

S.148

Introduced by Senators Illuzzi and Doyle

Referred to Committee on Natural Resources and Energy

Date: January 3, 2012

Subject: Conservation and development; natural resources; energy; public
service; hydroelectric plants

Statement of purpose: This bill proposes to require the commissioner of public
service, in consultation with the secretary of natural resources, to enter into an
agreement with the Federal Energy Regulatory Commission for a pilot project
to expedite development of small hydroelectric plants.

~~An act relating to a pilot project on expediting development of small
hydroelectric plants. *An act relating to expediting development of small and
micro hydroelectric projects*~~

It is hereby enacted by the General Assembly of the State of Vermont:

~~Sec. 1. FINDINGS~~

~~The general assembly finds:~~

~~(1) The existing policy of the state of Vermont is to promote
development and use of renewable energy plants, including hydroelectric
plants.~~

~~(2) The 2011 public review draft of the Comprehensive Energy Plan
issued by the department of public service (DPS) states in Sec. 3.3.2.8.2.2:~~

~~Opinions differ on the amount of available hydropower that is
available in Vermont. Depending on assumptions used, reports~~

1 ~~vary from 25 MW at 44 sites (estimated by the ANR [agency of~~
2 ~~natural resources] in 2008) to 434 MW at 1,291 sites (estimated in~~
3 ~~a DOE [Department of Energy] study in 2006). A 2007 study for~~
4 ~~the DPS identified more than 90 MW developable at 300 of the~~
5 ~~existing 1,200 existing dams.~~

6 (3) Most hydroelectric plants require a license from the Federal Energy
7 Regulatory Commission (FERC) unless FERC grants an exemption.

8 (4) There are two classes of hydroelectric license exemptions granted by
9 FERC:

10 (A) Small hydropower projects, which are five megawatts or less,
11 that will be built at an existing dam, or projects that utilize a natural water
12 feature for head or an existing project that has a capacity of five megawatts or
13 less and proposes to increase capacity.

14 (B) Conduit exemptions for generating capacities of 15 megawatts or
15 less for nonmunicipal and 40 megawatts or less for a municipal project. The
16 conduit must have been constructed primarily for purposes other than power
17 production and be located entirely on nonfederal lands. In this context,
18 “conduit” refers to a human-made water conveyance (e.g., an irrigation canal).

19 (5) In August 2010, FERC and the state of Colorado, through its energy
20 office, entered into a memorandum of understanding “to streamline and
21 simplify the authorization of small-scale hydropower projects.” Under this

1 ~~agreement, Colorado has undertaken a pilot project to test options for~~
2 simplifying the procedures to authorize the exemptions described in
3 subdivision (4) of this section for projects in Colorado while ensuring
4 environmental safeguards. The state's prescreening will allow FERC to waive
5 stages of its exemption authorization process. The pilot project will continue
6 until 20 projects have gone through the program.

7 (6) In Vermont, the state energy office is the department of public
8 service.

9 Sec. 2. MEMORANDUM OF UNDERSTANDING; PILOT PROJECT

10 (a) In consultation with the secretary of natural resources, the
11 commissioner of public service (the commissioner) shall by January 15, 2013
12 enter into a memorandum of understanding with the Federal Energy
13 Regulatory Commission (FERC) for a pilot project to simplify the procedures
14 for FERC's granting exemptions to its license requirements for plants in
15 Vermont that constitute small conduit hydroelectric facilities and small
16 hydroelectric power projects as defined in 18 C.F.R. § 4.30.

17 (b) In negotiating and entering into this memorandum of understanding, the
18 commissioner shall seek terms at least as favorable to the development of
19 in-state hydroelectric plants as those contained in the August 2010
20 "Memorandum of Understanding between the Federal Energy Regulatory
21 Commission and the State of Colorado through the Governor's Energy Office

1 ~~to Streamline and Simplify the Authorization of Small Scale Hydropower~~
2 ~~Projects.”~~

3 ~~(c) In negotiating and entering into a memorandum of understanding under~~
4 ~~this section, the commissioner shall offer and agree to prescreening by the state~~
5 ~~of Vermont of plants seeking exemption under the pilot project, in a manner~~
6 ~~similar to the prescreening undertaken by the state of Colorado in the~~
7 ~~memorandum of understanding described in subsection (b) of this section.~~

8 ~~(d) A memorandum of understanding between the commissioner of public~~
9 ~~service and FERC under this section shall bind the state of Vermont and its~~
10 ~~agencies, including the department of public service and the agency of natural~~
11 ~~resources.~~

12 ~~(e) No later than January 15, 2013 and annually by each January 15~~
13 ~~thereafter through the first January 15 after completion of the pilot project, the~~
14 ~~commissioner shall submit a written report to the general assembly detailing~~
15 ~~the progress of the project, including an identification of each hydroelectric~~
16 ~~plant receiving exemption from FERC license requirements through the~~
17 ~~project.~~

18 ~~(f) On entry into a memorandum of understanding with FERC under this~~
19 ~~section, the commissioner shall submit a copy of the memorandum to the~~
20 ~~general assembly.~~

21 ~~Sec. 3. EFFECTIVE DATE~~

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~~This act shall take effect on passage.~~

~~Sec. 1. FINDINGS~~

~~The general assembly finds:~~

~~(1) The existing policy of the state of Vermont is to promote development and use of renewable energy projects, including hydroelectric projects.~~

~~(2) The Comprehensive Energy Plan issued in December 2011 by the department of public service (DPS) states in Sec. 5.8.2.1.1:~~

~~Opinions differ on the amount of available hydropower that is available in Vermont. Depending on assumptions used, reports vary from 25 MW at 44 sites (estimated by the ANR [agency of natural resources] in 2008) to 434 MW at 1,291 sites (estimated in a DOE [Department of Energy] study in 2006). A 2007 study for the DPS identified more than 90 MW developable at 300 of the existing 1,200 existing dams.~~

~~(3) Many hydroelectric projects require a license from the Federal Energy Regulatory Commission (FERC) unless FERC grants an exemption. The length and cost of the process of obtaining a FERC license or exemption do not vary significantly with the capacity of the hydroelectric project. However, the ability of a hydroelectric project to absorb this cost decreases as the capacity of the project grows smaller.~~

~~(4) There are two classes of hydroelectric license exemptions granted by FERC:~~

~~(A) Small hydropower projects, which are five megawatts or less, that will be built at an existing dam, or projects that utilize a natural water feature for head or an existing project that has a capacity of five megawatts or less and proposes to increase capacity.~~

~~(B) Conduit exemptions for generating capacities of 15 megawatts or less for nonmunicipal and 40 megawatts or less for a municipal project. The conduit must have been constructed primarily for purposes other than power production and be located entirely on nonfederal lands. In this context, "conduit" refers to a human-made water conveyance (e.g., an irrigation canal).~~

~~(5) In August 2010, FERC and the state of Colorado, through its energy office, entered into a memorandum of understanding "to streamline and simplify the authorization of small-scale hydropower projects." Under this agreement, Colorado has undertaken a pilot project to test options for simplifying the procedures to authorize the exemptions described in~~

~~subdivision (4) of this section for projects in Colorado while ensuring environmental safeguards. The state's prescreening will allow FERC to waive stages of its exemption authorization process. The pilot project will continue until 20 projects have gone through the program.~~

~~(6) In Vermont, the state energy office is the department of public service and the main agency engaged in environmental regulation is the agency of natural resources (ANR). When a FERC license is sought for a hydroelectric project in Vermont, ANR reviews the project and determines whether to issue a certification under the Clean Water Act, 33 U.S.C. § 1341, that the project will not violate water quality standards adopted under that act.~~

~~(7) In a report to the general assembly entitled "The Development of Small Hydroelectric Projects in Vermont" (Jan. 9, 2008) at p. 19, ANR states that most hydroelectric projects in Vermont are smaller than five MW in capacity.~~

Sec. 2. MEMORANDUM OF UNDERSTANDING; SMALL HYDROELECTRIC PROJECTS

~~(a) In consultation with the secretary of natural resources (the secretary), the commissioner of the department of public service (the commissioner) shall enter into a memorandum of understanding (MOU) with the Federal Energy Regulatory Commission (FERC) for a project to simplify the procedures for FERC's granting exemptions to its license requirements for projects in Vermont that constitute small conduit hydroelectric facilities and small hydroelectric power projects as defined in 18 C.F.R. § 4.30 (the MOU project). By July 15, 2012, the commissioner shall initiate with FERC the process of negotiating this MOU.~~

~~(b) In negotiating and entering into this MOU, the commissioner shall seek terms at least as favorable to the development of in-state hydroelectric projects as those contained in the August 2010 "Memorandum of Understanding between the Federal Energy Regulatory Commission and the State of Colorado through the Governor's Energy Office to Streamline and Simplify the Authorization of Small Scale Hydropower Projects."~~

~~(c) In negotiating and entering into an MOU under this section, the commissioner in consultation with the secretary shall offer and agree to prescreening by the state of Vermont of hydroelectric projects participating in the MOU project.~~

~~(d) A MOU between the commissioner of public service and FERC under this section shall bind the state of Vermont and its agencies, including the department of public service and the agency of natural resources.~~

~~(e) No later than January 15, 2013 and annually by each January 15 hereafter through the first January 15 after completion of the MOU project, the commissioner shall submit a written report to the general assembly detailing the progress of the project, including an identification of each hydroelectric project participating in the MOU project. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be submitted under this subsection.~~

~~(f) On entry into an MOU with FERC under this section, the commissioner shall submit a copy of the MOU to the general assembly.~~

~~(g) As necessary and appropriate, the commissioner and the secretary shall seek funding from available sources to support the MOU project under this section, including funding from a federal agency or funding that may be available because a participating hydroelectric project will provide benefits to the regional electric transmission or local electric transmission and distribution systems. Inception of the MOU project shall not be contingent on receipt of such funding.~~

Sec. 3. MICRO HYDROELECTRIC PROJECTS; STUDY; REPORT

~~By January 15, 2013, the secretary of natural resources (the secretary), in consultation with the commissioner of the department of public service, shall evaluate options to facilitate the development in Vermont of micro hydroelectric projects and shall submit a report to the general assembly stating the results of this evaluation and providing the secretary's recommendations on how to facilitate such development.~~

~~(1) For the purpose of this section, "micro hydroelectric project" shall mean a hydroelectric project having a nameplate capacity of 100 kilowatts or less.~~

~~(2) The evaluation and report under this section shall address the regulatory barriers to the development of in-state micro hydroelectric projects.~~

~~(3) The report shall include the secretary's recommendations on how these barriers may be appropriately addressed, while protecting environmental quality, in order to facilitate the development of micro hydroelectric projects, including potential mechanisms to increase the transparency and reduce the cost and time of the process to obtain necessary government approvals.~~

~~(4) The report shall attach recommended legislation to facilitate the development in Vermont of micro hydroelectric projects.~~

~~(5) In preparing the report under this section, the secretary may build on work performed in preparing prior reports and studies that address the same subject matter.~~

~~Sec. 4. EFFECTIVE DATE~~

~~This act shall take effect on passage.~~

Sec. 1. FINDINGS

The general assembly finds:

(1) The existing policy of the state of Vermont is to promote development and use of renewable energy projects, including hydroelectric projects.

(2) Additional capacity exists for development of hydroelectric projects in Vermont, with estimates ranging from 25 megawatts (MW) to 434 MW. The Comprehensive Energy Plan issued in December 2011 by the department of public service (DPS) states in Sec. 5.8.2.1.1:

Opinions differ on the amount of available hydropower that is available in Vermont. Depending on assumptions used, reports vary from 25 MW at 44 sites (estimated by the ANR [agency of natural resources] in 2008) to 434 MW at 1,291 sites (estimated in a DOE [Department of Energy] study in 2006). A 2007 study for the DPS identified more than 90 MW developable at 300 of the existing 1,200 existing dams.

(3) In a report to the general assembly entitled "The Development of Small Hydroelectric Projects in Vermont" (Jan. 9, 2008) at p. 19, ANR states that most hydroelectric projects in Vermont are smaller than five MW in capacity.

(4) Most hydroelectric projects require approval from the Federal Energy Regulatory Commission (FERC). The length and cost of the process of obtaining a FERC approval do not vary significantly with the capacity of the hydroelectric project. However, the ability of a hydroelectric project to absorb this cost decreases as the capacity of the project grows smaller.

(5) A FERC approval of a hydroelectric project may be in the form of a "license" for a limited term that is not to exceed 50 years and that may be renewed. The majority of the over 1,700 hydroelectric projects regulated by FERC are subject to limited term licenses. These licenses can apply to large hydroelectric projects such as the 15 Mile Falls Hydroelectric Project on the Connecticut River (291 MW) and to small projects such as the Gilman Dam on the Black River in Vermont (0.125 MW). Licensed projects may include "minor water power projects," which FERC defines as any existing or proposed water power project that would have a total installed generation capacity of 1.5 MW or less.

(6) A FERC approval of a hydroelectric project may be in the form of

an “exemption,” under which the project is exempted from some requirements of the Federal Power Act, including the limited term, but there is still an extensive application and environmental review process. These exemptions therefore are approvals in perpetuity. There are two classes of hydroelectric license “exemptions” granted by FERC:

(A) Small hydropower projects, which are five MW or less, that will be built at an existing dam, or projects that utilize a natural water feature for head or an existing project that has a capacity of five MW or less and proposes to increase capacity.

(B) Conduit exemptions for generating capacities of 15 MW or less for nonmunicipal and 40 MW or less for a municipal project. The conduit must have been constructed primarily for purposes other than power production and be located entirely on nonfederal lands. In this context, “conduit” refers to a human-made water conveyance (e.g., an irrigation canal).

(7) In August 2010, FERC and the state of Colorado, through its energy office, entered into a memorandum of understanding “to streamline and simplify the authorization of small-scale hydropower projects.”

(8) In Vermont:

(A) The state energy office is the department of public service, which among other duties advances state energy policy pursuant to the direction provided by statute.

(B) The main agency engaged in environmental regulation is the agency of natural resources (ANR), the duties and expertise of which include science-based analysis of the impacts of projects on water quality, fish, and wildlife. When a FERC license or exemption is sought for a hydroelectric project in Vermont, ANR reviews the project and determines whether to issue a certification under the Clean Water Act, 33 U.S.C. § 1341, that the project will not violate water quality standards adopted under that act.

Sec. 2. MEMORANDUM OF UNDERSTANDING; SMALL

HYDROELECTRIC PROJECTS

(a) In consultation with the secretary of natural resources (the secretary), the commissioner of the department of public service (the commissioner) shall seek to enter into a memorandum of understanding (MOU) with the Federal Energy Regulatory Commission (FERC) for a program to expedite the procedures for FERC’s granting approvals for projects in Vermont that constitute small conduit hydroelectric facilities and small hydroelectric power projects as defined in 18 C.F.R. § 4.30 (the MOU program). The commissioner also may seek to include minor water power projects, as defined

by 18 C.F.R. § 4.30, in the MOU program. By July 15, 2012, the commissioner shall initiate with FERC the process of negotiating this MOU.

(b) In negotiating and entering into an MOU under this section, the commissioner in consultation with the secretary shall offer and agree to prescreening by the state of Vermont of hydroelectric projects participating in the MOU program.

(c) Prior to executing an MOU with FERC under this section, the commissioner shall submit a copy of the MOU, in its final form as the parties intend to execute it, to the house committee on fish, wildlife and water resources and the senate committee on natural resources and energy. The MOU may be submitted electronically to the office of legislative council, which shall distribute it to the members of these committees.

(d) In consultation with the secretary, the commissioner is authorized to sign an MOU under this section on behalf of the department of public service, the agency of natural resources, and other state agencies and departments involved in the review of proposed hydroelectric projects in Vermont.

(e) No later than January 15, 2014 and annually by each second January 15 thereafter, the commissioner shall submit a written report to the general assembly detailing the progress of the MOU program, including an identification of each hydroelectric project participating in the program. After five hydroelectric projects participating in the program are approved and commence operation, reports filed under this subsection shall evaluate and provide lessons learned from the program, including recommendations, if any, on how to improve procedures for obtaining approval of micro hydroelectric projects (100 kilowatts capacity or less). The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be submitted under this subsection.

(f) As necessary and appropriate, the commissioner and the secretary shall seek funding from available sources to support the MOU program under this section. Inception of the MOU program shall not be contingent on receipt of such funding.

Sec. 3. EFFECTIVE DATE

This act shall take effect on passage.