II

# Calendar No. 69

113TH CONGRESS
1ST SESSION

# S. 545

To improve hydropower, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

MARCH 13, 2013

Ms. MURKOWSKI (for herself, Mr. WYDEN, Mr. RISCH, Ms. CANTWELL, Mr. CRAPO, Mrs. MURRAY, Mr. BEGICH, Mr. BENNET, Mr. UDALL of Colorado, Mr. COONS, Mrs. FEINSTEIN, and Mr. CASEY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

MAY 13, 2013

Reported by Mr. WYDEN, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

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# A BILL

To improve 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; TABLE OF CONTENTS.**~~

~~(a) SHORT TITLE.—This Act may be cited as the "Hydropower Improvement Act of 2013".~~

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

**SEC. 2. FINDINGS.**

Congress finds that—

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

(2) 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, avoiding approximately 200,000,000 metric tons of carbon emissions each year; and

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

(3) only 3 percent of the 80,000 dams in the United States generate electricity so there is substantial potential for adding hydropower generation to nonpower dams;

(4) in every State, a tremendous untapped growth potential exists in hydropower resources, including—

(A) efficiency improvements and capacity additions;

(B) adding generation to nonpower dams;

(C) conduit hydropower;

(D) conventional hydropower;

(E) pumped storage facilities; and

(F) new marine and hydrokinetic resources; and

(5) improvements in increased hydropower production in the United States have the potential—

(A) to increase the clean energy generation of the United States;

(B) to improve project performance and result in better environmental outcomes; and

(C) to provide ancillary benefits that include grid reliability, energy storage, and integration services for variable renewable resources.

**SEC. 3. DEFINITIONS.**

In this Act:

(1) CONDUIT.—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, munic-

ipal, or industrial consumption and not primarily for the generation of electricity.

(2) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(3) SMALL HYDROELECTRIC POWER PROJECT.—The term ''small hydroelectric power project'' has the meaning given the term in section 4.30 of title 18, Code of Federal Regulations.

**SEC. 4. SENSE OF THE SENATE ON THE USE OF HYDROPOWER RENEWABLE RESOURCES.**

It is the sense of the Senate that the United States should increase substantially the capacity and generation of clean, renewable hydropower which will improve the environmental quality of resources in the United States and support local job creation and economic investment across the United States.

**SEC. 5. 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 certain

hydropower development during the 2-year period beginning on the date of commencement of the prefiling licensing process of the Commission (referred to in this section as a ''2-year process'').

(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 any pilot project to test a 2-year process, hold a final workshop to solicit public comment on the effectiveness of the pilot project.

(c) MEMORANDUM OF UNDERSTANDING.—The Commission shall, to the maximum 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 the pilot projects described in subsection (b) are not practicable, not later than 240 days after the date of enactment of this Act, the Commission shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives 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 a 2-year process is not 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 described in subsection (b), not later than 60 days after the date of completion of any final workshop held under subsection~~

(b)(4), the Commission shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that—

(A) describes the outcomes of the pilot projects;

(B) describes the public comments from the final workshop on the effectiveness of the pilot projects; and

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

(ii) outlines how the Commission will proceed with a rulemaking to adopt a 2-year process in the regulations of the Commission; or

(iii) identifies the process, legal, environmental, economic, and other issues that justify the determination of the Commission that a 2-year process is not practicable, with recommendations on how Congress may address or remedy the identified issues.

**SEC. 6. 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 redesignating subsections (c) through (e) as subsections (d) through (f), respectively;

(2) by striking ''SEC. 30.'' and all that follows through the end of subsection (b) and inserting the following:

**''SEC. 30. CONDUIT HYDROPOWER FACILITIES.**

''(a) DEFINITIONS.—In this section:

''(1) CONDUIT.—The term 'conduit' means any tunnel, canal, pipeline, aqueduct, flume, ditch, or similar manmade water conveyance that is operated—

''(A) for the distribution of water for agricultural, municipal, or industrial consumption; and

''(B) not primarily for the generation of electricity.

''(2) QUALIFYING CONDUIT HYDROPOWER FACILITY.—The term 'qualifying conduit hydropower facility' means a facility (not including any dam or other impoundment) that is determined or deemed under subsection (b)(2)(D) to meet the qualifying criteria.

''(3) QUALIFYING CRITERIA.—The term 'qualifying criteria' means, with respect to a facility, that—

"(A) the facility is constructed, operated, or maintained for the generation of electric power and uses for the generation only the hydroelectric potential of a non-federally owned conduit;

"(B) the facility has an installed capacity that does not exceed 5 megawatts; and

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

"(b) ADMINISTRATION.—

"(1) IN GENERAL.—A qualifying conduit hydropower facility shall not be required to be licensed under this part.

"(2) NOTICE OF INTENT TO CONSTRUCT FACILITY.—

"(A) IN GENERAL.—Any person, State, or municipality proposing to construct a qualifying conduit hydropower facility shall file with the Commission a notice of intent to construct the qualifying conduit hydropower facility.

"(B) INFORMATION.—The notice shall include sufficient information to demonstrate that the facility meets the qualifying criteria.

"(C) INITIAL DETERMINATION.—Not later than 15 days after receipt of a notice of intent is 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).

"(D) FINAL DETERMINATION.—If, not later than 45 days after the date of publication of the public notice described in subparagraph (C)(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 the qualifying criteria; or

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

''(c) EXEMPTIONS.—Subject to subsection (d), 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 that the Commission determines, by rule or order—

''(1) uses for the generation only the hydroelectric potential of a conduit; and

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

(3) in subsection (d) (as redesigned by paragraph (1)), by striking ''subsection (a)'' and inserting ''subsection (c)''; and

(4) in subsection (e) (as so redesignated), by striking ''subsection (a)'' and inserting ''subsection (c)''.

(b) CONFORMING AMENDMENTS.—

(1) Section 210(j)(3) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–3(j)(3)) is amended by striking ''section 30(c)'' and inserting ''section 30(d)''.

(2) Section 405(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2705(d)) is amended in the first sentence—

(A) by striking ''subsections (c) and (d)'' each place it appears and inserting ''subsections (d) and (c)''; and

(B) by striking ''subsection (a) of such section 30'' and inserting ''section 30(c) of that Act''.

(3) Section 3401(a)(2) of the Omnibus Budget Reconciliation Act of 1986 (42 U.S.C. 7178(a)(2)) is amended by striking ''30(c)'' and inserting ''30(f)''.

(4) Section 242(b)(3) of the Energy Policy Act of 2005 (42 U.S.C. 15881(b)(3)) is amended by striking ''section 30(a)(2) of the Federal Power Act (16 U.S.C. 823a(a)(2))'' and inserting ''section 30(a) of the Federal Power Act (16 U.S.C. 823a(a))''.

**SEC. 7. PROMOTING SMALL HYDROELECTRIC POWER PROJECTS.**

Section 405(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2705(d)) is amended in the first sentence by striking ''5,000'' and inserting ''10,000''.

**SEC. 8. FERC AUTHORITY TO EXTEND PRELIMINARY PERMIT TERMS.**

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) EXTENSION.—The Commission may extend the term of a preliminary permit once for not more than 2 additional years if the Commission finds that the permittee has carried out activities under the permit in good faith and with reasonable diligence.''.

**SEC. 9. STUDY OF PUMPED STORAGE AND POTENTIAL HYDROPOWER FROM CONDUITS.**

(a) IN GENERAL.—The Secretary 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 those 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 shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that describes the results of the study conducted under subsection (a), including any recommendations.

**SEC. 10. REPORT ON MEMORANDUM OF UNDERSTANDING ON HYDROPOWER.**

Not later than 180 days after the date of enactment of this Act, the President shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on actions taken by the Department of Energy, the Department of the Interior, and the Corps of Engineers to carry out the memorandum of understanding on hydropower entered into on March 24, 2010, with particular emphasis on actions taken by the agencies to work together and investigate ways to effi-

~~ciently and responsibly facilitate the Federal permitting process for Federal and non-Federal hydropower projects at Federal facilities, within existing authority.~~

***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. 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 prefiling 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, in-*

*cluding 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.*

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