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### HYDROPOWER REGULATORY EFFICIENCY

JUNE 3, 2013.—Ordered to be printed

Mr. WYDEN, from the Committee on Energy and Natural Resources, submitted the following

### R E P O R T

[To accompany S. 545]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 545) to improve hydropower, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

#### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Hydropower Regulatory Efficiency Act of 2013”.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

Sec. 3. Promoting small hydroelectric power projects.

Sec. 4. Promoting conduit hydropower projects.

Sec. 5. FERC authority to extend preliminary permit periods.

Sec. 6. Promoting hydropower development at nonpowered dams and closed loop pumped storage projects.

Sec. 7. DOE study of pumped storage and potential hydropower from conduits.

#### SEC. 2. FINDINGS.

Congress finds that—

(1) the hydropower industry currently employs approximately 300,000 workers across the United States;

(2) hydropower is the largest source of clean, renewable electricity in the United States;

(3) as of the date of enactment of this Act, hydropower resources, including pumped storage facilities, provide—

(A) nearly 7 percent of the electricity generated in the United States; and

(B) approximately 100,000 megawatts of electric capacity in the United States;

(4) 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; and

(5) according to one study, 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.

**SEC. 3. PROMOTING SMALL HYDROELECTRIC POWER PROJECTS.**

Subsection (d) of section 405 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2705) is amended by striking “5,000” and inserting “10,000”.

**SEC. 4. PROMOTING CONDUIT HYDROPOWER PROJECTS.**

(a) APPLICABILITY OF, AND EXEMPTION FROM, LICENSING REQUIREMENTS.—Section 30 of the Federal Power Act (16 U.S.C. 823a) is amended—

(1) by striking subsections (a) and (b) and inserting the following:

“(a)(1) A qualifying conduit hydropower facility shall not be required to be licensed under this part.

“(2)(A) Any person, State, or municipality proposing to construct a qualifying 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 criteria.

“(B) Not later than 15 days after receipt of a notice of intent filed under subparagraph (A), the Commission shall—

“(i) make an initial determination as to whether the facility meets the qualifying criteria; and

“(ii) if the Commission makes an initial determination, pursuant to clause (i), that the facility meets the qualifying criteria, publish public notice of the notice of intent filed under subparagraph (A).

“(C) If, not later than 45 days after the date of publication of the public notice described in subparagraph (B)(ii)—

“(i) an entity contests whether the facility meets the qualifying criteria, the Commission shall promptly issue a written determination as to whether the facility meets such criteria; or

“(ii) no entity contests whether the facility meets the qualifying criteria, the facility shall be deemed to meet such criteria.

“(3) For purposes of this section:

“(A) The term ‘conduit’ means any tunnel, canal, pipeline, aqueduct, flume, ditch, or similar manmade water conveyance that is operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity.

“(B) The term ‘qualifying conduit hydropower facility’ means a facility (not including any dam or other impoundment) that is determined or deemed under paragraph (2)(C) to meet the qualifying criteria.

“(C) The term ‘qualifying 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 5 megawatts; and

“(iii) on or before the date of enactment of the Hydropower Regulatory Efficiency Act of 2013, the facility is not licensed under, or exempted from the license requirements contained in, this part.

“(b) Subject to subsection (c), 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 (not including any dam or other impoundment) constructed, operated, or maintained for the generation of electric power which the Commission determines, by rule or order—

“(1) utilizes for such generation only the hydroelectric potential of a conduit; and

“(2) has an installed capacity that does not exceed 40 megawatts.”;

(2) in subsection (c), by striking “subsection (a)” and inserting “subsection (b)”; and

(3) in subsection (d), by striking “subsection (a)” and inserting “subsection (b)”.

(b) CONFORMING AMENDMENT.—Subsection (d) of section 405 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2705), as amended, is further amended by striking “subsection (a) of such section 30” and inserting “subsection (b) of such section 30”.

**SEC. 5. FERC AUTHORITY TO EXTEND PRELIMINARY PERMIT PERIODS.**

Section 5 of the Federal Power Act (16 U.S.C. 798) is amended—

- (1) by designating the first, second, and third sentences as subsections (a), (c), and (d), respectively; and
- (2) by inserting after subsection (a) (as so designated) the following:
 

“(b) The Commission may extend the period of a preliminary permit once for not more than 2 additional years beyond the 3 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.”.

**SEC. 6. PROMOTING HYDROPOWER DEVELOPMENT AT NONPOWERED DAMS AND CLOSED LOOP PUMPED STORAGE PROJECTS.**

(a) **IN GENERAL.**—To improve the regulatory process and reduce delays and costs for hydropower development at nonpowered dams and closed loop pumped storage projects, the Federal Energy Regulatory Commission (referred to in this section as the “Commission”) shall investigate the feasibility of the issuance of a license for hydropower development at nonpowered dams and closed loop pumped storage projects in a 2-year period (referred to in this section as a “2-year process”). Such a 2-year process shall include any pre-filing licensing process of the Commission.

(b) **WORKSHOPS AND PILOTS.**—The Commission shall—

- (1) not later than 60 days after the date of enactment of this Act, hold an initial workshop to solicit public comment and recommendations on how to implement a 2-year process;
- (2) develop criteria for identifying projects featuring hydropower development at nonpowered dams and closed loop pumped storage projects that may be appropriate for licensing within a 2-year process;
- (3) not later than 180 days after the date of enactment of this Act, develop and implement pilot projects to test a 2-year process, if practicable; and
- (4) not later than 3 years after the date of implementation of the final pilot project testing a 2-year process, hold a final workshop to solicit public comment on the effectiveness of each tested 2-year process.

(c) **MEMORANDUM OF UNDERSTANDING.**—The Commission shall, to the extent practicable, enter into a memorandum of understanding with any applicable Federal or State agency to implement a pilot project described in subsection (b).

(d) **REPORTS.**—

(1) **PILOT PROJECTS NOT IMPLEMENTED.**—If the Commission determines that no pilot project described in subsection (b) is practicable because no 2-year process is practicable, not later than 240 days after the date of enactment of this Act, the Commission shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report that—

(A) describes the public comments received as part of the initial workshop held under subsection (b)(1); and

(B) identifies the process, legal, environmental, economic, and other issues that justify the determination of the Commission that no 2-year process is practicable, with recommendations on how Congress may address or remedy the identified issues.

(2) **PILOT PROJECTS IMPLEMENTED.**—If the Commission develops and implements pilot projects involving a 2-year process, not later than 60 days after the date of completion of the final workshop held under subsection (b)(4), the Commission shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report that—

(A) describes the outcomes of the pilot projects;

(B) describes the public comments from the final workshop on the effectiveness of each tested 2-year process; and

(C)(i) outlines how the Commission will adopt policies under existing law (including regulations) that result in a 2-year process for appropriate projects;

(ii) outlines how the Commission will issue new regulations to adopt a 2-year process for appropriate projects; or

(iii) identifies the process, legal, environmental, economic, and other issues that justify a determination of the Commission that no 2-year process is practicable, with recommendations on how Congress may address or remedy the identified issues.

**SEC. 7. DOE STUDY OF PUMPED STORAGE AND POTENTIAL HYDROPOWER FROM CONDUITS.**

(a) **IN GENERAL.**—The Secretary of Energy shall conduct a study—

- (1)(A) of the technical flexibility that existing pumped storage facilities can provide to support intermittent renewable electric energy generation, including

the potential for such existing facilities to be upgraded or retrofitted with advanced commercially available technology; and

(B) of the technical potential of existing pumped storage facilities and new advanced pumped storage facilities, to provide grid reliability benefits; and

(2)(A) to identify the range of opportunities for hydropower that may be obtained from conduits (as defined by the Secretary) in the United States; and

(B) through case studies, to assess amounts of potential energy generation from such conduit hydropower projects.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report that describes the results of the study conducted under subsection (a), including any recommendations.

#### PURPOSE

The purpose of S. 545 is to promote hydropower development in the United States by statutorily exempting qualifying conduit hydropower facilities from licensing and regulation under the Federal Power Act, expanding existing exemptions for certain other conduit hydropower facilities and small hydroelectric power projects, and requiring the Federal Energy Regulatory Commission (FERC) to study ways to improve the licensing of hydropower development at nonpowered dams and closed loop pumped storage projects.

#### BACKGROUND AND NEED

Hydropower is the largest source of clean, renewable electricity in the United States. Today, we have 100,000 megawatts of hydroelectric capacity, providing about 7 percent of the nation's electricity needs, and avoiding approximately 200 million metric tons of carbon emissions each year. Last Congress, DOE testified before the Committee on Energy and Natural Resources that the nation could realize an additional 300 gigawatts of hydropower through efficiency and capacity upgrades at existing facilities, powering non-powered dams, new small hydro development, and pumped storage hydropower. In addition, there is an unknown amount of potential power that can be generated from existing conduits such as irrigation canals, and pumped storage facilities can help integrate intermittent renewable resources.

FERC's current licensing process takes five years or more. A shorter process, if feasible, would be much less burdensome and costly for a low-impact project such as installing hydro at an existing non-hydro dam. With only three percent of existing dams in the United States currently generating power, there is great potential for adding hydropower generation to existing non-powered dams. Improving and shortening the licensing process will help ensure that additional hydropower can be developed while maintaining environmental protections and the opportunity for public input into the licensing process. According to a study completed by the National Hydropower Association, the U.S. could add approximately 60,000 megawatts (MW) of new hydropower capacity at existing dams by 2025.

#### LEGISLATIVE HISTORY

S. 545 was introduced by Senator Murkowski on March 13, 2013. Senators Wyden, Risch, Cantwell, Crapo, Murray, Begich, Bennet, Coons, Udall of Colorado, Feinstein, and Casey are cosponsors. The

House of Representatives passed similar legislation, H.R. 267, on February 13, 2013, by a vote of 422 to 0.

The Committee on Energy and Natural Resources held a hearing on both S. 545 and H.R. 267 on April 23, 2013. The Committee adopted an amendment in the nature of a substitute to S. 545 to conform S. 545 to H.R. 267, and ordered S. 545, as amended, and H.R. 267 favorably reported on May 8, 2012.

The Committee considered similar legislation, S. 629, in the 112th Congress. S. 629 was also introduced by Senator Murkowski. The Committee held a hearing on S. 629 on March 31, 2011. S. Hrg. 112–26. The Committee ordered the bill reported favorably, with an amendment, on May 18, 2011. S. Rept. 112–19.

#### COMMITTEE RECOMMENDATION

The Committee on Energy and Natural Resources, in an open business session on May 8, 2013, by voice vote of a quorum present, recommends that the Senate pass S. 545, if amended as described herein.

#### COMMITTEE AMENDMENT

During its consideration of S. 545, the Committee adopted an amendment in the nature of a substitute to conform S. 545 to the text of H.R. 267. The amendment is described in the section-by-section analysis.

#### SECTION-BY-SECTION ANALYSIS

*Section 1* provides a short title and a table of contents.

*Section 2* sets forth findings.

*Section 3* amends section 405 of the Public Utility Regulatory Policies Act of 1978 to increase rated capacity of small hydropower projects eligible for the licensing exemption from 5 MW to 10 MW.

*Section 4* amends the small conduit hydropower exemption in section 30 of the Federal Power Act to create a new statutory exemption for certain qualifying small conduit facilities from the licensing and regulatory requirements of the Federal Power Act and to expand the scope of the existing exemption in section 30.

Subsection (a)(1) amends section 30(a) of the Federal Power Act to provide a statutory exemption for qualifying conduit hydropower facilities from the licensing requirements of the Federal Power Act. As amended, section 30(a)(3) defines a “qualifying conduit hydropower facility” as a project that: (1) uses a non-Federally owned conduit; (2) has an installed capacity of 5 MW or less; and (3) does not currently have a license or exemption.

Section 30(a)(2) of the Federal Power Act, as amended, provides that an entity proposing to construct a qualifying conduit hydropower facility is required to file a notice of intent with FERC that includes sufficient information to demonstrate that the facility meets the qualifying criteria. If FERC makes an initial determination that the proposed project meets the criteria, it shall publish a public notice of the notice of intent to construct the project. If no entity contests that the project meets the criteria within 45 days, the project is deemed to meet the criteria. If an entity contests whether the project meets the criteria, FERC is required to

promptly issue a written determination as to whether the facility meets the criteria.

Subsection 4(a) of the bill also amends section 30(b) of the Federal Power Act, which currently authorizes FERC to grant exemptions for small conduit hydropower facilities with installed capacity of up to 15 MW (40 MW in the case of State or local government facilities used solely for municipal water supply purposes), to increase the scope of the exemption from 15 MW to 40 MW. Small conduit hydropower facilities granted an exemption by FERC under the amended section 30(b) will still be subject to state and federal fish and wildlife terms and conditions pursuant to section 30(c) of the Federal Power Act. Small conduit hydropower facilities statutorily exempt from Federal Power Act licensing under section 30(a), as amended, will not be subject to fish and wildlife terms and conditions pursuant to section 30(c).

Paragraphs (2) and (3) of subsection 4(a) of the bill make conforming amendments to section subsections (c) and (d) of section 30 of the Federal Power Act.

Section 4(b) of the bill makes a conforming amendment to section 405 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2705).

*Section 5* amends section 5 of the Federal Power Act to provide FERC with the authority to extend preliminary permit periods for up to 2 years, for a total of 5 years if FERC finds that the permittee has carried out activities under the permit in good faith and with reasonable diligence.

*Section 6* promotes hydropower development at non-powered dams and closed-loop pumped storage projects by directing FERC to examine through a pilot process the feasibility of establishing a 2-year licensing process for hydropower development at non-powered dams and closed-loop pumped storage projects. The results of the program shall be reported to Congress.

*Section 7* directs the Secretary of Energy to complete a study of: (1) the technical flexibility and potential of certain new and existing pumped storage facilities to support intermittent renewable generation and provide grid reliability benefits; and (2) the range of opportunities for hydropower from conduits in the United States.

#### COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

##### *S. 545—Hydropower Regulatory Efficiency Act of 2013*

Under the Federal Power Act, the Federal Energy Regulatory Commission (FERC) issues licenses and regulates hydroelectric facilities, regardless of size. S. 545 would amend current law to allow FERC to extend certain permits related to hydroelectric facilities and exempt small hydroelectric facilities with a generating capacity of 10 megawatts or less from FERC's licensing requirements. In addition, the bill would direct the Secretary of Energy to study the feasibility of generating hydroelectric power using water flowing through conduits or at facilities that store water. Finally, the bill would authorize FERC to carry out pilot projects to demonstrate the potential of generating hydroelectric power at nonpowered dams and water-storage facilities.

Based on information from FERC and the Department of Energy (DOE), CBO estimates that implementing S. 545 would have no significant net impact on the federal budget. CBO anticipates that the proposed changes to FERC's permitting and licensing requirements would reduce the commission's workload. We also estimate that FERC would spend about \$1 million on pilot projects authorized under the bill, assuming appropriation of the necessary amounts. However, because FERC recovers 100 percent of its costs through user fees, any change in the agency's costs (which are controlled through annual appropriation acts) would be offset by an equal change in fees that the commission charges, resulting in no net change in federal spending. Finally, CBO estimates that any increased costs to DOE to prepare the study that would be required under S. 545 would be negligible because the proposed study is similar to ongoing efforts to analyze the potential for developing hydropower resources. Enacting S. 545 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

S. 545 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would impose no costs on state, local, or tribal governments.

CBO has issued two cost estimates for legislation that are similar to S. 545. On January 13, 2013, CBO transmitted a cost estimate for H.R. 267, the Hydropower Regulatory Efficiency Act of 2013, as ordered reported by the House Committee on Energy and Commerce on January 22, 2013. On May 14, 2013, CBO transmitted a cost estimate for H.R. 267 as ordered reported by the Senate Committee on Energy and Natural Resources. All three pieces of legislation are similar, and our cost estimates are the same.

The CBO staff contact for this estimate is Megan Carroll. The estimate was approved by Theresa Gullo, Deputy Assistant Director for Budget Analysis.

#### CONGRESSIONALLY DIRECTED SPENDING

S. 545, as ordered reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

#### REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 545.

The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of H.R. 267 as ordered reported.

## EXECUTIVE COMMUNICATIONS

The testimony provided by the Federal Energy Regulatory Commission at the April 23, 2013, Full Committee hearing on S. 545 follows.

## TESTIMONY OF JEFF C. WRIGHT, DIRECTOR, OFFICE OF ENERGY PROJECTS, FEDERAL ENERGY REGULATORY COMMISSION

Chairman Wyden, Ranking Member Murkowski, and Members of the Committee:

My name is Jeff Wright and I am the Director of the Office of Energy Projects at the Federal Energy Regulatory Commission (Commission or FERC). I appreciate the opportunity to appear before you to discuss the following legislation: S. 545, "Hydropower Improvement Act of 2013" and H.R. 267, "Hydropower Regulatory Efficiency Act of 2013." As a member of the Commission's staff, the views I express in this testimony are my own, and not those of the Commission or of any individual Commissioner.

## I. BACKGROUND

The Commission regulates over 1,600 hydropower projects at over 2,500 dams pursuant to Part I of the Federal Power Act (FPA). Together, these projects represent 54 gigawatts of hydropower capacity, more than half of all the hydropower 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 with public and private capacity together totaling about seven percent of U.S. electricity generation.

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 lands; (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 either licenses or exemptions for projects within its jurisdiction. Licenses are generally issued for terms of between 30 and 50 years, are renewable, and carry with them the right to exercise federal eminent domain to obtain property necessary for the construction, operation, and maintenance of a project. Exemptions are perpetual, and thus do not need to be renewed, but do not permit the use of eminent domain.

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 must be located on non-federal lands, and have a maximum capacity of 15 megawatts (40 megawatts if the exemptee is a state or

local government entity). Second, in section 405(d) of the Public Utility Regulatory Policies Act, Congress authorized the Commission to grant exemptions for small hydroelectric power projects having an installed capacity of 5,000 kilowatts or less. To qualify for this type of exemption, a project must be located at an existing dam that does not require construction or the enlargement of an impoundment, or must use 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.

The Commission has established three licensing processes, with the intent of allowing parties to select the process that is best suited to individual proceedings. The integrated licensing process (ILP) frontloads issue identification and environmental study to the period before an application is filed, and is thus well-suited to complex cases with substantial issues. The alternative licensing process (ALP) allows participants significant flexibility to tailor licensing procedures in a manner that may work well for unique cases. The traditional licensing process (TLP), in which environmental and other work can occur after the application is filed, appears to work best for less controversial matters. The TLP may be the process that is best-suited for many simple cases involving exemptions or small, low impact licenses. Commission staff has also developed a pilot licensing process for marine and hydrokinetic projects in which, with the assistance of federal and state resource agencies, a project can be licensed in as little as six months.

It is extremely important to note that project developers and other stakeholders, not the Commission, in most instances play the leading role in determining project success and whether the regulatory process will be short or long, simple or complex. The first key issue is site selection and proposed project operation. For example, the processing of applications tends to be expedited when applicants propose projects that: (1) are located at an existing dam where hydropower facilities do not currently exist, (2) would result in little change to water flow and use, (3) are unlikely to affect threatened and endangered species and are unlikely to need fish passage facilities, and (4) involve lands and facilities that are already owned by the applicant. To the extent that a proposed project, even one of small size, raises concerns about water use and other environmental issues, it may be difficult for the Commission to quickly process an application.

Another, and related, factor is the extent to which project developers reach out to affected stakeholders. If a developer contacts concerned citizens, local, state, and federal agencies, Indian tribes, and environmental organizations, and works with them to develop consensus as to what information is needed to understand the impacts of a project and what environmental measures may be appropriate, and to develop support for the project, the applica-

tion and review process is likely to be simpler and quicker. Where a project comes as a surprise to affected entities or where a developer does not respond to expressed concerns, the Commission's job becomes much more difficult.

A final, and again related, matter is the development of the full record that the Commission needs to act on an application. A potential applicant needs to work with Commission staff and with federal and state resource agencies and other stakeholders to determine what information is needed to support an application, and to provide the Commission with a complete application. Where Commission staff or other stakeholders must ask an applicant to provide information that is missing from an application, the regulatory process slows down.

The other entities with roles in the licensing and exemption process regarding small hydropower projects are also key to its success. The quickest, most efficient process can be achieved only where federal and state agencies, as well as other stakeholders, devote the resources early on to help project review move ahead, and where they display the flexibility to look at the merits of individual projects and the willingness to shorten the process in appropriate cases. Commission staff is dedicated to making the regulatory process as short and cost-effective as possible. We can only do that where applicants, resource agencies, and other stakeholders serve as willing partners in the process.

## II. COMMISSION EFFORTS REGARDING SMALL AND INNOVATIVE PROJECTS

The majority of the hydropower projects regulated by the Commission are small projects, with about 70 percent having an installed capacity of 5 megawatts (MW) or less. In recent years, the Commission has seen a greatly increased interest in small hydropower projects at existing dams, in innovative marine and hydrokinetic projects, and in pumped storage projects, particularly closed-loop pumped storage, which does not involve regular water withdrawals from rivers or other water sources. The Commission has responded by implementing a number of measures to facilitate efficient review of project proposals. In 2007, in order to provide personalized, responsive service to entities seeking to develop small hydropower projects, Commission staff established a dedicated phone line and email address for inquiries on small hydropower, developed a brochure to provide guidance to potential developers of small, low impact hydropower projects, and put these resources and a list of frequently-asked questions on the Commission's website.

In light of the continued growing interest in such development, the Commission held a technical conference on December 2, 2009, at its Washington, D.C. headquarters to explore issues related to licensing, and exempting from licensing, small non-federal hydropower projects in the U.S. The technical conference generated discussion on recommendations that could improve the process for author-

izing small hydropower projects. In addition to insights received from the panelists and attendees at the technical conference, written comments were solicited and over 40 comment letters were received from industry representatives; federal, state, and local agencies; private citizens; and nongovernmental organizations. At the Commission's April 15, 2010 meeting, staff reported on the conference and the comments received, and presented an action plan to assist and expedite the review of small hydropower proposals. The action plan adopted the following immediate changes: (1) adding new web-based resources to the Commission's website ([www.ferc.gov](http://www.ferc.gov)) to make it easier for applicants to understand and complete the licensing process; (2) updating or creating Memoranda of Understanding (MOUs) with other agencies to improve coordination; (3) continuing to maintain our small hydropower contact list on our web site to answer applicant questions; and (4) educating potential small hydropower developers through a new education and outreach program. The Commission has, under its small hydro initiative, held numerous outreach meetings with small hydropower developers and interested stakeholders, and implemented web based tools, such as application templates and application checklists, which potential applicants can use to prepare their applications. The small hydro website further contains guidance and sample letters that applicants can use to obtain waivers from fish and wildlife agencies for part of the pre-filing consultation process. The Commission staff has also relaxed some of the standards, under Section 4.39 of its regulations, for exhibits and drawings for exemption applications. For those applicants that have filed complete and adequate applications, and for which the Commission has determined that impacts are minimal, the Commission has reduced the public notice period from 60 days to 30 days and the reply period from 45 days to 15 days. A number of conduit and small hydro exemptions have been approved in as short as two months and original licenses in as short as 6 months from the date that an application has been deemed complete.

Since the April 15, 2010 Commission meeting, we have updated our MOU with the U.S. Army Corps of Engineers (March 2011) and entered into an MOU with the U.S. Coast Guard (March 2013); launched a small hydro program website (August 2010); participated in small hydro workshops across the U.S.; conducted webinars on our small hydro website (November 2010, December 2010, June 2011, and January 2012); and updated our small hydro brochure. Upcoming outreach efforts will include participating on a small hydro panel at the National Hydropower Association's annual conference in Washington, D.C., working with the state of Colorado on providing state guidance documents on our small hydro licensing process; and updating our small hydro licensing web site in response to user input. As a result of these efforts, consultation has improved, applications are more complete, and ap-

plication processing times have been reduced. With this background, I will turn to the draft legislation.

### III. HYDROPOWER IMPROVEMENT ACT OF 2013 (S. 545) AND HYDROPOWER REGULATORY EFFICIENCY ACT OF 2013 (H.R. 267)

The Hydropower Improvement Act of 2013 and the Hydropower Regulatory Efficiency Act of 2013 have the commendable goal of increasing hydropower production in the United States. I strongly support this goal, and offer comments on specific sections of the draft legislation.

#### *A. Section 5 of S. 545 and Section 6 of H.R. 267*

Section 5 of S. 545 and Section 6 of H.R. 267 would require the Commission to investigate the feasibility of implementing a two-year licensing process, in particular, with respect to hydropower development at existing, non-powered dams, and for closed-loop pumped storage projects.

I support the goal of an expedited licensing process. Indeed, as I have discussed, it is Commission staff's goal to act on all license applications as quickly as possible, and the Commission has established processes that allow for great flexibility and efficiency. I am thus not certain whether an additional licensing process is necessary. During the last few years, we have been able to issue some licenses in a matter of a few months, where the project proponent had selected a site wisely, stakeholders had agreed on information needs, and state and federal agencies performed their responsibilities quickly. Moreover, the Commission operates under significant constraints imposed by the FPA, and by other legislation affecting the licensing process—the Clean Water Act, Coastal Zone Management Act, Endangered Species Act, and National Historic Preservation Act among them. In the absence of the ability to waive sections of the FPA and other acts, or to set enforceable schedules in licensing proceedings, it is not clear that the Commission, under its existing authorities, can mandate a shortened process.

#### *B. Section 6 of S. 545 and Section 4 of H.R. 267*

Section 6 of S. 545 and Section 4 of H.R. 267 would establish various measures to promote conduit hydropower projects. This goal is consistent with Commission policy and has been a major focus of Commission staff's effort in the last few years. These sections would amend section 30 of the FPA to establish a procedure whereby conduit projects with an installed capacity of 5 MW or less would not be required to be licensed, provided the applicant makes a showing that the project qualifies as a conduit project. These sections would also allow the Commission to grant conduit exemptions on federal lands and would permit the Commission to issue conduit exemptions for those projects with an installed capacity of up to 40 MW. This proposed upper limit would apply to non-municipal, as well as municipal applicants. I support these provisions,

which should serve to increase the amount of electric generation derived from conduits.

*C. Section 7 of S. 545 and Section 3 of H.R. 267*

Section 7 of S. 545 and Section 3 of H.R. 267 would amend Section 405(d) of the Public Utility Regulatory Policies Act of 1978 to increase the installed capacity of a project to which the Commission could grant a small hydropower exemption from 5,000 to 10,000 kilowatts. This change would promote the development of small hydropower at the nation's existing non-powered dams by allowing a larger pool of small, low-impact projects to qualify for small hydropower exemptions. Such exemptions are attractive to developers in that the exemptions are perpetual, and thus the developer need not expend the cost and effort to renew the authorization as is the case with licenses. I, therefore, support this provision.

*D. Section 8 of S. 545 and Section 5 of H.R. 267*

Section 8 of S. 545 and Section 5 of H.R. 267 would amend the FPA to authorize the Commission to extend the term of a preliminary permit issued under FPA Section 5 once for up to two years. Preliminary permits grant the permittee a "first-to-file" preference with respect to license applications for projects being studied under a permit. Commission staff has heard anecdotally that developers are concerned that the need for environmental studies in some instances makes it difficult to complete a license application within the current maximum three-year term of a permit, with the result that a developer which has invested substantial time and money studying a project may face the possibility of losing its project based on competition from other entities—particularly those with statutorily-granted municipal preference—if it needs to seek a subsequent permit. I therefore support the proposed FPA amendment, which could ameliorate this problem. It might be worth considering, as an alternative, authorizing the Commission to issue permits for terms of up to five years, which could avoid the need for developers to go through the process of seeking an extension.

*E. Section 9 of S. 545 and Section 7 of H.R. 267*

Section 9 of S. 545 and Section 7 of H.R. 267 would require the Department of Energy to study the flexibility and reliability that pumped storage facilities can provide and the opportunities and potential generation from conduits. While I cannot speak for the Department of Energy, I support this research.

#### IV. CONCLUSION

There is a great deal of potential for the development of additional hydropower projects throughout the country, including small projects and marine and hydrokinetic projects. Working within the authority given it by Congress, the Commission continues to adapt its existing,

flexible procedures to facilitate the review and, where appropriate, the approval of such projects. Commission staff remains committed to exploring with project developers, its sister federal agencies, Indian tribes, the states, local government, and other stakeholders every avenue for the responsible development of our nation's hydropower potential. The legislation under consideration will, as I have testified, assist in realizing that potential.

This concludes my remarks. I would be pleased to answer any questions you may have.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 545, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

**PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978**

(Public Law 95-617, as amended)

AN ACT To suspend until the close of June 30, 1980, the duty on certain doxorubicin hydrochloride antibiotics.

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**TITLE IV—SMALL HYDROELECTRIC POWER PROJECTS**

\* \* \* \* \*

**SEC. 405. SIMPLIFIED AND EXPEDITIOUS LICENSING PROCEDURES.**

(a) ESTABLISHMENT OF PROGRAM.—The Commission shall establish, in such manner as the Commission deems appropriate, consistent with the applicable provisions of law, a program to use simple and expeditious licensing procedures under the Federal Power Act for small hydroelectric power projects in connection with existing dams.

\* \* \* \* \*

(d) EXEMPTIONS FROM LICENSING REQUIREMENTS IN CERTAIN CASES.—The Commission may in its discretion (by rule or order) grant an exemption in whole or in part from the requirements (including the licensing requirements) of part I of the Federal Power Act to small hydroelectric power projects having a proposed installed capacity of **[5,000]** *10,000* kilowatts or less, on a case-by-case basis or on the basis of classes or categories of projects, subject to the same limitations (to ensure protection for fish and wildlife as well as other environmental concerns) as those which are set forth in subsections (c) and (d) of section 30 of the Federal Power Act with respect to determinations made and exemptions granted under **[subsection (a) of such section 30]** *subsection (b) of such section 30*; and subsections (c) and (d) of such section 30 shall apply with respect to actions taken and exemptions granted under this subsection. Except as specifically provided in this subsection, the

granting of an exemption to a project under this subsection shall in no case have the effect of waiving or limiting the application (to such project) of the second sentence of subsection (b) of this section.

\* \* \* \* \*

**FEDERAL POWER ACT**

(The Act of June 10, 1920; 41 Stat. 1063, Chapter 685)

\* \* \* \* \*

**PART I**

\* \* \* \* \*

SEC. 5. (a) Each preliminary permit issued under this Part shall be for the sole purpose of maintaining priority of application for a license under the terms of this Act for such period or periods, not exceeding a total of three years, as in the discretion of the Commission may be necessary for making examinations and surveys, for preparing maps, plans, specifications, and estimates, and for making financial arrangements.

(b) *The Commission may extend the period of a preliminary permit once for not more than 2 additional years beyond the 3 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.*

(c) Each such permit shall set forth the conditions under which priority shall be maintained.

(d) Such permits shall not be transferable, and may be canceled by order of the Commission upon failure of permittees to comply with the conditions thereof or for other good cause shown after notice and opportunity for hearing.

\* \* \* \* \*

SEC. 30. [(a) Except as provided in subsection (b) or (c), 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 (not including any dam or other impoundment) constructed, operated, or maintained for the generation of electric power which the Commission determines, by rule or order—

[(1) is located on non-Federal lands, and

[(2) utilizes for such generation only the hydroelectric potential of a manmade conduit, which is operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity.

[(b) The Commission may not grant any exemption under subsection (a) to any facility the installed capacity of which exceeds 15 megawatts (40 megawatts in the case of a facility constructed, operated, and maintained by an agency or instrumentality of a State or local government solely for water supply for municipal purposes.)]

(a)(1) *A qualifying conduit hydropower facility shall not be required to be licensed under this part.*

(2)(A) *Any person, State, or municipality proposing to construct a qualifying conduit hydropower facility shall file with the Commis-*

sion a notice of intent to construct such facility. The notice shall include sufficient information to demonstrate that the facility meets the qualifying criteria.

(B) Not later than 15 days after receipt of a notice of intent filed under subparagraph (A), the Commission shall—

(i) make an initial determination as to whether the facility meets the qualifying criteria; and

(ii) if the Commission makes an initial determination, pursuant to clause (i), that the facility meets the qualifying criteria, publish public notice of the notice of intent filed under subparagraph (A).

(C) If, not later than 45 days after the date of publication of the public notice described in subparagraph (B)(ii)—

(i) an entity contests whether the facility meets the qualifying criteria, the Commission shall promptly issue a written determination as to whether the facility meets such criteria; or

(ii) no entity contests whether the facility meets the qualifying criteria, the facility shall be deemed to meet such criteria.

(3) For purposes of this section:

(A) The term “conduit” means any tunnel, canal, pipeline, aqueduct, flume, ditch, or similar manmade water conveyance that is operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity.

(B) The term “qualifying conduit hydropower facility” means a facility (not including any dam or other impoundment) that is determined or deemed under paragraph (2)(C) to meet the qualifying criteria.

(C) The term “qualifying 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 5 megawatts; and

(iii) on or before the date of enactment of the Hydropower Regulatory Efficiency Act of 2013, the facility is not licensed under, or exempted from the license requirements contained in, this part.

(b) Subject to subsection (c), 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 (not including any dam or other impoundment) constructed, operated, or maintained for the generation of electric power which the Commission determines, by rule or order—

(1) utilizes for such generation only the hydroelectric potential of a conduit; and

(2) has an installed capacity that does not exceed 40 megawatts.

(c) In making the determination under [subsection (a)] subsection (b) of this section the Commission shall consult with the United States Fish and Wildlife Service, National Marine Fisheries Service, and the State agency exercising administration over the fish and wildlife resources of the State in which the facility is or

will be located, in the manner provided by the Fish and Wildlife Coordination Act (16 U.S.C. 661, et seq.), and shall include in any such exemption—

(1) such terms and conditions as the Fish and Wildlife Service, National Marine Fisheries Service, and the State agency each determine are appropriate to prevent loss of, or damage to, such resources and to otherwise carry out the purposes of such Act, and

(2) such terms and conditions as the Commission deems appropriate to insure that such facility continues to comply with the provisions of this section and terms and conditions included in any such exemption.

(d) Any violation of a term or condition of any exemption granted under **subsection (a)** *subsection b* of this section shall be treated as a violation of a rule or order of the Commission under this chapter.

\* \* \* \* \*

