proceedings, and more litigation. As currently written, the only parties to a license proceeding that will benefit from this section are energy and water rights attorneys.

Trial-Type Hearings

In order to dispute prescriptions and conditions placed onto a license by the Secretaries of Agriculture, Commerce, and the Interior, trial-type hearings were added to the hydroelectric licensing process via the Energy Policy Act of 2005. To date, there has been *one* trial-type hearing that resulted in a formal determination (it upheld the Secretary's decision). All other trial-type hearings to date have ended in settlement. The resource agencies unfortunately do not have the same time and resources available as some litigious licensees, and have accepted settlement in order to evaluate other licenses needing review in a timely manner. The trial-type hearings for alternative conditions and prescriptions currently take place before an Administrative Law Judge (ALJ) in the Department that placed the condition on the license (with the exception of those imposed by the Secretary of Commerce; those trial-type hearings take place before a Coast Guard Judge Advocate General, due to historical, organizational reasons).

Trial-type hearings benefit from the expertise that ALJs and their staff have developed in evaluating the science required and the knowledge of how statutes beyond the Federal Power Act play into the Secretaries' determinations. Additionally, ALJs offer only conclusions as to law and fact, and cannot overrule a Secretarial decision (and neither can FERC). If a trial-type hearing is sought, the §§4(e) or 18 process is not concluded until, following the ALJ's determination, the Secretary's final condition or prescription is issued.

The Discussion Draft changes the trial-type hearing process in several key ways. First, *all* disputed issues of material fact supporting a condition on a license will be decided by a *single* ALJ at FERC. FERC ALJs typically hear disputes about interstate power, transmission lines, and rates set by utilities for payment of services. FERC ALJs do not—and have never—considered the implications of project construction or operation for threatened and endangered species, flows necessary to ensure safe boating or recreational swimming, or for preventing flooding of and damage to Native American reservations. This legislative change would put disputes relating to Indian treaty obligations, the ESA, and FLPMA in front of one FERC ALJ, who may not have experience with any of the issues or statutes. These proceedings (which, per §35(b), cannot last longer than 120 days, 30 days longer than currently allowed), would be required to fit into the schedule established by FERC pursuant to §34(c)—which is to say, the schedule would dictate whether *any* time were permitted for a trial-type hearing. It is possible that the schedule would not allow any trial-type hearing, which would in turn present a conundrum: the §§4(e) and 18 processes are not considered complete until the final Secretarial decision is offered following a trial-type hearing. If the trial-type hearing is not able to be completed before FERC's deadline, can the original condition or prescription legally be placed

on the license? **It is possible that the schedule would *not* allow for a final Secretarial determination.**

Not later than 60 days after the ALJ decision, the Secretary who issued the disputed condition or prescription "*in accordance with the schedule established by the Commission*," shall file with the Commission a final determination on the condition or prescription. The final determination of the Secretary must explain why it was changed or not changed; the determination will be included in the consolidated record. Beyond changing the venue for these hearings, this legislation would allow FERC, if the Commission "finds that the final condition or prescription of the Secretary is inconsistent with the purposes of this part or other applicable law" [to] seek resolution of the matter under the above-described MOU process for dispute resolution. That section would enable FERC to seek an MOU between the Secretary and FERC on the issue in dispute, all during the administrative process, pushing up against FERC's FPA rule-determined deadline.

It is simply not possible for FERC and the agencies in question to complete all of this new process in the time allotted by the Discussion Draft. The consequence will be legally indefensible conditions or increased delay, both of which will lead to more litigation.

Licensing Study Improvements

The licensing study improvements section, proposed new FPA section 36, is one element of the Discussion Draft which makes some progress towards solving areas of concern with the licensing process. By instructing FERC to compile current and accepted best practices and compile a comprehensive collection of studies and data accessible to the public, and encouraging license applicants, agencies, and tribes to develop a limited number of methodologies and tools applicable across an array of projects, this bill comes closest to what American Rivers and the

Hydropower Reform Coalition believes offers the greatest area for improvement: increased communication and cooperation. While this language falls short of promoting MOUs and presumptively granting study requests, pursuing similar language in future legislative drafts is more likely to truly solve the shared difficulties in hydroelectric licensing than any changes to the trial-type hearing process or the existing schedule under the integrated licensing process.

Although identifying and sharing best practices and core studies (please see Dave Steindorf, American Whitewater/Hydropower Reform Coalition, Questions for the Record regarding the March 15, 2017 Subcommittee on Energy hearing, "Modernizing Energy Infrastructure: Challenges and Opportunities to Expanding Hydropower Generation") is a step in the right direction, language included in proposed new section 36(b) presents a troubling issue. Currently, some applicants dispute whether they should be required to provide information necessary for a resource agency to offer a scientifically based and legally defensible condition or prescription on a license; they offer as evidence that such information is already available to the agency and the applicant need not expend time and resources in order to provide it. While it is currently the responsibility of the applicant to produce the study it believes answers the questions the agency needs to in order to complete the review, the Discussion Draft places the onus on the agency. This is impractical. Rather than the agency expending time and energy (all while burning through time on FERC's schedule) to locate a study the applicant believes exists, the burden should be on the applicant to produce the study.

I would also like to take this opportunity to voice American Rivers' support for a basin-wide or regional review. American Rivers believes that as no river is defined by the segment between two dams and creating the proper system for watershed-scale management planning would be a

transformative step forward. Therefore, we support in concept proposed Section 36(c) in the Discussion Draft, however, we have concerns about its practicability as drafted.

Qualified Project Upgrades

Qualified Project Upgrades are alterations to a project or its operation that are not required by the license, but improve the project or provide additional mitigation to fish, wildlife, and water quality impacts. While it is clear that the impetus for the proposed new FPA section 37 is to reward licensees who improve their projects mid-license and to ensure a timely evaluation of these applications, this section sets out an odd and practically unworkable timeline for review. It also establishes some criteria that could degrade environmental protections and proper resource management.

The process by which FERC publicizes the application for a qualified project upgrade and notifies the public and agencies is extremely convoluted. First, the applicant must include in the application sufficient information to demonstrate that the alteration to the project qualifies. FERC shall then, within 15 days of receiving the application, "make an initial determination" as to whether it qualifies, and will publish such determination. It shall solicit public comment for 45 days. This section does not direct FERC to notify any states, tribes, or federal resource agencies that have placed a condition on a license on which the applicant is seeking an upgrade.

If, at the end of the 45 days provided for above, no entity comments on the proposed upgrade, FERC shall "immediately" publish a notice stating a lack of contest or, if there is a contest, FERC shall have 30 days from the date of the publication of its initial determination in proposed new FPA §37(a)(3) to "issue a written determination as to whether the proposed license amendment is for a qualifying project upgrade." This means that although there are two different

processes for disputed versus non-disputed applications, the time permitted to issue a statement of non-dispute or an explanation of why the dispute is not credible is the same. It's difficult to understand how the timeline allows for 45 days of public comment, but within the 45 days, FERC must respond to an objection made as to the project's qualifications. If an objection comes on day 45 of the solicitation period, and the draft bill only allows FERC 30 days from the date of publication of the initial determination to rebut and analyze, given the incredibly tight turn-around and necessity to complete the entire process in 120 days, the only way that FERC can analyze and rebut an objection at the end of the public solicitation period is to burn the time the agencies have for review (see below). To keep the process moving, it is unclear whether FERC would have sufficient time to analyze and rebut while simultaneously allowing the resource agencies to perform their own oversight This bill requires consideration to overlap in such a way that there is no time for thoroughness, let alone delay.

The Discussion Draft allows FERC has 45 days from publicizing the initial determination to solicit public comments. It then has 30 days following a contested initial determination to analyze and rebut, but those thirty days count down from the overarching 45 days allotted for the public comment process. Simultaneously, from the day on which FERC publishes the initial determination, it has 60 days to send a notice to the resource agencies that have placed a condition or prescription on the license, or could, given the upgrade, place a condition or prescription on the license. That means that FERC could have had the application for 75 days before it is required to tell the resource agencies it has received it.

Starting from the date of initial publication, the resource agencies have 90 days to consider the application and determine whether the proposed upgrade is acceptable or whether a license amendment is required to preserve the scientifically based and legally defensible condition or

prescription. While this draft legislation gives the resource agencies 90 days at FERC's discretion, it only requires them to have 30 days. Thereafter, FERC has 30 additional days to consider the license. Outdoor recreationalists and other common intervenors/participants (such as American Rivers) are specifically excluded from this consultation process. Total time guaranteed to FERC: 120 days. Total time guaranteed to the resource agencies: 30 days.

No condition may be placed on an upgrade judged to be qualifying except those that are: necessary to public safety, "reasonable, *economically feasible, and essential* to prevent loss of or damage to, or to mitigate adverse effects on fish and wildlife resources, water supply, and water quality that are *directly* caused by the construction and operation of the qualifying project upgrade, as compared to the environmental baseline existing *at the time the Commission approves the application for the license amendment*." While I expect this language is an attempt to prevent agencies from placing conditions on the upgrade that the applicant believes to be too expensive or unnecessary, it vests in FERC authority to make that decision. FERC's area of expertise is regulation of the wholesale energy market, not ensuring that a Native American reservation is preserved or that threatened and endangered salmon populations are protected. Giving FERC the decision-making power will ensure that all decision making is in the pursuit of power generation.

We want to be clear that American Rivers is not opposed in concept to incentivizing license holders to make project upgrades mid-license term. We remain concerned that, as written, this section of the bill will not have that effect. Rather, it will sow yet more confusion in the licensing process, resulting in neither environmental nor power generation benefits.

Technical and Conforming Amendments

By changing "deems" to "determines" in these respective portions of the Discussion Draft, thus altering key components of the Federal Power Act that have been at the heart of so many important court cases, including the landmark *Tacoma Power v. FERC,* a risk is created that the corpus of §§4(e) and 18 court decisions of the past 97 years could be open to re-litigation. Altering the process by which the Secretaries engage in evaluating a proposed project is an unnecessary action that would potentially remove discretion from the Secretaries and would almost certainly guarantee a new point to litigate in licensing.

Extension of Construction of Project Works and Preliminary Permit Timelines

American Rivers supports sections 2(c) and 2(d) of the Discussion Draft. As we discuss more in our comments on H.R. 446, H.R. 447, and H.R. 2122, below, we believe that the delays in construction of new projects has little to do with the licensing process and more to do with other factors (please see discussion on H.R. 446, 447, and 2122 below), particularly in the case of powering non-powered dams. We also tend to object to Congressional earmarks for specific projects that have exceeded their deadlines for preliminary permits or project construction. Therefore we support changes to the FPA that will increase the likelihood of successful project development without developers being required to petition Congress for relief.

Conclusion

American Rivers opposes the Discussion Draft as written. While we have described our detailed concerns above, the summary is this: We object to the idea that we should federalize in the hands of FERC decisions with respect to state water law that are more appropriately left to states; we object to the idea that FERC should be allowed to impose its judgement onto federal agencies that have statutory mandates to protect natural resources, and we object to FERC being able to

override the concerns of Native American tribes when it comes to protecting their sovereign lands.

However, we acknowledge that there are improvements that could be made to a process that can be long and complex. We recognize that the Committee is seeking ways to improve the licensing process. If the Committee wishes to develop real solutions that will benefit all stakeholders, we would welcome the opportunity to engage with the Committee and any interested parties to try to achieve a mutually beneficial outcome.

Discussion Draft: Promoting Hydropower Development at Existing Non-Powered Dams Act

It is disappointing that after the Subcommittee's March 15 hearing on ways to improve the licensing process, particularly for powering non-powered dams, the Committee has chosen to ignore the recommendations not just of the Hydropower Reform Coalition (of which we are a part) but also Rye Development. Instead, the Subcommittee is recycling *verbatim* elements of the House Energy Bill from the previous Congress (H.R. 8) that received near universal condemnation from states, tribes, and the conservation and recreation community. President Obama threatened to veto the legislation because of its failure to respect environmental law and policy.

Specifically, the Discussion Draft:

- Narrows / limits protections for natural resources and other public values: Exemption conditions intended to address natural resource impacts would be limited to impacts on fish and wildlife resources directly caused by the construction and operation of the hydropower plant, and must be – in FERC's judgment – reasonable, economically feasible, and essential. Measures necessary to protect public safety are permissible.

However, exemption conditions would be prohibited from addressing the underlying natural resource impacts of the existing dam, diversion, or reservoir if one is involved. Exemption conditions to address the full range of impacts of the project on national parks, federal lands, recreational opportunities, cultural resources, water quality, and other values would be prohibited. Currently, FERC, states, tribes, and federal agencies have broad authority to protect these values at hydropower projects. All of these authorities would be significantly curtailed.

- Overrides the Endangered Species Act by limiting conditions for the protection of threatened and endangered species to conditions that are, in FERC's judgment, "economically feasible."
- Offers no flexibility to modify the "storage, control, withdrawal, diversion, release, or "flow operations" of the underlying dam, even if those changes are necessary to address natural resource impacts of the facility or of the underlying dam. This would limit any flow requirements as a condition of any federal authorization, including a CWA §401 water quality certification, or a Biological Opinion issued under the ESA.
- Prohibits FERC from preparing an Environmental Impact Statement; instead it would be limited to either an Environmental Assessment or a Categorical Exclusion.
- Limits FERC jurisdiction over essential project works. FERC's jurisdiction would be limited to the powerhouse and primary transmission line. Conduits, dams, impoundments, shoreline, lands, or project works associated with the underlying facility would be exempt from any environmental or safety oversight.

Taken together, these provisions are an indirect yet effective attack on states, tribes, and federal agencies' conditioning authority under sections 4(e), 10(a), 10(j), and 18 of the Federal Power Act, section 401 of the Clean Water Act, section 7 of the Endangered Species Act, section 408 of the Rivers and Harbors Act, and other federal and state authorities for protecting public lands and other resources. The Committee should not limit the application of these statutes, and the protections they provide, in order to generate what will likely be a minimal amount of electricity.

The Discussion Draft also threatens public safety by shifting dam safety burdens to the states: FERC may include conditions in the exemption to protect public safety, but FERC does not have jurisdiction over the underlying dam, so cannot ensure that it is safe. Potential exemptees would be required to provide FERC with certification "by an independent consultant approved by the Commission" that the dam complied with "the Commission's dam safety requirements." However, this certification would only address the state of the dam at the time that the exemption was issued. Since exemptions are permanent and FERC would not have jurisdiction over the dam, ongoing responsibility for ensuring dam safety would fall to the states, or fall through the cracks, endangering lives and property.

In conclusion, I reiterate that the Committee has before it an excellent opportunity to convene stakeholders interested in assisting the hydropower industry in facilitating powering of non-powered dams. American Rivers recommends that the Committee seek to bring interested parties together to achieve consensus on how to advance legislation to power non-powered dams rather than to attempt to advance the Discussion Draft as written.

Discussion Draft: Promoting Closed-Loop Pumped Storage Hydropower Act

Similar to the Committee's approach with the Discussion Draft related to Non-Powered Dams, this Discussion Draft also recycles provisions from H.R. 8 in the previous Congress that were universally condemned by states, tribes, and recreational and conservation interests because of their detrimental effect on fish, wildlife, public lands, Native American trust and treaty obligations, and state water rights. By deregulating closed-loop pumped storage projects, the Discussion Draft would allow for the construction of projects that, in the words of the State of California, "could have dramatic impact on the environment."[1] In addition, the State of California correctly points out that due to a failure to define within the Discussion Draft "impacts directly caused by the construction and operations of the project," enactment of the Discussion Draft could result in "increased predation or mortality of fish and wildlife,"[2] including threatened and endangered species. Finally, the State of California notes that the Discussion Draft's provisions exclude consideration of the impacts of deregulated projects on water quality and public health, which in the State's opinion is "inappropriate and will result in environmental impacts that could and should be addressed as part of the Commission's hydropower licensing process."[3]

Specifically, the Discussion Draft:

- Removes the Commission's licensing and conditioning authority, comprehensive planning responsibility, equal consideration responsibility, and requirements for working with federal and state agencies to protect fish and wildlife under sections 4(e), 10(a), 10(g), and 10(j) of the Federal Power Act.

[1] Letter from the Felicia Marcus, Chair of the California State Water Resources Control Board to Senators Murkowski and Cantwell, August 18, 2016; Attachment A, pg. 4. (Henceforth CA SWRCB Letter) Note: Section 1206 of H.R. 8 as reported in the Senate cited in the letter is identical to the Discussion Draft in question.
[2] CA SWRCB Letter, Attachment A, pg. 4
[3] CASWRCB Letter, Attachment A, pg 4-5

- Narrows / limits protections for natural resources and other public values: License conditions intended to address natural resource impacts would be limited to impacts on fish and wildlife resources directly caused by the construction and operation of the hydropower plant, and must be – in FERC's judgment – reasonable, economically feasible, and essential. Measures necessary to protect public safety are permissible. License conditions would be prohibited from addressing the underlying natural resource impacts of the existing dam, diversion, or reservoir if one is involved. License conditions to address the full range of impacts of the project on national parks, federal lands, recreational opportunities, cultural resources, water quality, and other values would be prohibited. Currently, FERC, states, tribes, and federal agencies have broad authority to protect these values at hydropower projects. All of these authorities would be significantly curtailed.
- Allows the developers of closed-loop pumped storage facilities to avoid complying with the Clean Water Act, the Federal Land Policy and Management Act, and other federal authorizations by limiting natural resource protections as described above.
- Overrides the Endangered Species Act by limiting conditions for the protection of threatened and endangered species to conditions that are, in FERC's judgment, "economically feasible."

Taken together, these provisions are an indirect, yet effective, attack on states, tribes, and federal agencies' conditioning authority under sections 4(e), 10(a), 10(j), and 18 of the Federal Power Act, section 401 of the Clean Water Act, section 7 of the Endangered Species Act, and other federal and state authorities for protecting public lands and other resources. The Committee should not limit the application of these statutes, and the protections they provide.

American Rivers recognizes the value of pumped storage projects for grid regulation and the integration of carbon free renewable energy. Unfortunately, this bill eliminates the balance that has been at the heart of the consideration of pumped storage projects since the Storm King Mountain project was rejected in *Scenic Hudson vs. Consolidated Edison*, thus leading to the enactment of the National Environmental Policy Act. We are willing to work with the Committee to develop incentives for the proper siting and construction of pumped storage projects, but not at the expense of half a century of environmental protections.

Discussion Draft: Promoting Small Conduit Hydropower Facilities Act of 2017

American Rivers supports the concepts contained within the Discussion Draft. We have been engaged in negotiations with the Colorado Small Hydropower Association over proposals to expedite the deployment of small conduit projects, and we want to commend them for working with us in a fair, open, and collaborative manner.

When successfully deployed, projects such as those intended by supporters of this legislation to be exempted from FERC jurisdiction can have a major beneficial impact on the health of a river system by increasing the efficiency and affordability of modern irrigation technologies. We want to ensure that legislation exempting projects from FERC jurisdiction does not exempt projects that are large enough, or environmentally sensitive enough, to warrant federal licensing. We believe that this can be achieved, and we look forward to working with the Committee to continue to refine this proposal to accomplish what we believe is a shared goal: the deployment

of more environmentally benign and in some cases environmentally beneficial conduit hydropower projects.

H.R. 1538, Supporting Home Owner Rights Enforcement Act

American Rivers is not opposed to legislation that would direct FERC to take into consideration the rights of private property holders along federally licensed reservoirs and impoundments. However, we would note several concerns:

- All of the other non-project specific hydropower legislation under consideration in this hearing has been written to reduce the power of federal natural resource agencies to exercise their authority under Section 4(e) of the Federal Power Act to protect federal reservations, their multiple uses, and the taxpayers of the United States who use them (including the Native Americans whose sovereign tribal lands are held in trust by the Secretary of the Interior and protected by Section 4(e)). These Discussion Drafts uniformly transfer power from federal natural resource agencies to FERC for the express purpose of elevating power production, and the utilities that produce power, above all other interests. H.R. 1538 does the opposite; the bill is designed to weaken FERC's authority to manage reservoir levels and shorelines for the purposes of power production, among other beneficial uses, in order to advantage reservoir front landowners.
- Thus, we cannot support legislation that amends Section 4(e) to advance the interests of a small group of landowners while other bills are being considered which would amend the same section of the statute to strip away authorities that protect tribal trust and treaty lands as well as public lands belonging to all Americans.

- Further, as long as FERC retains the power to exercise eminent domain on behalf of licensees, it is unlikely that H.R. 1538 will have much practical effect. If H.R. 1538 were amended to strip away FERC's eminent domain authority, it would be more likely to actually benefit the property owners it seeks to protect.

In summary, American Rivers does not oppose H.R. 1538 on its own, primarily because it will have little practical effect without FERC also being stripped of its eminent domain powers. However American Rivers must oppose H.R. 1538 in the context in which it is being considered. We are willing to work with the Committee to provide real relief to the aggrieved parties who seek this legislation provided that we can do so in such a way that is equitable to all parties whose interests are at stake in the licensing and operation of federally licensed projects.

Commence Construction Earmarks: H.R. 446, To extend the deadline for commencement of construction of a hydroelectric project; H.R. 447, To extend the deadline for commencement of construction of a hydroelectric project; and H.R. 2122, To reinstate and extend the deadline for commencement of construction of a hydroelectric project

We address these three bills *en bloc*. American Rivers does not support individual extension bills like H.R. 446, H.R. 447, and H.R. 2122. The vast majority of hydroelectric projects are able to commence construction within FERC's statutory deadline, and we generally look with disfavor on attempts to evade regular order in proceedings before FERC. We are concerned about the precedent set when Congress passes earmarks to waive regular order at specific dam sites or FERC projects. We want to make clear that our objection is to the practice of earmarking FERC projects in general, and not to any of the specific projects before the Committee at this time.

These bills are also a symptom of a larger issue with hydropower development. All of these projects involve retrofitting existing non-powered dams with new hydroelectric facilities. American Rivers generally supports policies, like the Hydropower Regulatory Efficiency Act of 2013, that would encourage the responsible development of hydropower on existing nonpowered water infrastructure.

The National Hydropower Association has argued that the provisions of the Discussion Draft with respect to Non-Powered Dams, — which would weaken bedrock environmental laws like the Clean Water Act and the Endangered Species Act, along with key protections for public land, Native American treaty obligations, recreation, and fisheries — are necessary to "expedite" the FERC licensing process. Members of the industry, arguing before this Committee, have consistently identified the hydropower licensing process — particularly sections of the law that protect these critical public values — as the greatest obstacle to new hydropower development.

We believe that the facts — demonstrated, in part, by the existence of these three bills and the many others like them that the Committee considers every year — tell a very different story. FERC's regulations envision a five-year licensing process, with three years of pre-filing activities and two years of processing after an application is filed. While some projects take longer, there are many examples of hydroelectric projects that receive FERC licenses in a much shorter period of time. For example, between 2006 and 2012, FERC issued 46 hydropower licenses in fewer than twelve months each.

All of the projects here are consistent with FERC's ordinary licensing timelines. The completed license applications for each of these projects were processed in fewer than two years, with an average processing time of fewer than 16 months. All of the developers of these projects received their licenses within 11-23 months of filing an application that was complete and ready to be processed.[4] The two projects with the longest licensing times (Gathright at 23 months and Flannagan at 18 months) involved a "delay" between the filing of the licensing application and FERC's determination that the license application was complete and ready for processing, meaning that the applicant had not provided sufficient information in its original application.

At all three of these projects, post-licensing activities have been the primary obstacle to successful development. Each of the projects in question has held a FERC license for more than five years, much greater than the time it took for FERC to process the license in the first place, which was an average of 26 months, not counting the time that the applicant needed to provide sufficient information to FERC. The average time it took for licensees to obtain their licenses for these projects (16 months) is far less than the time that has elapsed since they received those licenses and failed to commence construction (an average of 61 months and counting). On average, these developers have held these licenses without generating a single kilowatt or even breaking ground on the facility for nearly four times as long as it took FERC to process their licenses in the first place. The FERC licensing process is not holding back any of these projects.

[4] Time from FERC "Notice of application ready for environmental analysis" to issuance of license order.

The National Hydropower Association (NHA) continues to argue before Congress that the licensing process — particularly those portions of the process that are intended to protect the environment — are the greatest source of delay in bringing new hydropower online. Yet elsewhere, NHA downplays this concern. In a recent letter regarding the Obama Administration's Clean Energy Incentive Program (CEIP), NHA argues that many hydropower projects can be licensed and constructed without significant delay:

> Even under hydropower's current licensing process there are many examples of projects being licensed and built within the timeframes outlined in the CEIP. For example, the Federal Energy Regulatory Commission (FERC) maintains a list of projects that were expedited in less than one year, and between 2006 and 2012, 46 hydropower licenses were issued in under twelve months representing over 39,000 kWs. For small hydropower developers seeking a FERC exemption the median project timeline between exemption application and commercial operation is 2.5 years, and the median timeline between start construction to placed-in service is 17 months. Similarly, under the Hydropower Regulatory Efficiency Act of 2013 (HREA), Congress removed certain small conduit hydropower projects from FERC jurisdiction and since HREA's passage, 57 projects have received "qualifying conduit" status, representing over 24,000 kW's. For these projects it takes FERC between two and three months to issue a determination.

> Finally, the Bureau of Reclamation's Lease of Power Privilege (LOPP) process demonstrates hydropower projects can meet the CEIP's timeframes. Under the LOPP, Reclamation has approved a number of projects representing over 49,000 kW's. On average, these projects, from project initiation to operation, takes between 2.5 and 3 years.[5]

NHA argues elsewhere that the licensing process is not the most significant source of delay in developing new hydropower projects. In a comment letter to FERC in 2015, NHA referenced the Department of Energy's 2014 Hydropower Market Report[6] in support of its argument that FERC's annual charges for hydropower licensees (which fund FERC's licensing activities) should not apply to unconstructed hydroelectric projects:

> "Examining the major licensing milestones of sixteen projects between 2005 and 2013, the Market Report found that the **phase of licensing and project development between license issuance and the start [sic] construction took the most time, more than four years, typically, longer than obtaining the license itself.**" [emphasis added][7]

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[5] National Hydropower Association Comments on Docket No. EPA-HQ-OAR-2015-0199, Federal Plan Requirements for Greenhouse Gas Emissions from Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations. http://www.hydro.org/wpcontent/uploads/2016/01 [NHA-Comments-on-EPA ' s-Clean-Energy- Incentive-Program.pdf

[6] http://energy.gov/eere/water/downloads/2014-hydropower-market-report

[7] Comments of National Hydropower Association on Commencement of Assessment of Annual Charges under RM15-18. FERC Accession No. 20150721-5150.

Our own review of the data used to inform figure 7 (p. 20) in DOE's Market Report — which involves projects that are very similar to the ones addressed in these three bills — suggests that NHA is correct: Hydropower projects can indeed be licensed and constructed quickly, and licensing is far from the greatest source of delay when it comes to getting new hydropower projects online. Rather, the period of time between the receipt of a FERC license and commencement of construction is a much more significant source of delay:

- The average time it took to license a project was just shy of 2.5 years (an average of four years for licenses and six months for exemptions).
- FERC's licensing process contemplates a five-year licensing period. Only six new projects exceeded this period. The average delay was 16 months; the maximum delay was slightly less than eight years (again, much less than the industry's "10 year delays" talking point).
- By contrast, the period of time between the receipt of a FERC license and commencement of construction was a much larger source of delay: on average 5.21 years (7.36 years for licenses and 2.5 years for exemptions). These delays are unrelated to environmental concerns, as Clean Water Act certifications, ESA consultation, and other environmental issues were resolved before license issuance.

The three bills currently under consideration by the Committee provide further evidence that licensing is not the greatest of the hydropower industry's problems.

Rather, the problem appears to be with developers' ability to actually get projects built once they have received a license.

Solutions to Problems with the Licensing Process

American Rivers acknowledges that there are improvements to the licensing process that could be made to expedite licensing, reduce costs to utilities and ratepayers, federal and state taxpayers, and other participants in licensing, while still maintaining protections for the environment. As noted in comments submitted for the record to the hearing the Committee held on March 15, we believe that there are several steps this Committee can take to substantially improve licensing:

- FERC should presumptively grant study requests submitted by federal, state, and tribal agencies, especially with those with statutory authorities under Federal Power Act, the Clean Water Act or the Endangered Species Act.
- FERC should promote the adoption of memoranda of understanding (MOUs) between the Commission, tribes, and states to improve coordination and prevent unnecessary delays;
- FERC's *ex parte* rules should be changed to allow for greater cooperation between the Commission and mandatory conditioning agencies;
- Congress should increase appropriations to the federal resource management agencies to fund the staff positions that allow them to efficiently and thoroughly evaluate applications for hydroelectric licenses;
- Congress should extend its recognition of the right of Native American tribes and Alaska Native Corporations and Villages to manage water quality

standards on tribal lands to include their rights to manage land use and fish and wildlife populations as well;

- Congress should consider whether FERC should relinquish jurisdiction over permitting projects on non-powered dams owned by the U.S. Army Corps of Engineers (Corps);
- Congress should consider some sort of additional exemption for small conduit projects;
- Congress should consider enacting comprehensive changes to the deadlines for preliminary permits and the construction of project works, as found in the sections 2(c) and 2(d) of the Discussion Draft: Hydropower Policy Modernization Act of 2017.

Unfortunately, few if any of those steps are taken in any of the bills before us today. Instead the Committee is reviewing legislation that will be a bonanza for energy and water attorneys, and will lead to legal gridlock and environmental degradation.

American Rivers stands ready to work with the Committee to improve the licensing process. We urge the Committee to consider convening a stakeholder process by which the interests of utilities large and small, conservation and recreation groups, states, tribes, and the Departments of the Interior, Commerce, Agriculture, Energy, and the Army, along with FERC and the Power Marketing Administrations, can all be balanced to achieve the dual outcomes of more hydroelectric power generation, and improved river health.

Thank you for the opportunity to testify today.

Mr. OLSON. Thank you, Mr. Irvin.

And the Chair now recognizes for 5 minutes Ms. Danis for an opening statement.

STATEMENT OF JENNIFER DANIS

Ms. DANIS. I want to thank the committee for the opportunity to testify. My name is Jennifer Danis and I am a senior staff attorney with the Eastern Environmental Law Center representing New Jersey Conservation Foundation and Stony Brook-Millstone Watershed Association.

The proposed changes contained in the Interagency Coordination Act are unnecessary and would upset the careful balance of cooperative federalism that exists under the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act. The changes would inappropriately expand FERC's natural gas authority, attempt to undermine States' rights, and undermine the important role that other Federal and State agencies play in protecting natural resources for the public.

As we have already heard this morning, the proposed changes are a solution in search of a problem because FERC approves over 90 percent of projects within 1 year. FERC administers applications for both Section 3 and Section 7 approvals on a case by case basis subject to the statutory standards of the Natural Gas Act, operating under no larger Federal energy program. These approvals are major Federal actions under NEPA and as such FERC is required to consider their environmental impacts.

Yet FERC uses an extraordinarily narrow approach of its regulatory role under NEPA. For example, FERC has expressed its view that it is not FERC's duty to assess project purpose and need beyond accepting the applicant's stated project goal. This approach limits FERC's need for review excluding real analysis of alternatives. FERC will only consider alternatives to natural gas transmission pipelines that are other natural gas transmission pipelines.

Similarly, FERC takes an extremely narrow approach to environmental impact assessments. FERC's assessment of environmental impacts routinely finds that a project's environmental impacts will not be significant so long as other Federal agencies or State agencies acting pursuant to Federal law separately assess the project's environmental harm under substantive statutes such as the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act.

FERC considers authorizations on a case-by-case basis not subject to any Federal energy program or regional planning. As such, FERC's ad hoc authorizations demand robust, ancillary Federal authorizations by agencies operating subject to comprehensive plans to protect our water and air for future generations. For FERC projects, the comprehensive environmental impacts analyses required by NEPA are consistently performed by those other Federal and State agencies in their independent review under substantive environmental laws.

Although the proposed bill is entitled Promoting Agency Coordination for Review of Natural Gas Pipelines, the essence of the proposed changes would generate not resolve conflict between and among Federal and State agencies currently responsible for evalu-

ating the actual impacts of Section 3 and Section 7 projects. In fact, the proposed amendments threaten to abrogate State and Federal powers and duties under those laws.

Congress carefully allocated cooperative and specific roles for the States and for the relevant Federal agencies when enacting those substantive laws. They all explicitly recognize the critical role that the States play in protecting water and air quality. In fact, a key legislative purpose of the Clean Water Act was to uphold the primary responsibility for controlling water pollution that rests with the States.

From its inception, the 401 Certification requirement was a mechanism to explicitly protect States' ability to regulate water quality standards and pollution control ensuring their ability to enforce more stringent standards than Federal ones. Under the Clean Air Act and Coastal Zone Management Act, the State may also designate standards more protective but not less than Federal ones. These NGA amendments would create overt clashes with existing Federal statutes designed to protect water and air and to preserve the States' role in that process. For example, the proposed amendments attempting to allow FERC to define the scope of environmental review for the States or agencies acting pursuant to Clean Water Act authority would clearly run afoul of the Clean Water Act's goals.

The Clean Water Act is a model of cooperative federalism. There is no need for Congress to disturb this careful balance. Of the hundreds of energy infrastructure projects authorized by FERC, there have been only three. A tiny percentage that States have determined cannot be constructed in accordance with controlling water quality standards. Industry cries of abusing reserved and primary powers by the States to protect water quality must stem from a mistaken belief that any certification denials constitute an abuse of authority.

I see my time is coming to a close. I am happy to answer any questions. Thank you for the opportunity to testify.

[The prepared statement of Ms. Danis follows:]

Testimony of Jennifer Danis

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Eastern Environmental Law Center

on behalf of the
New Jersey Conservation Foundation and
the Stony Brook-Millstone Watershed Association

Before the U.S. House of Representatives Subcommittee on Energy and Power
of the Committee on Energy and Commerce

A Legislative Hearing on the Proposed "Promoting Interagency Coordination for Review of Natural Gas Pipelines Act"

May 3, 2017

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Concise Statement

The proposed changes to 15 U.S.C. 717n are unnecessary and would upset the careful balance of cooperative federalism that exists under the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act. It would inappropriately expand FERC's Natural Gas Act authority and undermine states' rights and the important role that other federal and state agencies play in ensuring the protection of natural resources for the public.

Summary

Under the Natural Gas Act, FERC is responsible for administering applications for both Section 3 and Section 7 approvals. It does so on a case by case basis, subject to the statutory standards of the Natural Gas Act, operating under no larger federal energy program. When processing approval requests under Section 7 for certificates of public convenience and necessity, FERC may grant such approval only if it finds that the project is required by the public convenience and necessity. FERC has generated a series of Policy Orders, collectively known as FERC's Certificate Policy Statement,[1] to which it nominally adheres when evaluating these projects to determine compliance with that Natural Gas Act standard. FERC grants Section 3 approvals if it finds that the project is in the public interest, and FERC generally reviews LNG projects employing the same standards as Section 7 projects.[2] FERC approvals under Section 3 and Section 7 constitute major federal action for the purposes of the National Environmental Policy Act (NEPA), and as such, FERC

[1] Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC 61,227 (1999), clarified, 90 FERC 61,128, further clarified, 92 FERC ¶ 61,094 (2000).
[2] See 15 U.S.C. 717b.

is required to consider the environmental impacts of its potential project authorizations in strict accord with NEPA.

FERC currently employs an extraordinarily narrow interpretation of its regulatory role under NEPA. For example, FERC has expressed its view that it is not FERC's duty to assess project purpose and need beyond accepting the applicant's stated project goal. This approach has limited FERC's NEPA review to a mere recitation of legal requirements, devoid of the real analysis of alternatives to the proposed projects that forms the heart of NEPA. FERC will only consider alternatives to natural gas transmission pipelines that are other natural gas transmission pipelines. Moreover, FERC's assessment of environmental impacts routinely finds that a project's environmental impacts will not be significant so long as other federal agencies, or state agencies acting pursuant to federal law, separately assess the project's environmental harms under comprehensive statutes such as the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act.[3]

Thus, the detailed and comprehensive environmental impacts analyses required to protect natural resources are consistently performed by other federal and state agencies under the more specific environmental standards contained in the above-listed substantive environmental laws -- not by FERC under NEPA. While FERC must additionally consult with other federal/state agencies, such as United States Fish and Wildlife Service, responsible for assessing Endangered Species Act effects, and state historic preservation authorities, in coordinating the Section 106 Process of the National Historic Preservation

[3]FERC has rarely, if ever, denied authorizations based on project-specific impacts identified during the NEPA review process. See Linda Luther & Paul W. Parfomak, Cong. Research Serv., R44140, Presidential Permit Review for Cross-Border Pipelines and Electric Transmission (2017).

Act, those important environmental reviews do not involve the same core authority delegated to the states under the CWA, CAA and CZMA.[4]

Although the proposed bill is entitled, "Promoting Interagency Coordination for Review of Natural Gas Pipelines Act," the essence of the Act's proposed changes to 15 U.S.C. § 717n would generate -- not resolve -- conflict between and among the federal and state agencies currently responsible for reviewing the actual environmental impacts of project proponents' applications to FERC for Section 3 or Section 7 Natural Gas Act approvals. In fact, the proposed statutory amendments threaten to abrogate state powers and duties under federal laws including the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act.

Clean Water Act and the Coastal Zone Management Act: The Importance of the State's Role in the Cooperative Federalism.

The Clean Water Act explicitly recognized the critical role that the states play in protecting water quality. Clean Water Act section 401 plainly mandates that "any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters . . . shall provide the licensing or permitting agency a certification from the State."[5] The statute further states, "[n]o license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been

[4] For example, as part of accepting delegation of the 401 program, states retained the core authority to determine that a particular project proposal cannot proceed in accordance with state water quality standards, although FERC has determined that the project can satisfy Natural Gas Act standards under Section 3 and Section 7.

[5] 33 U.S.C. § 1341(a)(1).

denied by the State . . . "[6] This authority is squarely reserved by the states when charged with considering FERC project applicants' requests for 401 Water Quality Certificates. Any amendments to the Natural Gas Act, such as the ones proposed for altering 717n, would create overt clashes with the existing federal statutes and comprehensive plans designed to protect the nation's water and air quality. The proposed bill's attempt to allow FERC to define the scope of environmental review *for* the states or agencies acting pursuant to Clean Water Act authority would clearly run afoul of the Clean Water Act's goals and language.

A key legislative purpose of the Clean Water Act was to uphold "the primary responsibility for controlling water pollution [that] rests with the States."[7] From its inception, the 401 certification requirement was a mechanism to explicitly protect states' ability to regulate water quality standards and pollution control, ensuring states' abilities to enforce more stringent standards than federal ones. Senator Muskie, who introduced the 1970 bill that created water quality certification, stated "no license or permit will be issued by a Federal agency for an activity that through inadequate planning or otherwise could in fact become a source of pollution."[8] He later expounded further on the aim of section 401, contemplating how the certificate program would prevent projects proposed for federal authorization such as Section 7 or Section 3 projects from circumventing the state's certification:

> No polluter will be able to hide behind a Federal license or permit as an excuse for a violation of water quality standards. No polluter will be able to make major investments in facilities under a Federal license or permit

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[6] Id.
[7] 115 Cong. Rec. 28,970 (1969) (statement of Sen. Cooper); see also 33 U.S.C. §1251(b).
[8] H.R. Rep. No. 91-127 (1969).

> without providing assurance that the facility will comply with water quality standards.[9]

Congress enacted the certification requirement as a mechanism to ensure that proposed projects would not move forward without first complying with state water pollution control standards. Congress recognized that occasional project delays could result from state certification requirements and decided that certification nonetheless was required before a federal permit could be issued, because it represented a critical safeguard. Congress purposely enacted the certification program to prevent "investments"[10] in projects until the state assured that such projects would abide by water quality standards, regardless of the attendant delays.[11] In fact, this has not borne out in practice. The complex interplay between these statutes has struck the appropriate balance between the respective federal and state agencies responsible for reviewing them under the various applicable statutes, and fulfilled Congressional intent to prevent the pursuit of any project activity unless the states certified that the project could proceed without harming water quality, as determined by the state 401 programs, which are confirmed by the USEPA.[12,13]

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[9] 116 Cong. Rec. 8984 (1970) (statement of Sen. Muskie).

[10] With the Clean Water Act section 401 process, Congress intended to prevent precisely the types of premature project investments that PennEast seeks to make in pre-construction activities prior to collecting all the relevant data regarding project impacts.

[11] Delays in FERC's certification processes typically do not stem from states' tardiness in issuing a section 401 certificate. Rather, applicants that postpone their section 401 applications and submit incomplete data to FERC in their CPCN applications create their own bottlenecks in the certification process. Furthermore, expediency is insufficient rationale for circumventing a carefully crafted statutory scheme. Applicants should anticipate and account for any delays that do result from the section 401 process. Despite the increase in applications, there is no indication that FERC's decision-making process has become overly burdened or delayed; recent congressional debates on this issue revealed that 92% of natural gas pipeline applications are decided within twelve months. Pete Kasperowicz, House Votes 252-165 to Speed up Natural Gas Pipeline Approvals, HILL (Nov. 21, 2013), 4 http://thehill.com/policy/energy-environment/191065-house-votes-to-speed-up-natural-gaspipeline-approvals.

[12] This right is independent of whether the particular state also has a federally delegated permitting program for Section 404 approvals, or for NPDES permits.

Congress explicitly provided that a federally licensed project could not proceed absent state certification under the Clean Water Act,[14] as evidenced by the plain language of the Clean Water Act statute and the foregoing legislative history. Congress enacted the Clean Water Act to establish a comprehensive statutory scheme in which states have final authority to set their own water quality standards and to impose conditions on federal licensing of projects or reject applications that do not meet water quality standards.[15] The Clean Water Act section 401 confers on the state the threshold determination of a project's viability for complying with water quality standards.[16] Those standards may regulate water quality more stringently than the baselines set out by EPA under the Clean Water Act. See 33 U.S.C. § 1370. A state's water quality standards are deemed to be the federal standards.[17]

The same is true for the state's role in the cooperative federalism established under the Coastal Zone Management Act.[18] States' exercise of this section 401 authority has been both expeditious and judicious, and overwhelmingly resulted in project approvals. Of the hundreds of energy infrastructure projects authorized by FERC, there have only been three

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[13] City of Tacoma, 460 F.3d at 67 (explaining that the state's ability to block the project is the mechanism through which the state fulfills its primary responsibilities under the Clean Water Act); see also Keating, 927 F.2d at 622 (same); Gunpowder, 807 F.3d at 279 (same).

[14] The Keating court also stated that "an applicant for such a license must first obtain state approval of the proposed project" and "section 401 certification is a predicate to the issuance of any section 404 permit." Keating v. FERC, 927 F.2d 616, 622 (D.C. Cir. 1991) (making the point that 401 governs 404 permits because the 404 permit is a federal license).

[15] Notably, the state's authority to establish such conditions is not restricted to those "specifically tied to a 'discharge'" under section 401, but rather applies to any activities which the state deems are necessary to ensure compliance with the Clean Water Act. PUD No. 1 of Jefferson County v. Washington Dep't of Ecology, 511 U.S. 700, 701 (1994) (finding that Washington state's minimum stream flow requirements were within the state's statutory authority and were entitled to deference).

[16] 33 U.S.C. § 1341(a)(1) (2012).

[17] See 33 U.S.C. § 1313(c)(3).

[18] See Islander East Pipeline Co., LLC v. McCarthy, 525 F.3d 141 (2d Cir. 2008) ("Clean Water and Coastal Zone Management Acts are notable in effecting a federal-state partnership to ensure water quality and coastal management around the country, so that state standards approved by the federal government become the federal standard for that state.").

-- a tiny percentage -- that states have determined cannot be constructed in accordance with applicable water quality standards. Industry cries of states "abusing" their reserved and primary powers to protect their water quality, therefore, must stem from their mistaken belief that any certification denial constitutes an abuse of authority.

Attempting to impose restricted schedules on state's review of Section 7 and Section 3 certificates in practice may prevent the state from fully protecting against any impacts from and undue investment in projects that may fail to comply with the CWA and other state water quality standards.[19] Congress need not disturb its determination that that ability is rooted in the prevention of "major investments in facilities under a Federal license or permit without providing assurance that the facility will comply with water quality standards."[20] The language of section 401 says any activity "which *may* result in discharge" -- as opposed to "usually" or "foreseeably" -- requires a state certificate.[21]

The impact of the proposed amendments to 717n on state authority under Section 401 of the Clean Water Act is particularly vague and ill-defined. As set out above, Section 401 requires that states certify that federally permitted activity is consistent with state water quality standards. The Clean Water Act is a model of cooperative federalism. Historically, water quality regulation was left to the states.[22] As water quality regulation was gradually federalized, states retained authority to determine water quality standards

[19] FERC's consideration of authorizations on a case by case basis, subject to no federal energy program or regional planning, is a prime example of an authorization system that must be continue to be reviewed for ancillary Federal authorizations by agencies operating subject to comprehensive plans, charged with protecting our waters and air for future generations.

[20] 116 Cong. Rec. 8984 (1970) (statement of Sen. Muskie).

[21] 33 U.S.C. § 1341(a) (emphasis added).

[22] See Federal Water Pollution Control Act, ch. 758, 62 Stat. 1155 (1948) (declaring a policy to "recognize, preserve, and protect the primary responsibilities and rights of the States in controlling water pollution"); Federal Water Pollution Control Amendments of 1956, ch. 518, 70 Stat. 498 (declaring that "[n]othing . . . shall be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters . . . of such States.").

applicable to their own waterways,[23] and in 1970, Congress created the water quality certification mechanism to assure that federally permitted activities would not violate state-set water quality standards.[24] In 1972, the Clean Water Act incorporated both these mechanisms into the new cooperative federalism framework: giving states authority to set water quality standards subject to minimum standards, and giving states the role of determining whether federally permitted activity would comply with those standards.[25]

Clean Air Act: The Importance of the State's Role in the Cooperative Federalism.

The same principles apply to states' certifications under the Clean Air Act.[26] Courts have made clear that states retain the right to deny an air quality permit pursuant to its State Implementation Plan (SIP).[27] Under the Clean Air Act, states retain the right to adopt their own plans for the "implementation, maintenance, and enforcement" of air quality standards issued by EPA.[28] States have significant authority and responsibility to develop SIPs, and may impose air quality or emission standards more stringent than EPA promulgated standards.[29] For projects proposed under Section 3 and Section 7 of the Natural Gas Act, emissions associated with LNG terminals and compressor stations often trigger state review for Clean Air Act compliance and permitting. The Clean Air Act provides its own complex system of cooperative federalism that precludes FERC from

[23] See Water Quality Act of 1965, Pub. L. No. 89-234, sec. 5, § 10.
[24] Water Quality Improvement Act of 1970, Pub. L. No. 91-224, sec. 102, § 21(b)(1).
[25] Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, §§ 303, 401.
[26] See Chevron, 467 U.S. 837, 842–43 (1984).
[27] Myersville, 783 F.3d at 1320.
[28] Michigan v. EPA, 213 F.3d 663, 669 (D.C. Cir. 2000); see also 42 U.S.C. §7410.
[29] This is analogous to the states' rights and substantial freedom under the Clean Water Act to develop state water quality standards more stringent than federal ones, discussed above.

sidestepping or controlling the requisite environmental review process arising thereunder. As is true with FERC's limited water quality impacts analysis during its NEPA review, wherein FERC inevitably concludes there will be no significant adverse water quality impacts by anticipatorily relying on the relevant state's more detailed and substantive water quality certificate review, FERC's air quality impacts analysis routinely assumes an applicant independently will satisfy the relevant state's Clean Air Act permitting processes, when concluding that the Section 3 or Section 7 project will not have significant adverse air quality impacts.[30]

Proposed Changes to 15 U.S.C. § 717n(b)(2)(B), (C)

The proposed changes to 15 U.S.C. § 717n(b)(2)(B) and (C) sow seeds of confusion, as they lack definition and use similar nomenclature to refer to legally distinct concepts. It is entirely unclear from the language what the newly proposed "Identification" and "Invitation" processes encompass. Is it intended to allow FERC to identify and invite agencies to its own internal review process?

Or is it, as it appears to be written, to be inviting agencies to participate in their own review processes? Without clarification, it is difficult to comment substantively. To the extent that it suggests that FERC has the power to identify who the agency administering the ancillary Federal authorizations must consult with when conducting those independent reviews, it ignores the fact that FERC has neither the substantive expertise nor the authority under those environmental statutes to do so. Nor should it direct a deadline for

[30] Importantly, states are charged with implementing comprehensive air quality programs tailored to their geographical regions, while, as set out above, FERC solely evaluates one project application at a time, subject to no integrated regional plan.

responding to FERC once receiving this invitation to "cooperate or participate in the review process for the applicable Federal authorization." It would appear this newly proposed language contemplates a statutory scheme in which FERC is inviting federal and state permitting agencies to participate in the review process that they are responsible for conducting themselves.

Moreover, wholly inconsistent with Congress' approach to delegating authority to other agencies, it also appears to put FERC in charge of identifying which agencies need to participate in those independent review processes, in violation of both its sister federal agencies' autonomous implementation of their authorizing statutory schemes, as well as those agencies' primary rights to determine with whom they need to consult once they have received an application for a permit or authorization. Additionally, nothing in this section indicates what happens if the "invited" body does not respond to FERC, nor does it even contemplate that such "invited" body has any administratively complete application in front of it, to trigger its native review authority.

Proposed Changes to 15 U.S.C. § 717n(c)[31]

The existing statutory language of 717n(c)(1) currently presents problems in FERC's review process for Section 3 and Section 7 projects, because FERC routinely accepts applications that are missing basic information and analyses required under FERC's own environmental review regulations, at 18 C.F.R. pt. 380. FERC currently condones and

[31] 15 U.S.C. § 717r(d)(2) states, "The failure of an agency to take action on a permit required under Federal law, other than the Coastal Zone Management Act of 1972, in accordance with the Commission schedule established pursuant to section 717n(c) of this title shall be considered inconsistent with Federal law for the purposes of paragraph (3)." Paragraph (3) instructs that upon finding this statutorily defined inconsistency, "the Court shall remand the proceeding to the agency to take appropriate action consistent with the order of the Court. If the Court remands the order or action to the Federal or State agency, the Court shall set a reasonable schedule and deadline for the agency to act on remand." 15 U.S.C. § 717r(d)(3).

excuses applicants' submissions of seriously deficient applications for Section 3 and Section 7 approvals. It repeatedly issues requests for data it identifies as critical, but then proceeds with its NEPA process for these empty applications, rather than rejecting them. The proposed (c)(1) compounds this problem, by providing the Commission authority to set a schedule for all Federal authorizations, without providing a required temporal trigger -- such as a completed application that contains the data FERC's regulation state are required for a complete submission, but which now allows to be submitted on a rolling basis -- for that schedule-setting endeavor. FERC's regulations implementing this statutory authorization, found at 18 C.F.R. § 157.22, currently use FERC's publication of an FEIS for the Section 3 or Section 7 project as its temporal trigger. The current regulation requires that "a final decision on a request for a Federal authorization is due no later than 90 days after the Commission issues its final environmental document, unless a schedule is otherwise established by Federal law."

This default timeline cannot prevent state agencies acting pursuant to or under delegated federal law from refusing to consider deficient applications for requisite Federal authorizations, such as state 401 Water Quality Certifications. The Natural Gas Act ("NGA") can only give FERC authority to coordinate the processing of "Federal authorizations," because the substantive review and decision making for those Federal authorizations are controlled by other statutes, such as the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act. Accordingly, the existing 717n provisions and any regulations implementing them can only establish a schedule if it does not conflict with one "otherwise established by Federal law."[32] When promulgating this default 90-day schedule via

[32] 18 C.F.R. § 157.22.

regulations, FERC reconciled the potential conflict with other critical environmental statutes by making clear that the ninety-day timeline does not apply where an authorization request (i.e., permit application) is incomplete:

> In the event of a disagreement regarding the adequacy of the contents of a request for a Federal authorization, the Commission may find reason to revise an agency's deadline for a final decision. However, although the Commission implores project sponsors and agencies to work cooperatively, it cannot compel them to do so. An agency retains the discretion to reject a request on the grounds that information necessary to reach a decision is lacking.[33]

Thus FERC's regulations propose a schedule but acknowledge that they cannot override environmental agencies' determinations of when those applications are lawful or sufficient.

The first proposed change sweeps the 90-day regulatory schedule into the statute, without explicitly incorporating a caveat providing that the schedule shall not come into effect if such timeline will interfere with the responsibilities of those federal agencies (or state agencies acting pursuant to federal law, or delegated federal authority) to comply with their own regulatory and statutory duties. This will impede other federal agencies from effectively carrying out their mandates under Federal environmental laws, and fails to explicitly recognize the primary importance of the states' review under the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act. Any amendments to the Natural Gas Act must not grant FERC authority that exceeds both its institutional expertise and its jurisdictional reach. Importantly, this newly proposed 717n(c)(2) fails to recognize that for many pipeline projects, the applicant may not submit its request for these ancillary Federal authorizations until after the FEIS is issued, and may well not be in a position to do so. A 90-day review deadline, as proposed, would interfere with the equal power of the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act to determine

[33] 71 Fed. Reg. 62,912, 62,916 n.26 (Oct. 27, 2006) (emphasis added).

whether a Section 3 or Section 7 project may proceed without jeopardizing valid state requirements/standards.

The next proposed change to 717n(c) is the inclusion of a newly minted paragraph 3, entitled "Concurrent Reviews." This section again fails to explicitly recognize that Federal and state agencies responsible for Federal authorizations cannot review applications that are administratively incomplete, and any such review schedule must (1) require the applicant to submit complete applications to those agencies concurrently with their application for Section 3 or Section 7 authorizations, and (2) explicitly provide that ancillary agencies' determinations of application completeness begin any statutorily recommended review period -- or risk infringing those agencies' obligations under other applicable laws.

The proposed alterations do not appear to explicitly impose any burdens on the applicants to marshal the requisite environmental data essential for allowing Federal authorizations to commence. Moreover, FERC's review under NEPA arises under the backdrop of the Natural Gas Act, while the other Federal authorizations arise against the backdrop of environmental statutes with highly specific environmental data requirements, and entirely different statutory or regulatory schemes. As such, while it would be expeditious for all necessary authorization processes to run simultaneously, the current landscape for such proposals routinely involves applications for projects that lack sufficient data for what FERC requires under its own regulations, much less what environmental agencies require under their authorizing statutes.

15 U.S.C. § 717n(c) paragraph 4, subsections (B) and (C), generate conflict and confusion, and appear to be crafted for the purpose of intruding upon other agencies' rights

under separate statutes. These are rights that FERC has understood and respected.[34] 717n(c)(4)(B) authorizes FERC to forward any issue of concern identified by a Federal or state agency "to the heads of the relevant agencies (including, in the case of a failure by the State agency, the Federal agency overseeing the delegated authority) for resolution. The term "failure by the State agency" is left entirely undefined. What constitutes a "failure" by the State agency appears to be left to FERC's discretion. Rather than speculate about what a "failure by the State agency" connotes, a review of the other jeopardy posed by this provision follows.

As set out herein, under the carefully crafted cooperative federalism set in place by the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act, the states retain substantial freedom and authority under those laws as the primary guardians of state water and air quality, under comprehensive and well planned programs. This provision attempts to grant FERC what can only be described as a quasi-parental controlling authority to police the states' exercise of their primary responsibility to safeguard their water and air, and to "punish" them for undefined "failures" by reallocating their statutory authority to the "Federal agency overseeing the delegated authority." The Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act all have provisions specifying and delineating the state's (or U.S. Army Corps of Engineers) and EPA's respective roles.[35] The states have primary responsibility for determining whether

[34] "The Commission does not interfere with another agency's oversight of its own regulations." Order Issuing Certificate and Approving Abandonment, 149 FERC 61,258 at 28. (Dec. 18 2014).

[35] See, e.g., 33 U.S.C. § 1313 (2012) (under the CWA, providing for state development and EPA review of water quality standards); 42 U.S.C. § 7409-10 (under the CAA, providing for EPA development of air quality standards, and for state development, enforcement, and revision of plans to achieve those standards); 16 U.S.C. § 1456 (under the CZMA, providing for consistency of federal activities with state coastal management plans).

applications for 401 Water Quality Certifications or Clean Air Act permits.[36] Importantly, as set out above, the states are entitled to implement more stringent environmental standards for these reviews than the federal standards established by the U.S.EPA; the federal standards provide the minimum standards to which the states must adhere.

Under the newly proposed 717n(c)(4)(B), this balance of power and carefully constructed cooperative federalism would become skewed towards the federal agency, according the federal agency ultimate authority to interpret and apply the states' own laws. Often states' Section 401 Water Quality Certification analyses involve coordination and application of myriad complex state laws. Requiring U.S.EPA to resolve issues of concern that may arise squarely under state law would abrogate those states' powers and generate countless litigation regarding the interplay between the Federal Environmental statutes and the Natural Gas Act.

Finally, the new 717n(c)(4)(C), titled, "Deference to Commission," proposes that FERC define the "appropriate" scope of environmental review for Federal authorizations. This cannot stand under existing federal environmental laws. The Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act do not accord FERC any role in their statutory or regulatory schemes. FERC has neither the statutory authority nor the substantive expertise to play any role in the implementation of these statutes. Thus, this provision, which attempts to accord deference to FERC's determination of what environmental agencies should consider in assessing applications for Federal

[36] New Jersey additionally has primary responsibility for determining whether specific projects qualify for wetlands permits under its own statutory and regulatory standards for most state wetlands, under delegated Section 404 Clean Water Act authority. Michigan has this delegated Section 404 authority as well. New Jersey's implementation of its freshwater wetlands permitting program employs more stringent standards than the federal Clean Water Act's.

authorizations, stands in conflict with both those statutory authorizations and with well-established judicial precedent. This provision's only possible purpose -- and the only possible purpose of so many of the Act's proposed changes -- is to abrogate states' rights and powers, and bestow those stolen powers upon FERC.

The language proposed for 15 U.S.C. 717n(c)(5) suffers from the same legal conflicts. It appears to mandate that any Federal or state agency that "does not complete a proceeding for an approval that is required for a Federal authorization in accordance" with FERC's established schedule shall become vulnerable to litigation brought by the applicant, as well as have its carefully reserved rights abrogated by the Federal agency responsible for administering the corresponding federal environmental statute. But it goes beyond this as well, and attempts to curtail states' provision of adjudicatory hearings on those federal authorizations. For example, in the case of a state agency exercising its rights to conduct a thorough Section 401 Water Quality Certification review, this proposed statutory amendment, through the use of totally undefined and new language referring to the state's failure to complete a "*proceeding* for an approval" (emphasis added), dictates that the U.S. EPA should then determine the timeline for that state's review proceedings.

Proposed 15 U.S.C. § 717n(d)

The proposed language contained in § 717n(d) directs a federal or state agency considering an ancillary environmental Federal authorization to consider remote or aerial survey data submitted by the project proponent, and purports to create a new type of permit under those environmental laws -- a conditional approval issued without on-site data -- providing a "subsequent onsite inspection" to verify the remote data. There are two major problems with this new provision. First, aerial data are notoriously insufficient

to provide baseline conditions or to assess project impacts to endangered species, on-site water quality, and critical wetlands habitat delineation. For example, aerial data provides no useful information for over 99% of the endangered species in New Jersey.[37] The bill, therefore, allows for conditional approval based upon a survey technique that is unable to catalog much of the data required by the complex environmental statutes and regulations those environmental agencies considering authorizations are charged with implementing.

Second, echoing concerns set out above with respect to the other proposed amendments, this provision oversteps FERC's substantive expertise and interferes with the agencies possessing environmental expertise's determination of what kinds of data applications for Federal authorizations must contain -- determinations that are part of complex state and federal statutory and regulatory schemes, and their implementing protocols. Moreover, requiring state and Federal agencies to consider project proponents' submissions of aerial surveys is a useless exercise and a waste of agency resources.[38] Since aerial surveys generate little, if any, legitimate scientific evidence upon which an agency may make an ultimate decision, there is no sound reason to create an alternative permitting regime in which an agency may simply guess as to the actual environmental impacts, and perform its analysis anew once onsite surveys and sampling occurs. Federal and state agencies should not be required to consider sub-par data and to make two

[37] See Testimony of Edward Lloyd on behalf of the New Jersey Conservation Foundation and the Stony Brook-Millstone Watershed Association, February 2, 2016 at Table 1, p. 12. The prior testimony also demonstrated that even extensive ground investigation is difficult to undertake and requires many person-hours. Id at p. 11-13. Moreover, aerial surveys are inadequate methods to identify wetlands along proposed pipelines. Id at 1, 15.

[38] In addition to its scientific inadequacies, aerial surveying also raises significant privacy and property rights concerns for homeowners along proposed pipeline routes. Id at 16-17. Aerial surveys—whether conducted with airplanes, helicopters, or drones—impose serious burdens on farming communities along proposed pipeline routes. Id.

separate determinations, one based on guesswork, and a subsequent one, based on actual verified on-site data. Doing so fails to promote interagency coordination -- it inappropriately places a non-environmental agency, FERC, that makes individual authorizations subject to no comprehensive energy policy or program, in the position of directing Federal authorizations under the Clean Water Act, the Clean Air Act, and the Coastal Zone Management Act.

Proposed 15 U.S.C. § 717n(e)

The newly proposed 717n(e), denoted "Application Processing," attempts to provide a statutory underpinning for outsourcing Federal and state environmental review to hired consultants paid by private industry applicants. This provision attempts to (1) put private corporations in the position of regulators, authorizing them to review applications for compliance with Federal and state environmental laws; and (2) allow the project proponent to fully fund this service. This provision pushes beyond the existing conflicts of interest that arise when FERC employs the same consultant to perform its "independent" NEPA review as the applicant pays to prepare its application to FERC for Section 3 and Section 7 approvals. And it goes beyond allowing third parties to collect data for such ancillary authorizations. The laws under which the Federal authorizations arise must be implemented by the impartial agencies that Congress designated as the guardians of our nation's water and air quality, and they alone must review the applications to determine consistency with applicable laws.

Proposed 15 U.S.C. § 717n(f)

The new provision for "Accountability, Transparency, Efficiency," encapsulated in the new 717n(f), appears to make information available to the public in a coherent and consolidated fashion. As such, it would be an improvement over the current chronological and mixed submission style docketing that FERC currently employs.

Proposed "Promoting Cross-Border Energy Infrastructure Act"

This proposed bill purports to "establish a more uniform, transparent, and modern process to authorize" international border crossing energy infrastructure projects. These projects often bear enormous environmental price tags, and, as such, the State Department has conducted increasingly robust NEPA reviews prior to issuing cross-border authorizations, with a national interest determination process informed by that NEPA review. For example, recent reviews have provided a much more thorough evaluation of climate impacts associated with new fossil fuel infrastructure projects, including the carbon emissions coming from the additional production they would enable. The existing NEPA review process provides the State Department an opportunity to evaluate the need for the proposed project in a global economy increasingly in transition. Accordingly, it allows for a broad policy and planning determination regarding which new fossil fuel infrastructure projects are not feasible or economic against this global backdrop. Further, this proposal removes the ability of the Department of Defense, Homeland Security as well as the Department of State to provide valuable insights of national security which may influence the decision whether it issue a Presidential Permit or not. This paradigm has been in place since Executive Order 11423, which established a longstanding process that has been used by both Republican and Democratic administrations for decades to ensure

that pipelines flowing into the U.S. are in the national interest, and was confirmed by Executive Order 13337.

The bill attempts to shift responsibility for proving that such cross-border energy projects are in the public interest from the project proponent onto the authorizing agency, where it instead becomes that agency's responsibility to prove that the project would not be in the public interest. The bill also removes the State Department's primary review responsibility, which it maintained under the Executive Branch's constitutional power to engage in foreign relations,[39] and purports to put FERC in charge of the NEPA process for the cross-border facilities involving oil infrastructure.[40]

Moreover, it appears to limit FERC's NEPA review of the impacts of such projects to just the cross-border facility itself, without requiring evaluation of the attendant suite of environmental impacts emanating from the oil pipelines to which these facilities attach. This essentially creates a statutory carve-out to NEPA, by codifying segmentation of FERC's review of the bulk of these projects' environmental impacts. The bill thus effectively exempts cross-border projects from meaningful environmental review under NEPA by dramatically narrowing the focus of that review, because both the permit requirement and the NEPA review apply only to the cross-border segment of the project. Trans-boundary pipelines and transmission lines are multi-billion dollar infrastructure investments that stretch hundreds of miles, last for decades, and pose environmental risks well beyond the narrow border crossing segment. But the proposed bill precludes review of the full

[39] This power has been exercised since Executive Order 10485 of Sept. 3, 1953 was signed by President Dwight D. Eisenhower. As the United States Supreme Court noted, it is a power exercised through "inherent constitutional authority to manage foreign affairs." Sisseton-Wahpeton Oyate v. U.S. Dept of State, 659 F. Supp. 2d. 1071 (D.S.D. 2009) (citing U.S. v. Curtiss-Wright Export Corporation, 299 U.S. 304, 319-320 (1936))

[40] FERC has neither the authority nor the expertise to consider the breadth of global environmental issues and economics encompassed within the current State Department reviews.

project's impacts, such as oil spills and the consequences for landowners, public safety, drinking water, climate change, and wildlife.

The proposed language also seeks to exempt "modifications" from needing any additional approvals. Yet the term modification is broadly defined to include new compressor stations, new diameter pipelines, additional pipelines for both oil and gas facilities, as well as changes to the flow direction and volume. These modifications can have significant environmental and economic impacts beyond those from the original construction. For example, reversing an oil pipeline from exporting into Canada to exporting tar sands oil into the United States could have significant air emission impacts. In doing so, it attempts to shield serious environmental impacts from federal review, leaving scant few projects that could not be cast as "modifications."

Thus it replaces the current requirement that proposed oil and natural gas pipelines and electric transmission lines that cross the U.S. border with Mexico or Canada obtain a presidential permit, after a robust environmental review and determination that the project is in the national interest, with a process that: (1) eliminates the national interest requirement, and shifts the burden of proof to the reviewing agency to prove that a narrow portion of the project would not be in the public interest, making it difficult to disapprove a project; (2) significantly narrows and limits environmental review to a small portion of the project; and (3) exempts many types of projects from any permit requirement.

Finally, as these projects currently require a Presidential Permit, the bill's new allocation of powers would usurp the Constitutional authority granted to the Executive Branch, Office of the President, by removing the requirement for a Presidential Permit ignoring the separation of powers set out in the United States Constitution, Article II, which

vests the authority to engage in foreign relations in the Executive Branch.

Conclusion

In conclusion, I thank the Committee for giving me the opportunity to submit this testimony and to appear before it. I also thank Susan Kraham, Esq. and Edward Lloyd, Esq. of the Columbia Environmental Law Clinic, Channing Jones, a legal intern at the Columbia Environmental Law Clinic, Anthony Swift, of Natural Resources Defense Council, Michael Pisauro, Esq. of the Stony Brook-Millstone Watershed Association, and Tom Gilbert of the New Jersey Conservation Foundation, for their contributions to the preparation of this testimony. I nonetheless take full responsibility for the contents of this testimony.

Mr. OLSON. Thank you, Ms. Danis.

The Chair now calls upon Mr. Santa for 5 minutes to give an opening statement.

STATEMENT OF DONALD F. SANTA

Mr. SANTA. Good afternoon, Vice Chairman Olson, Ranking Member Rush, and the members of the subcommittee. My name is Donald Santa and I am the president and CEO of the Interstate Natural Gas Association of America, or INGAA. Our members transport the vast majority of the natural gas consumed in the United States through a network of approximately 200,000 miles of interstate transmission pipelines.

These transmission pipelines are analogous to the interstate highway system. In other words, they are large capacity transportation systems spanning multiple States or regions. Thank you for the opportunity to share INGAA's perspective on the discussion draft of legislation to improve agency coordination during the review of federally regulated natural gas pipeline projects.

While the Federal Energy Regulatory Commission has exclusive authority to grant the certificate required to construct an interstate natural gas pipeline, various Federal and State agencies are responsible for granting other environmental and land use permits and approvals that must be obtained before a pipeline company may commence construction. This is not the first time that INGAA has testified before this subcommittee on the need to improve the natural gas pipeline permitting process.

The need for action is even greater today because the pipeline review and permitting process has only become more protracted and more challenging. Federal permitting agencies are taking longer and in some cases are electing not to initiate reviews until FERC has completed its review of a proposed pipeline project. These disjointed, sequential reviews cause delay and in some cases create the need for supplemental environmental analysis. This is unnecessary and avoidable.

Regulations implementing the National Environmental Policy Act provide for designating a lead agency to coordinate the review of a proposed major Federal action. The lead agency in turn identifies and works with cooperating agencies to develop a single environmental document for the project. Congress, as part of the Energy Policy Act of 2005, designated FERC as the lead agency for natural gas pipeline projects subject to the Commission's jurisdiction.

EPAct 2005 also provided a framework for FERC to coordinate the various permitting reviews connected with a natural gas pipeline project and to set a deadline for other agencies to complete their work. Notwithstanding the congressional intent expressed in EPAct 2005, it has been a challenge to get Federal and State agencies to work cooperatively and constructively within this framework. The recent experience of an INGAA member company illustrates the point.

The company has proposed a pipeline that would intersect the Blue Ridge Parkway and the Appalachian National Scenic Trail in Virginia. The company proposed a nearly one-mile, horizontal drill under a mountain so that the pipeline would cause no surface dis-

turbances, no tree clearing, and no interference with public access to the Parkway or Trail. The Park Service responded with indifference to the pipeline operator's efforts to minimize the impact of its project. The Park Service took 14 months to review a 22-page application to survey the area. Once permission was granted, the survey work was completed in a single afternoon.

The survey, however, is only an initial step. The Park Service has yet to complete its extensive review of the pipeline operator's application for a permit to drill beneath the Parkway and Trail. We clearly need better agency engagement and decision making than that demonstrated by the Park Service in this example.

These kinds of permitting delays are becoming much more frequent and are not confined to the Park Service. Because there is no direct accountability for this lack of engagement, agencies with limited resources are free to either ignore or to delay their response to requests to participate in the review of a proposed pipeline project.

Let me be clear that INGAA is not seeking diminution of the substantive requirements connected with permits that must be obtained to construct interstate natural gas pipeline. INGAA simply seeks greater certainty regarding the schedule for reviewing and acting upon applications for such permits and better coordination among the agencies responsible for issuing permits.

We appreciate the committee's leadership in drafting legislation to address this need. INGAA encourages the committee to provide even greater structure in detailed guidance so that there is no misunderstanding about congressional intent for the pipeline permitting process. Legislation to achieve this result is not unprecedented or outside the mainstream. The process created by Congress in highway authorization legislation offers a model. INGAA encourages you to be bold.

INGAA's written testimony includes specific recommendations for strengthening and refining the language of the draft bill to achieve its stated goals. We want to work with you in strengthening this bill and make it more effective in coordinating the necessary permitting reviews. Thank you for the opportunity to testify today.

[The prepared statement of Mr. Santa follows:]

TESTIMONY OF
DONALD F. SANTA
PRESIDENT AND CEO
INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

BEFORE THE
SUBCOMMITTEE ON ENERGY
COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES

REGARDING
LEGISLATION ADDRESSING PIPELINE AND HYDROPOWER INFRASTRUCTURE MODERNIZATION

MAY 3, 2017

Good morning Chairman Upton, Ranking Member Rush and the members of the subcommittee. My name is Donald Santa, and I am president and CEO of the Interstate Natural Gas Association of America, or INGAA. INGAA's members transport the vast majority of the natural gas consumed in the United States through a network of approximately 200,000 miles of interstate transmission pipelines. These transmission pipelines are analogous to the interstate highway system; in other words, they are large-capacity transportation systems spanning multiple states or regions.

Thank you for the opportunity to share INGAA's perspective on the discussion draft of legislation to improve agency coordination during the review of federally regulated natural gas pipeline projects. This testimony is limited to the pipeline permitting discussion draft because, as I understand it, the discussion draft on cross-border energy project approvals retains the current process for natural gas pipelines, with only a very minor amendment to existing law.

While the Federal Energy Regulatory Commission (FERC) has exclusive authority to grant the certificate of public convenience and necessity required to construct a new or expanded interstate natural gas pipelines, various federal and state agencies are responsible for granting other environmental and land use permits and approvals that must be obtained before a pipeline company may commence construction. Consequently, for purposes of this testimony, the term "permitting process" refers to the full range of approvals that are necessary to construct an interstate natural gas pipeline.

This is not the first time that INGAA has testified before this subcommittee on the need to improve the permitting process for interstate natural gas pipelines. In fact, I appeared before this subcommittee during the last Congress. The need for action is even greater today, because the pipeline review and permitting process has only become more protracted and more challenging over the intervening two years. Federal permitting agencies are taking longer, and, in some cases, are electing not to initiate reviews until FERC has completed its review of a proposed pipeline project. These disjointed, sequential reviews cause delay and, in some cases, create the need for supplemental environment analysis.

This is unnecessary and avoidable. The regulations implementing the National Environmental Policy Act (NEPA)[1] provide for designating a lead agency to coordinate the review of a proposed "major Federal action." The lead agency, in turn, identifies and works with "cooperating" agencies to develop a single environmental document for the

[1] 40 C.F.R. section 1501.

project. This document, either an environment impact statement or an environmental assessment, should include information and data that the cooperating agencies need for their separate permitting reviews. Congress, as part of the Energy Policy Act of 2005 (EPAct 2005), designated FERC as the "lead agency" under NEPA for natural gas projects subject to the commission's Natural Gas Act jurisdiction. EPAct 2005 also provided a framework for FERC to coordinate the various permitting reviews that occur in connection with a natural gas pipeline project and to set a deadline for other agencies to complete their work once the NEPA document was complete. Notwithstanding the intent expressed by Congress in EPAct 2005, it has been a challenge to get federal and state agencies to work cooperatively and constructively within this framework.

The recent experience of an INGAA member company illustrates this point. This company proposed a gas transmission pipeline that would intersect the Blue Ridge Parkway and Appalachian National Scenic Trail in Virginia. Instead of traditional boring methods, the pipeline company proposed a horizontal directional drill. If this proposed alternative is approved, the company would bore under a mountain for nearly one mile so that the pipeline would cross beneath the parkway and trail. This construction method, while very costly, was selected to ensure that there would be no surface disturbances, tree clearing or interference with public access to the parkway or trail.

The Park Service has responded with indifference to the pipeline operator's effort to minimize the impact of its project. The Park Service took 14 months to review the 22-page application to survey the area. Once permission was granted, the survey work was

completed within a single afternoon. The survey, however, is only an initial step. The Park Service has yet to complete its extensive review of the pipeline operator's application for a permit to cross the parkway and trail using horizontal directional drilling.

We clearly need better agency engagement and decision-making than that demonstrated by the Park Service in this example. These kinds of permitting delays are becoming much more frequent and are not confined to the Park Service. Because there is no direct accountability for this lack of engagement, agencies with limited resources are free to ignore or delay their response to requests to participate in the review of a proposed pipeline.

To address these conflicts, and to reinforce the intent of Congress in EPAct 2005, INGAA in its prior testimony proposed that the subcommittee clarify and strengthen the lead agency role for FERC and further define the process for participating federal and state agencies. Legislation to achieve this result is not unprecedented or outside the mainstream. The process created by the Congress in highway authorization legislation offers a model.[2] Just like interstate highway infrastructure, interstate pipelines need a clear, coordinated permitting process that addresses conflicts, allows agencies to negotiate with one another, and reaches a conclusion in reasonable time.

[2] 23 U.S.C. section 139.

Let me be clear that INGAA is not seeking a diminution of the substantive requirements connected with the permits that must be obtained to construct an interstate natural gas pipeline. INGAA simply seeks greater certainty regarding the schedule for reviewing and acting upon applications for such permits and better coordination among the agencies that are responsible for issuing such permits. We understand that each agency has an assigned duty under the law, and we support a thorough analysis of permit applications to ensure environmental and resource protection. We also recognize the need for robust stakeholder engagement and public dialogue. The certainty sought by INGAA's members can be achieved without diminishing the rigor of environmental review and mitigation.

Review of Discussion Draft

The direction signaled by the committee's discussion draft is consistent with INGAA's goal to strengthen FERC's role as the lead agency and to encourage a more coordinated NEPA and permit review process. We appreciate the committee's leadership in drafting legislation to address this need. INGAA encourages the committee to provide even greater structure and detailed guidance so that there is no misunderstanding about Congress' intent for the pipeline permitting process. Given current permitting delays, and the intent of earlier legislation, there is a clear need for greater Congressional guidance in this area. Past highway authorizations provide a blueprint. INGAA encourages you to be bold.

We suggest the following additions:

1) **"Agency actions" instead of "Federal authorizations."** The draft refers to coordination and approval of "Federal authorizations," as defined in past statutes such as EPAct 2005. We suggest a new defined term – "agency actions" – that would capture more broadly the universe of reviews and consultations connected with the pipeline permitting process, and not just those that require an affirmative approval.

2) **Clear designation of "participating agencies."** The highway authorization statutes created the concept of "participating agencies," which are agencies invited by the lead agency to participate in the review of a project, and that accept such invitation. Permitting agencies that elect to be a participating agency agree to work with the lead agency, but are not bound to a certain outcome. We propose that those agencies electing not to become participating agencies not be authorized to submit comments for the record of the lead agency's NEPA review, and be restricted in developing a supplemental NEPA review for the proposed project. This provides critical accountability. An agency either participates in the lead agency review process, or it forfeits the ability to comment or adjust the record later (with certain exceptions). FERC, as lead agency, should have a corresponding obligation to consult with the participating agencies to ensure that

the NEPA review produces information that those agencies may need for their permitting reviews.

Making permitting agencies accountable for this choice should increase the likelihood that permitting agencies will participate in the FERC NEPA review. This, in turn, should result in a more fulsome and complete environmental analysis in a single document. The participating agency concept is entirely consistent with the intent of NEPA.

3) **Clear demarcation between the NEPA review process and concurrent permitting reviews.** The NEPA review and the review of permit applications are complementary processes. While they can, and should, occur concurrently, they are nonetheless separate. We suggest that the draft provide greater clarity by defining the NEPA review process in one subsection and the concurrent review of applications for agency permits in another subsection.

4) **Transparency regarding permit applications that are "ready for processing."** The draft includes a section on the concurrent review of permit applications – a concept that we strongly support. To ensure that such permits are reviewed concurrently, however, agencies must be clear about when an application is "ready for processing." On numerous occasions, agencies have explained their choice not to act on a permit application on the basis that the application is "incomplete" or "unready." INGAA suggests that the draft require each

permitting agency notify an applicant whether its application is ready for processing within 30 days of receipt of the application. If the application is unready for processing, the agency should be required to provide a description of the information needed for the application to proceed.

5) **Accountability for missed deadlines.** As mentioned, EPAct 2005 empowered FERC to establish a deadline for final permitting determinations once the FERC NEPA document is complete. While FERC's current regulations provide for establishing this deadline, there is no accountability on the part of permitting agencies because the law provides no means to enforce the deadline. The discussion draft includes a provision on "failure to meet deadlines," pursuant to which an agency that misses the FERC-established deadline must report to Congress and FERC on the failure and its plan to ensure completion. INGAA supports this and suggests that the Office of Management of Budget also receive notice of the missed deadline. We also suggest that both the authorization and appropriations committees of the Congress overseeing an agency receive notice of a missed deadline. The point is to create some accountability for adhering to deadlines.

INGAA supports the provision in the discussion draft on remote surveys. Many permitting agencies require submission of extensive ground survey data before an application can be reviewed. However, access to all potential rights of way often cannot be obtained to conduct such surveys. For example, landowners may refuse to grant such

access. Project developers can find themselves in dilemma because they cannot collect the data needed to submit an application for a permit. With the change envisioned by the discussion draft, pipeline project developers could proceed in the least intrusive manner if they can use data obtained from remote surveys to file a permit application, with the proviso that ground surveys might be required for final permit approvals. The provision in the draft is permissive. It requires agencies to "consider" such remote survey data for purposes of a permit application. But it also states that agencies might condition permit approval on subsequent ground survey data collection.

This concludes my comments on the discussion draft.

I also wish to highlight for the subcommittee a pipeline permitting issue that lies outside its jurisdiction, but which INGAA strongly urges you to consider as part of any broader energy or infrastructure legislation. The Clean Water Act vests in states a limited authority to issue a "certification" that a project meets federally approved water quality requirements. Some states are abusing this authority by delaying the issuance of a certification, by issuing a certification that is laden with requirements that do not have a nexus to federal water quality requirements, or by denying a certification without a well-founded basis. These actions are inconsistent with what Congress intended when it established the certification authority. INGAA believes that amendments to the Clean Water Act are needed to clarify the scope of the certification authority to ensure that it is focused on the specific environmental matters at issue. INGAA has seen similar problems in how states exercise authority delegated to them under the Clean Air Act. It

will be increasingly difficult to construct major interstate infrastructure projects of any kind without amendments clarifying the scope of authority that federal law vests in the states.

The subcommittee's discussion draft is being considered against the backdrop of possible comprehensive infrastructure legislation in this Congress. We anticipate that the principal focus of that legislation will be the kinds of infrastructure that rely on public funding, such as roads, bridges, airports and sea ports. Projects funded with private capital, such as interstate natural gas pipelines, also are an important part of our nation's infrastructure. What our industry needs is a process for the timely review and permitting of proposed projects. We are not looking for a rubber stamp, but this robust review should not be an unending and protracted process either.

Finally, allow me to emphasize that a critical element to the timely approval of pipeline infrastructure will be restoring the quorum at the FERC. This is a place where your input with the president and your colleagues in the Senate can do great good. I appreciate the leadership of members of the Committee on Energy and Commerce in urging swift nomination of candidates as members of the FERC and encourage you to continue doing so.

Thank you for the opportunity to testify today.

Mr. OLSON. Thank you, Mr. Santa.

The Chair now calls upon Mr. Black for a 5-minute opening statement.

STATEMENT OF ANDREW BLACK

Mr. BLACK. Thank you, Mr. Chairman. And if you will permit, I would like to thank Mr. Barton for his nice comments on the sudden passing of my dad Bill Black in Houston last week. Dad admired what he did on committee and the floor. Dad would laugh and have me thank the Congress for entertainment over the years, and then he would tell me to get back to work, so I will.

I am Andy Black with the Association of Oil Pipe Lines. AOPL represents owners and operators of liquid pipelines transporting crude oil, refined products like gasoline and diesel, and natural gas liquids such as propane and ethane to American workers and consumers. The presidential permit process for cross-border energy pipelines needs reform. The poster child for presidential permit cross-border abuse is well known. The Keystone XL delay from 2008 to 2015 under the previous administration was inexcusable. No permit review process of any kind should take that long.

While delay of the Keystone XL pipeline project garnered widespread public attention, there were many other applications stuck at the State Department also facing multiyear delays. Many of those projects were simple changes of ownership filings with no impact on the pipelines' operations or border crossing status. Ironically, the Keystone XL NEPA environmental impact statement conducted by the previous administration found that building the pipeline would do more to protect the environment and avoid greenhouse gas emissions than any alternative including rejecting the pipeline.

According to U.S. Government statistics, more than 99.999 percent of petroleum products shipped by pipeline reach their destination safely. The State Department review found the alternatives to not building KXL and forcing that crude oil onto other modes of transportation would result in 2.6 times more crude oil released and 832 times more releases per year. The State Department study also found the project would provide tens of thousands of U.S. jobs in construction, manufacturing, trade, finance, insurance, professional services, health services, food accommodations, and more, with more than $2 billion in worker payroll.

Good paying jobs are the benefit of every pipeline project. Whenever a major project is proposed across our international borders or just within the U.S., thousands of jobs with millions of dollars in worker payroll can follow and increase tax revenues to governments. And consumers across the country also benefit from the downward pressure on gasoline and diesel prices that new crude oil supplies bring.

As pipeline operators, we know the ultimate reasons for delay and rejection of the Keystone XL pipeline had little to do with the superior safety, minimal environmental impact, new jobs or consumer benefits of pipelines. Larger forces were at work highjacking this project for their own political gain. Unfortunately, Keystone XL wasn't the only victim of a dysfunctional process.

Under the last administration we saw review of the simplest pipeline permits with the least amount of environmental impact grind to a halt. A prime example are the several pipelines that run from Canada to Michigan delivering liquid petroleum gases such as propane and butane for industrial uses in manufacturing chemicals, plastics, and similar products, supporting good paying jobs in Michigan and beyond.

For years, a liquid pipeline operator had presidential permit applications pending for pipelines crossing that border. Under current State Department guidelines, even a change in ownership of the pipeline triggered a need to apply for a new permit. For more than 5 years, the State Department considered whether to issue a permit for something almost as simple as a name change.

There were no operational changes of the pipeline, no change in materials or any physical or environmental impacts, just many years of review, document requests, and delays. We believe the career staff at the State Department faithfully executed their duties under executive authority. However, the current system with no statutory standards or limits still left the process vulnerable to manipulation by senior political officials.

With no obligations under Federal law to reach a timely decision, limit the scope of review to the border crossing, or avoid wasteful reviews of projects with little or no environmental impact, the current process is ripe for abuse. The current administration has returned to the original intent of the presidential permit process, but without reform a future administration could return to the abuses of the past.

Liquid pipeline operators support reforming the cross-border approval process and look forward to working with the committee. Keys to meaningful reforms are the discussion drafts provisions to, 1) provide a statutory time limit for permit reviews after any applicable environmental reviews are complete; 2) presume approval unless the pipeline is found not in the public interest, reflecting the benefit of reducing dependence on overseas energy suppliers; 3) limit the border crossing permit scope of review to border crossing issues and impacts; and 4) exempt modifications to existing cross-border facilities because they have no impact on the environment at the border crossing. A reformed border crossing approval process will ensure that American workers and consumers who want access to lower costing energy supplies are not penalized by political manipulation. Thank you.

[The prepared statement of Mr. Black follows:]

Testimony of Andrew Black
Association of Oil Pipe Lines, President & CEO
before the Committee on Energy & Commerce
U.S. House of Representatives

"Hearing on Legislation Addressing Pipeline and Hydropower Infrastructure Modernization"
May 3, 2017

Statement Summary

- AOPL represents owners and operators of liquids pipelines transporting crude oil, refined products like gasoline and diesel fuel, and natural gas liquids, such as propane and ethane. Our members' pipeline facilities stretch over 200,000 miles across the United States delivering over 18 billion barrels of crude oil and petroleum products

- While delay of the Keystone XL pipeline project garnered widespread public attention, there were many other Presidential Permit applications stuck at the State Department also facing multi-year delays. Many of these projects were simple changes of ownership filings with no impact on the pipeline's operations or border-crossing status. And yet they faced lengthy delays obtaining their permit

- For pipeline projects large or small, either intentionally or willingly, the current system of review with no statutory standards or limits allows for abuse of the permitting process

- We believe the State Department career staff faithfully executed their duties under executive order authority. However, the current system still left the process vulnerable to political manipulation by senior political officials of the last administration

- There is no authorizing statute from the Congress laying out the requirements for this program. There is no guidance in the law on what should be reviewed, and what can be exempted because it is too small to make a difference. There are no laws on what criteria to use, what to examine, how or by when. The unfortunate result of the lack of clear, statutory direction is uncertainty and delay

- For these reasons, liquids pipeline operators support reforming the presidential permit process and look forward to working with the committee on this legislation. Key to meaningful reform are the discussion drafts provisions to: 1) provide a statutory time limit for permit review after any applicable environmental reviews are complete, 2) a presumption of approval reflecting the benefit of reducing dependence on unstable overseas energy suppliers, 3) limit the border crossing permit scope of review to border crossing issues and impacts, and 4) exempt modifications to existing cross-border facilities, because they have no impact on the environment at the border crossing

Testimony of Andrew Black
Association of Oil Pipe Lines, President & CEO
before the Committee on Energy & Commerce
U.S. House of Representatives

"Hearing on Legislation Addressing Pipeline and Hydropower Infrastructure Modernization"

May 3, 2017

Mr. Chairman and distinguished members of the committee, thank you for inviting me here to testify today on the need for reform of the Presidential Permit program for cross-border energy infrastructure.

I am Andy Black, President & CEO of the Association of Oil Pipe Lines. AOPL represents owners and operators of liquids pipelines transporting crude oil, refined products like gasoline and diesel fuel, and natural gas liquids, such as propane and ethane. Our members' pipeline facilities stretch over 200,000 miles across the United States delivering over 18 billion barrels of crude oil and petroleum products.

Today, I will testify on the need for reform of the current Presidential Permit process for liquid pipeline projects. While delay of the Keystone XL pipeline project garnered widespread public attention, there were many other Presidential Permit applications stuck at the State Department also facing multi-year delays. Many of these projects were simple changes of ownership filings with no impact on the pipeline's operations or border-crossing status. And yet they faced lengthy delays obtaining their permit. We support legislation to streamline the permit process and exempt those projects with minimal policy or practical impact on the environment.

The poster child for presidential permit cross-border abuse is well known. The Keystone XL delay from 2008 to 2015 under the previous administration was inexcusable. No permit review process of any kind should take that long.

Ironically, the Keystone XL NEPA environmental impact statement conducted by the Obama State Department found building KXL would do more to protect the

environment and avoid greenhouse gas emissions than any alternative, including rejecting the pipeline. According to U.S. government statistics, 99.999% percent of petroleum products shipped by pipeline reach their destination safely. The Obama State Department review found the alternatives to not building KXL and forcing that crude oil onto other modes of transportation would result in 2.6 times more crude oil released and 832 times more releases per year. Transporting crude oil by KXL would also result in fewer greenhouse gas emissions.

The State Department study of KXL found the project would provide over 42,000 U.S. jobs and $2.1 billion in U.S. worker payroll. According to the U.S. State Department, while Keystone XL would support 6,800 construction jobs with $420 million in payroll, it would also lead to 4,600 manufacturing jobs with $309 million in payroll, 4,400 jobs in trade with $172 million in payroll, 2,200 jobs in finance and insurance with $131 million in payroll, 5,100 jobs in other professional services with $343 million in payroll, 2,700 jobs in health services with $141 million in payroll, and 5,700 jobs in food and accommodations with $278 million in payroll.

Good paying jobs, not just in construction, but also in manufacturing and service sectors, are the benefit of every pipeline project. Whenever a major pipeline project is proposed, across our northern border or anywhere within the United States, thousands of jobs with millions of dollars in worker payroll can follow.

In addition, the benefits of a pipeline project will continue long after construction is completed. Communities along the route of a pipeline will gain property tax revenue that can fund school budgets, police and fire departments and local government needs. Rural communities near pipelines with small budgets will benefit the most from this new influx of revenues. Consumers across the country will benefit from the downward pressure on gasoline and diesel prices new crude oil supplies bring.

As pipeline operators, we know the ultimate reasons for delay and rejection of the KXL pipeline had little to do with its superior safety, minimal environmental impact, new

jobs or consumer benefits. Larger forces were at work hijacking this project for their own political gain.

Unfortunately, the KXL pipeline wasn't the only victim of a dysfunctional presidential permitting process. Under the last administration, we saw review of the simplest pipeline projects with the least amount of environmental impact grind to a halt.

A prime example are the several pipelines that run from Canada to Michigan, crossing the US-Canadian border under the Detroit River near Detroit, Michigan, and under the St. Clair River at Port Huron, Michigan. These pipelines deliver liquefied petroleum gases such as propane and butane for industrial uses in manufacturing, chemicals, plastics, and similar products.

Simply put, these pipelines deliver the raw materials that support good-paying manufacturing jobs in Michigan and beyond. These are blue-collar jobs, with pay and benefits to support a family, provide healthcare, or send a child to college. These pipelines provide exactly the kind of jobs Michigan and the rest of the country need and want. So, it was doubly frustrating when something as important as this was caught up in years of bureaucratic delay under the current presidential permitting process.

For years, a liquids pipeline operator had two presidential permit applications pending for seven pipelines crossing the US - Canadian border into Michigan. Their need to apply for a presidential permit was triggered when the company bought these pipelines in 2012. Under current State Department guidelines, a change in ownership of the pipeline triggered the need to apply for a new presidential permit.

These pipelines already had a pending name change permit application from their previous change of ownership in 2007. So, for more than 5 years, the State Department considered whether to issue a presidential permit for something almost as simple as a name change at the top of the permit. There were no operational changes of the pipelines, no change in materials or any physical or environmental impacts. Just many years of review, document requests, pubic notices, and additional document requests.

For pipeline projects large or small, either intentionally or willingly, the current system of review with no statutory standards or limits allowed for abuse of the permitting process. We believe the career staff faithfully executed their duties under executive order authority. However, the current system still left the process vulnerable to political manipulation by senior political officials of the last administration.

With no obligations under federal law to reach a timely decision, limit the scope of the review to border crossing, or avoid wasteful reviews of projects with little to no environmental impact, the current process is ripe for abuse by future administrations. The current administration has returned to the original intent of the presidential permit program. Without reform, a future administration could return to the abuses of the past.

As this committee knows, there is no authorizing statute from the Congress laying out the requirements for this program. There is no guidance in the law on what should be reviewed, and what can be exempted because it is too small to make a difference. There are no laws on what criteria to use, what to examine, how or by when. The unfortunate result of the lack of clear, statutory direction is uncertainty and delay.

For these reasons, liquids pipeline operators support reforming the presidential permit process and look forward to working with the committee on this legislation. Key to meaningful reform are the discussion drafts provisions to: 1) provide a statutory time limit for permit review after any applicable environmental reviews are complete, 2) a presumption of approval reflecting the benefit of reducing dependence on unstable overseas energy suppliers, 3) limit the border crossing permit scope of review to border crossing issues and impacts, and 4) exempt modifications to existing cross-border facilities, because they have no impact on the environment at the border crossing.

Thank you again for inviting me to testify and I look forward to any questions you may have.

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Mr. OLSON. Thank you, Mr. Black, and thank you to all of you for your testimony. We will begin the question and answer portion of this hearing, and I will begin my questioning with the 5-minute rounds of questions.

The first question is for you, Mr. Black. And also before questions I want to echo the concerns and prayers from Vice Chairman Barton about losing your father, Bill, this past week. As the voice of over 850,000 fellow Texans, your family has our thoughts and prayers in their hearts.

Mr. Black, those 850,000 Texans I work for, my bosses called constituents, get why oil pipelines are important. But if I am the average American, why should I care about whether cross-border pipelines are approved in a timely way? What would you say to those people?

Mr. BLACK. Most Americans want lower energy prices and available supplies of gasoline, diesel fuel, propane. We have got great supplies in Canada to take advantage of and Keystone XL and all of the State approvals along the process, they just needed Washington to approve that small border crossing. If that border crossing had been approved on a timely basis, today Americans in your district and elsewhere would be reaping those benefits, but they are not.

Mr. OLSON. Now is 850,000 barrels correct per day, somewhere in that ballpark, being refined there in South Texas, Port of Houston, Port of Beaumont, Port Arthur; is that correct?

Mr. BLACK. Absolutely, supporting thousands of refinery worker jobs.

Mr. OLSON. Thank you.

The next questions are for you, Mr. Soth and Mr. Santa. First to Mr. Soth, Crosby, Texas is not my district, but as a Texan I say welcome, howdy. But as you know, pipelines are delayed, companies large and small face uncertainty. Not just the pipeline owners, but the suppliers, too. There are the shippers trying to move their products as well. These delays hurt those in the construction industry by looking for some predictable work. Can you talk about how red tape and uncertainty hurts your members and the ripple effect beyond the pipe?

Mr. SOTH. Yes, as Mr. Black mentioned those are jobs related to Keystone XL that just simply did not occur. Operating Engineers probably have the most labor intensity of any union on a pipeline job, and my written testimony mentioned those other unions engaged in the process whether that is the Laborers' International Union of North America, the Plumbers and Pipefitters Union, as well as the Teamsters, and those are good jobs that just won't occur. On Keystone XL, the remaining segment of it on both sides of the border close to 3,000 operating engineer jobs alone associated with that. And again those are great jobs.

For us in right-to-work communities like South Dakota that have comparatively low wages where our members would earn over $35 an hour on the check, that is before the extensive investments in pensions, health care for workers' families, as well as training investments that are made there. That is the way we finance the Pipeline Training Fund in association with the Pipe Line Contractors Association. That is 75 cents an hour out of every hour worked

on a pipeline job that an operating engineer would contribute into that fund for the future of the work force and to ensure that the workers have the skill necessary to make that industry and that specific pipeline as safe as can be.

Mr. OLSON. Thank you. Mr. Santa, how does red tape and uncertainty hurt your members?

Mr. SANTA. Mr. Olson, it leads to capital investment being parked on the sidelines. For example, we took a look at the projects that are being held up by the lack of a quorum at the FERC and our back-of-the-envelope calculation was that there were about $14 billion worth of pipeline projects that had been sidelined because of that.

The delays also have a multiplier effect because, for example, in some cases certain activities can occur only in certain months of the year due to environmental considerations, like tree clearing. So if one misses that window for tree clearing, maybe the certificate comes 2 months late, but tree clearing can't occur for another 6 months. It also affects, as Mr. Soth said, all of those pipeline contractors and workers who are on the sideline.

And finally, there is an effect on consumers in terms of more gas pipeline projects bring competitively priced gas that brings down home heating bills, electricity bills because gas is being used so much for electric generation, and also all of the inputs that natural gas is used within manufacturing processes that provide jobs and make the United States competitive.

Mr. OLSON. One quick question out of curiosity. You mentioned a pipeline in Virginia that is going to be put a thousand feet under the ground, is that correct, or a mile underground?

Mr. SANTA. The horizontal length of the drilling that will go beneath the mountain is going to be approximately one mile.

Mr. OLSON. One mile. Keystone is 50 feet, correct? How much does that cost going down one mile as opposed going 50 feet down which is very safe?

Mr. SANTA. I do not have that figure, but I do know that it adds considerably to the cost of the project. But the intent there was to minimize the environmental impact of it and create a path that would enable the project to get built.

Mr. OLSON. In Texas we say that is a whole lot of money. And my time has expired. I yield to the Ranking Member Mr. Rush for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman.

Mr. Black, I want to also join and extend my condolences to you and your family on behalf of your father. I know that it is—I admire your courage to come here in the midst of your mourning and your grieving to appear before this committee. I have a recently departed wife and so I know what it means and I know how you feel. So thank you.

I have a question, Mr. Chairman, for both Ms. Danis and Mr. Irvin. In your professional opinion, do you believe that requiring other agencies to defer to FERC on the scope of environmental review would help expedite the natural gas permitting and hydropower licensing process leading to fewer or more licenses; and the second part of the question is, are FERC staff equipped to deter-

mine the scope of environmental review over and above the experts in other agencies with jurisdiction over these same issues?

Ms. DANIS. We heard testimony earlier this morning from FERC itself that FERC is not versed in other agencies' review obligations under their substantive environmental statutes. So allowing a non-environmental agency or requiring a nonenvironmental agency to define the scope of review for other sister Federal agencies or States' agencies acting under delegated Federal authority would inevitably generate more conflict, more litigation, and end up in really a morass of permitting difficulties as the agencies' responsible for implementing comprehensive environmental review programs, such as the Clean Water Act or the Clean Air Act, are required to report to FERC or to explain to FERC why they must require in-depth inquiries of their own that exceed those that FERC would require or look at under the Natural Gas Act.

Mr. IRVIN. As I said in my statement, Mr. Rush, giving FERC primacy over other Federal resource agencies, over State agencies, and over Tribes in these issues would only lead to additional litigation and environmental degradation. The Federal resource agencies have the expertise on things like the Endangered Species Act, Tribes' certainly very important concerns that they want to uphold whether it be with regard to fish and wildlife resources or things like sacred and ancestral sites, and the States have great expertise and authority in evaluating water quality certification under the Clean Water Act.

There is also a well-established body of law under the Federal Power Act that deals with this interaction among the various agencies. And the courts have been very clear that the resource agencies, the Federal resource agencies and the States have the authority to enforce the Clean Water Act and the Endangered Species Act and that FERC needs to defer to those agencies in doing that. If as these bills would do, you upset that well established body of law you have got to figure out how is it going to work going forward which invariably will lead to additional litigation.

Mr. RUSH. I want to ask Mr. Soth. I come from a district that has very high unemployment, and notwithstanding these matters that we are discussing now in terms of the pipeline, how do you foresee in your training programs, how do you deal with the question of diversity in your training programs, because my experience as a member of the city council in Chicago is that we have always had problems diversifying so many unions, trade unions, in Chicago. So how do you see this going forward, the issue of diversity in your training and your employees?

Mr. SOTH. Apprenticeship, Congressman, is really one of the key methods by which we bring new entrants into the industry, and it is a key method to increase the diversity of the union. Within our apprenticeship programs at the IUOE, 23 percent of apprentices are people of color. We have eight percent of women in our construction. Eight percent of apprentices are women in our construction programs.

And that is an objective for our leadership to pursue diversity and, really, apprenticeship is that primary method and tool by which we increase our numbers of people of color and women in the trade.

Mr. OLSON. The gentleman's time has expired. The Chair calls upon the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you very much, Mr. Chairman, I do appreciate it.

And Mr. Santa, you may be aware of this, but I am going to use you for a minute as an example. I am always talking about my district which is the 9th congressional district of Virginia and that sometimes the policies of the previous administration related to coal didn't take into account that every mountain is different.

In relation to the pipeline that you are referencing, it is a perfect example of why you have to look at every mountain a little bit differently, because not only does it affect the Appalachian Trail and the Blue Ridge Parkway as you mentioned, and you mentioned it reduced the environmental risk, for those who don't know and I am sure you do know, but that was all about a salamander that lives on one mountain in Virginia. And the mountains in Virginia, the Appalachians in Virginia have lots of those kinds of things that happen, a salamander that might only live in one or two mountain areas.

The same is true for our mineral deposits, and sometimes one mountain will have lots of gas in the coal mine and the next mountain won't have any gas at all and they can be very close together. So you gave me a perfect example to explain to folks what I have been talking about for years. You have got to look at every mountain a little bit differently, which is why we ought to leave the Clean Water Act and allow the States to make a lot of these determinations because every mountain is different, every river is different.

And that brings me to rivers, Mr. Irvin. You indicated, and I am not going to ask you to give me a dissertation today. But if you could send me the information on how you think that the bill or one of the bills that we are talking about today impacts riparian rights in the East I would greatly appreciate it. Because it is of interest to me because we were talking earlier today and a couple of us got together down here and they were talking about how the rivers belong to everybody except there are exceptions.

Because in my district there is a part of the river that the king gave the entire river not just a piece of it, not just the water, the whole river, and as a result of that there are people who can actually keep other folks from floating down the river because they own that surface right there, so it is very interesting. But if you could forward that to me I would greatly appreciate it.

Mr. IRVIN. We will be happy to do that, Congressman. And each State has the responsibility for water rights and water law in their States, and it varies from State to State, with a big difference between the West and the East.

Mr. GRIFFITH. Yes, sir.

Mr. IRVIN. That is why changing the law to give FERC authority or primacy over States when they are seeking to protect their rivers and waters is so problematic.

Mr. GRIFFITH. And not only do we have kings' grants in Virginia, but obviously the eastern law is based on the English common law and the western law is based on the European continental methods or models.

Mr. Leahey, now with the subject I was really supposed to talk about in my questions, but I do find that your testimony—and sometimes when you get late in a hearing, you think maybe it is not making any difference; we are paying attention—but the closed loop hydropower: My region is very interested in this because we believe it is a way that we can bring life back to some—obviously you aren't going to have hundreds or thousands—but a couple of abandoned coal mines in our area. So I would ask you to discuss what you believe might be some of the possibilities for using that kind of technology or that kind of a system in our abandoned mines.

Mr. LEAHEY. Sure, absolutely. And as FERC testified earlier today, they have already approved one project that has a very similar configuration, a different type of mine than a coal mine. We have seen a growing list of proposed projects across the United States for both open loop and closed loop pump storage in the type of arrangement that you are talking about, so we see that there is great potential for these types of projects.

One thing that I would like to say with regards to the modernization bill is that we do not read that bill to repeal any of the authorities of the States, the Tribes, or the agencies. They still have those responsibilities and NHA believes those are appropriate responsibilities under those laws. What we believe the bill tries to do is get FERC in charge of putting together the coordination of the schedule.

And as others have talked about on this panel and as I said in my testimony, when you have projects that are going not just 2 years, 4 years, 6 years, but 8, 10, 12, or 14 years from concept to construction and operation that is almost a death knell for those projects.

Mr. GRIFFITH. And I appreciate that. And I will take a look at that language very carefully after having reviewed Mr. Irvin's information, because I am very interested in property rights and the historical rights of the various States. Likewise on the SHORE Act, which you all have not taken a position on.

One of the reasons that I really like that act it was introduced previously by my colleague Robert Hurt. He decided to retire, and since I am affected by it too I picked up the language that has previously been approved by the House. But one of the reasons I am so interested in it is I did some property right cases on the lake one time and they don't have all the power that—they didn't acquire as much as they thought they acquired when they did the deeds back in the 1950s and they are, I think, stepping on some property rights, so I will be looking at that too.

Mr. LEAHEY. Well, and Congressman, we would be happy to work with you on that bill going forward. Like I said in my testimony, we just want to be sure that the safe operation of the project is, and our members are able to continue to do that.

Mr. GRIFFITH. And I think we can have both interests secured in the end, but I appreciate it very much. And with that Mr. Chairman, I yield back.

Mr. OLSON. The gentleman yields back. The Chair now calls upon the gentleman from California, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman. First, I want to start by acknowledging my Duke classmate. It is traditional for you to talk about Duke Basketball with Mr. Santa. We skipped over that part, but I think we will leave it to another time.

I have some questions about hydro. I want to ask Mr. Leahey, you know, there has been concern about whether there is a patchwork of State regulations that talk about whether hydropower counts as renewable. The draft legislation that we are considering today attempts to take that on. Are you satisfied that this draft clarifies that so that all hydro is considered renewable?

Mr. LEAHEY. I believe there is a sense of Congress in the provision that would say that all hydro is renewable and then it would go back and amend the EPAct of 2005 definition to include all hydro as renewable. I think that is very important. And to the extent that other statutes and regulations parry off of that definition, then I think that will create, it will do what it is intended to do which is to make hydro renewable. If there are other statutes or regulations which have their own definitions then I am not sure, we may have to do some more.

Mr. PETERS. And you just mentioned that there is in your written testimony there is discussion of the avoided greenhouse gas emissions from hydro. Mr. Irvin made a comment about methane. Have you tried to quantify exactly how much greenhouse gas we avoid by using hydro?

Mr. LEAHEY. There is research that is being done by the Department of Energy and internationally. I would note that the International Panel on Climate Change has not regulated in this area or made recommendations in this area because of the fact that the science is not there yet. In addition, there is this issue with regards to net emissions of reservoirs. There is some of this degassing that happens naturally, and we would also point out that reservoirs are multi-use, right, so a project is not—any emissions, if there are any, should not be ascribed to the hydro generation when it is also potentially being used for water supply for cities or for irrigation for farms.

Mr. PETERS. OK, and any research that you had on that if you could forward it to us would be great. It is my understanding that about 40 percent of the U.S. Army Corps' hydropower fleet is 50 years old or older and increasingly that the Army Corps is engaging in public-private partnerships to finance many of its projects. Do you see an opportunity for that in the hydropower realm?

Mr. LEAHEY. It is probably the largest opportunity, near term opportunity that we have. Of the projects that have been identified by the Department of Energy, 80 of the top 100 projects are on Army Corps of Engineers' dams.

Mr. PETERS. Do you see that the law authorizes today those partnerships, public-private partnerships, to finance those improvements?

Mr. LEAHEY. Most of the financing, in my understanding most of the financing that is being done is being done by the private entity and then coming on to the Corps facility. There might be some opportunities for additional public-private partnerships with the Corps directly.

Mr. PETERS. Yes, I just want to make sure. Does the law authorize this for the hydro facilities? Do you think it does?

Mr. LEAHEY. I would have to get back to you on that one. I know that there are some differences between what the Corps can do with——

Mr. PETERS. Apparently there is some concern within the Army Corps that it doesn't, and if you think it needs to be changed we would appreciate knowing that.

Mr. LEAHEY. I think there are some changes that are needed. I would just need to get back to you on what those specifics are.

Mr. PETERS. Thank you.

And then I ask Mr. Irvin. I just think we argue a lot about process. And I don't want to give an misimpression about my interest in hydro, I want resources to be protected, but I see a concern in the amount of time it takes. So with my minute left, do you have ideas about how we could reduce the time it takes to get these permits and these hydro facilities operating and still protect resources? Is there a way we can reduce the amount of time?

Mr. IRVIN. Certainly. We have laid out several of these in my written testimony, Mr. Peters. They include things like presumptive inclusion in the FERC study of plans of studies requested by Federal, State, and Tribal agencies, do that up front. Promoting memoranda of understanding between FERC, the Tribes, and the States to improve the coordination, again do that up front.

There is a need to increase appropriations to the agencies. I know that that isn't always a popular topic, but the fact is that they need more money and staff in order to do a better job. And we also can have improved coordination between FERC and the Army Corps of Engineers on these various projects.

Mr. PETERS. Yes. And I would just say I would hope we can have more conversation about this. A lot of this is not really changing the process. I think it is adding more to the process and it provides—I think it is still difficult for me to understand in an objective way what improving coordination means and how we force that from this room.

So I will look forward to more conversation about it and hope that we can come up with a way that advances this interest that I have in reducing greenhouse gases, but also protecting rivers which is what we all want. And Mr. Chairman, thank you for the time.

Mr. OLSON. The gentleman's time has expired. The Chair would like to inform the gentleman and Mr. Santa that my wife is a 1985 Duke graduate, so the NCAA basketball tournament was a very, dark, dark time in the Olson house.

The Chair now calls upon the gentleman from Missouri, Mr. Long, for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman. I am glad I came to this hearing today because I didn't even know they played basketball at Duke.

[Laughter.]

Mr. LONG. Mr. Santa, you mentioned in your testimony that the pipeline review process is disjointed. I didn't know if that was meant as a pun or not, but that being said could you discuss why the process is disjointed and do you believe that the discussion

draft adequately addresses this issue to encourage a more coordinated review process?

Mr. SANTA. Thank you for the question, Mr. Long. As Vice Chairman Barton observed earlier, I mean the discussion draft is trying to get at what the Congress and this committee was very influential and it did in the Energy Policy Act of 2005, in finding a way to affect that congressional intent.

I think that the process is somewhat disjointed because as was noted by Mr. Turpin earlier there are other Federal and State agencies that have got multiple mandates, and for them at times issuing these permits that are essential to construct pipeline infrastructure may not be a high priority. They may not have the resources to do it. And as I noted in my testimony, there are times when there is quite a bit of unreasonable delay that affects the ability to construct these projects on a timely basis.

I do think that the discussion draft would improve the process. In our testimony we offer some examples for ways that it can be strengthened, so we think the committee is headed in the right direction with the discussion draft and look forward to working with the committee on perfecting it.

Mr. LONG. And the current regulations provide for establishing deadlines for final permitting determinations. Could you discuss how effective this current process is?

Mr. SANTA. It unfortunately has not been very effective. One of the problems is that notwithstanding that being part of the 2005 law, there wasn't really anything put in there for effective enforcement in it. The only recourse was for the pipeline applicant to take that permitting agency to court. That is awfully difficult because effectively you are suing the agency from whom you are trying to get the permit, and also the standard of review applied by Federal courts of appeal tends to be pretty permissive and highly deferential to the agencies. And so, in the limited instances where pipelines have chosen to litigate under that provision, it has not been very satisfying.

Mr. LONG. Do you believe the discussion draft that it provides accountability for failure to meet the deadlines?

Mr. SANTA. I believe that it does to the extent that it requires those agencies that have not met the deadlines to report to the Congress. It provides a process for attempting to resolve it within the administration and also requires them to specify a plan for what they can do to complete their work.

It is a challenge, because as has been noted by the witnesses on the committee those other agencies are acting pursuant to their particular legal mandates. We respect that but we are also looking for a process that will give us more predictability and more timeliness in terms of obtaining permits that are needed.

Mr. LONG. OK, thank you. And with that Mr. Chairman, I yield back.

Mr. OLSON. The gentleman yields back and the Chair reminds the gentleman the last time Duke played Missouri in the Tournament was March 17th of 2001 in the East Regional Final: Duke 94, Missouri 81.

Mr. LONG. I didn't know they played basketball in Missouri.

[Laughter.]

Mr. OLSON. Seeing that there are no further Members wishing to ask questions for the second panel—oh, I am sorry. I am sorry, Paul. I apologize. The Chair now calls upon the gentleman from New York, Mr. Paul Tonko, for as much time as he wants.

Mr. TONKO. Rescued by the buzzer. Thank you, Mr. Chairman.

Ms. Danis, as you know, the Interagency Coordination discussion draft would allow remote surveying data to be considered by agencies. Can you explain how aerial data may be insufficient?

Ms. DANIS. Aerial data, as we heard testimony earlier this morning, provides an extremely limited view of what is on the ground. It cannot be accurate with respect to wetlands delineation. It cannot be accurate with respect to endangered species, vernal ponds, seeps, vegetation, other things that require detailed onsite surveys.

In the provision in the amendments for aerial survey data, requiring ancillary Federal authorizations to consider those data simply decreases efficiency because it in essence asks, for example, States under 401 Certification to consider an application based on guesswork the first time, and then to go back and to reconsider that same application once they can make a true determination of what the onsite environmental impacts would be. It is a very inefficient way of approaching it.

And one way to increase efficiency and reduce delay in the permitting processes would be to require the applicants to come to the table with completed applications. First, when they approach FERC and to not put FERC in the position of routinely asking for deficiency, submitting deficiency notices, asking for additional environmental data, but to come to the table from the outset with a well-conceived plan supported by data.

Mr. TONKO. Thank you. And in addition to perhaps not providing the sort of accuracy we need, do you also see that requiring agencies would be ultimately caused to spend more time perhaps and more resources in reviewing applications because of the concerns you just mentioned?

Ms. DANIS. It would, because each agency under their enabling statutes retains the authority to determine when they have sufficient and verified data to make that assessment. This would inevitably increase those agencies' resource expenditure to consider applications that are substantially incomplete from an environmental groundtruthing perspective.

Mr. TONKO. Thank you.

And Mr. Irvin, in the licensing study improvement section, I believe it is page 19 of the Hydropower Policy Modernization discussion draft, we would place the onus on agencies rather than applicants to prove that a study is not duplicative. How might that undermine an agency's ability to get the information that agency needs especially when dealing with a potentially short timetable?

Mr. IRVIN. Well, agencies are of course stretched thin for all of the work that they have to do and anytime you put the burden of proof on the agency to basically to disprove something you are adding to that burden and you are making it much more difficult for them to carry out their responsibilities. And what we are talking about here is a licensing process where a private entity wants to do something to make money at it and it seems fair to require that

going through that licensing process they bear the burden of making the case for why they are entitled to a license.

Mr. TONKO. Would there be any reason that the burden of proof should not fall on the applicant when asked to meet study requests by agencies?

Mr. IRVIN. Not that I can think of.

Mr. TONKO. OK, thank you. And Mr. Irvin, again, at least in some cases delays in hydropower application and evaluation seem to be primarily caused by failure to provide all of information necessary for Federal and State agencies to do their jobs. How important is it to get this information and include all interested stakeholders early on in the process?

Mr. IRVIN. It is absolutely crucial. If you pick the right site and you get the information lined up, the statistics show that the process through FERC is actually fairly expeditious, a couple of years to get a license. What often happens is that an applicant will choose to go through the traditional licensing process which takes longer. And also it sometimes is actually in the interest, particularly in a license renewal situation, for the applicant to have the process take longer, because what happens then is that each year they get a 1-year extension of their existing license they don't have to undertake any of the environmental mitigation that would be required once they get a new license, and so continuing the process for a long time actually may be in the interest of the applicant.

That is obviously not a preferred outcome. We want to get through these processes. We want to get the new requirements in place. We want the applicant to get their license expeditiously. We can do that through the existing processes. We don't have to weaken existing environmental law in order to achieve that.

Mr. TONKO. Thank you.

Mr. Chair, is there an opportunity for one more quick question?

Mr. OLSON. Yes, sir, absolutely.

Mr. TONKO. Thank you.

Mr. Irvin and Ms. Danis, though you provided testimony on completely different subjects, your statements were remarkably similar in that they both focused much of their time on the relationship between the legislation before us and the Clean Water Act and how that legislation would undermine it. Specifically, you both focused on how the bills would harm States' rights under Section 401 of the Clean Water Act as well as water rights generally.

So my question to each of you is, it seems to me that these bills are in a large measure attempts to make significant changes to Section 401 of the Clean Water Act and to a somewhat lesser degree in Section 7 of the Endangered Species Act. Would you agree with that assessment?

Mr. IRVIN. Absolutely. That is one of the primary problems of these bills, is that it undermines both the Endangered Species Act and the Clean Water Act, and in particular for the Clean Water Act the State authority to decide what qualifies for a water quality certification.

Mr. TONKO. Thank you, and Ms. Danis?

Ms. DANIS. I agree with what Mr. Irvin just said, and additionally it is really important that those comprehensive and well-thought-out national policies that are embodied in the Clean Water

Act and the Clean Air Act are not scuttled for the purposes of consideration of private applicants' projects on a case-by-case basis, but really affect the Natural Gas Act goals of balancing those interests.

Mr. TONKO. Thank you very much.

With that Mr. Chair, I yield back.

Mr. OLSON. Thank you, Mr. Tonko. We saved the best for last. Now seeing there are no further members wishing to ask questions for the second panel, I would like to thank our witnesses, Mr. Soth, Mr. Leahey, Mr. Irvin, Ms. Danis, Mr. Santa, and Mr. Black for being here today.

As we conclude, I would like to remind everybody here——

Mr. RUSH. Mr. Chairman?

Mr. OLSON. Yes, sir.

Mr. RUSH. Mr. Chairman, I began this hearing with some very serious concerns about the status of our chairman, Fred Upton. Have you heard, is he all right?

Mr. OLSON. Chairman Fred Upton is fine. He is doing well. He has been working on the healthcare bill. God bless Fred Upton.

As we conclude, I would like to remind everybody here that my Houston Rockets are looking to go two games to zero up against the San Antonio Spurs. Tipoff is at 9:30 p.m., so take a nap.

I would also like to ask unanimous consent to submit the following documents for the record: a letter from the Edison Electric Institute; a letter from the Modesto Irrigation District and Turlock Irrigation District of California; a letter from the Southern California Public Power Authority; a letter from the Public Utility District No. 1 of Chelan County, Washington—I hope I pronounced that right; a letter from the Jordan Hydroelectric Limited Partnership; a letter from the County of Pulaski, Virginia; a letter from the NECA, the National Electrical Contractors Association; a letter from Public Utility District No. 1 of Okanogan County, Washington; a letter from the American Public Power Association; a letter from the National Electrical Contractors Association; testimony of Kevin Colburn on behalf of the American Whitewater; a series of letters collected by the Hydropower Reform Coalition; a letter from the Western Governors' Association; a letter from Mayor Linda Dahlmeier of Oroville, California; a letter from the Hydropower Reform Coalition; and finally, the FAST–41 Federal Permitting Improvement Steering Council Fiscal Year 2016 Annual Report to Congress.

That is it. I would ask unanimous consent they be submitted for the record. Without objection, so ordered.

[The information appears at the conclusion of the hearing.][1]

All Members, that they have 10 business days to submit additional questions for the record. I ask witnesses to submit their response in 10 business days of receipt of those questions. Without objection, this subcommittee is adjourned.

[Whereupon, at 1:14 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

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[1] Some of the information does not appear at the conclusion of the hearing but has been retained in committee files and is available at *http://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=105916.*

PREPARED STATEMENT OF HON. FRED UPTON

Today the subcommittee begins what I expect will be a thoughtful and deliberative process to examine legislation addressing pipeline and hydropower infrastructure modernization. We will review 10 bills, some of which have already been introduced, while others remain in the form of a discussion draft as we continue to work out the details. This committee has developed an extensive record on the issues these bills address. As some will recall, hydropower and gas pipeline infrastructure modernization were included in the energy bill conference last Congress. We began this Congress by picking up where we left off, with hearings examining the challenges and opportunities to expanding hydropower generation and promoting pipeline infrastructure improvement and expansion. We've heard from a variety of stakeholders, including job creators, contractors, labor, Tribal interests, consumers, and private citizens affected by development. Permitting pipeline and hydropower infrastructure often requires extensive consultation with more than a dozen Federal and State agencies. Today, we will hear from the Federal Energy Regulatory Commission, which is the coordinating agency for these reviews. As we move forward, we will continue to engage with States and other Federal permitting agencies that have a participating role to ensure that we are balancing the need to update and modernize our infrastructure with important safety, environmental, and consumer protections.

The legislation before us today takes important strides toward modernizing our Nation's energy infrastructure. The hydropower policy modernization discussion draft encompasses many of the bipartisan reforms that received support in both the House and the Senate last Congress. The draft would designate FERC as the lead agency for hydropower licensing and encourage greater coordination and cooperation among the dozens of agencies involved in the permitting process. We are also examining discussion drafts that would promote new hydropower development at existing nonpowered dams and the development of closed-loop pumped storage projects, like the one in Ludington, Michigan, my home State. As we've heard in testimony before the committee, these projects are a win-win; minimal environmental impact, new investments, jobs, and added benefits to the grid. Another bill would streamline the permitting process for small conduit hydro, which is an emerging source of renewable energy that can be bolted on to existing infrastructure to provide flexible and reliable power.

We are also taking a close look at legislation to improve the process to permit interstate natural gas pipelines and cross-border energy infrastructure. The discussion draft promoting interagency coordination for review of natural gas pipelines will streamline the process and increase public transparency. Together, these reforms will bring more certainty to the permitting process, which will encourage investments, create jobs, and lower prices for consumers—especially those that are already paying too much for energy due to pipeline bottlenecks and capacity shortages.

The discussion draft promoting cross-border energy infrastructure would, for the first time, enshrine in law a uniform and transparent process to authorize crossborder oil and natural gas pipelines and electric transmission facilities. As we've all seen with the Keystone XL pipeline, the current presidential permit process is broken beyond repair. The draft legislation would bring predictability and transparency to the process. It will allow the technical experts at FERC and DOE to review proposed projects without politics getting in the way. Importantly, the draft legislation will not touch bedrock environmental laws like NEPA, the Clean Air Act, or the Clean Water Act. It will also preserve and even strengthen opportunities for stakeholders and property owners to have their voice heard.

Together, these 10 bills represent the beginning of an ambitious effort to modernize our energy infrastructure, increase access to affordable and reliable energy, and lower prices for consumers. I want to thank the witnesses for appearing before us today, and I look forward to their testimony.

[DISCUSSION DRAFT]

115TH CONGRESS
1ST SESSION

H. R. _____

To amend the Federal Power Act to promote hydropower development at existing non-powered dams, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M_____ _____ introduced the following bill; which was referred to the Committee on _____ _____

A BILL

To amend the Federal Power Act to promote hydropower development at existing non-powered dams, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Promoting Hydropower Development at Existing Non-Powered Dams Act".

SEC. 2. PROMOTING HYDROPOWER DEVELOPMENT AT EXISTING NONPOWERED DAMS.

Part I of the Federal Power Act (16 U.S.C. 792 et seq.) is amended by adding at the end the following:

"SEC. . PROMOTING HYDROPOWER DEVELOPMENT AT EXISTING NONPOWERED DAMS.

"(a) EXEMPTIONS FOR QUALIFYING FACILITIES.—

"(1) EXEMPTION QUALIFICATIONS.—Subject to the requirements of this subsection, the Commission may grant an exemption in whole or in part from the requirements of this part, including any license requirements contained in this part, to any facility the Commission determines is a qualifying facility.

"(2) CONSULTATION WITH FEDERAL AND STATE AGENCIES.—In granting any exemption under this subsection, the Commission shall consult with—

"(A) the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the State agency exercising administrative control over the fish and wildlife resources of the State in which the facility will be located, in the manner provided by the Fish and Wildlife Coordination Act;

"(B) any Federal department supervising any public lands or reservations occupied by the project; and

"(C) any Indian tribe affected by the project.

"(3) EXEMPTION CONDITIONS.—

"(A) IN GENERAL.—The Commission shall include in any exemption granted under this subsection only such terms and conditions that the Commission determines are—

"(i) necessary to protect public safety; or

"(ii) reasonable, economically feasible, and essential to prevent loss of or damage to, or to mitigate adverse effects on, fish and wildlife resources directly caused by the construction and operation of the qualifying facility, as compared to the environmental baseline existing at the time the Commission grants the exemption.

"(B) NO CHANGES TO RELEASE REGIME.—No Federal authorization required with respect to a qualifying facility described in paragraph (1), including an exemption granted by the Commission under this subsection, may include any condition or other requirement that results in any material change to the storage, control, withdrawal, diversion, release, or flow

operations of the associated qualifying nonpowered dam.

"(4) ENVIRONMENTAL REVIEW.—The Commission's environmental review under the National Environmental Policy Act of 1969 of a proposed exemption under this subsection shall consist only of an environmental assessment, unless the Commission determines, by rule or order, that the Commission's obligations under such Act for granting exemptions under this subsection can be met through a categorical exclusion.

"(5) VIOLATION OF TERMS OF EXEMPTION.—Any violation of a term or condition of any exemption granted under this subsection shall be treated as a violation of a rule or order of the Commission under this Act.

"(6) ANNUAL CHARGES FOR ENHANCEMENT ACTIVITIES.—Exemptees under this subsection for any facility located at a non-Federal dam shall pay to the United States reasonable annual charges in an amount to be fixed by the Commission for the purpose of funding environmental enhancement projects in watersheds in which facilities exempted under this subsection are located. Such annual charges shall be equivalent to the annual charges for

use of a Government dam under section 10(e), unless the Commission determines, by rule, that a lower charge is appropriate to protect exemptees' investment in the project or avoid increasing the price to consumers of power due to such charges. The proceeds of charges made by the Commission under this paragraph shall be paid into the Treasury of the United States and credited to miscellaneous receipts. Subject to annual appropriation Acts, such proceeds shall be available to Federal and State fish and wildlife agencies for purposes of carrying out specific environmental enhancement projects in watersheds in which one or more facilities exempted under this subsection are located. Not later than 180 days after the date of enactment of this section, the Commission shall establish rules, after notice and opportunity for public comment, for the collection and administration of annual charges under this paragraph.

"(7) EFFECT OF JURISDICTION.—The jurisdiction of the Commission over any qualifying facility exempted under this subsection shall extend only to the qualifying facility exempted and any associated primary transmission line, and shall not extend to any conduit, dam, impoundment, shoreline or other

land, or any other project work associated with the qualifying facility exempted under this subsection.

"(b) DEFINITIONS.—For purposes of this section—

"(1) FEDERAL AUTHORIZATION.—The term 'Federal authorization'—

"(A) means any authorization required under Federal law with respect to an application for a license, license amendment, or exemption under this part; and

"(B) includes any permits, special use authorizations, certifications, opinions, or other approvals as may be required under Federal law to approve or implement the license, license amendment, or exemption under this part.

"(2) QUALIFYING CRITERIA.—The term 'qualifying criteria' means, with respect to a facility—

"(A) as of the date of enactment of this section, the facility is not licensed under, or exempted from the license requirements contained in, this part;

"(B) the facility will be associated with a qualifying nonpowered dam;

"(C) the facility will be constructed, operated, and maintained for the generation of electric power;

"(D) the facility will use for such generation any withdrawals, diversions, releases, or flows from the associated qualifying nonpowered dam, including its associated impoundment or other infrastructure; and

"(E) the operation of the facility will not result in any material change to the storage, control, withdrawal, diversion, release, or flow operations of the associated qualifying nonpowered dam.

"(3) QUALIFYING FACILITY.—The term 'qualifying facility' means a facility that is determined under this section to meet the qualifying criteria.

"(4) QUALIFYING NONPOWERED DAM.—The term 'qualifying nonpowered dam' means any dam, dike, embankment, or other barrier—

"(A) the construction of which was completed on or before the date of enactment of this section;

"(B) that is operated for the control, release, or distribution of water for agricultural, municipal, navigational, industrial, commercial, environmental, recreational, aesthetic, or flood control purposes;

"(C) that, as of the date of enactment of this section, is not equipped with hydropower generating works that are licensed under, or exempted from the license requirements contained in, this part; and

"(D) that, in the case of a non-Federal dam, has been certified by an independent consultant approved by the Commission as complying with the Commission's dam safety requirements.".

[DISCUSSION DRAFT]

115TH CONGRESS
1ST SESSION

H. R. _____

To amend the Federal Power Act to promote closed-loop pumped storage hydropower, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__ _____ _____ introduced the following bill; which was referred to the Committee on _____ _____ _____

A BILL

To amend the Federal Power Act to promote closed-loop pumped storage hydropower, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Promoting Closed-Loop Pumped Storage Hydropower Act".

SEC. 2. CLOSED-LOOP PUMPED STORAGE PROJECTS.

Part I of the Federal Power Act (16 U.S.C. 792 et seq.) is amended by adding at the end the following:

"SEC. ___. CLOSED-LOOP PUMPED STORAGE PROJECTS.

"(a) DEFINITIONS.—In this section:

"(1) CLOSED-LOOP PUMPED STORAGE PROJECT.—The term 'closed-loop pumped storage project' means a project—

"(A) in which the upper and lower reservoirs do not impound or directly withdraw water from navigable waters; or

"(B) that is not continuously connected to a naturally flowing water feature.

"(2) FEDERAL AUTHORIZATION.—The term 'Federal authorization'—

"(A) means any authorization required under Federal law with respect to an application for a license, license amendment, or exemption under this part; and

"(B) includes any permits, special use authorizations, certifications, opinions, or other approvals as may be required under Federal law to approve or implement the license, license amendment, or exemption under this part.

"(b) IN GENERAL.—As provided in this section, the Commission may issue and amend licenses and preliminary permits, as appropriate, for closed-loop pumped storage projects.

"(c) DAM SAFETY.—Before issuing any license for a closed-loop pumped storage project, the Commission shall assess the safety of existing dams and other structures related to the project (including possible consequences associated with failure of such structures).

"(d) LICENSE CONDITIONS.—With respect to a closed-loop pumped storage project, the authority of the Commission to impose conditions on a license under sections 4(e), 10(a), 10(g), and 10(j) shall not apply, and any condition included in or applicable to a closed-loop pumped storage project licensed under this section, including any condition or other requirement of a Federal authorization, shall be limited to those that are—

"(1) necessary to protect public safety; or

"(2) reasonable, economically feasible, and essential to prevent loss of or damage to, or to mitigate adverse effects on, fish and wildlife resources directly caused by the construction and operation of the project, as compared to the environmental baseline existing at the time the Commission completes its environmental review.

"(e) TRANSFERS.—Notwithstanding section 5, and regardless of whether the holder of a preliminary permit for a closed-loop pumped storage project claimed municipal preference under section 7(a) when obtaining the per-

mit, the Commission may, to facilitate development of a closed-loop pumped storage project—

"(1) add entities as joint permittees following issuance of a preliminary permit; and

"(2) transfer a license in part to one or more nonmunicipal entities as co-licensees with a municipality.".

.....

(Original Signature of Member)

115TH CONGRESS
1ST SESSION

H. R. _____

To amend the Federal Power Act to provide that qualifying small conduit hydropower facilities are not required to be licensed under part I of such Act.

IN THE HOUSE OF REPRESENTATIVES

_____ introduced the following bill; which was referred to the Committee on _____

A BILL

To amend the Federal Power Act to provide that qualifying small conduit hydropower facilities are not required to be licensed under part I of such Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Promoting Small Conduit Hydropower Facilities Act of 2017".

SEC. 2. QUALIFYING SMALL CONDUIT HYDROPOWER FACILITIES.

Section 30(a) of the Federal Power Act (16 U.S.C. 823a(a)) is amended—

(1) by redesignating paragraph (3) as paragraph (4);

(2) by inserting after paragraph (2) the following:

"(3)(A) A qualifying small conduit hydropower facility shall not be required to be licensed under this part.

"(B) Any person, State, or municipality proposing to construct a qualifying small conduit hydropower facility shall file with the Commission a notice of intent to construct such facility. The notice shall include sufficient information to demonstrate that the facility meets the qualifying small conduit facility criteria.

"(C)(i) Not later than 15 days after receipt of a notice of intent filed under subparagraph (B), the Commission shall make a determination as to whether the facility meets the qualifying small conduit facility criteria.

"(ii) If the Commission fails to make a determination with respect to a facility in accordance with clause (i), the facility shall be deemed to meet the qualifying small conduit facility criteria."; and

(3) in paragraph (4), as redesignated by paragraph (1) of this section—

(A) in subparagraph (C)(ii), by inserting "exceeds 2 megawatts but" after "capacity that"; and

(B) by inserting at the end the following:

"(D) The term 'qualifying small conduit hydropower facility' means a facility (not including any dam or other impoundment) that is determined or deemed under paragraph (3)(C) to meet the qualifying small conduit facility criteria.

"(E) The term 'qualifying small conduit facility criteria' means, with respect to a facility—

"(i) the facility is constructed, operated, or maintained for the generation of electric power and uses for such generation only the hydroelectric potential of a non-federally owned conduit;

"(ii) the facility has an installed capacity that does not exceed 2 megawatts; and

"(iii) on or before the date of enactment of the Promoting Small Conduit Hydropower Facilities Act of 2017, the facility is not licensed under, or exempted from the license requirements contained in, this part.".

[DISCUSSION DRAFT]

115TH CONGRESS
1ST SESSION

H. R. _____

To provide for Federal and State agency coordination in the approval of certain authorizations under the Natural Gas Act.

IN THE HOUSE OF REPRESENTATIVES

M_ . ___ ___ __ introduced the following bill; which was referred to the Committee on ___ ___ ___ ___ ___

A BILL

To provide for Federal and State agency coordination in the approval of certain authorizations under the Natural Gas Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Promoting Interagency Coordination for Review of Natural Gas Pipelines Act".

SEC. 2. FERC PROCESS COORDINATION.

Section 15 of the Natural Gas Act (15 U.S.C. 717n) is amended—

(1) by amending subsection (b)(2) to read as follows:

"(2) OTHER AGENCIES.—

"(A) IN GENERAL.—Each Federal and State agency considering an aspect of an application for a Federal authorization shall cooperate with the Commission and comply with the deadlines established by the Commission.

"(B) IDENTIFICATION.—The Commission shall identify, as early as practicable after it is notified by a prospective applicant for an authorization under section 3 or a certificate of public convenience and necessity under section 7, any Federal or State agency, local government, or Indian Tribe that may consider an aspect of an application for a Federal authorization for such authorization or certificate.

"(C) INVITATION.—

"(i) IN GENERAL.—The Commission shall invite any agency identified under subparagraph (B) to cooperate or participate in the review process for the applicable Federal authorization.

"(ii) DEADLINE.—An invitation issued under clause (i) shall establish a

deadline by which a response to the invitation shall be submitted to the Commission, which may be extended by the Commission for good cause.";

(2) in subsection (c)—

(A) in paragraph (1)—

(i) by striking "and" at the end of subparagraph (A);

(ii) by redesignating subparagraph (B) as subparagraph (C); and

(iii) by inserting after subparagraph (A) the following new subparagraph:

"(B) set deadlines for all such Federal authorizations; and";

(B) by striking paragraph (2); and

(C) by adding at the end the following new paragraphs:

"(2) DEADLINE FOR FEDERAL AUTHORIZATIONS.—A deadline for a Federal authorization set by the Commission under paragraph (1) shall be not later than 90 days after the Commission issues its final environmental document, unless an applicable schedule is otherwise established by Federal law.

"(3) CONCURRENT REVIEWS.—Each Federal and State agency—

"(A) that may consider an application for a Federal authorization pursuant to this section shall formulate and implement a plan for administrative, policy, and procedural mechanisms to enable the agency to ensure completion of Federal authorizations in compliance with schedules established, in accordance with paragraph (2), by the Commission under paragraph (1); and

"(B) in considering an aspect of an application for a Federal authorization, shall—

"(i) formulate and implement a plan to enable the agency to comply with the schedule established by the Commission under paragraph (1);

"(ii) carry out the obligations of that agency under applicable law concurrently, and in conjunction with, the review required by the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), and in compliance with the schedule established by the Commission under paragraph (1), unless the agency notifies the Commission in writing that doing so would impair the ability of the agency to conduct needed

analysis or otherwise carry out such obligations;

"(iii) transmit to the Commission a statement—

"(I) acknowledging receipt of the schedule established by the Commission under paragraph (1); and

"(II) setting forth the plan formulated under clause (i) of this subparagraph; and

"(iv) not less often than once every 90 days, transmit to the Commission a report describing the progress made in considering such application for a Federal authorization.

"(4) ISSUE IDENTIFICATION AND RESOLUTION.—

"(A) IDENTIFICATION.—Federal and State agencies that may consider an aspect of an application for a Federal authorization shall identify, as early as possible, any issues of concern that may delay or prevent an agency from working with the Commission to resolve such issues and granting such authorization.

"(B) ISSUE RESOLUTION.—The Commission may forward any issue of concern identified under subparagraph (A) to the heads of the relevant agencies (including, in the case of a failure by the State agency, the Federal agency overseeing the delegated authority) for resolution.

"(C) DEFERENCE TO COMMISSION.—In making a decision with respect to a Federal authorization, each agency shall give deference, to the maximum extent authorized by law, to the scope of environmental review that the Commission determines to be appropriate.

"(5) FAILURE TO MEET DEADLINE.—If a Federal or State agency does not complete a proceeding for an approval that is required for a Federal authorization in accordance with the schedule established by the Commission under paragraph (1)—

"(A) the applicant may pursue remedies under section 19(d); and

"(B) not later than 15 days after the date on which the schedule provided for such completion, the head of the relevant Federal agency (including, in the case of a failure by a State agency, the Federal agency overseeing the dele-

gated authority) shall notify Congress and the Commission of such failure and set forth a recommended implementation plan to ensure completion of the proceeding for an approval.";

(3) by redesignating subsections (d) through (f) as subsections (g) through (i), respectively; and

(4) by inserting after subsection (c) the following new subsections:

"(d) REMOTE SURVEYS.—If a Federal or State agency considering an aspect of an application for a Federal authorization requires the applicant to submit environmental data, the agency shall consider any such data gathered by aerial or other remote means that the applicant submits. The agency may grant a conditional approval for the Federal authorization based on data gathered by aerial or remote means, conditioned on the verification of such data by subsequent onsite inspection.

"(e) APPLICATION PROCESSING.—The Commission, and Federal and State agencies, may allow an applicant seeking a Federal authorization to fund a third-party contractor to assist in reviewing the application.

"(f) ACCOUNTABILITY, TRANSPARENCY, EFFICIENCY.—For an application for an authorization under section 3, or a certificate of public convenience and necessity under section 7, that requires multiple Federal au-

thorizations, the Commission, with input from any Federal or State agency considering an aspect of the application, shall track and make available to the public on the Commission's website information related to the actions required to complete the Federal authorizations. Such information shall include the following:

"(1) The schedule established by the Commission under subsection (c)(1).

"(2) A list of all the actions required by each applicable agency to complete permitting, reviews, and other actions necessary to obtain a final decision on the application.

"(3) The expected completion date for each such action.

"(4) A point of contact at the agency accountable for each such action.

"(5) In the event that an action is still pending as of the expected date of completion, a brief explanation of the reasons for the delay.".

[DISCUSSION DRAFT]

115TH CONGRESS
1ST SESSION

H. R. _____

To establish a more uniform, transparent, and modern process to authorize the construction, connection, operation, and maintenance of international border-crossing facilities for the import and export of oil and natural gas and the transmission of electricity.

IN THE HOUSE OF REPRESENTATIVES

M_ _ _ _ _ introduced the following bill; which was referred to the Committee on _ _ _ _ _ _ _ _ _

A BILL

To establish a more uniform, transparent, and modern process to authorize the construction, connection, operation, and maintenance of international border-crossing facilities for the import and export of oil and natural gas and the transmission of electricity.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Promoting Cross-Border Energy Infrastructure Act".

SEC. 2. APPROVAL FOR BORDER-CROSSING FACILITIES.

(a) AUTHORIZATION OF CERTAIN ENERGY INFRASTRUCTURE PROJECTS AT AN INTERNATIONAL BOUNDARY OF THE UNITED STATES.—

(1) AUTHORIZATION.—Except as provided in paragraph (3) and subsection (e), no person may construct, connect, operate, or maintain a border-crossing facility for the import or export of oil or natural gas, or the transmission of electricity, across an international border of the United States without obtaining a certificate of crossing for the border-crossing facility under this subsection.

(2) CERTIFICATE OF CROSSING.—

(A) REQUIREMENT.—Not later than 120 days after final action is taken, by the relevant official or agency identified under subparagraph (B), under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to a border-crossing facility for which a person requests a certificate of crossing under this subsection, the relevant official or agency, in consultation with appropriate Federal agencies, shall issue a certificate of crossing for the border-crossing facility unless the relevant official or agency finds that the construction, connection, operation, or maintenance of the bor-

der-crossing facility is not in the public interest of the United States.

(B) RELEVANT OFFICIAL OR AGENCY.—The relevant official or agency referred to in subparagraph (A) is—

(i) the Federal Energy Regulatory Commission with respect to border-crossing facilities consisting of oil or natural gas pipelines; and

(ii) the Secretary of Energy with respect to border-crossing facilities consisting of electric transmission facilities.

(C) ADDITIONAL REQUIREMENT FOR ELECTRIC TRANSMISSION FACILITIES.—In the case of a request for a certificate of crossing for a border-crossing facility consisting of an electric transmission facility, the Secretary of Energy shall require, as a condition of issuing the certificate of crossing under subparagraph (A), that the border-crossing facility be constructed, connected, operated, or maintained consistent with all applicable policies and standards of—

(i) the Electric Reliability Organization and the applicable regional entity; and

(ii) any Regional Transmission Organization or Independent System Operator with operational or functional control over the border-crossing facility.

(3) EXCLUSIONS.—This subsection shall not apply to any construction, connection, operation, or maintenance of a border-crossing facility for the import or export of oil or natural gas, or the transmission of electricity—

(A) if the border-crossing facility is operating for such import, export, or transmission as of the date of enactment of this Act;

(B) if a permit described in subsection (d) for the construction, connection, operation, or maintenance has been issued; or

(C) if an application for a permit described in subsection (d) for the construction, connection, operation, or maintenance is pending on the date of enactment of this Act, until the earlier of—

(i) the date on which such application is denied; or

(ii) [ ].

(4) EFFECT OF OTHER LAWS.—

(A) APPLICATION TO PROJECTS.—Nothing in this subsection or subsection (e) shall affect the application of any other Federal statute to a project for which a certificate of crossing for a border-crossing facility is requested under this subsection.

(B) NATURAL GAS ACT.—Nothing in this subsection or subsection (e) shall affect the requirement to obtain approval or authorization under sections 3 and 7 of the Natural Gas Act for the siting, construction, or operation of any facility to import or export natural gas.

(b) IMPORTATION OR EXPORTATION OF NATURAL GAS TO CANADA AND MEXICO.—Section 3(c) of the Natural Gas Act (15 U.S.C. 717b(c)) is amended by adding at the end the following: "In the case of an application for the importation of natural gas from, or the exportation of natural gas to, Canada or Mexico, the Commission shall grant the application not later than 30 days after the date on which the Commission receives the complete application.".

(c) TRANSMISSION OF ELECTRIC ENERGY TO CANADA AND MEXICO.—

(1) REPEAL OF REQUIREMENT TO SECURE ORDER.—Section 202(e) of the Federal Power Act (16 U.S.C. 824a(e)) is repealed.

(2) CONFORMING AMENDMENTS.—

(A) STATE REGULATIONS.—Section 202(f) of the Federal Power Act (16 U.S.C. 824a(f)) is amended by striking "insofar as such State regulation does not conflict with the exercise of the Commission's powers under or relating to subsection 202(e)".

(B) SEASONAL DIVERSITY ELECTRICITY EXCHANGE.—Section 602(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–4(b)) is amended by striking "the Commission has conducted hearings and made the findings required under section 202(c) of the Federal Power Act" and all that follows through the period at the end and inserting "the Secretary has conducted hearings and finds that the proposed transmission facilities would not impair the sufficiency of electric supply within the United States or would not impede or tend to impede the coordination in the public interest of facilities subject to the jurisdiction of the Secretary.".

(d) NO PRESIDENTIAL PERMIT REQUIRED.—No Presidential permit (or similar permit) required under Executive Order No. 13337 (3 U.S.C. 301 note), Executive Order No. 11423 (3 U.S.C. 301 note), section 301 of title 3, United States Code, Executive Order No. 12038, Executive Order No. 10485, or any other Executive order shall be necessary for the construction, connection, operation, or maintenance of an oil or natural gas pipeline or electric transmission facility, or any border-crossing facility thereof.

(e) MODIFICATIONS TO EXISTING PROJECTS.—No certificate of crossing under subsection (a), or permit described in subsection (d), shall be required for a modification to—

(1) an oil or natural gas pipeline or electric transmission facility that is operating for the import or export of oil or natural gas or the transmission of electricity as of the date of enactment of this Act;

(2) an oil or natural gas pipeline or electric transmission facility for which a permit described in subsection (d) has been issued; or

(3) a border-crossing facility for which a certificate of crossing has previously been issued under subsection (a).

(f) EFFECTIVE DATE; RULEMAKING DEADLINES.—

(1) EFFECTIVE DATE.—Subsections (a) through (e), and the amendments made by such subsections, shall take effect on the date that is 1 year after the date of enactment of this Act.

(2) RULEMAKING DEADLINES.—Each relevant official or agency described in subsection (a)(2)(B) shall—

(A) not later than 180 days after the date of enactment of this Act, publish in the Federal Register notice of a proposed rulemaking to carry out the applicable requirements of subsection (a); and

(B) not later than 1 year after the date of enactment of this Act, publish in the Federal Register a final rule to carry out the applicable requirements of subsection (a).

(g) DEFINITIONS.—In this section—

(1) the term "border-crossing facility" means the portion of an oil or natural gas pipeline or electric transmission facility that is located at an international boundary of the United States;

(2) the term "modification" includes a reversal of flow direction, change in ownership, change in flow volume, addition or removal of an interconnection, or an adjustment to maintain flow (such as a

reduction or increase in the number of pump or compressor stations);

(3) the term "natural gas" has the meaning given that term in section 2 of the Natural Gas Act (15 U.S.C. 717a);

(4) the term "oil" means petroleum or a petroleum product;

(5) the terms "Electric Reliability Organization" and "regional entity" have the meanings given those terms in section 215 of the Federal Power Act (16 U.S.C. 824o); and

(6) the terms "Independent System Operator" and "Regional Transmission Organization" have the meanings given those terms in section 3 of the Federal Power Act (16 U.S.C. 796).

I

115TH CONGRESS
1ST SESSION

H. R. 1538

To amend the Federal Power Act to require the Federal Energy Regulatory Commission to minimize infringement on the exercise and enjoyment of property rights in issuing hydropower licenses, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 2017

Mr. GRIFFITH (for himself, Mr. GARRETT, Mr. BUTTERFIELD, Mr. MULLIN, and Mrs. HARTZLER) introduced the following bill; which was referred to the Committee on Energy and Commerce

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A BILL

To amend the Federal Power Act to require the Federal Energy Regulatory Commission to minimize infringement on the exercise and enjoyment of property rights in issuing hydropower licenses, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Supporting Home Owner Rights Enforcement Act".

SEC. 2. HYDROPOWER LICENSES.

(a) LICENSES.—Section 4(e) of the Federal Power Act (16 U.S.C. 797(e)) is amended—

(1) by striking "and" after "recreational opportunities,"; and

(2) by inserting ", and minimizing infringement on the useful exercise and enjoyment of property rights held by nonlicensees" after "aspects of environmental quality".

(b) PRIVATE LANDOWNERSHIP.—Section 10 of the Federal Power Act (16 U.S.C. 803) is amended—

(1) in subsection (a)(1), by inserting ", including minimizing infringement on the useful exercise and enjoyment of property rights held by nonlicensees" after "section 4(e)"; and

(2) by adding at the end the following:

"(k) PRIVATE LANDOWNERSHIP.—In developing any recreational resource within the project boundary, the licensee shall consider private landownership as a means to encourage and facilitate—

"(1) private investment; and

"(2) increased tourism and recreational use.".

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I

115TH CONGRESS
1ST SESSION

H. R. 446

To extend the deadline for commencement of construction of a hydroelectric project.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 11, 2017

Mr. GRIFFITH introduced the following bill; which was referred to the Committee on Energy and Commerce

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A BILL

To extend the deadline for commencement of construction of a hydroelectric project.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. EXTENSION.

(a) IN GENERAL.—Notwithstanding the time period specified in section 13 of the Federal Power Act (16 U.S.C. 806) that would otherwise apply to the Federal Energy Regulatory Commission project numbered 12737, the Commission may, at the request of the licensee for the project, and after reasonable notice, in accordance with the good faith, due diligence, and public interest require-

ments of that section and the Commission's procedures under that section, extend the time period during which the licensee is required to commence the construction of the project for up to 3 consecutive 2-year periods from the date of the expiration of the extension originally issued by the Commission.

(b) REINSTATEMENT OF EXPIRED LICENSE.—If the period required for commencement of construction of the project described in subsection (a) has expired prior to the date of the enactment of this Act, the Commission may reinstate the license for the project effective as of the date of its expiration and the first extension authorized under subsection (a) shall take effect on the date of such expiration.

○

I

115TH CONGRESS
1ST SESSION

H. R. 447

To extend the deadline for commencement of construction of a hydroelectric project.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 11, 2017

Mr. GRIFFITH introduced the following bill; which was referred to the Committee on Energy and Commerce

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A BILL

To extend the deadline for commencement of construction of a hydroelectric project.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. EXTENSION.

(a) IN GENERAL.—Notwithstanding the time period specified in section 13 of the Federal Power Act (16 U.S.C. 806) that would otherwise apply to the Federal Energy Regulatory Commission project numbered 12740, the Commission may, at the request of the licensee for the project, and after reasonable notice, in accordance with the good faith, due diligence, and public interest require-

ments of that section and the Commission's procedures under that section, extend the time period during which the licensee is required to commence the construction of the project for up to 3 consecutive 2-year periods from the date of the expiration of the extension originally issued by the Commission.

(b) REINSTATEMENT OF EXPIRED LICENSE.—If the period required for commencement of construction of the project described in subsection (a) has expired prior to the date of the enactment of this Act, the Commission may reinstate the license for the project effective as of the date of its expiration and the first extension authorized under subsection (a) shall take effect on the date of such expiration.

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(Original Signature of Member)

115TH CONGRESS
1ST SESSION

H. R. 2122

To reinstate and extend the deadline for commencement of construction of a hydroelectric project involving Jennings Randolph Dam.

IN THE HOUSE OF REPRESENTATIVES

Mr. MCKINLEY introduced the following bill; which was referred to the Committee on _____

A BILL

To reinstate and extend the deadline for commencement of construction of a hydroelectric project involving Jennings Randolph Dam.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. REINSTATEMENT AND EXTENSION OF TIME FOR A FEDERAL ENERGY REGULATORY COMMISSION PROJECT INVOLVING JENNINGS RANDOLPH DAM.

(a) EXTENSION OF TIME.—Notwithstanding the time period specified in section 13 of the Federal Power Act

(16 U.S.C. 806) that would otherwise apply to the Federal Energy Regulatory Commission project numbered 12715 (referred to in this section as the "project"), the Federal Energy Regulatory Commission (referred to in this section as the "Commission") may, at the request of the licensee for the project, and after reasonable notice, in accordance with the good faith, due diligence, and public interest requirements of, and the procedures of the Commission under, that section, extend the time period during which the licensee is required to commence the construction of the project for not more than 3 consecutive 2-year periods that begin on the date of the expiration of the extension originally issued by the Commission.

(b) OBLIGATION OF LICENSEE.—Any obligation of the licensee for the project for the payment of annual charges under section 10(e) of the Federal Power Act (16 U.S.C. 803(e)) shall commence on the expiration of the time period to commence construction of the project, as extended by the Commission under subsection (a).

(c) REINSTATEMENT OF EXPIRED LICENSE.—

(1) IN GENERAL.—If the period required for the commencement of construction of the project has expired before the date of enactment of this Act, the Commission may reinstate the license effective as of the date of the expiration of the license.

(2) EXTENSION.—If the Commission reinstates the license under paragraph (1), the first extension authorized under subsection (a) shall take effect on the date of the expiration of the license.

[DISCUSSION DRAFT]

115TH CONGRESS
1ST SESSION

H. R. _____

To modernize hydropower policy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__. _____ introduced the following bill; which was referred to the Committee on _____

A BILL

To modernize hydropower policy, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Hydropower Policy Modernization Act of 2017".

SEC. 2. HYDROPOWER REGULATORY IMPROVEMENTS.

(a) SENSE OF CONGRESS ON THE USE OF HYDROPOWER RENEWABLE RESOURCES.—It is the sense of Congress that—

(1) hydropower is a renewable resource for purposes of all Federal programs and is an essential source of energy in the United States; and

(2) the United States should increase substantially the capacity and generation of clean, renewable hydropower resources that would improve environmental quality in the United States.

(b) MODIFYING THE DEFINITION OF RENEWABLE ENERGY TO INCLUDE HYDROPOWER.—Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) is amended—

(1) in subsection (a), by striking "the following amounts" and all that follows through paragraph (3) and inserting "not less than 15 percent in fiscal year 2017 and each fiscal year thereafter shall be renewable energy." ; and

(2) in subsection (b), by striking paragraph (2) and inserting the following:

"(2) RENEWABLE ENERGY.—The term 'renewable energy' means energy produced from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or hydropower.".

(c) PRELIMINARY PERMITS.—Section 5 of the Federal Power Act (16 U.S.C. 798) is amended—

(1) in subsection (a), by striking "three" and inserting "4"; and

(2) by amending subsection (b) to read as follows:

"(b) The Commission may—

"(1) extend the period of a preliminary permit once for not more than 4 additional years beyond the 4 years permitted by subsection (a) if the Commission finds that the permittee has carried out activities under such permit in good faith and with reasonable diligence; and

"(2) if the period of a preliminary permit is extended under paragraph (1), extend the period of such preliminary permit once for not more than 4 additional years beyond the extension period granted under paragraph (1), if the Commission determines that there are extraordinary circumstances that warrant such additional extension.".

(d) TIME LIMIT FOR CONSTRUCTION OF PROJECT WORKS.—Section 13 of the Federal Power Act (16 U.S.C. 806) is amended in the second sentence by striking "once but not longer than two additional years" and inserting "for not more than 8 additional years,".

(e) LICENSE TERM.—Section 15(e) of the Federal Power Act (16 U.S.C. 808(e)) is amended—

(1) by striking "(e) Except" and inserting the following:

"(e) LICENSE TERM ON RELICENSING.—

"(1) IN GENERAL.—Except"; and

(2) by adding at the end the following:

"(2) CONSIDERATION.—In determining the term of a license under paragraph (1), the Commission shall consider project-related investments by the licensee over the term of the existing license (including any terms under annual licenses) that resulted in new development, construction, capacity, efficiency improvements, or environmental measures, but which did not result in the extension of the term of the license by the Commission.".

(f) ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.—Section 33 of the Federal Power Act (16 U.S.C. 823d) is amended—

(1) in subsection (a)—

(A) in paragraph (1), by striking "deems" and inserting "determines";

(B) in paragraph (2)(B), in the matter preceding clause (i), by inserting "determined to be necessary" before "by the Secretary";

(C) by striking paragraph (4); and

(D) by striking paragraph (5);

(2) in subsection (b)—

(A) by striking paragraph (4); and

(B) by striking paragraph (5); and

(3) by adding at the end the following:

"(c) FURTHER CONDITIONS.—This section applies to any further conditions or prescriptions proposed or imposed pursuant to section 4(e), 6, or 18.".

SEC. 3. HYDROPOWER LICENSING AND PROCESS IMPROVEMENTS.

(a) HYDROPOWER LICENSING AND PROCESS IMPROVEMENTS.—Part I of the Federal Power Act (16 U.S.C. 792 et seq.) is amended by adding at the end the following:

"SEC. 34. HYDROPOWER LICENSING AND PROCESS IMPROVEMENTS.

"(a) DEFINITION.—In this section, the term 'Federal authorization'—

"(1) means any authorization required under Federal law with respect to an application for a license, license amendment, or exemption under this part; and

"(2) includes any permits, special use authorizations, certifications, opinions, or other approvals as may be required under Federal law to approve or

implement the license, license amendment, or exemption under this part.

"(b) DESIGNATION AS LEAD AGENCY.—

"(1) IN GENERAL.—The Commission shall act as the lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(2) OTHER AGENCIES AND INDIAN TRIBES.—

"(A) IN GENERAL.—Each Federal, State, and local government agency and Indian tribe considering an aspect of an application for Federal authorization shall coordinate with the Commission and comply with the deadline established in the schedule developed for the project in accordance with the rule issued by the Commission under subsection (c).

"(B) IDENTIFICATION.—The Commission shall identify, as early as practicable after it is notified by the applicant of a project or facility requiring Commission action under this part, any Federal or State agency, local government, or Indian tribe that may consider an aspect of an application for a Federal authorization.

"(C) NOTIFICATION.—

"(i) IN GENERAL.—The Commission shall notify any agency and Indian tribe identified under subparagraph (B) of the opportunity to participate in the process of reviewing an aspect of an application for a Federal authorization.

"(ii) DEADLINE.—Each agency and Indian tribe receiving a notice under clause (i) shall submit a response acknowledging receipt of the notice to the Commission within 30 days of receipt of such notice and request.

"(D) ISSUE IDENTIFICATION AND RESOLUTION.—

"(i) IDENTIFICATION OF ISSUES.—Federal, State, and local government agencies and Indian tribes that may consider an aspect of an application for Federal authorization shall identify, as early as possible, and share with the Commission and the applicant, any issues of concern identified during the pendency of the Commission's action under this part relating to any Federal authorization that may delay or prevent the granting of such authoriza-

tion, including any issues that may prevent the agency or Indian tribe from meeting the schedule established for the project in accordance with the rule issued by the Commission under subsection (c).

"(ii) ISSUE RESOLUTION.—The Commission may forward any issue of concern identified under clause (i) to the heads of the relevant State and Federal agencies (including, in the case of scheduling concerns identified by a State or local government agency or Indian tribe, the Federal agency overseeing the delegated authority, or the Secretary of the Interior with regard to scheduling concerns identified by an Indian tribe) for resolution. The Commission and any relevant agency shall enter into a memorandum of understanding to facilitate interagency coordination and resolution of such issues of concern, as appropriate.

"(c) SCHEDULE.—

"(1) COMMISSION RULEMAKING TO ESTABLISH PROCESS TO SET SCHEDULE.—Within 180 days of the date of enactment of this section the Commis-

sion shall, in consultation with the appropriate Federal agencies, issue a rule, after providing for notice and public comment, establishing a process for setting a schedule following the filing of an application under this part for the review and disposition of each Federal authorization.

"(2) ELEMENTS OF SCHEDULING RULE.—In issuing a rule under this subsection, the Commission shall ensure that the schedule for each Federal authorization—

"(A) includes deadlines for actions by—

"(i) any Federal or State agency, local government, or Indian tribe that may consider an aspect of an application for the Federal authorization;

"(ii) the applicant;

"(iii) the Commission; and

"(iv) other participants in a proceeding;

"(B) is developed in consultation with the applicant and any agency and Indian tribe that submits a response under subsection (b)(2)(C)(ii);

"(C) provides an opportunity for any Federal or State agency, local government, or In-

dian tribe that may consider an aspect of an application for the applicable Federal authorization to identify and resolve issues of concern, as provided in subsection (b)(2)(D);

"(D) complies with applicable schedules established under Federal and State law;

"(E) ensures expeditious completion of all proceedings required under Federal and State law, to the extent practicable; and

"(F) facilitates completion of Federal and State agency studies, reviews, and any other procedures required prior to, or concurrent with, the preparation of the Commission's environmental document required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(d) TRANSMISSION OF FINAL SCHEDULE.—

"(1) IN GENERAL.—For each application for a license, license amendment, or exemption under this part, the Commission shall establish a schedule in accordance with the rule issued by the Commission under subsection (c). The Commission shall publicly notice and transmit the final schedule to the applicant and each agency and Indian tribe identified under subsection (b)(2)(B).

"(2) RESPONSE.—Each agency and Indian tribe receiving a schedule under this subsection shall acknowledge receipt of such schedule in writing to the Commission within 30 days.

"(e) ADHERENCE TO SCHEDULE.—All applicants, other licensing participants, and agencies and tribes considering an aspect of an application for a Federal authorization shall meet the deadlines set forth in the schedule established pursuant to subsection (d)(1).

"(f) APPLICATION PROCESSING.—The Commission, Federal, State, and local government agencies, and Indian tribes may allow an applicant seeking a Federal authorization to fund a third-party contractor selected by such agency or tribe to assist in reviewing the application. All costs of an agency or tribe incurred pursuant to direct funding by the applicant, including all costs associated with the third party contractor, shall not be considered costs of the United States for the administration of this part under section 10(e).

"(g) COMMISSION RECOMMENDATION ON SCOPE OF ENVIRONMENTAL REVIEW.—For the purposes of coordinating Federal authorizations for each project, the Commission shall consult with and make a recommendation to agencies and Indian tribes receiving a schedule under subsection (d) on the scope of the environmental review

for all Federal authorizations for such project. Each Federal and State agency and Indian tribe shall give due consideration and may give deference to the Commission's recommendations, to the extent appropriate under Federal law.

"(h) EXTENSION OF DEADLINE.—

"(1) APPLICATION.—A Federal, State, or local government agency or Indian tribe that is unable to complete its disposition of a Federal authorization by the deadline set forth in the schedule established under subsection (d)(1) shall, not later than 30 days prior to such deadline, file for an extension with the Commission.

"(2) EXTENSION.—The Commission shall only grant an extension under paragraph (1) if the agency or tribe demonstrates, based on the record maintained under subsection (i), that complying with the schedule established under subsection (d)(1) would prevent the agency or tribe from complying with applicable Federal or State law. If the Commission grants the extension, the Commission shall set a reasonable schedule and deadline, that is not later than 90 days after the deadline set forth in the schedule established under subsection (d)(1), for the agency

or tribe to complete its disposition of the Federal authorization.

"(i) CONSOLIDATED RECORD.—The Commission shall, with the cooperation of Federal, State, and local government agencies and Indian tribes, maintain a complete consolidated record of all decisions made or actions taken by the Commission or by a Federal administrative agency or officer (or State or local government agency or officer or Indian tribe acting under delegated Federal authority) with respect to any Federal authorization. Such record shall constitute the record for judicial review under section 313(b).

"SEC. 35. TRIAL-TYPE HEARINGS.

"(a) DEFINITION OF COVERED MEASURE.—In this section, the term 'covered measure' means—

"(1) a condition determined to be necessary under section 4(e), including an alternative condition proposed under section 33(a);

"(2) fishways prescribed under section 18, including an alternative prescription proposed under section 33(b); or

"(3) any further condition pursuant to section 4(e), 6, or 18.

"(b) AUTHORIZATION OF TRIAL-TYPE HEARING.—The license applicant (including an applicant for a license

under section 15) and any party to the proceeding shall be entitled to a determination on the record, after opportunity for a trial-type hearing of not more than 120 days, on any disputed issues of material fact with respect to an applicable covered measure.

"(c) DEADLINE FOR REQUEST.—A request for a trial-type hearing under this section shall be submitted not later than 60 days after the date on which, as applicable—

"(1) the Secretary determines the condition necessary under section 4(e) or prescription under section 18; or

"(2)(A) the Commission publishes notice of the intention to use the reserved authority of the Commission to order a further condition under section 6; or

"(B) the Secretary exercises reserved authority under the license to prescribe, submit, or revise any condition to a license under the first proviso of section 4(e) or fishway prescribed under section 18, as appropriate.

"(d) NO REQUIREMENT TO EXHAUST.—By electing not to request a trial-type hearing under subsection (c), a license applicant and any other party to a license proceeding shall not be considered to have waived the right of the applicant or other party to raise any issue of fact

or law in a non-trial-type proceeding, but no issue may be raised for the first time on rehearing or judicial review of the license decision of the Commission.

"(e) ADMINISTRATIVE LAW JUDGE.—All disputed issues of material fact raised by a party in a request for a trial-type hearing submitted under subsection (c) shall be determined in a single trial-type hearing to be conducted by an Administrative Law Judge within the Office of Administrative Law Judges and Dispute Resolution of the Commission, in accordance with the Commission rules of practice and procedure under part 385 of title 18, Code of Federal Regulations (or successor regulations), and within the timeframe established by the Commission for each license proceeding (including a proceeding for a license under section 15) under section 34(c).

"(f) STAY.—The Administrative Law Judge may impose a stay of a trial-type hearing under this section for a period of not more than 120 days to facilitate settlement negotiations relating to resolving the disputed issues of material fact with respect to the covered measure.

"(g) DECISION OF THE ADMINISTRATIVE LAW JUDGE.—

"(1) CONTENTS.—The decision of the Administrative Law Judge shall contain—

"(A) findings of fact on all disputed issues of material fact;

"(B) conclusions of law necessary to make the findings of fact, including rulings on materiality and the admissibility of evidence; and

"(C) reasons for the findings and conclusions.

"(2) LIMITATION.—The decision of the Administrative Law Judge shall not contain conclusions as to whether—

"(A) any condition or prescription should be adopted, modified, or rejected; or

"(B) any alternative condition or prescription should be adopted, modified, or rejected.

"(3) FINALITY.—A decision of an Administrative Law Judge under this section with respect to a disputed issue of material fact shall not be subject to further administrative review.

"(4) SERVICE.—The Administrative Law Judge shall serve the decision on each party to the hearing and forward the complete record of the hearing to the Commission and the Secretary that proposed the original condition or prescription.

"(h) SECRETARIAL DETERMINATION.—

"(1) IN GENERAL.—Not later than 60 days after the date on which the Administrative Law Judge issues the decision under subsection (g) and in accordance with the schedule established by the Commission under section 34(e), the Secretary proposing a condition under section 4(e) or a prescription under section 18 shall file with the Commission a final determination to adopt, modify, or withdraw any condition or prescription that was the subject of a hearing under this section, based on the decision of the Administrative Law Judge.

"(2) RECORD OF DETERMINATION.—The final determination of the Secretary filed with the Commission shall identify the reasons for the decision and any considerations taken into account that were not part of, or inconsistent with, the findings of the Administrative Law Judge and shall be included in the consolidated record in section 34(i).

"(i) LICENSING DECISION OF THE COMMISSION.—Notwithstanding sections 4(e) and 18, if the Commission finds that the final condition or prescription of the Secretary is inconsistent with the purposes of this part or other applicable law, the Commission may seek resolution of the matter under section 34(b)(2)(D).

"(j) JUDICIAL REVIEW.—The decision of the Administrative Law Judge and the record of determination of the Secretary shall be included in the record of the applicable licensing proceeding and subject to judicial review of the final licensing decision of the Commission under section 313(b).

"SEC. 36. LICENSING STUDY IMPROVEMENTS.

"(a) IN GENERAL.—To facilitate the timely and efficient completion of the license proceedings under this part, the Commission shall, in consultation with applicable Federal and State agencies and interested members of the public—

"(1) compile current and accepted best practices in performing studies required in such license proceedings, including methodologies and the design of studies to assess the full range of environmental impacts of a project that reflect the most recent peer-reviewed science;

"(2) compile a comprehensive collection of studies and data accessible to the public that could be used to inform license proceedings under this part; and

"(3) encourage license applicants, agencies, and Indian tribes to develop and use, for the purpose of fostering timely and efficient consideration of license

applications, a limited number of open-source methodologies and tools applicable across a wide array of projects, including water balance models and streamflow analyses.

"(b) USE OF STUDIES.—To the extent practicable, the Commission and other Federal, State, and local government agencies and Indian tribes considering an aspect of an application for Federal authorization (as defined in section 34) shall use current, accepted science toward studies and data in support of their actions. Any participant in a proceeding with respect to a Federal authorization shall demonstrate a study requested by the party is not duplicative of current, existing studies that are applicable to the project.

"(c) BASIN-WIDE OR REGIONAL REVIEW.—The Commission shall establish a program to develop comprehensive plans, at the request of project applicants, on a regional or basin-wide scale, in consultation with the applicants, appropriate Federal agencies, and affected States, local governments, and Indian tribes, in basins or regions with respect to which there are more than one project or application for a project. Upon such a request, the Commission, in consultation with the applicants, such Federal agencies, and affected States, local governments, and Indian tribes, may conduct or commission regional or basin-

wide environmental studies, with the participation of at least 2 applicants. Any study conducted under this subsection shall apply only to a project with respect to which the applicant participates.

"SEC. 37. LICENSE AMENDMENT IMPROVEMENTS.

"(a) QUALIFYING PROJECT UPGRADES.—

"(1) IN GENERAL.—As provided in this section, the Commission may approve an application for an amendment to a license issued under this part for a qualifying project upgrade.

"(2) APPLICATION.—A licensee filing an application for an amendment to a project license under this section shall include in such application information sufficient to demonstrate that the proposed change to the project described in the application is a qualifying project upgrade.

"(3) INITIAL DETERMINATION.—Not later than 15 days after receipt of an application under paragraph (2), the Commission shall make an initial determination as to whether the proposed change to the project described in the application for a license amendment is a qualifying project upgrade. The Commission shall publish its initial determination and issue notice of the application filed under para-

graph (2). Such notice shall solicit public comment on the initial determination within 45 days.

"(4) PUBLIC COMMENT ON QUALIFYING CRITERIA.—The Commission shall accept public comment regarding whether a proposed license amendment is for a qualifying project upgrade for a period of 45 days beginning on the date of publication of a public notice described in paragraph (3), and shall—

"(A) if no entity contests whether the proposed license amendment is for a qualifying project upgrade during such comment period, immediately publish a notice stating that the initial determination has not been contested; or

"(B) if an entity contests whether the proposed license amendment is for a qualifying project upgrade during the comment period, issue a written determination in accordance with paragraph (5).

"(5) WRITTEN DETERMINATION.—If an entity contests whether the proposed license amendment is for a qualifying project upgrade during the comment period under paragraph (4), the Commission shall, not later than 30 days after the date of publication of the public notice of the initial determination

under paragraph (3), issue a written determination as to whether the proposed license amendment is for a qualifying project upgrade.

"(6) PUBLIC COMMENT ON AMENDMENT APPLICATION.—If no entity contests whether the proposed license amendment is for a qualifying project upgrade during the comment period under paragraph (4) or the Commission issues a written determination under paragraph (5) that a proposed license amendment is a qualifying project upgrade, the Commission shall—

"(A) during the 60-day period beginning on the date of publication of a notice under paragraph (4)(A) or the date on which the Commission issues the written determination under paragraph (5), as applicable, solicit comments from each Federal, State, and local government agency and Indian tribe considering an aspect of an application for Federal authorization (as defined in section 34) with respect to the proposed license amendment, as well as other interested agencies, Indian tribes, and members of the public; and

"(B) during the 90-day period beginning on the date of publication of a notice under

paragraph (4)(A) or the date on which the Commission issues the written determination under paragraph (5), as applicable, consult with—

"(i) appropriate Federal agencies and the State agency exercising administrative control over the fish and wildlife resources, and water quality and supply, of the State in which the qualifying project upgrade is located;

"(ii) any Federal department supervising any public lands or reservations occupied by the qualifying project upgrade; and

"(iii) any Indian tribe affected by the qualifying project upgrade.

"(7) FEDERAL AUTHORIZATIONS.—The schedule established by the Commission under section 34 for any project upgrade under this subsection shall require final disposition on all necessary Federal authorizations (as defined in section 34), other than final action by the Commission, by not later than 120 days after the date on which the Commission issues a notice under paragraph (4)(A) or a written determination under paragraph (5), as applicable.

"(8) COMMISSION ACTION.—Not later than 150 days after the date on which the Commission issues a notice under paragraph (4)(A) or a written determination under paragraph (5), as applicable, the Commission shall take final action on the license amendment application.

"(9) LICENSE AMENDMENT CONDITIONS.—Any condition included in or applicable to a license amendment approved under this subsection, including any condition or other requirement of a Federal authorization, shall be limited to those that are—

"(A) necessary to protect public safety; or

"(B) reasonable, economically feasible, and essential to prevent loss of or damage to, or to mitigate adverse effects on, fish and wildlife resources, water supply, and water quality that are directly caused by the construction and operation of the qualifying project upgrade, as compared to the environmental baseline existing at the time the Commission approves the application for the license amendment.

"(10) PROPOSED LICENSE AMENDMENTS THAT ARE NOT QUALIFYING PROJECT UPGRADES.—If the Commission determines under paragraph (3) or (5) that a proposed license amendment is not for a

qualifying project upgrade, the procedures under paragraphs (6) through (9) shall not apply to the application.

"(11) RULEMAKING.—Not later than 180 days after the date of enactment of this section, the Commission shall, after notice and opportunity for public comment, issue a rule to implement this subsection.

"(12) DEFINITIONS.—For purposes of this subsection:

"(A) QUALIFYING PROJECT UPGRADE.—The term 'qualifying project upgrade' means a change to a project licensed under this part that meets the qualifying criteria, as determined by the Commission.

"(B) QUALIFYING CRITERIA.—The term 'qualifying criteria' means, with respect to a project license under this part, a change to the project that—

"(i) if carried out, would be unlikely to adversely affect any species listed as threatened or endangered under the Endangered Species Act of 1973 or result in the destruction or adverse modification of critical habitat, as determined in consultation with the Secretary of the Interior or

Secretary of Commerce, as appropriate, in accordance with section 7 of the Endangered Species Act of 1973;

"(ii) is consistent with any applicable comprehensive plan under section 10(a)(2);

"(iii) includes only changes to project lands, waters, or operations that, in the judgment of the Commission, would result in only insignificant or minimal cumulative adverse environmental effects;

"(iv) would be unlikely to adversely affect water quality and water supply; and

"(v) proposes to implement—

"(I) capacity increases, efficiency improvements, or other enhancements to hydropower generation at the licensed project;

"(II) environmental protection, mitigation, or enhancement measures to benefit fish and wildlife resources or other natural and cultural resources; or

"(III) improvements to public recreation at the licensed project.

"(b) AMENDMENT APPROVAL PROCESSES.—

"(1) RULE.—Not later than 1 year after the date of enactment of this section, the Commission shall, after notice and opportunity for public comment, issue a rule establishing new standards and procedures for license amendment applications under this part. In issuing such rule, the Commission shall seek to develop the most efficient and expedient process, consultation, and review requirements, commensurate with the scope of different categories of proposed license amendments. Such rule shall account for differences in environmental effects across a wide range of categories of license amendment applications.

"(2) CAPACITY.—In issuing a rule under this subsection, the Commission shall take into consideration that a change in generating or hydraulic capacity may indicate the potential environmental effects of a proposed amendment but is not determinative of such effects.

"(3) PROCESS OPTIONS.—In issuing a rule under this subsection, the Commission shall take into consideration the range of process options available under the Commission's regulations for new and original license applications and adapt such op-

tions to amendment applications, where appropriate.".

SEC. 4. TECHNICAL AND CONFORMING AMENDMENTS.

(a) LICENSES.—Section 4(e) of the Federal Power Act (16 U.S.C. 797(e)) is amended—

(1) by striking "adequate protection and utilization of such reservation" and all that follows through "That no license affecting the navigable capacity" and inserting "adequate protection and utilization of such reservation: *Provided further,* That no license affecting the navigable capacity"; and

(2) by striking "deem" and inserting "determine".

(b) OPERATION OF NAVIGATION FACILITIES.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended by striking the second, third, and fourth sentences.

Edison Electric
INSTITUTE

Thomas R. Kuhn
President

May 2, 2017

The Honorable Fred Upton
Chairman, Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Upton and Ranking Member Rush:

On behalf of the Edison Electric Institute (EEI), the association that represents all U.S. investor-owned electric companies, I commend you for holding a hearing tomorrow on a Discussion Draft of the Hydropower Policy Modernization Act of 2017.

Hydropower is America's largest source of renewable energy, providing millions of Americans with reliable, clean baseload electricity. In addition, hydropower provides important features and services to the electric grid such as peaking generation, load-following, energy storage, and other reliability benefits.

In order to preserve and protect the existing hydropower system and promote new expansion opportunities, the current hydro relicensing process must be modernized to streamline and coordinate agency reviews, add accountability and transparency, eliminate inefficiencies and redundancies, ensure that license conditions are well founded and reasonable, and facilitate the deployment of low-impact new hydro and upgrades to existing projects.

The Discussion Draft, similar to language developed and passed by the House and Senate in the 114th Congress, represents a positive and significant first step towards achieving these goals. We appreciate your prompt scheduling of this hearing to examine the many issues related to hydropower policy reforms. The Discussion Draft can be further improved in several areas, including provisions related to mandatory conditions, deadline extensions, license terms, credit for early action, and trial-type hearings.

Once again, we thank you for your leadership and continuing focus on this critical issue. As the Subcommittee addresses hydropower reform again this Congress, we look forward to working with you and other Members to further improve the bill and achieve effective, bipartisan legislation.

Sincerely,

[redacted]

Thomas R. Kuhn
President

May 1, 2017

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

The Honorable Bobby Rush
Ranking Member, Subcommittee on Energy and Power
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton and Ranking Member Rush:

The Modesto Irrigation District (MID) and the Turlock Irrigation District (TID) of California write to express their appreciation for holding the May 3, legislative hearing on the *"Hydropower Policy Modernization Act of 2017"* discussion draft. MID and TID strongly support efforts by the Subcommittee to modernize and improve the hydropower licensing and relicensing process, as we are eight years and over $25 million into relicensing the 203 megawatt Don Pedro Hydropower Project on the Tuolumne River in the Central Valley of California.

MID and TID are currently working with project partners, resource agencies, Tribes, and conservation groups to move forward with an agreement to renew the Don Pedro hydropower license, which expired on April 30, 2016. The Districts started the process of relicensing in 2009, and to date we have conducted over 38 studies and a suite of models to inform the Federal Energy Regulatory Commission and relicensing participants on the conditions of the reservoir and the Tuolumne River. Because MID and TID are public agencies, the costs associated with the relicensing process and meeting any additional conditions imposed by a new license, will be borne by the communities we serve.

MID and TID commend the Subcommittee for holding this hearing. We support your efforts to promote hydropower as a renewable and economic resource, as well as efforts to streamline the process to allow applicants to move through the licensing/relicensing process in a more timely, efficient, and affordable manner.

We are hopeful the members of this Subcommittee will find a way to move forward with a balanced, bipartisan bill that will remove regulatory inefficiencies and impediments to licensing and relicensing of clean and reliable hydropower generation.

Sincerely,

[redacted]

Greg Salyer
General Manager
Modesto Irrigation District

[redacted]

Casey Hashimoto
General Manager
Turlock Irrigation District

SCPPA

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ANAHEIM • AZUSA • BANNING •
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PASADENA • RIVERSIDE • VERNON
IMPERIAL IRRIGATION DISTRICT

April 27, 2017

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

The Honorable Bobby Rush
Ranking Member
Subcommittee on Energy and Power
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton and Ranking Member Rush:

On behalf of Southern California Public Power Authority (SCPPA), a joint powers' agency, whose electric utility members collectively serve nearly five million people throughout Southern California, I write to commend you for holding the May 3 legislative hearing on *Discussion Draft H.R. ___*, the *Hydropower Policy Modernization Act of 2017."*

SCPPA has long supported modernization of the hydropower licensing process to allow applicants to move through the licensing/relicensing process in a more timely, efficient and affordable manner. Specifically, SCPPA supports provisions that would establish FERC as the coordinating agency for setting hydropower licensing schedules and accompanying study processes, and that would eliminate conflicting requirements, ensuring more timely decisions by regulators. These reforms also would speed the upgrading of power facilities, including the improvement of environmental protections and upgrade facilities more quickly than can be done today.

SCPPA believes improvement to hydropower licensing can be accomplished in a manner that preserves the existing system, promotes new development and also protect our fisheries, natural resources and environmental values.

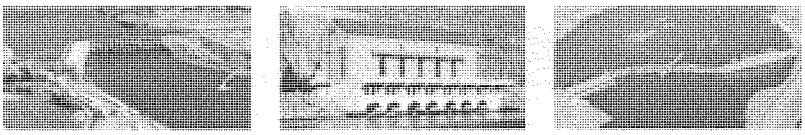
We are hopeful the members of this Committee will find a way to move forward with a balanced bipartisan bill that will remove regulatory inefficiencies and impediments to licensing and relicensing of clean and reliable hydropower generation.

Sincerely,

[redacted]

Michael S. Webster
Executive Director

c: Representative Raul Ruiz
Representative Mimi Waters
Representative Tony Cardenas



PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY
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May 2, 2017

Rep. Fred Upton, Chair
Energy Subcommittee
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

Rep. Bobby Rush, Ranking Member
Energy Subcommittee
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton and Ranking Member Rush:

Public Utility District No. 1 of Chelan County (Chelan PUD) is pleased that the Energy Subcommittee of the House Committee on Energy and Commerce is holding a hearing this week on legislation to address hydropower infrastructure modernization. According to the Committee website, eight hydropower bills will be considered. Chelan PUD appreciates this opportunity to comment specifically on the discussion draft of the Hydropower Policy Modernization Act of 2017.

Chelan PUD is a municipal corporation organized under the laws of the State of Washington and is authorized under Washington state law (RCW Title 54) to engage in the business of generating, transmitting, and distributing electric energy. The utility was formed in 1936 by local voters who wanted affordable power for rural as well as urban residents. Today, Chelan PUD operates three hydroelectric projects licensed by the Federal Energy Regulatory Commission (FERC). They generate approximately 10 million MWhs annually of clean, renewable, low-cost energy to 48,000 local customers and to other utilities that serve businesses and residents throughout the Pacific Northwest. Two of these projects, the Rocky Reach (P-2145) and Rock Island (P-943) hydroelectric projects, are located on the Columbia River. The third, the Lake Chelan Hydroelectric Project (P-637) is located on the Chelan River. Chelan PUD's generation mix is over 99 percent hydropower, with less than 1 percent wind associated with a long-term power purchase contract. Therefore, Chelan PUD has been keenly focused on the regulatory environment for hydropower.

Background

Chelan PUD received new licenses for the Lake Chelan and Rocky Reach hydroelectric projects in 2006 and 2009, respectively.

- For the 59-MW Lake Chelan Project, the relicensing process itself took about 9 years and cost $7 million. The package of protection, enhancement and mitigation measures proposed for the new 50-year license was approximately $51 million.

- For the 865 MW Rocky Reach Project, the relicensing process took about 11 years and cost approximately $16 million. The package of protection, mitigation and enhancement measures proposed for the new license totaled about $410 million. While Chelan PUD submitted its comprehensive settlement agreement with FERC before the original license expired in mid-2006, the project was put on annual licenses in 2007 and 2008 while awaiting a biological opinion for bull trout from the U.S Fish and Wildlife Service.

- The Rock Island Project license expires in 2028, and was previously licensed in 1989 and 1930.

In addition to the licensing process itself, Chelan PUD has significant experience in navigating other laws and regulations that affect the licensing process. In 2004, Chelan PUD entered into the first Habitat Conservation Plans (HCPs) for hydropower for the Rocky Reach and Rock Island projects[1] under section 10 of the Endangered Species Act (ESA). Under the HCPs, Chelan PUD committed to go above and beyond ESA requirements to reach 100% "no net impact" on salmon and steelhead migrating through the project area. By committing to the HCPs, Chelan PUD avoided a potentially prescriptive requirement from the federal National Marine Fisheries Service, which indicated in its final environmental assessment that without the HCPs, the preferred option would have been to require spill up to 40% of the daily average flow at the projects[2]. Instead, Chelan PUD was allowed the flexibility to pursue the methods it determined were the most effective for meeting the standard. For the Rocky Reach Project, this entailed installing a $110 million juvenile fish bypass system and reducing spill (as a passage method, the bypass system is much more effective than spill, due to the dam's unique Z-shape configuration).

As Chelan PUD worked with various federal and state agencies and tribes, at the local and national level, the Council on Environmental Quality was particularly helpful in facilitating a final agreement. When all of the administrative processes were complete, the HCPs became part of the FERC operating license for the Rocky Reach and Rock Island hydroelectric projects in 2004.

The HCPs and Licensing Policy

Chelan PUD's experience with the HCPs influenced how the utility viewed our upcoming relicensing processes, first for Rocky Reach and Lake Chelan. We supported Section 241 of the Energy Policy Act of 2005 (16 U.S. Code § 823d), which is intended to allow license applicants and others to propose alternatives to mandatory conditions and fishway prescriptions if the Secretary determined the alternative condition provided for the adequate protection and utilization of the reservation, or the alternative prescription was equally protective as the Secretary's condition or prescription. The alternative would also need to cost less and result in improved electricity production. For Chelan PUD, the potential to suggest alternatives, based on our intimate knowledge of our projects, represented the opportunity to replicate the successes of the HCP in the relicensing process. Our

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[1] Anadromous Fish Agreement and Habitat Conservation Plan, Rocky Reach Hydroelectric Project, FERC License No. 2145 and Rock Island Hydroelectric Project, FERC License No. 943. A third HCP covers the upstream Wells Hydroelectric Project, FERC No. 2149.

[2] Anadromous Fish Agreements and Habitat Conservation Plan, Final Environmental Impact Statement for the Wells, Rocky Reach, and Rock Island Hydroelectric Projects, National Marine Fisheries Service, December 2002

comments on the draft legislation (below) address problems with the implementation of Section 241, and how the draft bill could affirm these provisions.

Chelan PUD also viewed the HCP as a proactive step that prepared the utility for entering the relicensing process for the Rocky Reach Project. It was amended into the existing project license in 2004, only five years before the new license was issued. Unfortunately, in its order on rehearing[3], FERC declined to include the cost of the new juvenile fish bypass system when determining the length of the new license term. Without those costs, FERC found the license to constitute a "moderate" investment[4]. This finding affected the agency's decision to issue a 43-year license instead of a 50-year license. FERC ordered Chelan PUD to continue implementation of the HCP for purposes of ESA compliance, but remarked that when setting the length of the license term it "evaluates new measures to be included in the license, and does not consider requirements carried over from the prior license."

While the Rock Island Project license does not expire for more than a decade, Chelan PUD is already beginning to assess its path forward. Based on our experience with the Rocky Reach Project, one issue we are considering is how potential investments we may make in "early actions" could affect the length of a new license for the Rock Island Project. We believe that licensing policy should encourage early investments in hydropower projects, and that the timing of the investment should not put a licensee at risk for a shorter license term.

Our comments on the draft legislation (below) outline how Congress can address this problem, and incentivize "early action" for operational and environmental improvements.

Comments on the Hydropower Policy Modernization Act of 2017

The draft bill before the Subcommittee is poised to address some significant issues that could affect licensees like Chelan PUD. Chelan PUD will address several specific provisions.

- *License Term, Draft Page 4, lines 6 - 14*

This provision would require FERC, in determining the term of a license, to "consider project-related investment by the license over the term of the existing license (including any terms under annual licenses) that resulted in new development, construction, capacity, efficiency improvements, or environmental measures, but which did not result in the extension of the term of the license by the Commission."

Chelan PUD strongly supports this concept of the bill. Currently, FERC bases its license term decision on a number of factors, but largely on the measures that are imposed in the new license. Unfortunately, FERC has declined, as a matter of policy, to credit a licensee for making investments

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[3] *Pub. Util. Dist. No. 1 of Chelan County*, 126 FERC ¶ 61,138 at P 150, *order on reh'g*, 127 FERC ¶ 61,152 (2009).

[4] Section 15(e) of the FPA, 16 U.S.C. § 808(e), authorizes FERC to issue new hydropower licenses upon relicensing for terms between 30 and 50 years. In exercising its discretion, FERC's policy is "to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures." *Consumers Power Co.*, 68 FERC ¶ 61,077, at pp. 61,383-84 (1994).

and conducting improvements *prior* to entering the licensing process. This policy discourages early resolution of issues and encourages licensees to defer improvements until they can be submitted as part of a new license package. FERC's policy should be modernized by removing disincentives for early action, recognizing that hydropower projects are becoming better adapted to their respective waterways, and setting license terms that account for cumulative investment and ongoing stewardship. In November 2016, FERC issued a notice of inquiry (NOI) on whether to revisit how they establish license terms, but has taken no permanent action. A legislative change in this area would be valuable for creating long-term clarity.

While Chelan PUD supports this concept in the discussion draft bill, it recommends that the current language be strengthened. It is our understanding that further discussions at the end of last Congress resulted in a new version of this language, which would, among other things, ensure that FERC appropriately credits early investments by giving them the same or equivalent weight as similar measures proposed in a new license package - rather than merely considering them. In addition, the language could be improved by providing more description around the types of investments that may be considered eligible early action. We would be pleased to provide the Committee with specific suggestions, if requested.

- *Alternative Conditions and Prescriptions, Page 4, beginning line 15*

Section 241 of EPAct 2005 added section 33 to the Federal Power Act (16 U.S. Code § 823d). It allows license applicants or other stakeholders to propose an alternative condition when the Department imposes a requirement. The Secretary is required to accept the alternative condition if the Secretary determines that it provides for the adequate protection and utilization of the reservation and will either, as compared to the initial condition, cost significantly less to implement or result in improved operation of the project works for electricity production. The new section 33 of the FPA includes a similar provision allowing alternatives to any mandatory fishway prescribed under FPA section 18.

According to a Government Accountability Office report issued in 2010, no applicant alternatives have been accepted under this approach since enactment. Instead of accepting an alternative as required by EPAct section 241, agencies modify their original conditions. Moreover, in some instances agencies have avoided the opportunity for other parties to submit alternatives by using other authorities, such as a biological opinion under the Endangered Species Act, to impose license requirements.

Chelan PUD recommends that this section be modified to ensure that it applies to any instance in which a Secretary seeks to propose, modify, or exercise reserved authority to impose or modify a condition under section 4(e) or a prescription under section 18. This section should also apply to any requirement applicable to the project pursuant to any Federal authorization that is within the scope of a Secretary's 4(e) or 18 authorities.

- *Equal Consideration, Page 13, lines 3 - 12*

Section 241 of EPAct 2005 required agencies such as Interior to submit into the public record a written statement explaining the basis for their mandatory conditions and prescriptions, and any reasons for not accepting the alternatives. Moreover, the Secretary is to submit a written statement demonstrating

that the Secretary gave equal consideration to the effects of the condition or prescription adopted and alternatives not accepted on energy supply, distribution, cost, and use; flood control; navigation; water supply; and air quality (in addition to the preservation of other aspects of environmental quality).

Agencies have taken the position that the requirement for the Secretary to submit a written statement is restricted only to situations where an alternative condition or prescription is offered. This approach is contrary to the plain language of the statute, which requires the "equal consideration" statement whenever a condition or prescription is submitted by the agency. Therefore, this provision of EPAct 2005 has not helped identify the various trade-offs associated with the imposition of agency requirements.

Under Sec. 2 (f) of the draft bill, it appears that this balancing provision is inadvertently eliminated from existing law (this elimination occurs to the amendments to FPA section 33 on page 4, line 24-25, and on page 5, lines 1-3.) Chelan PUD recommends that the problem be remedied by moving the requirement to submit a written statement (whenever a Secretary imposes a mandatory condition or prescription) to the section on Consolidated Record.

- *Trial-Type Hearings, Page 13, beginning line 13*

Section 241 of EPAct 2005 established a trial-type hearing process for resolving disputed issues of material facts relied upon by agencies in support of their mandatory conditions and prescriptions (amends 16 U.S.C. 797(e) and 16 U.S.C. 811).

For several reasons, the trial-type hearings have not offered a meaningful opportunity for licensing participants to resolve key factual disputes in hydropower licensing. Chelan PUD recommends that this section of the draft bill be modified to indicate that trial-type hearings apply when an agency exercises reserved authority, or uses other federal authorizations to impose a condition or prescription within the scope of 4(e) or 18. Finally, it appears that the bill does not include an opportunity for discovery and cross-examination of witnesses – which exists under the current law. This provision should be repaired and standard trial practice followed.

- *Schedule Coordination and Process Improvements, Page 5, beginning line 8*

This section of the draft bill would establish FERC as the lead agency for purposes of coordinating all permits and other authorizations for hydropower project required under federal law and require other resource agencies to cooperate with FERC. It intends to improve schedule discipline by directing FERC to develop a schedule for completing its licensing process, as well as other authorizations required under federal law, and to consult with other resource agencies in developing the schedule.

Chelan PUD is supportive of the bill's attempt to better coordinate the licensing process. One issue remains unresolved – specifically, how decisions are made if agencies are late with their federal and state authorizations, beyond the extended deadline. The legislation should contemplate an avenue for dispute resolution. We believe there should be a single decision-maker, preferably within the White House (we would suggestion the Chair of the Council on Environmental Quality) to convene the relevant agencies and make a final decision.

Conclusion

Hydropower is the nation's premier renewable resource due to its economic and air quality value. Generally speaking, hydropower is the least-cost source of electricity generation and produces virtually no air emissions. As the nation relies increasingly on variable energy resources, there is a growing need for services that hydropower provides which maintain system reliability, such as capacity, storage, frequency reserves, operating reserves, contingency reserves, inertia and black start capability.

The public, therefore, has a vested interest in ensuring projects can be effectively licensed and relicensed. Federal licensing policy should be designed to preserve existing hydropower generation and flexibility, and to encourage upgrades and new facilities. Chelan PUD believes the draft Hydropower Policy Modernization Act of 2017, with suggested changes, will help improve the regulatory environment for hydropower.

Again, we appreciate the opportunity to provide input, and would be happy to answer any questions from the Subcommittee.

Sincerely,

Steve Wright
General Manager

Jordan Hydroelectric Limited Partnership

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Gatlinburg, TN
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April 28, 2017

Representative Morgan Griffith
United States House of Representatives
2202 Rayburn HOB
Washington, DC 20515

Dear Congressman Griffith:

In 2012, the Federal Energy Regulatory Commission ("FERC") granted Jordan Hydroelectric Limited Partnership ("Jordan") fifty-year licenses for two hydroelectric projects located in Virginia: Gathright Hydroelectric Project (FERC Project No. 12737) and Flannagan Hydroelectric Project (FERC Project No. 12740) (collectively "Projects"). Section 13 of the Federal Power Act requires licensees to commence construction of hydroelectric projects under license within four years of license issuance. Thus, the deadlines to commence construction for the Gathright and Flannagan Projects expired on March 2016 and January 2016, respectively. Congress, however, frequently authorizes FERC to grant retroactive extensions of this deadline and, if necessary, reinstate licenses when circumstances so warrant. Jordan seeks relief from Congress in order to extend the commencement of construction deadline and to ensure that the benefits of the Projects may be realized.

Summary of the Projects

Both Projects will be located on existing Army Corps of Engineers ("Corps") dams. Prior to issuing a license to the Projects, FERC examined potential environmental impacts of the Projects under the National Environmental Policy Act ("NEPA") and concluded that there were no significant impacts. This conclusion was described in the Environmental Assessment prepared by FERC for each project when the license was issued.

The Gathright Hydro Project will be built at the Corps' Gathright Dam in Alleghany County, Virginia near the Town of Falling Spring, about 5 miles from the West Virginia border. The Gathright Project has a capacity of 3.7 MW. The single generating unit will be placed in a pipe immediately upstream of the existing intake tower that controls the discharge from the lake. The new pipe placed against the tower will convey water from the lake through the turbine and into the river downstream. The annual generation should be about 18,000,000 kilowatt-hours, which is enough to supply about 1,800 homes annually.

The Flannagan Project will be built at the Corps' Flannagan Dam in Dickenson County, Virginia near the Town of Haysi, about 5 miles from the Kentucky border. The Flannagan Project will have a capacity of 1.8 MW. The two generating units will be placed inside the existing intake tower that controls the discharge from the lake. There are two existing pipes inside the tower that are not used, and they can be cut to insert the hydroelectric turbines. This will convey water from the lake through the turbines and into the river downstream. The annual generation should be about 8,000,000 kilowatt-hours, which is enough to supply about 800 homes annually.

Request for Congressional Action

Since license issuance for the two Projects, Jordan has diligently worked on project development by seeking power purchasers, arranging for interconnection with the local utility, designing the projects and providing that design to the Corps for review, and receiving equipment and construction bids to build the Projects. There is no opposition to the Projects, and with the exception of Corps approval, all regulatory licenses and permits have been obtained at this time. Further, the FERC licensing and NEPA processes concluded that the installation of the two Projects on the Corps facilities would pose no unacceptable environmental impacts. Despite Jordan's diligent efforts to develop these Projects, however, it has not been able to commence construction within the statutory deadline.

Jordan submits this request largely for two reasons. First, extensive post-licensing approvals and inquiries from the Corps require considerable time to address. Although the installation processes for the Projects will not alter Corps equipment or structures significantly, in order to ensure that any hydroelectric project proposed for development on Corps facilities does not conflict with the existing authorized purposes of the site, the Corps must review and approve the proposed development as a part of its Section 408 authorization process. The Corps' Section 408 authorization process is designed to protect the federal investment in the Corps facility as well as to ensure that the hydroelectric project poses minimal to no impact on the existing operations of the facility. Further and most importantly, the Corps is responsible for ensuring dam and life safety. With these important objectives, the Corps must work to obtain conclusive evidence of the safety of any proposed hydroelectric project to be constructed on its facilities, including the Gathright and Flannagan Projects. This type of review and coordination is, by its nature, time-intensive. Unfortunately, the Corps' Section 408 authorization process does not commence until after a FERC license is issued.[1]

Jordan has expended a considerable amount of time (1) negotiating with the Corps over access agreements in order to prepare detailed design specifications and (2) discussing technical issues concerning design and operation of the proposed Projects. The consultation and review necessary for the Corps to approve parts of the Project has consumed much of the time allotted to commence construction. Though much of the project development is at a standstill at the present time due to the expiration of the Projects' commencement of construction deadlines, this review is still ongoing. With the additional time and certainty of an extension of the commencement of construction deadline, Jordan will be able to design projects that will meet with Corps approval.

Second, Jordan has been unable to proceed with construction because currently the price for which the power can be sold is not sufficient to support construction. With an abundance of natural gas presently pushing the cost of power downward, Jordan has experienced difficulty in obtaining a power purchase agreement in the present financial environment. The Gathright and Flannagan Projects are no exception. With the growing realization of the importance on obtaining power from renewable resources (both from load-serving utilities and from retail electric consumers), however,

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[1] In fact, on July 21, 2016, FERC and the Corps executed a Memorandum of Understanding to facilitate the development of hydropower at Corps facilities by synchronizing each agency's licensing and permitting process. *See* Press Release, *FERC, U.S. Army Corps of Engineers Sign MOU on Hydropower Development* (July 21, 2016).

Jordan is convinced that, with additional time, we will be able to find a power buyer that will make the project economical.

Jordan seeks a statutory solution that would authorize FERC to extend the commencement of construction deadline retroactively for the Gathright Project beyond March 2016 and for the Flannagan Project beyond January 2016. The solution that Jordan seeks is not unique. Congress has passed numerous other laws that accomplish the same objective. In fact, there are currently several other bills before the House, for other FERC-licensed hydroelectric projects, that seek precisely the same statutory relief. Jordan and its related companies have received three similar extensions to begin construction in the past; of those three projects one is generating and the other two will be generating within 2 years. These three projects total 159 MW in capacity. These projects probably would not have been built without the extensions received.

Importantly, the statutory language commonly used for this relief does not automatically extend the commencement of construction deadline but authorizes FERC to do so as long as additional extensions are within the public interest and the project developer continues to demonstrate that it is diligently working toward construction. Therefore, FERC will continue to exert oversight authority over development of the two Projects. In addition, FERC itself does not oppose this statutory relief. FERC Chairs have adopted a long-standing policy of not opposing legislation that authorizes FERC to extend the commencement of construction deadline so long as that legislation does not extend the deadline beyond ten years from the issuance date.[2] This commonly used statutory language is consistent with that policy because it would authorize FERC to grant three two-year extensions for a total of ten years, two under Section 13 of the Federal Power Act and an additional six under these three two-year extensions.

Further, Jordan's request is consistent with recent congressional action intended to spur hydropower development at Corps facilities. In the Water Resources Reform and Development Act of 2014, Congress declared it a national policy that "the development of non-Federal hydroelectric power at Corps of Engineers civil works projects, including locks and dams, shall be given priority."[3] Moreover, in unanimously passing the Hydropower Regulatory Efficiency Act the prior year, Congress found that "only 3 percent of the 80,000 dams in the United States generate electricity, so there is substantial potential for adding hydropower generation to nonpowered dams."[4] In that legislation, Congress also cited a study in finding that, "by utilizing currently untapped resources, the United States could add approximately 60,000 megawatts of new hydropower capacity by 2025, which could create 700,000 new jobs over the next 13 years."

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2 *See S. Amdt. 579 and H.R. 316, the Collinsville Renewable Energy Promotion Act Before the Subcomm. on Water and Power of the S. Comm. on Energy and Natural Res.*, 113th Cong. (2013) (testimony of John Katz, Deputy Assoc. Gen. Counsel, FERC); *Hearing on H.R. 2080, H.R. 2081, H.R. 3447, Bill Regarding Jennings Randolph Project No. 12715, Bill Regarding Cannonsville Project No. 13287, and H.R. 3021 Before the Subcomm. On Energy and Power of the H. Comm. On Energy and Commerce*, 114th Cong. (2016) (testimony of Ann Miles, Dir. of Energy Projects, FERC).

3 Water Resources Reform and Development Act, Pub. L. No. 113-121, 128 Stat. 1193, 1215 (2014).

4 Hydropower Regulatory Efficiency Act, Pub. L. No. 113-23, 127 Stat. 493, 493 (2013).

Conclusion

In the 115th Congress, you introduced HR4411 and HR4412—legislation that precisely mirrors HR446 and HR447 that you have introduced in this Congress—that would have granted FERC the authority to extend the commencement of construction deadlines for the Projects. Those two bills passed the House Energy and Commerce Committee and the House itself and were included in the comprehensive energy bills (S.2012 and the House Amendment to S.2012) that went to conference in the 115th Congress. Though Jordan understands that these bills (or the larger comprehensive energy bills to which they were attached) were not able to clear the procedural hurdles to be passed into law in 2016, Jordan appreciates your prior support of its efforts to develop these Projects and sincerely hopes that project-specific legislation can be advanced through this Congress.

The construction of these Projects will provide jobs to an area that is in need of additional opportunities. Construction at the site of the Gathright Project should take about 2 years and employ 20 to 35 workers. The total cost of the Gathright Project will be $8 to $11 million. At a total cost of approximately $2 million, construction at the Flannagan Project site take about 18 months and employ 15 to 25 workers.

In addition to realizing economic and reliability benefits, completion of the Project would provide Virginians a renewable energy resource. This clean energy will directly displace electricity that is now provided by fossil fuels. Moreover, because the Projects will operate in "run-of-river" mode, the Projects will not affect existing flows that the Corps will release from its own facilities. In short, the Projects will convert the Corps' current flow releases, which currently constitute wasted energy, into clean electricity that is capable of supplying clean, renewable energy to approximately 2,600 homes annually. Further, the environmental impact of these Projects has been closely examined by FERC in its NEPA process.

Jordan appreciates the leadership you have demonstrated in championing an "all of the above" energy policy that includes renewable energy development, including by private interests such as Jordan, as well as your introduction of HR446 and HR447 in support of these Projects. Jordan looks forward to working with you and your staff to secure the time and certainty that would be afforded by a statutory solution to the project development hurdle that Jordan now encounters. With your assistance, we can clear this hurdle to ensure that the benefits of the Gathright and Flannagan Projects are realized for the people of the 9th District of Virginia.

Sincerely,

[redacted]

James Price
President
Jordan Hydroelectric Limited Partnership

Administration
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Pulaski County
Where There Is Room to Grow
In Virginia's New River Valley!

May 1, 2017

The Honorable Morgan Griffith
Member of Congress
2202 Rayburn HOB
Washington, D.C. 20515

RE: SHORE Act Letter of Support

Dear Congressman Griffith,

On behalf of the citizens of Pulaski County, Virginia, please allow this letter to demonstrate support for the SHORE Act (H.R. 1538) that you introduced during the 115th Congress. As you may know, Pulaski County citizens have expressed concerns regarding the preservation of private property rights at Claytor Lake, which is managed by Appalachian Power under a license from FERC. The SHORE Act's intent to ensure private property rights and land use are considered by FERC when making regulatory decisions is precisely the type of legislation needed to address concerns being voiced by Pulaski County residents. While Pulaski County and Appalachian Power have a long cooperative partnership at Claytor Lake, having legislation in place that helps protect private property values is critical to long-term economic growth of the County.

The Pulaski County Board of Supervisors appreciates your continued support of initiatives that improve the quality of life for citizens of Pulaski County! Please feel free to contact me at 540-980-7705 if you have any questions or would like any additional information.

Sincerely,

[redacted]

Jonathan D. Sweet, ICMA-CM
County Administrator

CC Pulaski County Board of Supervisors

May 2, 2017

The Honorable Fred Upton
Chairman
Subcommittee on Energy
Washington, DC 20510

The Honorable Bobby Rush
Ranking Member
Subcommittee on Energy
Washington, DC 20510

Dear Chairman Upton and Ranking Member Rush:

On behalf of the National Electrical Contractors Association (NECA), I am writing in strong support of pending energy legislation being considering by the Energy and Commerce Committee. NECA urges Members of the committee to pass these critical pieces of legislation, especially **H.R. ___, Hydropower Policy Modernization Act of 2017** and **H.R. ___, Promoting Cross-Border Energy Infrastructure Act.**

These long-term energy policy measures focus on the transmission, distribution, storage of energy, and federal permitting process to ensure we have the necessary infrastructure to meet today's modern energy challenges and will bring our nation's energy policies into the 21st century.

NECA is the nationally recognized voice of the $130 billion electrical construction industry that brings power, light, and communication technology to buildings and communities across the U.S. NECA's national office and its 119 local chapters are dedicated to enhancing the industry through continuing education, labor relations, safety codes, standards development, and government relations. NECA is committed to advocating for a comprehensive energy policy that addresses all available opportunities for energy exploration and independence.

The benefits of energy legislation are clear: job creation, energy security, energy independence, and economic growth. We urge the committee to move this critical legislation forward to a full committee vote as soon as possible.

Sincerely,

[redacted]

Marco A. Giamberardino, MPA
Executive Director
Government Affairs

National Electrical Contractors Association
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PUBLIC UTILITY DISTRICT NO. 1 OF OKANOGAN COUNTY

May 3, 2017

Chairman Fred Upton
Ranking Member Bobby Rush
Subcommittee on Energy
House Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, D.C. 20515

Chairman Upton and Representative Rush:

In 2013, the Federal Energy Regulatory Commission ("FERC") granted the Public Utility District No. 1 of Okanogan County ("the District") an original license for the Enloe Dam Hydroelectric Project (FERC Project No. 12569) ("Enloe Project") to be located at the existing Enloe Dam, situated in a narrow constriction of the Similkameen River Valley, about 3.5 miles northwest of the City of Oroville. Section 13 of the Federal Power Act requires licensees to commence construction of hydroelectric projects within four years of license issuance, and therefore the District faces a July 9, 2017 deadline to commence construction on the Enloe Project. Development of the Enloe Project has experienced setbacks, discussed below, that have complicated the District's ability to meet this deadline. For this reason, consistent with prior Congressional actions in similar circumstances, the District is requesting support from Congress to extend the commencement of construction deadline and to ensure that the benefits of the Enloe Project may be realized.

Summary of the Enloe Project

The Enloe Dam was constructed in 1920 on Bureau of Land Management ("BLM") lands for power generation and was initially licensed by the Federal Power Commission, predecessor of FERC. The District acquired the Enloe Project in 1945, but the Enloe Project ceased operation in 1958 when the extension of Bonneville Power Administration's high voltage transmission line into the Okanogan Valley provided a less expensive source of power. Under the current FERC license, the District will relocate the site for hydropower development to the opposite bank, which offers both environmental and construction advantages. The proposed 9 MW facility has a footprint that is about half the size of the existing facilities, while providing nearly three times the generating capacity of the existing decommissioned plant. The Enloe Project will utilize the existing dam and construct the remaining project features.

Project Development Efforts

Since issuance of the license, the District has worked diligently toward developing, and taken the necessary steps toward commencing construction of, the Enloe Project. To date, the District has submitted twelve project-specific drawings and management plans required by the FERC license. These management plans encompass a variety of subject matters, including, among others, (1) dam and public safety, (2) historic preservation, (3) recreation, (4) wildlife protection, and (5) protection of a threatened form of vegetation. All have been approved by FERC. In addition, pursuant to a license requirement, the District removed a deteriorated building located within the project boundary, and the Commission issued a letter confirming the District's compliance with this requirement. Therefore, the District has been diligently fulfilling pre-construction requirements imposed by the FERC license.

Despite the District's diligent efforts to develop the Enloe Project, it has not been able to commence construction within the statutory deadline. Concurrent with the District's diligent preparation of the requisite plans, it faced legal challenges to its water rights. Resolving the issue of the District's water rights proved particularly time- and resource-intensive. This challenge worked its way through the administrative process before both the Washington State Department of Ecology and the Washington Pollution Control Hearing Board, as well as the state Superior Court and the Court of Appeals. The District is pleased to report that the litigation has terminated with a favorable ruling in the court of appeals in October 2016. Despite this legal victory, the litigation demands and a variety of conflicting internal and budgetary constraints required the District to defer proceeding with construction-related license requirements.

With the water rights litigation concluded in October 2016, the District immediately proceeded with the identification of a design and construction firm to take on the work of constructing the Enloe Project. Okanogan commenced this work by applying to the state agency charged with reviewing alternative public works contracting procedures to obtain approval to employ a design-build contracting model. The District determined that the design-build contracting model would be the most efficient and cost-effective contracting method because, among other benefits, it offers greater innovation and efficiencies through value engineering executed by the design engineer, generating equipment supplier and construction contractor working as a team. Having obtained approval for use of the design-build model, the District issued a request for proposals ("RFP") and is currently evaluating responses.

As demonstrated above, the District has proceeded with diligence in pursuing the Enloe Project and looks forward to selecting a firm through the RFP process to advance the District's project development efforts to date.

Request for Congressional Action

Following the protracted litigation over the District's water rights, the District now seeks a statutory solution that would authorize FERC to extend the commencement of construction deadline for the Enloe Project in order to accommodate the District's development constraints. The relief the District is seeking is fairly common among FERC licensees. Our research indicates that, since the 104th Congress, 33 similar bills extending the commencement of construction deadline for specific projects have been signed into law. The language has become nearly *pro forma* over the many years that such project-specific commencement of construction

deadline extensions have been introduced into and passed by Congress. This *pro forma* legislation has two clauses. The first clause authorizes FERC to extend a commencement of construction deadline for an additional six years, in three two-year increments. The second clause directs that, if the period for commencing construction has expired prior to the bill's enactment, FERC is to reinstate the license.

In reviewing the current legislation before the Subcommittee at its May 3rd, 2017 hearing, the District notes that the discussion draft entitled "Hydropower Policy Modernization Act" would amend Section 13 of the Federal Power Act to provide FERC the authority to grant a licensee up to a total of ten, rather than a mere four, years to commence construction. As the District understands, this discussion draft would still require that FERC grant such extensions only when in the public interest, consistent with the existing provisions of Section 13. In short, the discussion draft would closely follow the intent of the first clause in the *pro forma* project-specific legislation.

The District supports this discussion draft because it will reduce the burden on a FERC licensee that is incapable of commencing construction within four years, such as the District, of seeking project-specific legislation that will allow it to continue its pursuit of its FERC-licensed hydropower project. The District, however, understands that many bills introduced in the prior 115th Congress were unable to clear the procedural hurdles required for enactment despite being appended to the comprehensive energy package that emerged from both Houses of Congress—specifically S.2012 and the House Amendment to S.2012. For that reason, the District believes that, in recognition of those licensees as well as other licensees whose commencement of construction deadlines are set to expire within the coming months, the discussion draft of the "Hydropower Policy Modernization Act" should be amended to include a reinstatement provision similar to the following:

> If the period required for commencement of construction of any Commission-licensed project has expired within the past five years of the date of the enactment of this Act, the Commission may reinstate the license effective as of the date of its expiration and extend the time limit for commencement of construction in two-year increments, as described above, so long as the time period for commencement of construction does not exceed 10 years.

The discussion draft would, therefore, more closely mirror the *pro forma* project-specific legislation by including a second reinstatement provision.

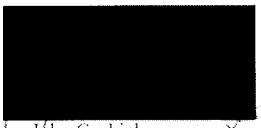
The District enjoys the strong support of Congressman Newhouse, with whom the District is working to develop a project-specific bill applicable to the Enloe Project. Nevertheless, providing FERC with the authority to reinstate the license of any licensee that was unable to satisfy the existing four-year commencement of construction deadline within some definite period of time—five years in the proposed language above—will afford a level of certainty to those existing licensees whose project-specific bills were not enacted in the prior Congress due to the failure to pass a consensus energy policy bill.

Conclusion

The District's request for Congressional action, which would afford it additional time to pursue the Enloe Project, is consistent with recent Congressional action evidencing an intent to spur hydropower development at existing non-powered dams. In unanimously passing the Hydropower Regulatory Efficiency Act of 2013 ("HREA"), Congress found that "only 3 percent of the 80,000 dams in the United States generate electricity, so there is substantial potential for adding hydropower generation to nonpowered dams" (Pub. L. No. 113-23, 127 Stat. 493, 493). Congress also found that, "by utilizing currently untapped resources, the United States could add approximately 60,000 megawatts of new hydropower capacity by 2025, which could create 700,000 new jobs over the next 13 years." The Enloe Project would electrify an existing BLM dam and thus is precisely the type of low-hanging fruit that Congress intended to incentivize with passage of the HREA.

Pursuit of the Enloe Project makes economic and environmental sense. In addition to the fact that construction of the Project will provide much-needed employment opportunities to an area with an unemployment rate that far exceeds the national average, completion of the Enloe Project will provide Washingtonians and their neighbors in the region a clean, renewable energy resource, generating about 45,000 MWh per year of renewable, carbon-free power, an equivalent to 14 wind turbines. Further, because the Enloe Project will be located at the site of an existing dam, it will convert the currently untapped energy in existing flow releases into clean renewable electricity.

The District appreciates the Subcommittee's efforts to reduce regulatory burdens that FERC applicants face in obtaining a Federal Power Act license to construct, operate, and maintain a hydroelectric facility. The District looks forward to any opportunity it has to discuss the benefits of the Enloe Dam Hydroelectric Project. Please do not hesitate to contact me if you have any questions about the Enloe Project.



John Grubich
General Manager
Okanogan Public Utility District #1

AMERICAN PUBLIC POWER ASSOCIATION
Powering Strong Communities

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May 3, 2017

The Honorable Fred Upton
Chairman, House Energy Subcommittee
2183 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby Rush
Ranking Member, House Energy Subcommittee
2188 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton and Ranking Member Rush:

On behalf of the American Public Power Association (APPA or Association), I am writing to express our support for the Subcommittee on Energy holding a legislative hearing on various hydropower and pipeline process coordination bills. APPA is the national service organization representing the interests of over 2,000 community-owned, not-for-profit electric utilities. These utilities include state public power agencies, municipal electric utilities, and special utility districts that provide low-cost, reliable electricity and other services to over 49 million Americans.

Public power utilities have led in hydropower development in recent years. Today, one hundred public power utilities have Federal Energy Regulatory Commission (FERC or Commission)-licensed hydropower facilities. Making full use of the nation's hydropower resources is key to ensuring that the nation's grid remains reliable and resilient, and that utilities can meet emission reduction goals. Hydropower is a source of emissions-free, base-load power. Moreover, hydropower's "black start" capability makes it highly valuable through the lens of concerns about cyber and physical security; in instances of outages or disruptions to the grid, hydropower units can cycle back on quickly and become a backbone of full power restoration.

There is a significant potential for new hydropower to be generated at non-powered dams throughout the country, as well as for hydropower output to be dramatically increased in existing hydropower facilities and at water distribution conduits/canals. But there are excessive barriers to tapping this potential.

The Association appreciates the subcommittee recognizing the importance of hydropower as an important source of renewable power and holding today's hearing to examine hydropower infrastructure modernization. The Hydropower Policy Modernization Act of 2017 discussion draft incorporates much of the language developed in the House and Senate energy bills from the 114th Congress that APPA supported.

In addition, APPA appreciates the subcommittee's examination of the Promoting Interagency Coordination for Review of Natural Gas Pipelines Act. This discussion draft is similar to language in Section 1101 of H.R. 8, the North American Energy Security and Infrastructure Act, that was passed by the House of Representatives in the 114th Congress. Given many public power utilities have built or plan to build new natural gas plants for either baseload power or to back up intermittent renewable generation, it is important they have access to interstate natural gas pipelines. The discussion draft language would help expedite the permitting of interstate natural gas pipelines by reinforcing the Commission's role as the lead agency for siting and requiring cooperating agencies to conduct environmental reviews concurrently.

We look forward to working with the subcommittee on these important bills and thank you for your leadership on essential hydropower and pipeline permitting reform.

Sincerely,

[redacted]

Susan N. Kelly
President & CEO
SNK/DW

WRITTEN TESTIMONY OF KEVIN COLBURN ON BEHALF OF AMERICAN WHITEWATER
UNITED STATES HOUSE OF REPRESENTATIVES
THE ENERGY AND COMMERCE COMMITTEE
ENERGY SUBCOMMITTEE
HEARING ON "MODERNIZING ENERGY INFRASTRUCTURE: CHALLENGES AND OPPORTUNITIES TO EXPANDING HYDROPOWER GENERATION"
CONGRESSMAN FRED UPTON, CHAIRMAN
HEARING ON MARCH 15, 2017

TESTIMONY SUBMITTED BY KEVIN COLBURN
NATIONAL STEWARDSHIP DIRECTOR, AMERICAN WHITEWATER
629 WEST MAIN ST, SYLVA, NC 28779

Chairman Upton, Ranking Member Rush, and Members of the Subcommittee:

American Whitewater appreciates having the opportunity to provide written testimony in relation to the March 15th Committee hearing on challenges and opportunities in expanding hydropower generation.

American Whitewater is a national 501(c)(3) non-profit organization with a mission "to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely." With approximately 6,000 members and 100 affiliate clubs, we represent the conservation interests of tens of thousands of whitewater enthusiasts across the country. Since the early 1990's, we have actively participated in the FERC hydropower licensing and relicensing process on well over 100 dams. Through the Federal Power Act, our efforts have brought life back to rivers that had been severely impacted by hydropower for decades. In our work, we strive to balance society's need for power with what flowing rivers also do for fish, wildlife and our communities. As these rivers have been restored, so have local economies that depend on outdoor recreation, including paddlesports, fishing, and other river-dependent recreation.

The Hydropower Relicensing Process Offers Opportunities For Rural Communities to Reclaim Rivers.

Hydropower dams have dried up river beds that provide fishing and boating opportunities for local residents and visitors, inundated towns and farmlands under reservoirs, and blocked the migration of fish–including many species that provide economic and cultural value for local and regional communities. Many rural communities still suffer from these enduring losses today. Through the federal hydropower relicensing process of the Federal Energy Regulatory Commission (FERC), American Whitewater has worked as a public interest advocate to restore water and economic opportunities to communities across the country. We highlight several of our success stories below.

The Cheoah River was dewatered by Santeetlah Dam for 77 years before it roared back to life in 2005. We successfully advocated for 20 annual high flows and year-round base flows which together mimic key components of natural river while continuing to allow for ample power generation. These releases have become a recreational treasure in Graham County, which is one of the poorest counties in North Carolina. Anglers are reporting high quality smallmouth bass fishing, and last month an estimated 600 paddlers descended the river during a single scheduled release. Graham County recently passed a resolution in favor of additional recreational dam releases on the Cheoah, an outcome that is possible and envisioned in the FERC license. These transformative benefits for the communities around the river were apparently not overly burdensome on the Licensee, who sold the newly licensed project (the Tapoco Project, which includes four dams) in 2012, reportedly for $600 million dollars.[1]

Nearby, power generation releases on North Carolina's Nantahala and Tuckasegee rivers are scheduled in advance to allow for profitable power generation as well as predictable rafting, canoeing, and kayaking. These releases support a large number of tourism related jobs in this rural Appalachian region, and are the result of collaboratively developed licenses that American Whitewater helped craft. A 2009 study found that the largest and one of many rafting outfitters in the area, the Nantahala Outdoor Center, created and maintains 579 jobs and contributed a total of $48,073,691 to the local economy in 2008.[2]

In the early part of the 20th century, the Feather River in California was known as a world-class trout fishery until a series of dams either inundated or dewatered the river for much of its length. American Whitewater engaged in the relicensing process and was successful at securing new flows in several reaches that restore vital ecological functions to the river. The result has been a 30% increase in flows, better fishing, and popular kayaking and rafting opportunities, with only a modest 6% reduction in power production.

These examples illustrate that the modern relicensing process is capable of producing outcomes that allow for power generation while restoring ecological, recreational, and economic values with direct benefit to local communities. It would be an overstatement, however, to say that these rivers are flourishing. They remain severely impacted by the enormous footprint of the projects and their ongoing operations. They are working rivers with chronic problems, but the relicensing process has required the power companies to share the rivers with their neighboring communities, with many species that call these rivers home, and with the public who owns the river. That well-reasoned reallocation of a fraction of the river's water, which the relicensing process has facilitated, has indeed had profound benefits on rural and natural communities alike with corresponding positive economic benefits.

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[1] http://www.thedailytimes.com/news/alcoa-closes-dam-sale-tapoco-now-brookfield-smoky-mountain-hydropower/article_90c65b1b-17f2-53cc-846f-03a2a541a6a1.html

[2] http://datalibrary.nemac.org/swnc/sites/default/files/2009%20Nantahala%20Gorge%20Economic%20Impact%20Study.pdf

Hydropower is a Mature, Built-Out Energy Source, and is Appropriately Challenged By Free Market Competition From Young Energy Sources That Have Ample Room To Grow.

Generating electricity from hydropower is a more than century-old technology that has already been employed and operational at an enormous scale; the vast majority of potential sites have already been developed. We contrast this development with wind, solar, and advances in batteries and energy efficiency, that are each in their relative infancy and growing rapidly. In 2016 alone, more than 14 GW of new solar power and 8 GW of wind power was brought online in the United States.[3] In contrast, the Department of Energy estimates new hydropower potential over *the next 34 years* totals between 5.2 GW under a "business as usual scenario," and 12.8 GW with advances in technology and low cost financing.[4] (Note that these figures do not include pumped storage that can be used for energy storage and is sometimes included in estimates of future hydropower potential.) Simply put, it will take creative action and 34 years for additional hydropower generation to compete with what wind or solar added to the grid last year alone.

Hydropower already plays a significant role in our energy system and we anticipate that it will continue to do so for many years to come. As the Hydropower Vision Report outlines, it is unlikely that hydropower will grow significantly, especially relative to wind, solar, and associated battery storage systems. Instead of providing baseload generation, hydropower's value in the future will be one of helping to regulate the grid as these renewables continue to grow. In fact, it is reasonable to assume that these changes will leave some hydropower projects unprofitable and lead to removal. The future may well involve fewer hydropower projects, with those that remain being more efficient and effective at meeting the needs of the grid.

The Only Appropriate Opportunity For Expanding Hydropower Generation is at Existing Dams.

The Department of Energy's Hydropower Vision Report specifies that there is no potential for additional generation from new stream development under current circumstances, and potential for just 1.7 GW between now and 2050 if technological advances are realized and low-cost financing is in place. Instead of developing new projects, the future of expanding hydropower generation lies within upgrading existing projects and retrofitting non-powered dams. We support this effort if it is done in a responsible manner that protects public trust resources.

As mentioned above, the Department of Energy estimates that 5.2 GW of new hydropower capacity can be added through such upgrades and installations over the next 34 years.[5] While

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[3] Solar Energy Industries Association. (n.d.) *Solar Market Insight Report 2016 Year in Review.* http://www.seia.org/research-resources/solar-market-insight-report-2016-year-review (last visited March 12, 2017); and American Wind Energy Association. (n.d.) *U.S. Wind Industry Fourth Quarter 2016 Market Update.* Available at: http://awea.files.cms-plus.com/FileDownloads/pdfs/4Q2016%20Fact%20Sheet.pdf (last visited March 12, 2017).

[4] U.S. Department of Energy, Wind and Water Power Technologies Office. *Hydropower Vision Report.* July 2016. P. 18. Available at: http://energy.gov/eere/water/articles/hydropower-vision-new-chapter-america-s-1st-renewable-electricity-source (last visited March 12, 2017).

[5] *Hydropower Vision Report* at 18. See also "business as usual" alternative, Table ES-2.

by no means a game-changing figure, this capacity is low hanging fruit. We have supported projects that fit this category, including the major capacity increase at Holtwood Dam on the Susquehanna River in Pennsylvania and numerous smaller projects.

During the hearing, there was discussion that it was potentially possible to add hydropower capabilities to at least half of the 80,000 existing dams without hydropower. While the Department of Energy's 2016 Hydropower Vision Report estimates that potential exists to add hydropower to over 50,000 non-powered dams in the U.S., it is not practical to do so at the majority of these projects. The Report wisely places a filter on this number for projects that have a minimum capacity of 500 kW, reducing the number of non-powered dams where it is practical to add hydropower capabilities to just 671 dams.[6]

Constructing new dams does not make sense in this era of rapid market changes. We support improving efficiencies at existing hydropower projects and adding hydropower capabilities to non-powered dams in large part because of the profound cumulative impacts that over a century of rampant private hydropower development have had on our public rivers. Our dammed, working rivers are already severely impaired, and our remaining free-flowing rivers are rare and more important than ever as biological strongholds and recreational destinations.

The Importance of Collaboration Among Stakeholders and State and Federal Resource Agencies.

FERC's Integrated Licensing Process appropriately contains involvement from tribal, state and federal agencies with expertise in energy, fish and wildlife, water quality, recreation and cultural values. In our experience, good outcomes like those described above happen when the licensee works collaboratively with all stakeholders throughout the entire process. This includes ensuring that there is robust, scientifically sound data early in the process about the project and the river, and a willingness to mitigate the Project's impacts. When collaboration does not happen disagreements and intransigence lead to delays, administrative challenges, and occasionally litigation, which is expensive and time consuming. We reference David Steindorf's testimony on behalf of the Hydropower Reform Coalition for suggestions to ensure that the process is a collaborative one.[7]

Legislators proposed hydropower legislation in the last session of Congress (H.R. 8) that would have shifted responsibility for all of these areas to FERC. During the hearing questions arose about whether this should be pursued again. Our answer is no. Aside from licensing hydropower projects, FERC is an independent agency responsible for regulating the interstate transmission of electricity, natural gas and oil. By design, it does not have sufficient expertise relevant to rivers. This is the mandate given to other agencies, including the U.S. Forest Service, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, and state and tribal water quality agencies.

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[6] *Id.* at 252.
[7] http://docs.house.gov/meetings/IF/IF03/20170315/105702/HHRG-115-IF03-Wstate-SteindorfD-20170315.pdf, last accessed March 23, 2017.

When stakeholders cooperate, the Integrated Licensing Process takes approximately six years. While some compare this timeframe to the process for permitting a natural gas plant, we believe this is an unfair comparison. The impact of the two technologies is completely different. Hydropower dams automatically change the function and use and enjoyment of a publicly owned river by blocking it and significantly altering its flow, preventing species from accessing critical parts of their habitat. Additionally, hydropower license terms last for 30-50 years.

Further, hydropower licenses cover projects that can involve multiple dams, reservoirs and powerhouses, and more than one river. Some of the projects we've worked on in California involve dozens of dams and the footprint of one is the size of the state of Rhode Island. Additionally, the hydropower facilities that are up for relicensing now were first constructed before virtually all modern environmental laws were in place. It is during relicensing proceedings that the public gets the opportunity to ensure that dam owners make the necessary changes to comply with modern laws. The opportunity to mitigate for the damage to the environment, while still providing reliable electricity, only arises once in a generation or two. For all of these reasons, it makes sense to take the time to get it right.

Hydropower Emits Greenhouse Gasses.

The idea that hydropower is a "clean, green, and renewable" source of power is a myth. In addition to the impacts to water quality, riparian habitat, and natural life cycles of aquatic fish and wildlife, the technology contributes to greenhouse gas emissions. Reservoirs behind dams are not carbon-neutral, but instead are responsible for approximately 1.3% of anthropogenic CO_2 equivalent emissions world-wide over a 100-year timespan.[8] In addition to carbon, reservoirs emit methane which has 34 times the warming potential as carbon.[9] We recognize that these reservoirs emit less carbon than a coal-fired power plant, but to say that they are carbon-free is incorrect.

Response to Sacramento Municipal Utility District's Testimony.

One of the projects that we consider as an example of a relicensing success is that of the Sacramento Municipal Utility District's (SMUD) Upper American River Project (UARP) (FERC Project No. P-2101). American Whitewater participated in relicensing negotiations and was a signatory to the relicensing Settlement Agreement in 2007, as was SMUD. Given the spirit of collaboration and the final agreement, we were surprised to see SMUD's written testimony for this hearing in which it states:

> *"The UARP was once an effective resource for meeting fluctuations in peak energy demand. But in the years since relicensing, the majority of water releases are for*

[8] Deemer B, Harrison J, Li S, Beaulieu J, DelSontro T, Barros N, Bezerra-Neto J, Powers S, Dos Santos M, Vonk J. 2016. Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis. BioScience 66: 949-964.
[9] *Id.*

recreational purposes, leaving little water available to release into turbines during the late afternoon and early evening when summer air-conditioning needs are highest."[10]

SMUD would have the Committee believe that recreational releases are solely responsible for taking down what once was a great hydropower project. Nothing could be further from the truth. As SMUD points out in its testimony, the UARP is a 688-megawatt hydroelectric project that consists of 11 reservoirs and 8 powerhouses. The project is complex, with a footprint that spans an area from the crest of the Sierra Nevada mountains to the foothill communities of the Sacramento Valley. SMUD fails to specify which releases at which dams are causing this alleged issue. If it is referring to the few recreational releases that occur at Ice House Dam or Slab Creek, it is important that the Committee understand that the total amount of water that is returned to the river for these releases is a fraction of 1% of the water that SMUD diverts to produce power.

We believe that SMUD is likely referring to its obligations to coordinate with Pacific Gas and Electric (PG&E), which owns and operates the Chili Bar Hydroelectric Project (P-2155) immediately downstream of the UARP. The flow provided at PG&E's Chili Bar Project are critical for the Lower South Fork American River because it is home to the largest commercial rafting industry on the West Coast, bringing in more than $30 million to the local economy. The Chili Bar Dam and Reservoir are specifically designed to regulate flows into the Lower South Fork American River, which allows SMUD to operate the upstream UARP facilities in a peaking mode. In its testimony, SMUD failed to provide any evidence that its ability to provide grid regulating capabilities is compromised by its agreement with PG&E. American Whitewater participates in monthly license implementation meetings with SMUD and other stakeholders for the UARP, and SMUD has failed to provide any evidence of this in that setting as well.

SMUD's statements are particularly perplexing in light of the fact that it was a willing participant in settlement negotiations and agreed to these flow conditions when it signed the 2007 Settlement Agreement. This settlement was based upon the understanding that, while we all did not get everything that we wanted in negotiations, we found this agreement to be enough of an acceptable compromise for FERC to issue SMUD a 50-year license term. Is unclear to us why SMUD is now indicating that this settlement was an agreement that they were forced into and is inherently unfair to their interests, their ratepayers and their community. Where SMUD could have challenged agency conditions in a trial-type hearing, or before FERC or the California State Water Resources Control Board during the process, they did not. Instead, SMUD helped to craft the Agreement that states, "the Parties agree that this Settlement is fair and reasonable and in the public interest, consistent with the standards under the FPA."[11] SMUD also stated that it "agreed that the Settlement appropriately balances all interests and resources related to

[10] Sacramento Municipal Utility District. Testimony for the House Energy and Commerce Subcommittee on Energy Hearing on *Modernizing Energy Infrastructure: Challenges and Opportunities to Expand Hydropower Generation.* March 15, 2017. Available at: http://docs.house.gov/meetings/IF/IF03/20170315/105702/HHRG-115-IF03-20170315-SD011.pdf (last visited March 24, 2017).

[11] Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project. January 2007. §2.1, p. 9. (FERC Project No. P-2101, eLibrary Accession No. 20070201-4014)

relicencing of the UARP. SMUD applauds the efforts of the Settling parties in studying impacts of the UARP, assessing and analyzing study requests, understanding and working through differences, and ultimately negotiating the Settlement."[12]

Even more perplexing is that SMUD voluntarily provided these very same flows that it complains about for seven years before its license was finalized, which is contrary to its statement that there has been little water available for power generation because of recreational releases "in the years since relicensing." It is unclear to us why SMUD would offer to do this before the license was implemented if providing these flows had such an extreme impact to their ability to produce power.

SMUD also takes aim at the relicensing process indicating that the conditions placed on a license by resource agencies can only be challenged through the costly and time consuming trial-type hearing process. We agree that that this adversarial process is costly and time consuming, which is why we have opposed it since it was proposed by the industry back in 2005. SMUD also suggests that allowing agencies to have a reasonable basis defense for their conditions sets the bar too high for utilities to prevail in a hearing. We disagree. Going back to the days where sound science and resource protection are thrown out the window in favor of eking every last ounce of power from rivers would be a huge step backwards.

Conclusion

We thank the Subcommittee for this opportunity to provide testimony on hydropower's future, which will affect rivers and recreation-based rural economies nationwide. We have significant experience with relicensing hydropower dams and feel that implementation of the Integrated Licensing Process has encouraged enhanced collaboration among all stakeholders. Placing more authority with FERC, an agency with DC-based decision makers, and less with local stakeholders and resource agencies that have on-the-ground expertise, will only serve to discourage this collaborative approach and local decision-making.

Much of the testimony before the Committee focused on the opportunity to increase capacity at existing dams through efficiency improvements and retrofitting existing non-powered dams to add generation capacity. We support this approach, and to the extent modest regulatory reforms will encourage this type of development, we welcome any opportunity to work with the members of the Committee, tribes, resource agencies, and utilities on comprehensive solutions that create these new opportunities, provided they are fully protective of our aquatic resources. We do not support or see potential for the construction of new hydropower dams.

[12] Sacramento Municipal Utility District. *Explanatory Statement and Request for Technical Conference.* 2/1/2007. P. 2. (FERC Project No. P-2101, eLibrary Accession No. 20070201-4014)

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May 1, 2017

Honorable Greg Walden, Chairman
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Honorable Frank J. Pallone, Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Walden and Ranking Member Pallone:

Western Governors recognize the importance of renewable energy sources, including hydropower, as critical components of an all-of-the-above national energy portfolio. The West accounts for nearly 70 percent of the nation's hydroelectric power generation, and the Pacific Northwest is the nation's largest hydropower-producing region. Western Governors support improving the efficiency of existing hydropower systems and increasing the amount of electricity generated from new, retrofitted, or relicensed hydroelectric facilities.

States are vested with primary authority to manage water within their borders, and they have the authority to develop, use, control and distribute water resources within their boundaries. As expressed in section B(1)(a) of WGA Policy Resolution 2015-08, *Water Resource Management in the West* (attached):

> While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states' primacy over the allocation and administration of their water resources.

Western Governors are concerned about provisions in Section 34, "Hydropower Licensing and Process Improvement" of the proposed *Hydropower Policy Modernization Act of 2017*. Portions of the language included in the published discussion draft of this proposal are identical to language of Subtitle B, "Hydropower Regulatory Modernization" of the proposed North American Energy Security and Infrastructure Act of 2015 (H.R. 8).

On July 18, 2016, Governor Steve Bullock and Governor Dennis Daugaard provided correspondence (attached) to the Committee, expressing the Western Governors' concerns over the language included in Subtitle B of H.R. 8, which would have designated the Federal Energy Regulatory Commission (FERC) as lead agency for all hydropower authorizations, approvals, and requirements mandated by federal law, including hydropower facility licenses and amendments, as well as all permits, special use authorizations, certifications, and opinions. The Governors requested that this language be removed or amended so that existing state hydropower licensing authorities are not replaced, or in any way impeded, by FERC jurisdiction.

Western Governors request that the language in Section 34 of the proposed *Hydropower Policy Modernization Act of 2017* be removed or amended so that states' existing hydropower licensing authorities are in no way usurped by FERC jurisdiction. Thank you for your attention to this important matter.

Sincerely,

[redacted]

James D. Ogsbury
Executive Director

Enclosures

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July 18, 2016

Honorable Fred Upton, Chairman
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2125 Rayburn House Office Building
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Honorable Frank J. Pallone, Jr., Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Upton and Ranking Member Pallone:

Western Governors recognize the importance of renewable energy sources, including hydropower. The West accounts for nearly 70 percent of the nation's hydroelectric power generation, and the Pacific Northwest is the nation's largest hydropower-producing region. Western Governors support improving the efficiency of existing hydropower systems and increasing the amount of electricity generated from new, retrofitted, or relicensed hydroelectric facilities.

Western Governors are concerned about provisions in Subtitle B: Hydropower Regulatory Modernization of the *North American Energy Security and Infrastructure Act of 2015* (H.R. 8). This subtitle would designate the Federal Energy Regulatory Commission (FERC) as lead agency for all hydropower authorizations, approvals and requirements mandated by federal law, including hydropower facility licenses and amendments, as well as all permits, special use authorizations, certifications, and opinions.[1]

States are vested with authority to manage water within their borders, and they have the right to develop, use, control and distribute surface water and ground water within state boundaries. As expressed in section B(1)(a) of WGA Policy Resolution 2015-08: *Water Resource Management in the West* (attached for your reference):

[1] *North American Energy Security and Infrastructure Act of 2015*, Section 1203(a)(1) and (2).

> While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states' primacy over the allocation and administration of their water resources.

We understand that members of the hydropower industry have expressed concern that state licensing processes generally, and state water quality certifications under section 401 of the Clean Water Act specifically, can be overly time-consuming.

It is crucial, however, that state water quality certifications and other necessary state procedures be undertaken in a careful, deliberate manner. Hydropower licenses may have a term in excess of 50 years, and those rights granted in a hydropower license directly affect the quality and quantity of state water, state wildlife and other resources.

We note also that western states have taken proactive steps to reduce hydropower licensing and relicensing timelines and initiated programs that increase intra-state agency coordination and coordination between states, project proponents and federal partners. These efforts have proven effective at reducing licensing and relicensing timelines, while also ensuring protection of water and other state resources.

Western Governors request that language in Subtitle B of H.R. 8 be removed or amended so that existing state hydropower licensing authorities are not replaced or in any way impeded by FERC jurisdiction. Western Governors request that the Energy and Commerce Committee and the U.S. House of Representatives take these concerns into account as resolution of the differences between H.R. 8 and the Senate's *North American Energy Security and Infrastructure Act of 2016* (S. 2012) is pursued.

Sincerely,

[redacted]

Steve Bullock
Governor of Montana
Chair, WGA

[redacted]

Dennis Daugaard
Governor of South Dakota
Vice Chair, WGA

cc: Honorable Mitch McConnell, Senate Majority Leader
Honorable Harry M. Reid, Senate Minority Leader
Chairwoman Lisa Murkowski, Senate Committee on Energy and Natural Resources
Ranking Member Maria Cantwell, Senate Committee on Energy and Natural Resources

WESTERN GOVERNORS' ASSOCIATION

Western Governors' Association
Policy Resolution 2015 - 08

Water Resource Management in the West

A. BACKGROUND

1. Water is a crucial resource for communities, industries, habitats, farms, and Western states. Clean, reliable water supplies are essential to maintain and improve quality of life. The scarce nature of water in much of the West makes it particularly important to our states.

2. States are the primary authority for allocating, administering, protecting, and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of Western water law and hydrology.

3. Many communities in the West anticipate challenges in meeting future water demands. Supplies are nearly fully allocated in many basins across the West, and increased demand from population growth, economic development, and extreme weather and fire events places added stress on those limited water resources. Sustainability of our natural resources, specifically water, is imperative to the foundations upon which the West was developed. Growth and development can only continue upon our recognition of continued state stewardship of our unique resources and corresponding responsibilities.

4. Strong state, regional and national economies require reliable deliveries of good-quality water, which in turn depend on adequate infrastructure for water and wastewater. Investments in water infrastructure also provide jobs and a foundation for long-term economic growth in communities throughout the West. Repairs to aging infrastructure are costly and often subject to postponement.

5. Western Governors recognize the essential role of partnership with federal agencies in Western water management and hope to continue the tradition of collaboration between the states and federal agencies.

6. Tribal governments and Western states also share common water resource management challenges. The Western Governors Association and Western States Water Council have had a long and productive partnership with tribes, working to resolve water rights claims.

B. GOVERNORS' POLICY STATEMENT

1. **State Primacy in Water Management:** As the preeminent authority on water management within their boundaries, states have the right to develop, use, control and distribute the surface water and groundwater located within their boundaries, subject to international treaties and interstate agreements and judicial decrees.

   a. **Federal Recognition of State Authority:** The federal government has long recognized the right to use water as determined under the laws of the various states; Western Governors value their partnerships with federal agencies as they operate under this established legal framework.

      While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states' primacy over the allocation and administration of their water resources.

      Reauthorization of the Water Resources Reform & Development Act, proposed federal surplus water rulemakings, and/or storage reallocation studies should recognize and defer to the states' legal right to allocate, develop, use, control, and distribute their waters, including but not limited to state storage and use requirements.

   b. **Managing State Waters for Environmental Purposes:** States and federal agencies should coordinate efforts to avoid, to the extent possible, the listing of water-dependent species under the Endangered Species Act (ESA). When ESA listings cannot be avoided, parties should promote the use of existing state tools, such as state conservation plans and in-stream flow protections, to conserve and recover species.

2. **Infrastructure Needs:** Aging infrastructure for existing water and wastewater facilities and the need for additional water projects cannot be ignored. Infrastructure investments are essential to our nation's continued economic prosperity and environmental protection, and they assist states in meeting federally-mandated standards.

   a. **Federal Support for Infrastructure Investment:** Congress should provide adequate support for the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) State Revolving Funds. Further, Congress should fully utilize the receipts accruing to the Reclamation Fund for their intended purpose in the continuing conservation, development and wise use of western resources to meet Western water-related

needs, including the construction of Congressionally-authorized Bureau of Reclamation rural water projects and facilities that are part of a Congressionally-authorized Indian water rights settlement.

Congress should reauthorize Water Resources Reform & Development Act (WRRDA) legislation on a regular schedule and appropriate funding so all projects and studies authorized in WRRDA can be completed in a timely manner.

Congress also should consider facilitating greater investment in water infrastructure, utilizing such tools as loan guarantees, revolving funds, infrastructure banks and water trust funds.

Capital budgeting and asset management principles should be used to determine funding priorities based on long-term sustainability and not annual incremental spending choices. It should be accompanied by dedicated sources of funding with appropriate financing, cost-sharing, pricing and cost recovery policies.

b. **Alternatives to Direct Federal Investment:** Federal and state policymakers should also consider other tools to promote investment in water infrastructure and reduce financing costs, including: public-private partnerships; bond insurance; risk pooling; and credit enhancements.

Congress should remove the state volume caps for private activity bonds used for water and wastewater projects, provide guaranteed tax-exempt status for bonds issued by state or local agencies to finance water infrastructure, provide loan guarantees, and otherwise support and encourage alternatives to direct federal investment of limited general funds.

c. **Hydropower:** Congress and the Administration should authorize and implement appropriate hydropower projects and programs through efficient permitting processes that enhance renewable electric generation capacity and promote economic development, while ensuring protection of important environmental resources and indigenous people's rights.

d. **Infrastructure Planning and Permitting:** Infrastructure planning and permitting guidelines, rules and regulations should be coordinated, streamlined and sufficiently flexible to: 1) allow for timely decision-making in the design, financing and construction of needed infrastructure; 2) account for regional differences; 3) balance economic and environmental considerations; and 4) minimize the cost of compliance.

3. **Western States Require Innovative and Integrated Water Management.** Western Governors believe effective solutions to water resource challenges require an integrated

approach among states and with federal, tribal and local partners. Federal investments should assist states in implementing state water plans designed to provide water for municipal, rural, agricultural, industrial and habitat needs, and should provide financial and technical support for development of watershed and river basin water management plans when requested by states.

Integrated water management planning should also account for flood control, water quality protection, and regional water supply systems. Water resource planning must occur within a framework that preserves states' authority to manage water through policies which recognize state law and the financial, environmental and social values of the water resource to citizens of the western states today and in the future.

a. **Water Transfers:** Western Governors recognize the potential benefits of market-based water transfers, meaning voluntary sales or leases of water rights. The Governors support water transfers that avoid or mitigate damages to agricultural economies and communities while preventing injury to other water rights, water quality and the environment.

b. **Energy Development:** Western Governors recognize that energy development and electricity generation may create new water demands. Western Governors recommend increased coordination across the energy and water management communities, and support ongoing work to assess the interconnection of energy and water through the Regional Transmission Expansion Planning Project for the Western interconnection and similar efforts.

c. **Conservation and Efficiency:** Because of diminished water resources and declining and inconsistent snowpack, Western Governors encourage adoption of strategies to sustain water resources and extend existing water supplies further through water conservation, water reuse and recycling, desalination and reclamation of brackish waters, and reductions in *per capita* water use. The Governors encourage the use of and research into promising water-saving strategies.

d. **Local Watershed Planning:** Western Governors encourage federal agencies and Congress to provide resources such as technical support to states and local watershed groups. States may empower these watershed groups to address local water issues associated with water quality, growth and land management to complement state water needs.

e. **Intergovernmental Collaboration and Conflict Resolution:** Western Governors support the negotiated settlement of interstate water disputes, Indian and Hawaiian water rights claims, and other federal water needs and claims, the settlement of which are in the best interest of Western states.

f. **State-Federal Coordination:** Western Governors recognize the important role of federal agencies in advancing sound water resource management in the Western states. Governors appreciate the efforts of federal agencies to coordinate water-related activities, particularly through the Western States Water Council, and support the continuation of these key state-federal partnerships.

4. **Western States Need Reliable Water Resource Information:** Basic information on the status, trends and projections of water resource availability is essential to sound water management.

   a. **Basic Water Data:** Western Governors support the U.S. Geological Survey's Cooperative Water Program and National Streamflow Information Program (NSIP), the Natural Resources Conservation Service's Snow Survey and Water Supply Forecasting Program, the National Oceanic and Atmospheric Administration's (NOAA) weather and hydrology-related data collection, monitoring, and drought information programs, and the National Aeronautics and Space Administration's National Land Imaging (Landsat) Program with its thermal infrared sensor. Western Governors support federal efforts to coordinate water data gathering and information programs across multiple agencies.

   b. **Extreme Weather Events Planning**: Western Governors recognize the significant potential impacts of extreme weather events and variability in water supplies. Western Governors urge Congress and the Administration to work closely with states and other resource managers to improve predictive and adaptive capabilities for extreme weather variability and related impacts. We specifically urge the federal government to place a priority on improving the sub-seasonal and seasonal precipitation forecasting capabilities that could support water management decision-making.

   c. **Water Data Exchange:** The Western Governors' Association and the Western States Water Council have worked together to create the Water Data Exchange, an online portal that will enable states to share their water data with each other, federal agencies, and the public via a common platform. The Governors encourage the use of state water data in planning for both the public and private sectors.

5. **Drought Preparedness and Response:** As exceptional levels of drought persist across the West, Governors are leading on drought preparedness and response through the Western Governors' Drought Forum. The Drought Forum provides a framework for leaders from states, businesses, non-profits, communities, research organizations and federal agencies to share best practices and identify policy options for drought management. The Governors have identified several areas in need of additional attention from Drought Forum partners, including:

a. **Data and Analysis:** Basic data on snowpack, streamflow and soil moisture is essential to understanding drought. Though a great deal of information already exists, enhanced drought data collection and real-time analysis at a higher resolution is essential. Governors support state and federal efforts to maintain adequate collection of drought and water data, enhance data networks where appropriate, and facilitate better use of existing information.

   The Governors appreciate the collaborative efforts on drought provided through NOAA's National Weather Service River Forecast Centers and Weather Forecast Offices, and the Office of Atmospheric Research's labs and programs, such as the National Integrated Drought Information System (NIDIS).

b. **Produced, Reused and Brackish Water:** Technology exists to use produced, reused, recycled and brackish water—sources traditionally considered to be marginal or wastewater. Adoption of this technology has been limited by inadequate data, regulatory obstacles, financial barriers, public attitudes and logistical uncertainties. Governors support regulatory streamlining and policy options to encourage use of produced, brackish, and re-used water where appropriate.

c. **Forest Health and Soil Stewardship:** Better land management practices for forests and farmland may help improve availability and soil moisture retention. Wildfires can cause sediment runoff in water systems, leading to problems for reservoir management and water quality. Governors support policies and practices that encourage healthy and resilient forests and soils in order to make the most of existing water supplies.

d. **Water Use Efficiency and Conservation:** Public awareness of drought has directed increasing attention to water conservation strategies, both in-home and on-farm. Governors encourage municipal, industrial and agricultural water conservation strategies as drought management strategy.

e. **Infrastructure and Investment:** Water infrastructure to store and convey water is crucial to drought management, but maintenance and expansion of that infrastructure is often difficult to fund. Governors support efforts to make the most of existing infrastructure, while seeking creative solutions to add more infrastructure with limited resources.

f. **Working within Institutional Frameworks to Manage Drought**: Legal frameworks and regulatory regimes can sometimes limit the ability of state, local and federal agencies to respond quickly to drought conditions. Governors believe that

innovative, flexible policy solutions, such as streamlined processing of temporary water transfers, should be considered when managing drought.

g. **Communication and Collaboration:** Communication among state officials, federal agency representatives, water providers, agricultural users and citizens is a crucial component of effective drought response. The Western Governors' Drought Forum will continue to provide a framework for sharing best practices thought its online resource library, informational webinars, and strategy-sharing meetings for the duration of this resolution.

C. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution including funding, subject to the appropriation process, based on a prioritization of needs.

2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.

LINDA L. DAHLMEIER
MAYOR, THE CITY OF OROVILLE

CONGRESSMAN FRED UPTON, CHAIRMAN
THE ENERGY AND COMMERCE COMMITTEE ENERGY SUBCOMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, DC

RE: HEARING ON "MODERNIZING ENERGY INFRASTRUCTURE: CHALLENGES AND OPPORTUNITIES TO EXPANDING HYDROPOWER GENERATION, MARCH 15, 2017

Dear Chairman Upton, Ranking Member Rush, and Members of the Subcommittee:

I am writing to share my perspective as Mayor for the City of Oroville on the topic of Challenges and Opportunities to Expanding Hydropower Generation.

My small rural town of 19,000 people sits at the base of the Sierra foothills along the banks of the Feather River. While I have always felt blessed to live in Oroville, we are not a wealthy community. The median income for my community is $36,000 and almost 24% of our residents are below the poverty line. Our town is also home to the tallest dam in America. Until this past month, having the tallest dam bear the name of our town has always been a point of pride. That all changed on February 9th of this year.

The collapse of the main spillway at the Oroville Dam and the near failure of the emergency spillway led to the evacuation of 180,000 people, including virtually all of the residents of my city. People spent hours trying to flee just a few miles, not knowing if the spillway would fail, taking them and their loved ones away. Had the spillway failed, 180,000 people would have died; 28,000,000 would be without a source of water and life as we know it in the state of California would forever be changed. This disaster is one of the worst nightmares any elected official could imagine for their community.

While the dam did not fail, the cost of this event continues, and it goes far beyond the repairs to the dam. The thousands of truck trips to bring materials have degraded many of our roads. Real Estate transactions have declined and escrows

have been cancelled. And recreation, which we depend on in our small community, has come to a standstill with very little options in place for alternatives or recovery.

The Feather River fishery is one of the important elements of our recreation economy. We do not know the long-term impacts the damage has caused to the hatchery. We do know that the mud and silt from the collapsed spillway has killed many of the fish that live in the river and certainly destroyed much of the habitat. We also know that many fish were stranded as the flows ramped down from 50,000 cfs (cubic feet per second) to zero in just a few hours.

River Bend Park, which was built as part of the Settlement Agreement with DWR for the FERC hydropower license for Oroville Dam, was inundated and sustained serious damage. 800 families will be displaced for soccer while the park remains closed and tournaments will be held in other cities. For the past several years we have been working on a river plan that would reconnect the City with the river, and many now wonder if the river is something to embrace or if it should be feared.

Biking and running trails gone. Fishing tournaments gone. Boat ramps closed. Roads closed. Docks closed until further notice. The cost for just the road repair is in the millions. The cost to our community is overwhelming. How can we move forward from here? We need your help.

First, the residents of Oroville and the surrounding areas deserve to know how this happened. Several public interest organizations brought up the inadequacy of the emergency spillway during the FERC relicensing process in 2005. FERC and the California Department of Water Resources assured us that the dam was safe and could handle any foreseeable flood event. We in Oroville believed this to be true. The fact the emergency spillway was supposedly rated to 350,000 cfs and yet it nearly failed with a flow of just 12,000 cfs tells us that the dam safety regulators at FERC did not take the safety of the citizens of my town seriously.

While some testifying before your committee recommended a 50% expansion in our nation's hydropower, we believe the safety and integrity of the nation's

existing hydropower infrastructure needs to be addressed before you consider legislation to promote new hydropower.

With this concern in mind, we request an oversight hearing on FERC's Division of Dam Safety to determine how this regulatory failure occurred. Second, we need to have a full analysis of the impacts of this event to Oroville and the surrounding areas. This should include the direct and indirect impacts to services, infrastructure, and local economies. We also need to have a full analysis of the impacts to the Feather River and how that will impact current and future recreation.

Lastly, we need to have a process to discuss with FERC, DWR, and the water beneficiaries of this project about how these impacts will be mitigated. The fact is that the benefits from the Oroville project are immense. California does not exist in its current form without the water from this project. But it is the people from my community that were in harms way when parts of this project failed. We need to be made whole before any discussion moves forward regarding expanding the role of dams and hydropower.

I sincerely hope that this committee would want to know more about the regulatory failure that occurred at the Oroville Dam before any consideration is given to expanding FERC's regulatory authority on promoting development of new hydropower infrastructure in this country.

Respectfully,

Mayor Linda L. Dahlmeier

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HYDROPOWER REFORM COALITION
Putting water, wildlife, and people back in rivers.

May 3, 2017

The Honorable Fred Upton
Chairman
Subcommittee on Energy
House Committee on Energy and Commerce
2125 Rayburn House Building
Washington, DC 20515

The Honorable Bobby Rush
Ranking Member
Subcommittee on Energy
House Committee on Energy and Commerce
2125 Rayburn House Building
Washington, DC 20515

Dear Chairman Upton and Ranking Member Rush:

The Hydropower Reform Coalition would like to register our strong opposition to the current versions of Discussion Draft Hydropower Policy Modernization Act; Discussion Draft Promoting Hydropower Development at Existing Non-Powered Dams Act; and Discussion Draft Promoting Closed-Loop Pumped Storage Hydropower Act. These drafts elevate FERC above all other federal, state, and local agencies and tribes and in the process undo many of the checks and balances that have equitably balanced hydropower development with other uses of our public resources for 40 years.

The Federal Energy Regulatory Commission (FERC) has long shared the responsibility for developing hydropower license conditions with those state and federal agencies that have the statutory mandates, experience, and expertise FERC lacks. This team approach serves to ensure that impacts from hydropower operations to public resources such as fish, wildlife, water quality, recreation, and federal property are fully mitigated. Congress has placed checks and balances on FERC's authority through Sections 4(e) and 18 of the Federal Power Act, Section 401 of the Clean Water Act, and the consultation requirements in the Endangered Species Act. Collectively, these mandatory conditioning authorities ensure that natural resources and public property are protected from the impacts of hydropower projects.

While the goal of the Discussion Draft Hydropower Policy Modernization Act is to address the perceived delay in the hydropower licensing process, it has the following practical impacts:

- It severely constrains the ability of federal and state agencies as well as tribes to protect the lands and the waters they manage,
- It gives power to a bureaucratic agency in Washington DC to protect our natural resources over scientific experts in federal and state agencies working in local communities who understand the resources better from direct on-the-ground experience, and
- It imposes undue burden on sister agencies that are participants in the licensing process by allowing FERC to set a schedule that even it may be not be able to meet.

While we oppose the current Discussion Draft for these reasons, we appreciate that this has been introduced as a draft and we would welcome the opportunity to engage with the Committee and interested parties to achieve mutually beneficial outcomes that improve the licensing process, provide

greater certainty to licensees, and address resource impacts of hydropower projects in a meaningful way.

The Discussion Draft Promoting Hydropower Development at Existing Non-Powered Dams Act and Discussion Draft Promoting Closed-Loop Pumped Storage Hydropower Act also take away the authorities of scientists and experts at natural resource management agencies and place them in the hands of federal regulators in Washington DC whose expertise lies in energy regulation. The provisions in these drafts will have detrimental effect on fish, wildlife, public lands, Native American trust and treaty obligations, and state water rights during development of hydropower at non-powered dams and closed-loop pumped storage projects.

The Hydropower Reform Coalition believes that there are ways to improve the licensing process and to get hydropower projects licensed faster. We think adequate communication and cooperation between federal agencies, including FERC, is the single most effective way to ensure smooth and faster licensing process. For that, we offer the following preliminary recommendations for FERC to do the following:

- Approve licensing studies requested by federal, state, and tribal resource management agencies in the licensing process;
- Promote memoranda of understanding (MOU) with tribes and states to improve coordination and prevent unnecessary delay; and
- Explore ways to improve coordination with the U.S. Army Corps of Engineers (USACE) to expedite the powering of non-powered dams owned and operated by the ACE.

We also have three recommendations for consideration by Congress:

- Consider increasing appropriations to federal resource management agencies to fund the staff positions allowing for efficient and thorough evaluation of hydroelectric licenses;
- Delegate Section 4(e) and 18 autborities under the Federal Power Act to technically qualified and capable tribes;
- Consider amending the Federal Power Act to remove FERC jurisdiction over dams owned by the USACE.

The balance the Federal Power Act strikes between power and non-power values has existed for almost a century. Current law protects the public's right to enjoy its rivers, a right which can and should be compatible with responsible electricity production. However, these Discussion Drafts upend that balance. Simply put, these Drafts come at the expense of healthy rivers and the fish, wildlife, and people that depend upon them while doing little to bring more hydropower projects online.

The Hydropower Reform Coalition is ready and willing to work with the Committee and other stakeholders to work on common sense reforms to hydropower licensing while also protecting natural resources. Please do not hesitate to contact me at okeefe@americanwhitewater.org or (425) 417-9012 if you have any questions or require additional assistance.

Sincerely,

Thomas O'Keefe
Chair
Hydropower Reform Coalition

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

May 19, 2017

Mr. Terry Turpin
Director
Office of Energy Projects
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Dear Mr. Turpin,

Thank you for appearing before the Subcommittee on Energy on Wednesday, May 3, 2017, to testify at the hearing entitled "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, June 5, 2017. Your responses should be mailed to Grace Appelbe, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Wyatt.Ellertson@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Chairman
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachment

Attachment - Additional Questions for the Record

The Honorable Fred Upton

1. Please provide a summary of all Commission activities in support of the Federal Permitting Steering Council.

2. When asked about timeframes associated with the interstate pipeline permitting process, you responded, "in looking back at the data for all issuances for the Commission since 2009, on average it is 88 percent of the projects get issued within one year." Please provide data to support this statement.

3. Under the Natural Gas Act, the Commission acts as the lead agency for the purposes of coordinating all applicable Federal authorization for interstate natural gas pipelines and for the purposes of complying with the National Environmental Policy Act. Congress has instructed each Federal and State agency charged with evaluating an aspect of an application for Federal authorization to work with the Commission and to comply with the deadlines established by the Commission, unless a schedule is otherwise established by Federal law. Please list and provide the status of all pending pipeline proceedings where the Commission is waiting for another Federal or State agency to act on a Federal authorization.

The Honorable David B. McKinley

1. You stated that one fourth of all hydropower licenses issued by the Federal Energy Regulatory Commission ("the Commission") could be begun and completed within two years. This assertion is not in your written testimony and is contrary to the experiences of hydropower developers endeavoring to add hydro to existing dams in Indiana and throughout the United States. It is important that this committee clearly understand why some licenses can be completed in less than two years and why others take longer than that – in some cases, three times longer or more.

   Please provide the Committee and me the data set that FERC uses to determine the one fourth statistics. If possible, please include as much information about the projects that were able to be licensed within two years and those that were not. I would be interested in data dating to before the enactment of the Energy Policy Act of 2005, if it is available. It is my hope that this data will help to guide the committee in its oversight of how best to support the development of low-cost, environmentally-friendly energy sources on existing infrastructure.

The Honorable Bill Johnson

1. The United States has a window to enter the global LNG export market. In order to take advantage of this window, it is critical that proposed projects are approved within a reasonable timeline. Multiple applications for LNG export facilities are before your agency. The permitting for an LNG export facility, and associated pipelines, is a complex, expensive and lengthy process.

   Regarding LNG export applications, how does your agency coordinate with other federal agencies in their NEPA review?

   How is your working relationship with PHMSA?

Do coordinating agencies, including US Army Corps of Engineers (USACE) or PHMSA, ever delay FERC's issuance of important permitting milestones for an applicant?

How would you recommend improving the coordinating agency role so as to ensure that important American energy assets, like LNG export facilities, move from proposals, to construction?

[Mr. Turpin's answers to submitted questions have been retained in committee files and also are available at *http://docs.house.gov/meetings/IF/IF03/20170503/105916/HHRG-115-IF03-Wstate-TurpinT-20170503-SD071.pdf.*]

GREG WALDEN, OREGON
CHAIRMAN

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May 19, 2017

Mr. John Katz
Deputy Associate General Counsel
Office of General Counsel
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Dear Mr. Katz,

Thank you for appearing before the Subcommittee on Energy on Wednesday, May 3, 2017, to testify at the hearing entitled "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization."

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Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Chairman
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachment

The Honorable Fred Upton

1. **Please provide a summary of all Commission activities in support of the Federal Permitting Steering Council.**

The Commission and its staff have been actively involved in carrying out Title 41 of the Fixing America's Surface Transportation Act (FAST-41) since the statute was enacted in December 2015. In February 2016, the Chairman of the Commission designated a Councilmember and a Chief Environmental Review and Permitting Officer (CERPO) to support the Federal Permitting Improvement Steering Council (Council).

In addition to attending the four Council meetings held since December 2015, Commission staff have attended weekly Infrastructure Working Group meetings and training sessions related to FAST-41 implementation, as well as meetings of the Fees Sub-Working Group. The Councilmember and CERPO worked with the Executive Director of the Council on project-specific issues during the 2016 calendar year, and continue to engage the Acting Executive Director on issues related to covered project schedules. Also, in conjunction with the Nuclear Regulatory Commission, Commission staff has attended meetings with the Executive Director, the Office of Management and Budget, and the Council on Environmental Quality on the manner in which the statute can best be applied to independent regulatory agencies.

On September 22, 2016, the Executive Director established a covered project inventory that included 13 FERC projects, the most of any Federal agency. In compliance with the statute, Commission staff created Coordinated Project Plans based on the consultation and coordination that occurred between the project sponsors and government agencies during the Commission's pre-filing review process. On a weekly basis, Commission staff maintains and updates the FAST-41 Permitting Dashboard website to ensure up-to-date information is presented to the public. On a quarterly basis, Commission staff updates the Coordinated Project Plans with any information received from participating/cooperating agencies.

FERC staff also provides support to the Council by actively contributing to FAST-41 work products, including the January 13, 2017 FAST-41 guidance document, the January 18, 2017 reports on best practices and performance schedules, and the April 14, 2017 FAST-41 report to Congress, each of which is available on the Permitting Dashboard website.

2. **The Commission serves as the lead agency in hydropower proceedings and sets schedules for those proceedings. When asked if there is a way to speed up the relicensing of existing facilities, you stated, "there are some instances where the Commission has completely done its work on a project and has been sitting for more than a decade waiting for a State to act under the Clean Water Act, and there is just flatly nothing the Commission can do about that." Please list and**

provide the status of all pending hydropower proceedings where the Commission is waiting for another Federal or State agency to act on a Federal authorization.

Table 1 shows the cases where the Commission staff has completed its environmental review and is currently waiting for an action to be completed by another agency before the Commission can issue a decision on the project. Of these 26 cases, 23 are relicenses.

These situations fall into two categories: (1) waiting for either the National Marine Fisheries Service or U.S. Fish and Wildlife Service to complete consultation under section 7(a) of the Endangered Species Act and/or; (2) waiting for a state water quality agency to issue water quality certification under section 401 of the Clean Water Act.

The Honorable David B. McKinley

1. **You stated that one fourth of all hydropower licenses issued by the Federal Energy Regulatory Commission ("the Commission") could be begun and completed within two years. This assertion is not in your written testimony and is contrary to the experiences of hydropower developers endeavoring to add hydro to existing dams in Indiana and throughout the United States. It is important that this committee clearly understand why some licenses can be completed in less than two years and why others take longer than that - in some cases, three times longer or more.**

   Please provide the Committee and me the data set that FERC uses to determine the one fourth statistics. If possible, please include as much information about the projects that were able to be licensed within two years and those that were not. I would be interested in data dating to before the enactment of the Energy Policy Act of 2005, if it is available. It is my hope that this data will help to guide the committee in its oversight of how best to support the development of low-cost, environmentally-friendly energy sources on existing infrastructure.

   Table 2 provides the requested data set. The available information is from the period between 2003 and 2016 and comprises 83 projects that completed pre-filing activities and were issued original licenses or small hydropower exemptions. Of these 83 projects, approximately 28% (23 projects) were issued a license in two years or less. This data set is the basis for an analysis that is included in a report that the Commission recently provided to Congress pursuant to section 6 of the Hydropower Regulatory Efficiency Act (HREA) of 2013.

2. **FERC has before it the relicensing of the Hawk's Nest hydroelectric facility on the New River in West Virginia. I understand that this project was constructed in the 1930's in tandem with a nearby silicon alloy manufacturing plant, solely for the purpose of supplying affordable electricity to that plant. The Commission, in deciding whether to reauthorize the project, must give equal**

consideration to a number of factors, including recreational opportunities that may jeopardize continued operations at the plant and cause a loss of manufacturing jobs. Please explain how the Commission will consider the power and developmental purposes of the project and give equal consideration to recreational opportunities under the Federal Power Act.

Commission staff are currently preparing a final environmental assessment (FEA) on the existing licensee's (Brookfield Renewable Energy Group) application to relicense the Hawks Nest Project (FERC No. 2512). One of the primary issues in the project's relicensing is the effects various flow releases to the project's bypassed reach would have on developmental and environmental resources. The FEA will, to the extent feasible, quantify the benefits and costs of these effects. To that end, the Commission has recently issued an information request to the licensee to clarify staff's understanding of how the project operates to provide power to WVA Manufacturing LLC's nearby alloy plant. For environmental resources such as recreation and fisheries, the FEA will assess the amount of aquatic habitat and extent of whitewater boating opportunities that would be available under the same bypassed reach flow scenarios.

The Honorable Richard Hudson

1. **Mr. Katz, as you know, small conduit hydropower plays an important role in our nation's energy mix. It's a great option to add renewable generation to existing infrastructure. It can be installed almost anywhere - even in remote or isolated places -to provide affordable and reliable electricity.**

   a. **The Hydropower Regulatory Efficiency Act of 2013 created a streamlined process for qualifying conduit facilities. What has been your experience since then?**

   Since the creation of the qualifying conduit facility program nearly four years ago by the Hydropower Regulatory Efficiency Act of 2013 (HREA), the program has been effective. Eighty-six projects have qualified and accordingly have not been required to be licensed or exempted by the Commission. The Commission has rejected 11 applications for qualifying conduits, because they were not located on conduits, as required by the statute, or did not meet other statutory requirements. The entire process has taken on average just over 2 months, including the 15-day initial determination issued by the Commission and the 45-day public notice period, both required by the 2013 Act.

   b. **The draft legislation promoting small conduit facilities would shorten the 45 day notice period for projects under 2 megawatts. What's the Commission's position on this provision?**

   It is my understanding that the discussion draft of the Promoting Small Conduit Hydropower Facilities Act of 2017 would add provisions to Section 30(a) of the Federal Power Act for projects that meet the same criteria as current

qualifying conduit facilities but do not exceed 2 megawatts. For such projects, there would be no public notice provisions, and the facility would be deemed to qualify upon the affirmative determination by Commission staff or the failure of the Commission to act within 15 days of the initial determination of the notice of intent to construct a qualifying conduit facility.

Commission staff's view is there is no significant regulatory or practical different between qualifying conduit facilities of 2 megawatts or less and those of five megawatts or less. Accordingly, it might cause confusion to create two qualifying conduit provisions for small projects with different capacities. Staff also has some concern that completely eliminating the notice period would not give the public a chance to comment and to possibly provide information to the Commission that may not appear in the applicant's notice of intent. As an alternative, Congress could consider establishing a shorter public notice period for all qualifying conduits.

c. Should Congress consider shortening the process for larger small conduit facilities?

As discussed above, this would be appropriate for Congress to consider.

The Honorable Frank Pallone, Jr.

1. Mr. Katz, the Integrated Licensing Process (ILP) was implemented just over ten years ago to improve coordination among all parties involved in the licensing process. In your testimony you identified two other processes -the Alternative License Process (ALP) and the Traditional License Process (TLP) that are available to licensees that request one of these alternatives and receive approval of their request by FERC. How many of the pending re-licensing proceedings are being conducted through an ALP? A TLP?

There are currently 64 relicense applications pending. Of these applications, five were prepared using the ALP, 31 were prepared using the TLP, and 28 were prepared using the ILP.

2. Does FERC consult with federal agencies, states, tribes, or advocacy groups in cases where a licensee requests the use of either the ALP or the TLP prior to making a decision to grant a request for an ALP or TLP?

Yes. Under section 5.3 of the Commission's current regulations, a potential applicant must provide a copy of its request to use the TLP or ALP to all affected resource agencies, Native American tribes, and members of the public likely to be interested in the proceeding. The request must state that comments on the request must be filed with the Commission within 30 days of the filing date of the request. The potential applicant must also publish notice of its request to use the TLP or ALP in a daily or weekly newspaper of general circulation in each county in which the

project is located. The Commission considers any filed comments prior to acting on a potential applicant's request to use the TLP or ALP.

3. **The ILP was established as the default under FERC Order No. 2002, issued on July 23, 2003. If a licensee had initiated the relicense process prior to the establishment of the ILP as a default, was the applicant required to file the application and proceed under the ILP or make a formal request to FERC for approval to proceed under an ALP or TLP?**

   Pursuant to section 5.3 of the Commission's current regulations, a potential applicant for a new, subsequent, or original license could, until July 23, 2005, have elected to use the TLP or ALP. Any potential license applicant that initiated the licensing process after July 23, 2005, had to request authorization to use the TLP or ALP.

4. **Please provide a list of the projects with a pending relicense application that are being considered under the TLP or the ALP.**

   The list is provided in Table 3.

Table 1: Cases Requiring Other Agency Action						
Project No.	Project Name	State	FERC NEPA Completed	Time Since NEPA Completion (Years)	Authorization Type Needed	Federal / State Agency Responsible
2086	Vermilion Valley	CA	5/3/2004	13	ESA / WQC	FWS / CA
2105	Upper N. Fork Feather	CA	11/10/2005	11.5	WQC	CA
2174	Portal	CA	4/27/2006	11.1	ESA / WQC	FWS / CA
11810	Augusta Canal	SC	9/22/2006	10.7	ESA	NMFS
2107	Poe	CA	3/29/2007	10.2	WQC	CA
1971	Hells Canyon	ID/OR	8/31/2007	9.8	ESA / WQC	NMFS and FWS / OR and ID
199	Santee Cooper	SC	10/26/2007	9.6	ESA	NMFS
67	Big Creek	CA	3/13/2009	8.2	ESA / WQC	FWS / CA
120	Big Creek 3	CA	3/13/2009	8.2	ESA / WQC	FWS / CA
2085	Mammoth Pool	CA	3/13/2009	8.2	ESA / WQC	FWS / CA
2175	Big Creek 1 and 2	CA	3/13/2009	8.2	ESA / WQC	FWS / CA
2088	South Feather	CA	6/4/2009	7.9	WQC	CA
2244	Packwood Lake	WA	7/1/2009	7.8	ESA	NMFS
803	DeSabla Centerville	CA	7/24/2009	7.8	ESA	NMFS
516	Saluda	SC	7/20/2010	6.8	ESA	NMFS
2106	McCloud-Pit	CA	2/25/2011	6.3	WQC	CA
2615	Brassua	ME	9/14/2011	5.7	WQC	ME
12965	Wickiup Dam	OR	11/2/2012	4.5	ESA / WQC	FWS / OR
2079	Mid-Fork American	CA	2/22/2013	4.3	ESA / WQC	FWS / CA
2266	Yuba Bear	CA	12/19/2014	2.4	ESA / WQC	FWS / CA

Table 1: Cases Requiring Other Agency Action						
Project No.	**Project Name**	**State**	**FERC NEPA Completed**	**Time Since NEPA Completion (Years)**	**Authorization Type Needed**	**Federal / State Agency Responsible**
2310	Drum Spaulding	CA	12/19/2014	2.4	ESA / WQC	FWS / CA
12796	R.C. Byrd	OH	1/23/2015	2.3	ESA	FWS
405	Conowingo	MD	3/11/2015	2.2	ESA / WQC	NMFS and FWS / MD
2179	Merced	CA	12/4/2015	1.4	ESA / WQC	NMFS and FWS / CA
2467	Merced Falls	CA	12/4/2015	1.4	ESA / WQC	NMFS and FWS / CA
2335	Williams	ME	11/9/2016	0.5	WQC	ME

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

Table 2: Original Licenses or Small Hydropower Exemptions Issued 2003-2016									
Record #	**Project No.**	**Project Name**	**Waterway**	**State**	**Authorized Capacity (KW)**	**NOI/PAD/ ICD**	**Application Filed**	**FERC Order Issued**	**NOI/PAD/ICD Filing to Issuance (Years)**
Licenses									
1	12597	Lower Turnbull Drop	Spring Valley Canal	MT	7,700	3/18/2005	11/28/2005	7/28/2006	1.36
2	12598	Upper Turnbull Drop	Spring Valley Canal	MT	5,300	3/18/2005	11/28/2005	7/28/2006	1.36
3	12599	Mill Coulee Drop	Mill Coulee Canal	MT	1,050	3/18/2005	11/28/2005	7/28/2006	1.36
4	12667	Meldahl	Ohio River	OH	105,000	6/12/2006	10/6/2006	6/25/2008	2.04
5	13301	Culinary Water System	Culinary Water Supply System	WY	225	8/27/2008	4/28/2009	10/9/2009	1.12
6	13569	Arrow Canyon Conduit Energy Recovery	Coyote Spring Valley Well	NV	500	8/14/2009	3/24/2010	8/19/2010	1.01
7	13526	Expanded Kansas River	Kansas River	KS	6,500	10/6/2009	2/8/2010	8/19/2010	0.87
8	12628	Cedar Lake	Cedar River	IA	800	1/18/2007	1/13/2009	10/27/2010	3.78

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9	12576	Red Rock	Des Moines River	IA	36,400	7/30/2007	2/24/2009	4/18/2011	3.72
10	13797	Ouray Water Supply Small Conduit	Weehawken Spring	CO	20	2/12/2010	6/8/2010	7/7/2011	1.4
11	12632	Lake Livingston	Lake Livingston & Trinity River	TX	24,000	12/21/2007	3/31/2009	8/26/2011	3.68
12	13351	Marseilles Lock & Dam	Illinois River	IL	10,260	12/30/2008	12/30/2008	12/15/2011	2.96
13	13829	Creasey	Lincoln Creek	ID	20	5/13/2010	2/4/2011	1/5/2012	1.65
14	12740	Flannagan	Pound River	VA	1,800	9/24/2008	7/13/2009	1/27/2012	3.34
15	12737	Gathright	Jackson River	VA	3,700	12/26/2007	4/16/2009	3/13/2012	4.22
16	13368	Townshend Dam	West River	VT	924	7/24/2009	11/1/2010	3/29/2012	2.68
17	13226	Ball Mountain Dam	West River	VT	2,196	7/10/2009	11/1/2010	4/12/2012	2.76
18	12715	Jennings Randolph	Potomac River	WV	14,000	6/2/2008	12/23/2010	4/30/2012	3.91

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19	12642	W. Kerr Scott	Yadkin River	NC	4,000	10/1/2008	9/29/2009	7/17/2012	3.79
20	13237	Crocker	Whitman River	MA	145	11/30/2009	8/29/2011	9/5/2012	2.77
21	13417	Angelo Dam	La Crosse River	WI	205	12/22/2009	10/21/2011	12/28/2012	3.02
22	14066	Gartina Falls	Gartina Creek	AK	450	10/28/2011	5/25/2012	1/29/2013	1.26
23	14154	Little Wood River Ranch II	Little Wood River	ID	1,230	4/28/2011	11/15/2011	4/16/2013	1.97
24	14308	Vermont Tissue Mill	Walloomsac River	VT	360	12/5/2009	2/17/2012	4/25/2013	3.39
25	12569	Enloe Project	Similkameen River	WA	9,000	7/21/2005	8/22/2008	7/9/2013	7.97
26	13124	Allison Creek	Allison Lake	AK	6,500	4/7/2010	8/29/2011	8/1/2013	3.32
27	14327	Humboldt River	Humboldt River	NV	750	11/22/2011	6/26/2013	1/31/2014	2.19
28	13160	Overton Lock & Dam	Red River	LA	78,000	4/3/2009	5/24/2012	4/2/2014	5

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29	12756	Red River Lock & Dam No. 3	Red River	LA	36,200	2/27/2009	7/26/2010	4/14/2014	5.13
30	13011	Lake Shelbyville	Kaskaskia River	IL	6,800	9/8/2009	10/28/2011	4/18/2014	4.61
31	14367	Gilbert Project	Bear River	ID	90	6/15/2011	5/30/2012	5/12/2014	2.91
32	13287	Cannonsville	West Branch Delaware River	NY	14,080	8/13/2009	2/29/2012	5/13/2014	4.75
33	13123	Eagle Mountain Pumped Storage	Closed-Loop	CA	1,300,000	1/10/2008	6/22/2009	6/19/2014	6.44
34	14537	Antrim Micro	Susquehann a River	PA	40	4/12/2013	12/12/2013	9/3/2014	1.39
35	13346	Williams Dam	White River	IN	4,000	2/18/2011	12/13/2012	9/8/2014	3.56
36	13953	Lake Milton	Mahoning River	OH	650	5/19/2011	11/22/2011	9/26/2014	3.36
37	12790	Pomperaug	Pomperaug River	CT	76	1/29/2008	1/17/2013	10/16/2014	6.72

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38	14345	Rock River Beach	Rock River	MI	8	1/1/2007	11/23/2012	11/4/2014	7.85
39	13739	Braddock Locks And Dam	Monongahela River	PA	5,250	12/27/2011	9/17/2012	6/4/2015	3.44
40	13994	Hancock Creek	Hancock Creek	WA	6,000	9/9/2011	8/1/2013	6/19/2015	3.78
41	13948	Calligan Creek	Calligan Creek	WA	6,000	9/9/2011	8/1/2013	6/23/2015	3.79
42	14657	Zealand Falls	Whitewall Brook	NH	2,500	2/28/2013	12/29/2014	8/12/2015	2.45
43	14628	A-Mill Artist Lofts	Mississippi River	MN	600	7/29/2014	3/23/2015	9/4/2015	1.1
44	12721	Pepperell	Nashua River	MA	22,065	10/11/2012	10/9/2013	9/8/2015	2.91
45	13213	Heidelberg	Kentucky River	KY	2,064	10/12/2010	5/16/2012	12/21/2015	5.19
46	13214	Ravenna	Kentucky River	KY	2,064	10/12/2010	5/16/2012	12/21/2015	5.19
47	13701	Sardis Lake	Sardis Lake Dam	MS	14,600	1/31/2012	11/13/2013	12/28/2015	3.91

Table 2: Original Licenses or Small Hydropower Exemptions Issued 2003-2016									
Record #	Project No.	Project Name	Waterway	State	Authorized Capacity (KW)	NOI/PAD/ ICD	Application Filed	FERC Order Issued	NOI/PAD/ICD Filing to Issuance (Years)
48	13702	Grenada Lake	Yalobusha River	MS	9,000	1/31/2012	11/13/2013	12/28/2015	3.91
49	13703	Enid Lake	Yocona River	MS	4,600	1/31/2012	11/13/2013	12/28/2015	3.91
50	13704	Arkabutla Lake	Coldwater River	MS	5,100	1/31/2012	11/13/2013	12/28/2015	3.91
51	13404	Beverly	Muskingum River	OH	3,000	12/1/2010	10/31/2012	12/30/2015	5.08
52	13406	Malta	Muskingum River	OH	4,000	12/1/2010	10/31/2012	12/30/2015	5.08
53	13408	Philo	Muskingum River	OH	3,000	12/1/2010	10/31/2012	12/30/2015	5.08
54	13411	Rokeby	Muskingum River	OH	4,000	12/1/2010	10/31/2012	12/30/2015	5.08
55	13405	Devola	Mushingum River	OH	4,000	12/1/2010	10/31/2012	3/30/2016	5.33
56	13407	Lowell	Muskingum River	OH	4,800	12/1/2010	10/31/2012	3/30/2016	5.33
57	12613	Tygart Dam	Tygart River	WV	30,000	12/23/2008	4/30/2013	4/29/2016	7.35
58	13272	Old Harbor	Mountain Creek	AK	262	8/24/2009	11/1/2013	4/29/2016	6.68

Table 2: Original Licenses or Small Hydropower Exemptions Issued 2003-2016									
Record #	**Project No.**	**Project Name**	**Waterway**	**State**	**Authorized Capacity (KW)**	**NOI/PAD/ ICD**	**Application Filed**	**FERC Order Issued**	**NOI/PAD/ICD Filing to Issuance (Years)**
59	14276	Kentucky River Lock & Dam No. 11	Kentucky River	KY	5,000	5/5/2014	4/16/2015	5/5/2016	2
60	12717	Brandon Road	Des Plaines River	IL	6,800	7/16/2008	5/27/2009	7/22/2016	8.02
61	12686	Mason Dam	Power River	OR	3,400	4/27/2006	4/30/2013	9/6/2016	10.37
62	13563	Sweetheart Lake	Sweetheart Creek	AK	19,800	7/28/2010	5/29/2014	9/8/2016	6.12
63	12626	Dresden Island	Illinois River	IL	10,960	7/16/2008	4/1/2009	9/23/2016	8.19
64	12958	Uniontown	Ohio River	KY	66,600	11/3/2008	4/29/2011	9/27/2016	7.9
Exemptions									
65	12462	Indian River Power Supply	Westfield River	MA	1,600	5/27/2003	7/28/2003	2/23/2006	2.75
66	2204	Williams Fork	Williams Fork River	CO	3,650	4/21/2003	12/30/2004	9/29/2006	3.44
67	12629	Corriveau	Swift River	ME	350	5/25/2005	12/7/2005	10/24/2006	1.42
68	12608	Alternative	Mumford River	MA	47	10/8/2004	8/15/2005	12/8/2006	2.17

Table 2: Original Licenses or Small Hydropower Exemptions Issued 2003-2016									
Record #	**Project No.**	**Project Name**	**Waterway**	**State**	**Authorized Capacity (KW)**	**NOI/PAD/ ICD**	**Application Filed**	**FERC Order Issued**	**NOI/PAD/ICD Filing to Issuance (Years)**
69	12769	Ice House Power	Nashua River	MA	280	11/23/2005	1/22/2007	3/31/2008	2.35
70	12557	Royal Mills	South Branch Pawtuxet River	RI	225	3/10/2006	12/12/2007	3/26/2009	3.05
71	12551	Mansfield Hollow	Natchaug River	CT	500	7/21/2005	1/25/2008	6/17/2009	3.91
72	13652	Potter Creek	Potter Creek	MT	0	6/1/2009*	1/11/2010	4/22/2010	0.89
73	13565	Alder Brook	Alder Brook	VT	9	10/15/2008	8/6/2009	7/13/2010	1.74
74	13356	Slatersville	Upper Slatersville Reservoir	RI	360	5/31/2008	1/15/2009	12/20/2010	2.56
75	13871	Humphreys	Goose Creek	CO	310	7/9/2010	10/18/2010	12/22/2010	0.45
76	13381	Troy Hydroelectric	Missisquoi River	VT	850	1/22/2010	7/23/2010	12/2/2011	1.86
77	13583	Byron Weston	Housatonic River	MA	250	11/24/2009	3/9/2011	2/29/2012	2.27
78	13080	Cargill Falls	Quinebaug River	CT	875	8/30/2010	4/13/2011	3/19/2012	1.55

Table 2: Original Licenses or Small Hydropower Exemptions Issued 2003-2016									
Record #	**Project No.**	**Project Name**	**Waterway**	**State**	**Authorized Capacity (KW)**	**NOI/PAD/ ICD**	**Application Filed**	**FERC Order Issued**	**NOI/PAD/ICD Filing to Issuance (Years)**
79	14447	Crescent Street	Millers River	MA	448	10/1/2011	8/15/2012	3/1/2013	1.42
80	14421	Freedom Falls	Sandy Stream	ME	50	1/6/2012	6/1/2012	3/25/2013	1.22
81	14332	Cheshire Mills	Nubanusit Brook	NH	90	12/9/2010	12/5/2011	6/4/2013	2.49
82	13806	Brooklyn Dam	Upper Ammonoosuc	NH	600	1/15/2014	7/28/2014	8/14/2015	1.58
83	14550	Hanover Pond Dam	Quinnipiac River	CT	220	10/15/2014	6/26/2015	5/19/2016	1.59

* Date estimated from pre-filing consultation record.
NOI = Notice of Intent- notice from licensee of intent to file a license application
PAD = Pre-Application Document- provides existing information relevant to the project that is in the applicant's possession or that the applicant can obtain with the exercise of due diligence. It is distributed to the Commission and interested stakeholders to enable these entities to identify issues and related information needs, develop study requests and study plans, and prepare documents analyzing any license application that may be filed with the Commission.
ICD = Initial Consultation Document – summary of agencies consulted prior to filing of license/exemption application

Table 3: List of Pending Projects under the TLP or the ALP					
Project No.	**Project Name**	**Capacity (MW)**	**State**	**Application Filed**	**Process Type**
P-2086	Vermilion Valley	0.0	CA	8/30/2001	TLP
P-2105	Upper North Fork Feather River	362.3	CA	10/23/2002	TLP
P-2174	Portal	10.8	CA	3/27/2003	TLP
P-1971	Hells Canyon	1,166.9	ID, OR	7/21/2003	TLP
P-2107	Poe	120.0	CA	12/16/2003	TLP
P-2082	Klamath	169.0	CA, OR	2/25/2004	TLP
P-199	Santee-Cooper	134.5	SC	3/15/2004	TLP
P-2100	Oroville	762.9	CA	1/26/2005	ALP
P-2085	Mammoth Pool	190.0	CA	11/29/2005	ALP
P-2242	Carmen Smith	92.0	OR	11/24/2006	TLP
P-67	Big Creek 2A, 8, Eastwood	373.3	CA	2/23/2007	ALP
P-120	Big Creek 3	174.5	CA	2/23/2007	ALP
P-2175	Big Creek 1 & 2	150.0	CA	2/23/2007	ALP
P-2088	South Feather Power Project	117.5	CA	3/26/2007	TLP
P-516	Saluda	207.3	SC	8/28/2008	TLP
P-2744	Menominee-Park Mill	4.6	MI/WI	2/28/2013	TLP
P-4093	Bynum	0.6	NC	3/30/2015	TLP
P-10253	Lower Pelzer	3.0	SC	12/4/2015	TLP
P-10254	Upper Pelzer	2.0	SC	12/4/2015	TLP
P-14439	Glen Ferris	6.2	WV	12/29/2015	TLP
P-2428	Piedmont	1.0	SC	12/30/2015	TLP
P-2593	Upper Beaver Falls	1.5	NY	12/30/2015	TLP
P-2727	Ellsworth	8.9	ME	12/30/2015	TLP

Table 3: List of Pending Projects under the TLP or the ALP					
Project No.	**Project Name**	**Capacity (MW)**	**State**	**Application Filed**	**Process Type**
P-2823	Lower Beaver Falls	1.0	NY	12/30/2015	TLP
P-848	Trout Creek	0.1	NV	5/18/2016	TLP
P-2307	Salmon and Annex Creek	10.6	AK	8/31/2016	TLP
P-2386	Holyoke No. 1	1.1	MA	8/31/2016	TLP
P-2387	Holyoke No. 2	0.8	MA	8/31/2016	TLP
P-2388	Holyoke No. 3	0.5	MA	8/31/2016	TLP
P-2808	Lower Barker	1.5	ME	1/30/2017	TLP
P-190	Uintah	1.2	UT	1/31/2017	TLP
P-2788	Colliersville	1.5	NY	2/28/2017	TLP
P-1510	Kaukauna	4.8	WI	3/24/2017	TLP
P-2684	Arpin	1.5	WI	4/26/2017	TLP
P-9100	Riverdale Mills	0.2	MA	4/27/2017	TLP
P-2809	American Tissue	1.2	ME	4/29/2017	TLP

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225-2927
Minority (202) 225-3641

May 19, 2017

Mr. Jeffrey A. Leahey
Deputy Executive Director
National Hydropower Association
601 New Jersey Avenue, N.W.; Suite 660
Washington, DC 20001

Dear Mr. Leahy,

Thank you for appearing before the Subcommittee on Energy on Wednesday, May 3, 2017, to testify at the hearing entitled "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Monday, June 5, 2017. Your responses should be mailed to Grace Appelbe, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Wyatt.Ellertson@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Chairman
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachment

U.S. House of Representatives Committee on Energy and Commerce
Subcommittee on Energy
May 3, 2017 Hearing: Legislation Addressing Pipeline and Hydropower Infrastructure Modernization
Questions for the Record Submitted to Mr. Jeffrey Leahey

The Honorable Frank Pallone, Jr.

1. Mr. Leahey, in your written testimony, you stated that improvements could be made to the discussion draft of the SHORE Act. Would removing FERC's power of eminent domain protect private property rights? Do you recommend doing so?

A: As stated in my written testimony, NHA has not taken a position on the bill, but recognizes that shoreline management is an important issue for both project owners and landowners adjacent to hydropower reservoirs or within project boundaries.

It appears to NHA that the bill is attempting to strike a balance between the lands needed or associated with a project for FERC-regulated recreational purposes, and those adjacent lands that may be held by private property owners. NHA does not believe the eminent domain authority under Section 21 of the Federal Power Act is a problem that the bill aims to address, nor is Section 21 implicated by the bill in any way. NHA would not recommend any change to the eminent domain provisions of the Federal Power Act.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States
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Minority (202) 225-3641

May 19, 2017

Mr. William Robert Irvin
President and CEO
American Rivers
1101 14th Street, N.W.; Suite 1400
Washington, DC 20005

Dear Mr. Irvin,

Thank you for appearing before the Subcommittee on Energy on Wednesday, May 3, 2017, to testify at the hearing entitled "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

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Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Chairman
Subcommittee on Energy

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy

Attachment

June 5, 2017

Ms. Grace Appelbe
Legislative Clerk
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

Dear Ms. Appelbe:

Please find, attached, Mr. William Robert Irvin's responses to questions from the Hon. Frank Pallone, Jr., following Mr. Irvin's testimony before the Subcommittee on Energy on Wednesday, May 3, 2017, in the hearing entitled "Legislation Addressing Pipeline and Hydropower Infrastructure Modernization." A copy of the responses was also emailed to Mr. Wyatt Ellertson, pursuant to the instructions contained in Chairman Upton's letter to Mr. Irvin dated May 19, 2017.

If you have any questions, please feel free to contact me at 202-243-7029, or at jbradley@americanrivers.org.

Sincerely,

Jim Bradley
Vice President, Policy and Government
American Rivers

Questions from Hon. Frank Pallone, Jr. to Mr. William Robert Irvin

Q1. *Mr. Irvin, in your oral testimony, you referenced methane emissions from hydroelectric reservoirs as contributors to global warming. Recent meta-analyses have indicated that the greenhouse gas emissions associated with these reservoirs are higher than previously believed. Are you aware of academic, private, or governmental surveys of methane emissions from reservoirs attached to hydroelectric projects or potential hydroelectric projects?*

A recent meta-analysis by Deemer et al. (2016; attached) synthesizes all of the published data on greenhouse gas emissions (i.e., methane, CH_4; carbon dioxide, CO_2; nitrous oxide, N_2O) from hydroelectric reservoirs as well as those used for flood control, irrigation, navigation, and recreation. This global dataset includes methane emissions data from 21 hydroelectric reservoirs in 11 states and Puerto Rico (AL, CA, CO, GA, ID, NC, OR, SC, TN, WA, WI, PR). American Rivers believes that based on this meta-analysis, a comprehensive survey of American hydropower projects to determine methane emission levels is overdue. As the Committee continues to grapple with the issue of regulating and limiting the emission of greenhouse gas pollutants from the electricity sector, it is important that methane emissions from hydropower projects be fully accounted for so that other electricity producers are not compensating for the hydropower industry.

A plain language overview of the findings of the Deemer et al. study was published in a September 2016 article in the Washington Post titled "Reservoirs are a major source of global greenhouse gases, scientists say." The full dataset from this meta-analysis is available online: Deemer BR, Harrison JA, Li S, Beaulieu JJ, DelSontro T, Barros N, Bezerra-Neto JF, Powers SM, dos Santos MA, Vonk JA (2016) Data from: Greenhouse gas emissions from reservoir water surfaces: a new global synthesis. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.d2kv0

Could you provide more information on what the current research has shown and what the committee should consider as it conducts oversight of hydroelectricity in the United States?

Hydropower is often thought of as "green" energy; however a growing number of scientific studies document hydroelectric reservoirs as a source of greenhouse gas. All hydroelectric reservoirs are a source of methane to the atmosphere (Barros et al. 2011) and methane emissions are responsible for the majority of the climate change impacts of hydropower (Deemer et al. 2016). Methane is a powerful and fast-acting greenhouse gas that can trap 34 times as much heat as carbon dioxide over a 100-year period (Shindell et al. 2009). Deemer et al. (2016) estimate that global hydroelectric and non-hydroelectric reservoirs emit approximately 13.4 million metric tons of methane per year, with nearly half of that coming from hydroelectric reservoirs. Calculated reservoir methane emissions are 25 percent larger than previous estimates and greater than those for natural lakes, ponds, rivers, or wetlands.

Methane is produced through the decomposition of organic matter (e.g., leaves, trees, algae) under anoxic (i.e., no oxygen) conditions that are common in reservoir sediments. Methane is emitted from manmade reservoirs through a number of pathways including: (1) continuous diffusion across the surface of the reservoir, (2) bubbling ("ebullition") from sediments, and (3) transport through plants growing within the reservoir (Beaulieu et al. 2014, Deemer et al. 2016, Harrison et al. 2017). Because decomposition of flooded vegetation and soil organic matter fuels greenhouse gas production, the first 10 to 20 years after dam construction is often associated with particularly high greenhouse gas emissions (Barros et al. 2011) though emissions persist for the life of the reservoir. The operation of hydropower dams creates two additional pathways for greenhouse gas emissions, which lead to hydroelectric reservoirs producing double the amount of methane produced by non-hydroelectric reservoirs; these include: (4) degassing at turbines and spillways as a result of rapid depressurization of water leaving the reservoir, and (5) emissions resulting from drawdowns of greater than 0.5 meters that cause increased bubbling of methane and periodic exposure of flooded, methane-producing sediments to the atmosphere (Deemer et al. 2016, Harrison et al. 2017). Rivers segments downstream of hydropower dams are also associated with increased methane emissions, especially if anoxic, methane-rich water from the bottom of the reservoir flows through the turbines (Deemer et al. 2016).

While the amount of methane emitted by individual reservoirs is variable, scientists have shown that on average nutrient-rich ("eutrophic") reservoirs emit ten times more methane than nutrient-poor ("oligotrophic") reservoirs (Deemer et al. 2016). This is because decomposing algae generates more methane than decomposing leaves or wood and algal blooms are common in nutrient-rich systems. Eutrophication also magnifies the effects of reservoir drawdown on methane emissions (Harrison et al. 2017). It was previously believed that low-latitude reservoirs (and Amazonian reservoirs in particular) produced the most methane per unit area, but it is now believed that reservoirs with warm waters and high algal growth emit more methane per unit area, regardless of latitude (Beaulieu et al. 2014).

Future plans for hydroelectric development should not only aim at minimizing the overall environmental impacts of the dams themselves, but also to minimize greenhouse gas emissions per unit of energy generated through careful siting and operation (Barros et al. 2011). For example, by locating new reservoirs upstream of nutrient inputs that fuel higher methane emissions (Deemer et al. 2016) or reducing the frequency and magnitude of drawdowns (Harrison et al. 2017), methane emissions may be reduced.

American Rivers urges the Committee to conduct oversight on the issue of methane emissions from hydroelectric plants, both in the United States and overseas. As noted above, we believe that methane emissions need to be accounted for when creating a regulatory regime to reduce overall greenhouse gas emissions. We urge the Committee to direct federal agencies, particularly the Department of Energy, to facilitate, encourage, and conduct research into the greenhouse gas emissions from hydropower projects. Such research could build upon the work of scientists who have developed models for predicting methane emissions in the Amazon basin

(de Faria et al 2015). Further, we urge the Committee to examine the role that U.S. government financing of hydropower development overseas may be contributing to overall global greenhouse gas emissions.

Unfortunately, when FERC examines hydropower license applications, the Commission does not require methane gas emissions data. More concerning, the Commission does not require applicants to examine the impacts of climate change on the supply of fuel, in this case, river flows, over the proposed license term. It is evident to all that climate change is having dramatic impacts on hydrology; climate change is responsible for decreased snowpack, extreme rainfall, prolonged droughts, and changes to historic weather patterns. The failure of FERC to consider climate change in considering its license conditions and terms does a disservice not only to the applicant but also all other stakeholders who rely on healthy river flows at or about the project.

However, the failure to consider methane emissions may have even more broad impacts by exacerbating the very conditions causing climate change. Evidence for such a feedback loop is convincingly argued by Deemer et al:

[A] warming climate supports larger algal populations, larger algal populations provide more organic matter to support more methane production, and a portion of the methane produced escapes to the atmosphere, where it functions to further warm climate.

I urge the Committee and the Commission to take seriously the scientific evidence that hydroelectric dams are contributing to climate change. In doing so, I recognize the greenhouse gas avoidance that some, but not all, current or proposed hydroelectric projects provide. However, that avoidance is not 100 percent at most projects, in comparison to wind and solar which are truly carbon free and for which the fuel source is truly renewable, as opposed to hydroelectric dams which by their nature rely upon finite, and competed for, hydrologic resources.

Barros, N., J.J. Cole, L.I. Tranvik, Y.T. Prairie, D. Bastviken, P.A. del Giorgio, F. Roland, and V.L.M. Huszar. 2011. Carbon emission from hydroelectric reservoirs linked to reservoir age and latitude. Nature Geoscience 4: 593–596.

Beaulieu, J.J., R.L. Smolenski, C.T. Nietch, A. Townsend-Small, and M.S. Elovitz. 2014. High methane emissions from a midlatitude reservoir draining an agricultural watershed. Environmental Science and Technology 48:11100–11108.

Deemer, B.R., J.A. Harrison, S. Li, J.J. Beaulieu, T. Delsontro, N. Barros, J.F. Bezerra-Neto, S.M. Powers, M.A. Dos Santos, and J.A. Vonk. 2016. Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis. BioScience 66(11):949-964.

de Faria FAM, Jaramillo P, Sawakuchi HO, Richey J E and Barros N. 2015. Estimating greenhouse gas emissions from future Amazonian hydroelectric reservoirs. Environmental Research Letters 10 124019

Harrison, J.A., B.R. Deemer, M.K. Birchfield, and M.T. O'Malley. 2017. Reservoir Water-Level Drawdowns Accelerate and Amplify Methane Emission. Environmental Science and Technology 51:1267–1277.

Shindell, D.T., G. Faluvegi, D.M. Koch, G.A. Schmidt, N. Unger, and S.E. Bauer. 2009. Improved attribution of climate forcing to emissions. Science 326:716–718.

Q2. *Mr. Irvin, Democratic Members of the Energy Subcommittee recently wrote to Chairman Upton and Chairman Walden to request a follow-up oversight hearing on hydroelectric licensing to receive testimony from Federal resources agencies, states and Native American tribes. These entities, as you know, have mandatory conditioning authority on hydroelectric licenses that is central to any discussion of legislative changes to the licensing process. As a member of the Congressional Native American Caucus, I'm particularly interested in ensuring the views of tribes are heard in this matter. Mr. Irvin, are you aware of any specific concerns by a Tribe with regard to the draft legislation?*

Many Native American tribes have long had serious concerns with the construction and operation of hydropower dams on or impacting their reservations. That is why the National Congress of American Indians passed a resolution in 2015 that stated in pertinent part:

> *[NCAI]opposes changes to the hydropower section of the Federal Power Act that: (a) weaken the current protections Indian tribes have through the Mandatory Conditions requirements under Section 4(e) of that Act; (b) overturn the watershed case of City of Tacoma, Washington v. F.E.R.C., 460 F.3d 53 (D.C. Cir. 2006), which affirmed the authority of federal agencies to address the impacts of water diversion taking place off reservation lands after decades of hard-fought litigation; (c) roll back efforts to restore fish populations through the requirement of fishways; and (d) unnecessarily limit the available time and scientific information available to federal agencies in deciding what Mandatory Conditions should be included with a license...* [1]

The experience of the Skokomish Tribe in Washington State illustrates the problems that tribes have faced in hydropower licensing, and has informed their position on the discussion drafts the Committee considered in the May 3rd hearing. Their concerns, while specific to their tribe, are shared by numerous tribes from across the country. I will attempt to summarize the Skokomish's concerns, as I understand them, but would urge the Committee to consider holding another hearing on the Discussion Draft, specifically on how it impacts tribes, in order to more fully and directly hear the tribal perspective.

The Skokomish Tribe in Washington State is concerned about the current draft of the Hydropower Modernization Act and the impact that the draft bill could have on the federal government's ability to meet its trust responsibility to protect Indian reservations, and treaty protected resources. While the Tribe, like all stakeholders, wants the licensing process not to be unnecessarily delayed or to be fraught with extraneous costs, they believe that truncated schedules and sloppy science will result in fifty-year dam licenses that will destroy watersheds and ecosystems, as was the case for the Skokomish Tribe with the licensing of the Cushman Dam.

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[1] The National Congress of American Indians Resolution #SD-15-009

The City of Tacoma operated Cushman Dam without any license conditions for 80 years. The Interior Department's failure to exercise its statutory duty to impose any – let alone "appropriate-license conditions" in 1924 resulted in the destruction of the once plentiful Skokomish North Fork fisheries, the flooding of almost thirty percent of the Skokomish Reservation, the degradation of the entire Skokomish Watershed, and the devastation of treaty protected cultural and wildlife resources. FERC did not even require Tacoma to pay for the use of Reservation lands where some of the Project was located. The Skokomish Tribe had to fight at every step in the relicensing process to secure conditions to protect its Reservation and the reason it was established – to be a homeland and provide access to the natural resources that the Skokomish relied on for generations.

When the Interior Department finally imposed conditions on the Cushman Dam license, FERC decided that Interior's conditions were untimely. And it was the Tribe that had to fight in court to ensure that the conditions were enforced in the license. Even Interior was not willing to defend its conditions – but instead deferred to FERC regarding FERC's decision that the conditions that the Interior imposed were not timely and extended beyond the project works that were on the Reservation, and therefore were not mandatory.

The Skokomish Tribe prevailed, and the ruling is set out in a 2006 decision from the U.S. Court of Appeals for the District of Columbia Circuit, *City of Tacoma v. FERC*.[2] In that ruling, the Court agreed with the Tribe regarding Interior's authority to impose conditions on a project. The Court's decision established that FERC's deadline did not constrain Interior's mandatory authority under the Federal Power Act. The Court also upheld Interior's decision to impose conditions on the license beyond those project works that were actually on the Reservation, but including those necessary to protect the Reservation.

This decision was critical to the Tribe and Tacoma reaching an historic settlement, which made Tacoma and the Tribe partners in the management of the Skokomish River and the Skokomish Watershed. As a result of this settlement, there have been major improvements in the Skokomish River Estuary, improved habitat on the North Fork of the Skokomish River, and the construction of a Sockeye hatchery to restore this run up the North Fork of the Skokomish River.

The Skokomish Tribe's experience with the Federal Power Act demonstrates the critical importance that that the conditions set out in Sections 4(e) and 18 of the Act play in balancing the use of the Nation's waters for hydropower with terms and conditions essential to ensuring that hydropower is not developed at the expense of other vitally important resources.

This is why the Skokomish Tribe is concerned with the draft bill's impact on the ability of the federal government to uphold its trust responsibility to protect tribal lands and treaty resources.

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[2] Note: American Rivers intervened in this case in support of the Skokomish Tribe.

Specifically, the draft bill would give FERC the ability to set deadlines on Interior and other agencies to set their conditions under the Federal Power Act, including Sections 4(e) and 18. While all stakeholders want the process to move in a prudent and timely manner, (after all, the licensee gets to operate the facility under annual licenses without any new conditions until a new license is issued), without the resources or personnel to do the job, it is very unlikely that Interior or other federal and state agencies will meet the deadline that FERC sets. In the Tribe's experience, FERC readily extended deadlines for the applicant and for itself, but only sought to impose unrealistically short deadlines on the other federal and state agencies which had equally important and distinct responsibilities under the Act. The Court in the *City of Tacoma v FERC* decision recognized this. But under the Discussion Draft, the consequence of failing to meet the deadline will be FERC's rejection of the conditions, essentially overturning a critical element of the *City of Tacoma v. FERC* decision.

The Tribe is also concerned about the provisions of the draft bill that delegate to FERC, an agency that has neither the manpower nor expertise, the ability to make critical environmental decisions regarding projects. The Federal Power Act was forward-thinking in recognizing the experience and expertise of other agencies and the need for them to play a role in the issuance of these licenses. In the Tribe's view, this proposal would make an agency that is not qualified to make environmental decisions, ultimately responsible for these decisions.

The Tribe has expressed the view that, as Congress considers changes in the Federal Power Act it should make changes that specifically strengthen Sections 4(e) and 18. Specifically, the Tribe asks that the Federal Power Act be amended to enable Tribes to assume the authority to impose 4(e) and 18 conditions to protect its Reservations and Treaty rights and resources. This would make the Federal Power Act consistent with other statutes like the Clean Water Act and Safe Drinking Water Act, where Tribes are treated as governments instead of wards of the government. In the alternative, if Congress insists on authorizing FERC to set deadlines for Agencies to impose 4(e) and 18 conditions, the Tribe asks that the Federal Power Act also be amended to mandate that federal agencies must impose conditions on licenses to protect Indian Reservations, Tribal Treaty rights, and Tribal Trust resources, and provide Tribes with a cause of action against the United States, if the Agencies fail to do their job.

Q.3 *Mr. Irvin, in your testimony, you state that FERC routinely denies study requests from state, federal, and tribal resource agencies because FERC itself does not believe the information is necessary for FERC to complete its own review. Further, because the state, federal, and tribal resource agencies, acting under separate statutory authority or pursuant to their directives under the Federal Power Act, are unable to complete their oversight of a license application until the requested information is provided by the applicant, FERC's refusal to transmit the study requests on the resource agencies' behalf causes unnecessary delays and confusion.*

Can you expand on the issue of study denial delays?

Do you know of instances in which applicants were aware that state, tribal, and federal resources agencies required information pursuant to their statutory authorities, that FERC had declined to include a request in its study plan, and the applicant chose to not collect the data necessary to establish a scientifically based and legally defensible condition on a license?

Denial of resource agency study requests by the Federal Energy Regulatory Commission (FERC) has long been a significant contributing factor in licensing delays. Federal, state, and tribal resource agencies have independent legal authorities granted to them by federal statutes such as the Clean Water Act, the Endangered Species Act, and the Federal Power Act that require them to complete their own reviews and place necessary conditions on a license for that license to be compliant with state and federal law. In order to complete a thorough, timely, and defensible review, it is critically important that resource agencies have scientific data from studies to inform their decision making.

Where the applicant-proposed study plan will not provide adequate information for resource agencies to carry out their reviews, resource agencies ask FERC to require the applicant to provide the necessary information. Frequently, these requests are rebuffed and resource agencies are forced into a situation where they must make resource protection decisions without sufficient information (leaving them vulnerable to legal challenge), deny the permit or certification, or use taxpayer funds from their budgets to conduct the studies themselves. The additional wrangling to get information deemed necessary, the study dispute process embedded within the licensing process, and the conducting of studies to get the necessary information that the applicant and FERC have refused to provide, all add time to the licensing process and divert agency attention and resources away from exercising their authority in a timely manner.

The following are several examples that highlight the challenge that resource agencies face in getting FERC to assist them in obtaining the information they need to thoroughly and timely exercise their independent reviews and authorities:

Conowingo Hydroelectric Project (P-405), Maryland

In 2009, the Maryland Department of Natural Resources (MDNR), on behalf of and in conjunction with the Maryland Department of the Environment (MDE) requested the applicant perform a Sediment and Nutrient Loading and Distribution Study in order to assess the project's impact on natural patterns of sediment and nutrient transportation and deposition in the impoundment, downstream riverine habitat and upper Chesapeake Bay. To support its request MDNR wrote:

> *[The] [l]ong-term consequences of sediment accumulation and its [effect] on downstream riverine and upper Chesapeake Bay habitat have not been adequately studied. This study will address missing information and data.*[3]

The applicant agreed to do a sediment study, but failed to include information on benchmarks for potential future mitigation that MDNR requested. FERC agreed and in its Study Plan Determination wrote:

> *Exelon's revised study plan includes projections of sediment accumulation and options to manage, mitigate, and remove accumulated sediment. However, it did not address benchmarks (triggers) for potential impacts and actions. Given the temporal variability of when the reservoir will reach its sediment storage capacity, the study report should include a sediment management plan that includes projections of sediment accumulation; benchmarks for potential impacts and actions; and options to manage, mitigate, and remove accumulated sediment.*[4]

Subsequently, the applicant again, failed to include the required information in its study report and despite objections from MDNR, FERC determined that the information was not required and declined to require the applicant to provide the requested information.[5] MDNR and MDE requested FERC reconsider its decision because it was not consistent with FERC's own prior study plan determination or FERC's regulations.[6] FERC declined to do so.

MDNR continued to raise the deficiency issues with the applicant and FERC and ultimately informed the applicant that it did not have sufficient information to process the 401 certification for the project. The applicant finally relented and in 2014 entered into an agreement with MDE to conduct a multi-year study to address the data deficiencies.[7] [8] As of March 2017, the project

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[3] FERC Accession No. 20090710-5127

[4] FERC Accession No. 20100204-3055

[5] FERC Accession No. 20120521-3002

[6] FERC Accession No. 20120620-5101

[7] FERC Accession No. 20141218-3065

[8] http://news.maryland.gov/mde/2014/12/08/water-quality-certification-application-for-proposed-conowingo-dam-relicensing-withdrawn-january-7-water-quality-certification-public-hearing-canceled-exelon-agrees-to-fund-

still has not received a 401 and MDE has only recently determined it may have sufficient information to begin assessing the water quality impacts of the project.[9]

It is clear from the record that much of the delay on this project could have been avoided 1) if the applicant had simply provided the information it was required to provide in the study plan and 2) if FERC had required the applicant to provide the necessary information. Instead, this project is still awaiting its license because the State of Maryland did not have enough information to issue a legally defensible water quality certification.

El Dorado Project (P-184), California

In 2001, the California State Water Resources Control Board (SWRCB), California's agency with responsibility for implementing section 401 of the Clean Water Act, wrote to Congress in response to FERC's report pursuant to section 603 of the Energy Policy Act of 2000 to address the issue of study requests and delay. In that letter the SWRCB wrote:

> *In addition, FERC often delays requiring, or refuses to require, the applicant to complete the agency requested studies that were required as part of the first and second stage consultation requirements prior to submitting the license application to FERC.*
>
> *FERC's handling of El Dorado Project #184 is an example of this problem. The license application was submitted without completion of the water quality, fisheries, hydrology, recreation, or aquatic surveys for listed or sensitive species. The state and federal agencies commenting on the draft application concluded that the application was deficient. FERC nevertheless accepted the application for filing, thus triggering the requirement for water quality certification. Because the data will not be available for more than a year, the SWRCB is forced to either deny certification or waive its authority for certification. The other option is for the applicant to withdraw its request.*
>
> *This recurring problem is a product of FERC's own regulations. The failure to complete required studies, the absence of firm deadlines governing responses to [Additional Information Requests], and the premature requirement to request 401 certification, leaves the agencies uncertain about when or if they will receive necessary information. This uncertainty compromises the agency's ability to evaluate and analyze project impacts to natural resources.*[10]

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additional-study/

[9] FERC Accession No. 20170517-5130

10 California's Response to the Federal Energy Regulatory Commission Staff Report on Hydroelectric Policies, Procedures, and Regulations-Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000, October 2001.

In this letter, the SWRCB very clearly lays out how uncertainty around whether they will receive the necessary information to complete the 401 compromises their ability to complete their water quality certification. The obvious solution would be for FERC to require studies that mandatory conditioning agencies need to complete their reviews.

Dorena Lake Dam Hydroelectric Project (P-11945), Oregon

The Oregon Department of Fish and Wildlife (ODFW) became concerned about entrainment of fish in the project area and they requested an entrainment study. The applicant declined to provide the study and FERC agreed, also declining to require the applicant to conduct the study. ODFW submitted 10(j) recommendations to FERC asking that a fish screen be required to prevent entrainment and FERC, in its October 2008 license order, rejected the 10(j) recommendation, citing a lack of information on entrainment of fish in the project area :

> *As discussed in the final EA, staff found no evidence to suggest that downstream migration of fish from Dorena Lake currently is occurring in large numbers, or that loss of fish through the dam is currently having a negative effect on populations of fish in the lake... For these reasons, staff concluded that there would be little biological benefit associated with installing an exclusion screen on the intake and subsequently performing a performance evaluation, and therefore, the measures would not justify an annualized cost of $56,240.*[11]

In its December 2008 response to the license order, ODFW sent a letter pointing out the unfairness of refusing to require a study ODFW requested, then refusing to incorporate their 10(j) recommendation on the basis of lack of information:

> *Symbiotics and ODFW developed a settlement agreement, outside of the FERC process which, in this case, adequately addresses ODFW's concern with project entrainment of the state's fish and wildlife resources. While ODFW is satisfied with the outcome it has reached with Symbiotics, we note that there are several conclusions for which the Commission should provide more explanation. For example, the Order at 42 suggests there was no evidence that large numbers of fish were migrating downstream. However, the order omits the fact that FERC did not require a study to obtain information on fish migrations, and further, FERC rejected ODFW's Additional Study Request to conduct an entrainment study necessary to collect the information. Essentially, FERC refused to require the collection of data, then concluded that there was no evidence that large numbers of fish were migrating.*[12]

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11 FERC Accession No. 20081017-3023

12 FERC Accession No. 20081226-5004

Merced (P-2179) and Merced Falls (P-2467), California

In 2009, the State Water Resources Control Board (SWRCB) requested a mercury bioaccumulation study for the Merced and Merced Falls Hydroelectric Projects because they had information that indicated there may be a mercury problem in the project area:

> *At the meeting on the Water Quality Study Plan, staff requested that the Licensee include an examination of whether and to what extent bioaccumulation of mercury may be occurring in fish that reside in the Project impoundments. This request is due, in part, to information contained in an October 2004 Technical Memorandum prepared by Stillwater Sciences for the CALFED Ecosystem Restoration Program entitled: "Mercury Assessment of the Merced River Ranch1" that shows that the mercury content of biota collected below the Merced Falls Project is considerably higher than biota collected above Lake McClure. State Water Board staff has consulted with the Office of Environmental Health Hazard Assessment (OEHHA) to determine the appropriate level of effort required to collect the data needed by that agency to make a determination regarding potential human health hazards associated with mercury bioaccumulation.* [13]

The bioaccumulation study went to dispute resolution and FERC declined to require the study despite evidence that there may be a mercury problem in the project reach and the implications thereof to human health:

> *Finally, we disagree with the Panel and the Resource Agency's Panelist's assessment that the proposed study identifies an appropriate nexus to potential project effects. As stated in the Determination, the baseline for our NEPA review is existing conditions, not the original construction of the project reservoirs. MID is not proposing to alter project operations, to increase water fluctuations, or mobilize substrates. Therefore, as proposed, the project is not performing any actions associated with the release of methylation of mercury. For the reasons cited above, we maintain that a study of mercury bioaccumulation is not warranted.* [14]

This determination would be reasonable if the SWRCB had not told FERC it had information in its possession indicating that a problem may exist under *current* operations of the project.

In 2011, the SWRCB used its own authority to issue an investigation order to get the required bioaccumulation information. The investigation order notes:

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[13] FERC Accession No. 20090302-5139

[14] FERC Accession No. 20091222-3035

> *Division staff have participated in the Commission relicensing proceeding and have provided input regarding the information that will be needed to develop the water quality certification. The study plans proposed by MID did not address the full range of information needed by the State Water Board to develop the certification. The Study Determination issued by the Commission's Director of Energy Projects on September 14, 2009, was likewise deficient by not requiring that MID implement additional studies or study modifications requested by the State Water Board and other participating agencies and non-governmental organizations, in particular those that deal with resource issues downstream of Crocker-Huffman Diversion Dam.*[15]

In this particular situation, the SWRCB was able to obtain the needed data. However, the order required additional staff time and resources that would not have been necessary had the applicant or FERC agreed to implement the study when first requested. The applicant was not successful in avoiding providing the information, but did manage to delay doing necessary studies for two years.

Chasm Hydroelectric Project (P-7320), New York

In 2013, the United States Fish and Wildlife Service (USFWS) and New York Department of Environmental Conservation (NYDEC) requested additional studies related to base flow and bypass flow. The agencies had previously agreed with the license applicant on a study to determine flows. This agreement on the study methodology was based on the understanding that the project would continue to spill approximately 80% of the time, contributing an extra 50 cfs in flows to the river. After the study was complete, the license applicant later revealed that it intended to change operations to spill only 25-30% of the time. The anticipated change in operations made the information provided by the study irrelevant to the potential new operations. Writing to FERC to explain why it needed additional information, the USFWS explained:

> *The management objectives were designed to reflect the current operational mode... During settlement negotiations, Erie indicated that they have been inefficiently utilizing the power generating capabilities at this site. In the future, Erie plans to reduce spillage to the maximum extend practical. Erie estimated that the project would spill about 25-30% of the time in the future. Based on this determination, the Delphi Team members other than Erie determined that the study was conducted under false pretenses and rescinded their recognition of the scoring system that occurred.*[16]

In its denial, FERC did not address the change in operations proposed by the license applicant or the assertion of "false pretenses" by the U.S. Fish and Wildlife Service. Instead, they denied the

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[15] California State Water Resources Control Board Investigation Order WR 2011-0003-EXEC, pg. 4

[16] FERC Accession No. 20130827-5195

study requests on the basis that its staff looked at the information and determined that it was sufficient for another agency's review process:

> *Based on staff's review of the study and other information provided in the application, including information related to habitat suitability, existing information is adequate to serve as the basis for an independent analysis of bypassed reach flows. Therefore, the agencies requested additional studies related to bypassed reach flows are denied.*[17]

The USFWS and NYDEC are exercising authorities separate from FERC's licensing authority. FERC does not have the expertise or authority to determine what is sufficient to satisfy the needs of another agency's authority. Denying their study requests on the grounds that FERC thinks it is sufficient is substituting FERC's judgement for that of independent agencies. The NYDEC noted afterwards in a letter to FERC, that it did not receive adequate information and would use the 401 process to obtain the desired bypass reach flow number necessary to protect aquatic resources and maintain water quality standards.[18]

Lower Barker Hydroelectric Project (P-2808), Maine

On March 21, 2017, the Maine Department of Environmental Protection (Maine DEP), which has statutory authority to issue a Water Quality Certification under Section 401 of the Clean Water Act, requested additional water quality sampling in the deepest area of the impoundment to determine whether waters in the project area meet existing surface water quality criteria or adversely affects Dissolved Oxygen (DO) levels. Maine DEP had specifically requested that water quality sampling occur in the deepest part of the reservoir, but the applicant instead collected samples from half the depth of the deepest part of the reservoir:

> *The study objective is to demonstrate attainment of Maine Water Quality Standards for Class C waters at the Project and is required by the Department before issuance of a water quality certification. This additional data is needed because the applicant did not sample in the deepest area of the impoundment, as required by the Department.*[19]

On April 13, 2017, FERC denied Maine DEP's request stating that:

> *... [S]ampling in 2015 demonstrated that the project impoundment meets the state standard for DO... All measurements of water quality demonstrated that the beneficial uses of the waterway are met, and that existing surface water criteria*

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17 FERC Accession No. 20140422-3002

18 FERC Accession No. 20140716-5144

19 FERC Accession No. 20170321-5153

> *are attained. Further, there is no indication that operation of the project adversely affects dissolved oxygen.*[20]

In this case, FERC denied the request of a state agency because FERC itself felt that the information was sufficient to meet state water quality standards. FERC has neither the authority nor the expertise to make this determination.

Additionally, because this study request denial just happened, it is impossible to know if this will result in delay. However, it is not hard to see a pattern of behavior here and how this could easily add to the processing time if Maine DEP is forced to require the additional sampling during its 401 certification process.

Upper Pelzer (P-10254), Lower Pelzer (P-10253), and Piedmont (P-2428), South Carolina

In 2016, the U.S. Fish and Wildlife Service (USFWS) and the South Carolina Department of Natural Resources (SCDNR) requested studies of water quality conditions in the bypass reach and the tailrace area. In its comments on the license application and study requests, SCDNR writes:

> *SCDNR has previously requested information to assess water quality conditions in the bypass reach of the Project. This request was made once in our comments to FERC regarding the PAD and Study Requests (DNR letter of July 26, 2013) and again in our comments on the DLA. This information is needed to help us assess the need for additional minimum flows in the bypass reach to be protective of aquatic habitat in the bypass area, which we have estimated to be approximately two acres in size. SCDNR concern that the current flow may not be sufficient to protect habitat appears to be justified by the results of the mussel study, which found only one species of mussel in the bypass.*[21]

In its comments, the USFWS noted its previous request and the lack of suitability of the data collected:

> *Contrary to the Study Plan, the Applicant positioned this downstream station in a location immediately below the powerhouse for Units 2 and 3 and upstream of the tailrace for Unit 1 without notifying the Service. Therefore, the study provides insufficient water quality data for the Project's bypassed reach and the area below Unit 1, and we cannot evaluate the Project's influence on water quality.*[22]

FERC did not require any of the studies writing:

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[20] FERC Accession No. 20170413-3012.
[21] FERC Accession No. 20160129-5019
[22] FERC Accession No. 20160128-5306

> *We find that the data collected downstream of the powerhouse provides sufficient water quality information to characterize the conditions downstream of the dam, including in the tailrace area. Therefore, we do not require FWS's and South Carolina DNR's requests for additional temperature and DO sampling, or surveys of macroinvertebrates within the tailrace area...*[23]

For both of these study requests FERC determined that they had the information they needed for their purposes ignoring the information needs of other agencies- federal and state.

Braddock Locks and Dam Hydroelectric Project (P-13739), Pennsylvania

In 2012, during the licensing of this project proposed on their dam, the US Army Corps of Engineers (Corps) requested water quality monitoring upstream and downstream of the dam before and during construction. They cited their need to "*... protect basin-wide water quality benefits provided by the District's Monongahela River Basin reservoirs and the Braddock Dam water quality gate. Additionally, to assure compliance with Federal laws and regulations as they pertain to the Corps' water management/water quality and resource management missions.*"[24]

FERC did not require the water quality monitoring study claiming that there was sufficient information already available:

> *We find that Hydro Friends Fund's water quality sampling, in conjunction with the abundant existing water quality data contained in its Pre-Application Document (PAD) is adequate to support the Commission's environmental review of the proposed project. As a result, we are not requesting the applicant to perform the requested additional monitoring.*[25]

This is an example where FERC determined the information needs for another agency, in this case the *owner of the dam*, to be sufficient when the agency said it was not. Many stakeholders have testified about the challenges that occur when developers propose adding hydropower to federally-owned and operated non-powered dams. Here is an instance where the owner of the dam, the United States Army Corps of Engineers, sought information about how development of hydropower at its dam would impact the dam's authorized purposes (for which the taxpayers paid capital construction costs and continue to pay operations and maintenance costs), but that request was denied by FERC. The Corps will undoubtedly refuse permission for any alterations to its structure without that information, which FERC and presumably the applicant, surely knew. In this case, the applicant has no one to blame but themselves, and FERC, for the failure to expeditiously get approval for development at a facility owned by the United States.

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[23] FERC Accession No. 20170322-3050

[24] Id.

[25] Id.

LaGrange (P-14581) and Don Pedro (P-2299), California

A particularly egregious example occurred in 2015 in the LaGrange (P-14581) and Don Pedro (P-2299) proceedings. NMFS requested study of habitat upstream of Don Pedro reservoir, in order to evaluate the appropriateness of fish passage past two FERC-jurisdictional dams: La Grange Dam and Don Pedro Dam. In making its request for these studies, NMFS explained how this information would help both it and FERC evaluate the impacts of the project:

> *NMFS' Requests are intended to provide information that directly applies to:*
>
> - *Inform NMFS, other ILP participants, and OEP staff about the Project's effects on anadromous fish passage, and to assist NMFS in exercising its Federal Power Act (FPA) § 18 authority, to either: 1) prescribe fishways at the Project, (2) not prescribe, or (3) reserve the prescriptive authority over the license term;*
> - *Inform NMFS, other ILP participants, and OEP staff with respect to future FPA § 10 (j) and § 10 (a) recommendations for protection, mitigation, and enhancement measures related to anadromous fishes or habitats affected by the Project;*
> - *Inform NMFS and OEP staff about potential Project effects to be discussed during Magnuson-Stevens Fishery Conservation and Management Act (MSA) consultation between the Commission and NMFS regarding the effects of the Project on Chinook salmon essential fish habitat (EFH);*
> - *Inform ESA § 7 consultation between the Commission and NMFS regarding Project effects on threatened species and designated critical habitats in the Tuolumne River, and in areas downstream.*[26]

FERC ordered an engineering study of passing fish past the dams, but declined to order an evaluation of the habitat upstream of Don Pedro because there were no "project effects" on that habitat. In the Director's study determination, the Director of OEP stated that FERC was not obligated to order studies to satisfy information needs of other agencies:

> *We recognize NMFS's statutory authority, and have provided a licensing process where applicants, agencies, and other interested parties can work together to ensure that necessary studies are performed. However, it is up to the Commission to determine whether a particular study is necessary for the Commission to fully understand the effects of licensing or relicensing a project, and we are not obligated to require a study to support another agency's decision making.*[27]

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[26] FERC Accession No. 20150223-5175

[27] 151 FERC 61,240 p.9

This is the clearest example of FERC's view that it requires studies for itself and is little interested in the needs of other agencies. When FERC takes this approach to licensing, it is disingenuous to then go before Congress and claim that the exercise of other agencies authorities is slowing down the licensing process when FERC itself has done little to make the exercise of that authority easier or more timely. The paragraph cited above is the best example of why mandatory conditioning agency study requests should be required in FERC's study plan.

These are just a few of the myriad of examples whereby FERC and license applicants have wasted time and created difficulties for resource agencies trying to fulfill their authorities under federal, tribal, and state law.

Thank you for the opportunity to answer your questions and for the opportunity to testify. Please feel free to contact me, or Jim Bradley of my staff, if American Rivers can be of any further assistance.

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