

113TH CONGRESS
1ST SESSION

S. 545

To improve hydropower, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 13, 2013

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

A BILL

To improve hydropower, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Hydropower Improvement Act of 2013”.

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

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

Sec. 3. Definitions.

Sec. 4. Sense of the Senate on the use of hydropower renewable resources.

Sec. 5. Promoting hydropower development at nonpowered dams and closed
loop pumped storage projects.

Sec. 6. Promoting conduit hydropower projects.

Sec. 7. Promoting small hydroelectric power projects.

Sec. 8. FERC authority to extend preliminary permit terms.

Sec. 9. Study of pumped storage and potential hydropower from conduits.

Sec. 10. Report on memorandum of understanding on hydropower.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

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

5 (2) as of the date of enactment of this Act, hy-
6 dropower resources, including pumped storage facili-
7 ties, provide—

8 (A) nearly 7 percent of the electricity gen-
9 erated in the United States, avoiding approxi-
10 mately 200,000,000 metric tons of carbon emis-
11 sions each year; and

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

14 (3) only 3 percent of the 80,000 dams in the
15 United States generate electricity so there is sub-
16 stantial potential for adding hydropower generation
17 to nonpower dams;

18 (4) in every State, a tremendous untapped
19 growth potential exists in hydropower resources, in-
20 cluding—

21 (A) efficiency improvements and capacity
22 additions;

23 (B) adding generation to nonpower dams;

24 (C) conduit hydropower;

- 1 (D) conventional hydropower;
2 (E) pumped storage facilities; and
3 (F) new marine and hydrokinetic re-
4 sources; and
5 (5) improvements in increased hydropower pro-
6 duction in the United States have the potential—
7 (A) to increase the clean energy generation
8 of the United States;
9 (B) to improve project performance and re-
10 sult in better environmental outcomes; and
11 (C) to provide ancillary benefits that in-
12 clude grid reliability, energy storage, and inte-
13 gration services for variable renewable re-
14 sources.

15 **SEC. 3. DEFINITIONS.**

16 In this Act:

- 17 (1) CONDUIT.—The term “conduit” means any
18 tunnel, canal, pipeline, aqueduct, flume, ditch, or
19 similar manmade water conveyance that is operated
20 for the distribution of water for agricultural, munic-
21 ipal, or industrial consumption and not primarily for
22 the generation of electricity.
23 (2) SECRETARY.—The term “Secretary” means
24 the Secretary of Energy.

1 (3) SMALL HYDROELECTRIC POWER
2 PROJECT.—The term “small hydroelectric power
3 project” has the meaning given the term in section
4 4.30 of title 18, Code of Federal Regulations.

5 **SEC. 4. SENSE OF THE SENATE ON THE USE OF HYDRO-**
6 **POWER RENEWABLE RESOURCES.**

7 It is the sense of the Senate that the United States
8 should increase substantially the capacity and generation
9 of clean, renewable hydropower which will improve the en-
10 vironmental quality of resources in the United States and
11 support local job creation and economic investment across
12 the United States.

13 **SEC. 5. PROMOTING HYDROPOWER DEVELOPMENT AT**
14 **NONPOWERED DAMS AND CLOSED LOOP**
15 **PUMPED STORAGE PROJECTS.**

16 (a) IN GENERAL.—To improve the regulatory process
17 and reduce delays and costs for hydropower development
18 at nonpowered dams and closed loop pumped storage
19 projects, the Federal Energy Regulatory Commission (re-
20 ferred to in this section as the “Commission”) shall inves-
21 tigate the feasibility of the issuance of a license for certain
22 hydropower development during the 2-year period begin-
23 ning on the date of commencement of the prefilings licens-
24 ing process of the Commission (referred to in this section
25 as a “2-year process”).

1 (b) WORKSHOPS AND PILOTS.—The Commission
2 shall—

3 (1) not later than 60 days after the date of en-
4 actment of this Act, hold an initial workshop to so-
5 licit public comment and recommendations on how
6 to implement a 2-year process;

7 (2) develop criteria for identifying projects fea-
8 turing hydropower development at nonpowered dams
9 and closed loop pumped storage projects that may be
10 appropriate for licensing within a 2-year process;

11 (3) not later than 180 days after the date of
12 enactment of this Act, develop and implement pilot
13 projects to test a 2-year process, if practicable; and

14 (4) not later than 3 years after the date of im-
15 plementation of any pilot project to test a 2-year
16 process, hold a final workshop to solicit public com-
17 ment on the effectiveness of the pilot project.

18 (c) MEMORANDUM OF UNDERSTANDING.—The Com-
19 mission shall, to the maximum extent practicable, enter
20 into a memorandum of understanding with any applicable
21 Federal or State agency to implement a pilot project de-
22 scribed in subsection (b).

23 (d) REPORTS.—

24 (1) PILOT PROJECTS NOT IMPLEMENTED.—If
25 the Commission determines that the pilot projects

1 described in subsection (b) are not practicable, not
2 later than 240 days after the date of enactment of
3 this Act, the Commission shall submit to the Com-
4 mittee on Energy and Natural Resources of the Sen-
5 ate and the Committee on Energy and Commerce of
6 the House of Representatives a report that—

7 (A) describes the public comments received
8 as part of the initial workshop held under sub-
9 section (b)(1); and

10 (B) identifies the process, legal, environ-
11 mental, economic, and other issues that justify
12 the determination of the Commission that a 2-
13 year process is not practicable, with rec-
14 ommendations on how Congress may address or
15 remedy the identified issues.

16 (2) PILOT PROJECTS IMPLEMENTED.—If the
17 Commission develops and implements pilot projects
18 involving a 2-year process described in subsection
19 (b), not later than 60 days after the date of comple-
20 tion of any final workshop held under subsection
21 (b)(4), the Commission shall submit to the Com-
22 mittee on Energy and Natural Resources of the Sen-
23 ate and the Committee on Energy and Commerce of
24 the House of Representatives a report that—

1 (A) describes the outcomes of the pilot
2 projects;

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

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

9 (ii) outlines how the Commission will pro-
10 ceed with a rulemaking to adopt a 2-year proc-
11 ess in the regulations of the Commission; or

12 (iii) identifies the process, legal, environ-
13 mental, economic, and other issues that justify
14 the determination of the Commission that a 2-
15 year process is not practicable, with rec-
16 ommendations on how Congress may address or
17 remedy the identified issues.

18 **SEC. 6. PROMOTING CONDUIT HYDROPOWER PROJECTS.**

19 (a) **APPLICABILITY OF, AND EXEMPTION FROM, LI-**
20 **CENSING REQUIREMENTS.**—Section 30 of the Federal
21 Power Act (16 U.S.C. 823a) is amended—

22 (1) by redesignating subsections (e) through (e)
23 as subsections (d) through (f), respectively;

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

4 **“SEC. 30. CONDUIT HYDROPOWER FACILITIES.**

5 “(a) DEFINITIONS.—In this section:

6 “(1) CONDUIT.—The term ‘conduit’ means any
7 tunnel, canal, pipeline, aqueduct, flume, ditch, or
8 similar manmade water conveyance that is oper-
9 ated—

10 “(A) for the distribution of water for agri-
11 cultural, municipal, or industrial consumption;
12 and

13 “(B) not primarily for the generation of
14 electricity.

15 “(2) QUALIFYING CONDUIT HYDROPOWER FA-
16 CILITY.—The term ‘qualifying conduit hydropower
17 facility’ means a facility (not including any dam or
18 other impoundment) that is determined or deemed
19 under subsection (b)(2)(D) to meet the qualifying
20 criteria.

21 “(3) QUALIFYING CRITERIA.—The term ‘quali-
22 fying criteria’ means, with respect to a facility,
23 that—

24 “(A) the facility is constructed, operated,
25 or maintained for the generation of electric

1 power and uses for the generation only the hy-
2 droelectric potential of a non-federally owned
3 conduit;

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

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

10 “(b) ADMINISTRATION.—

11 “(1) IN GENERAL.—A qualifying conduit hydro-
12 power facility shall not be required to be licensed
13 under this part.

14 “(2) NOTICE OF INTENT TO CONSTRUCT FACIL-
15 ITY.—

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

21 “(B) INFORMATION.—The notice shall in-
22 clude sufficient information to demonstrate that
23 the facility meets the qualifying criteria.

24 “(C) INITIAL DETERMINATION.—Not later
25 than 15 days after receipt of a notice of intent

1 is filed under subparagraph (A), the Commis-
2 sion shall—

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

6 “(ii) if the Commission makes an ini-
7 tial determination, pursuant to clause (i)
8 that the facility meets the qualifying cri-
9 teria, publish public notice of the notice of
10 intent filed under subparagraph (A).

11 “(D) FINAL DETERMINATION.—If, not
12 later than 45 days after the date of publication
13 of the public notice described in subparagraph
14 (C)(ii)—

15 “(i) an entity contests whether the fa-
16 cility meets the qualifying criteria, the
17 Commission shall promptly issue a written
18 determination as to whether the facility
19 meets the qualifying criteria; or

20 “(ii) no entity contests whether the
21 facility meets the qualifying criteria, the
22 facility shall be considered to meet the
23 qualifying criteria.

24 “(c) EXEMPTIONS.—Subject to subsection (d), the
25 Commission may grant an exemption in whole or in part

1 from the requirements of this part, including any license
2 requirements contained in this part, to any facility (not
3 including any dam or other impoundment) constructed,
4 operated, or maintained for the generation of electric
5 power that the Commission determines, by rule or order—

6 “(1) uses for the generation only the hydro-
7 electric potential of a conduit; and

8 “(2) has an installed capacity that does not ex-
9 ceed 40 megawatts.”;

10 (3) in subsection (d) (as redesigned by para-
11 graph (1)), by striking “subsection (a)” and insert-
12 ing “subsection (c)”;

13 (4) in subsection (e) (as so redesignated), by
14 striking “subsection (a)” and inserting “subsection
15 (c)”.

16 (b) CONFORMING AMENDMENTS.—

17 (1) Section 210(j)(3) of the Public Utility Reg-
18 ulatory Policies Act of 1978 (16 U.S.C. 824a-
19 3(j)(3)) is amended by striking “section 30(c)” and
20 inserting “section 30(d)”.

21 (2) Section 405(d) of the Public Utility Regu-
22 latory Policies Act of 1978 (16 U.S.C. 2705(d)) is
23 amended in the first sentence—

1 (A) by striking “subsections (c) and (d)”
2 each place it appears and inserting “subsections
3 (d) and (e)”; and

4 (B) by striking “subsection (a) of such sec-
5 tion 30” and inserting “section 30(c) of that
6 Act”.

7 (3) Section 3401(a)(2) of the Omnibus Budget
8 Reconciliation Act of 1986 (42 U.S.C. 7178(a)(2)) is
9 amended by striking “30(e)” and inserting “30(f)”.

10 (4) Section 242(b)(3) of the Energy Policy Act
11 of 2005 (42 U.S.C. 15881(b)(3)) is amended by
12 striking “section 30(a)(2) of the Federal Power Act
13 (16 U.S.C. 823a(a)(2))” and inserting “section
14 30(a) of the Federal Power Act (16 U.S.C.
15 823a(a))”.

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

18 Section 405(d) of the Public Utility Regulatory Poli-
19 cies Act of 1978 (16 U.S.C. 2705(d)) is amended in the
20 first sentence by striking “5,000” and inserting “10,000”.

21 **SEC. 8. FERC AUTHORITY TO EXTEND PRELIMINARY PER-**
22 **MIT TERMS.**

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

1 (1) by designating the first, second, and third
2 sentences as subsections (a), (c), and (d), respec-
3 tively; and

4 (2) by inserting after subsection (a) (as so des-
5 ignated) the following:

6 “(b) EXTENSION.—The Commission may extend the
7 term of a preliminary permit once for not more than 2
8 additional years if the Commission finds that the per-
9 mittee has carried out activities under the permit in good
10 faith and with reasonable diligence.”.

11 **SEC. 9. STUDY OF PUMPED STORAGE AND POTENTIAL HY-**
12 **DROPOWER FROM CONDUITS.**

13 (a) IN GENERAL.—The Secretary shall conduct a
14 study—

15 (1)(A) of the technical flexibility that existing
16 pumped storage facilities can provide to support
17 intermittent renewable electric energy generation, in-
18 cluding the potential for those existing facilities to
19 be upgraded or retrofitted with advanced commer-
20 cially available technology; and

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

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

4 (B) through case studies, to assess amounts of
5 potential energy generation from such conduit hy-
6 dropower projects.

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

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

16 Not later than 180 days after the date of enactment
17 of this Act, the President shall submit to the Committee
18 on Energy and Natural Resources of the Senate and the
19 Committee on Energy and Commerce of the House of
20 Representatives a report on actions taken by the Depart-
21 ment of Energy, the Department of the Interior, and the
22 Corps of Engineers to carry out the memorandum of un-
23 derstanding on hydropower entered into on March 24,
24 2010, with particular emphasis on actions taken by the
25 agencies to work together and investigate ways to effi-

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

