

UNITED STATES OF AMERICA 107 FERC ¶ 62,217
FEDERAL ENERGY REGULATORY COMMISSION

Barton Village, Inc.

Project No. 7725-005

ORDER ISSUING SUBSEQUENT LICENSE
(MINOR PROJECT)

(June 09, 2004)

INTRODUCTION

1. Pursuant to Part I of the Federal Power Act (FPA),¹ Barton Village Inc. filed an application on September 27, 2002, for a subsequent minor license to continue to operate the existing 1,400-kilowatt (kW) Barton Village Hydroelectric Project No. 7725 with an average annual generation of 4,897,000 kilowatthours (kWh). The project is located on the Clyde River² in the Town of Charleston, in Orleans County, Vermont. Barton Village proposes no new capacity at the project. For the reasons stated below, I am issuing a subsequent license for the project.

BACKGROUND

2. The existing license for the project was issued on October 11, 1984,³ and expires on October 1, 2004.

3. On December 12, 2002, the Commission issued a public notice soliciting motions to intervene and comments. The United States Department of the Interior (Interior) and Vermont Agency of Natural Resources (Vermont ANR) filed timely motions to intervene. On March 20, 2003, the Commission issued a public notice indicating the

¹16 U.S.C. §§ 791a - 825r.

²The navigability of the entire length of the Clyde River was established in Opinion No. 318, 21 FPC 233 (February 16, 1959). There are no federal lands within the project boundary.

³ 29 FERC ¶ 62,023.

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project was ready for environmental analysis and soliciting comments, recommendations, and terms and conditions. In response, the Commission received comments from Interior and Vermont ANR.

4. On April 15, 2004, the Commission's staff issued for public comment an environmental assessment (EA). Comments on the EA were filed by U.S. Fish and Wildlife Service (FWS), and Barton Village. The EA recommends that the project be licensed with certain additional environmental measures, and finds that licensing the project would not constitute a major federal action significantly affecting the quality of the human environment.

5. All comments and motions to intervene have been fully considered and addressed in this order in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

6. The existing project consists of a reservoir, dam, powerhouse, and transmission line. The dam is a 77-foot-long, 24-foot-high masonry and concrete gravity dam that diverts up to 266 cubic feet per second (cfs) from the Clyde River to project powerhouse. At a pool elevation of 1,140.9 feet mean sea level, the reservoir (Pensioner Pond) has a surface area of 187 acres. The powerhouse houses two generating units with a total installed capacity of 1,400 kW. The tailrace returns flow to the Clyde River. The project's bypassed reach is about 800 feet in length. There are two underground 2.4 kilovolt (KV) transmission lines extending from the powerhouse to the substation. The project is described in greater detail in ordering paragraph (B)(2).

7. Barton Village proposes no increased capacity, and proposes to operate the project in a run-of-river mode. Historically, the project generates about 4,897,000 kWh of electricity annually.

APPLICANT'S CONSERVATION EFFORT

8. In accordance with Section 10(a)(2)(C) of the FPA⁴ staff has evaluated Barton Village's record as a licensee with respect to conservation efforts. I accept staff's findings.

⁴ 16 U.S.C. §803(a)(2)(C).

9. Barton Village participates in the Efficiency Vermont program. Efficiency Vermont is a statewide provider of energy efficiency services. The program was created in 2000 by the Vermont legislature and the Vermont Public Service Board to help all state residents save energy, reduce energy costs, and protect Vermont's environment. The program provides technical advice, financial assistance, and design guidance to help make Vermont homes, farms, and businesses energy efficient. Staff finds that through this program, Barton Village is making a satisfactory effort to conserve electricity.

APPLICANT'S CAPABILITIES

10. We have evaluated Barton Village's record as a licensee with respect to the following factors: (A) compliance history and ability to comply with the new license; and (B) safety management, operation, and maintenance of the project. I accept the staff's findings in each of these areas.

A. Compliance History and Ability to Comply with the Subsequent License

11. Staff reviewed Barton Village's license application and its record of compliance with the existing license in an effort to judge its ability to comply with the terms and conditions of any license issued, and with other applicable provisions of this part of the FPA. Staff found that its overall record of making timely filings and compliance with its license is satisfactory. As a result of its review of Barton Village's compliance record and the license application, staff concludes that Barton Village is able to satisfy the conditions of a new license.

B. Safe Management, Operation, and Maintenance of the Project

12. Staff concludes that the Barton Village Project would be safe and adequate for continued operation during the new license term, and would pose no threat to public safety if operated and maintained according to good engineering practices, and the normal regulations governing our hydroelectric licenses.

13. The Barton Village Project is exempt from Part 12, Subpart C, and is not subject to Part 12, Subpart D of the Commission's regulations, which implement the Commission's safety requirements.⁵

⁵18 C.F.R. §§ 12.1 - 12.44 (2003).

WATER QUALITY CERTIFICATION

14. Under Section 401(a)(1) of the Clean Water Act (CWA),⁶ the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency has issued a water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that state certification shall become a condition on any federal license or permit that is issued.⁷ Only a reviewing court can revise or delete these conditions.⁸

15. Barton Village applied for a Section 401 water quality certification (WQC) for the project with Vermont ANR on September 26, 2002. On May 19, 2003, Vermont ANR issued the WQC for this project that includes 17 conditions which are set forth in the Appendix to this order, and incorporated in the license (see ordering paragraph E).

16. In addition to standard conditions of reservations of authority to Vermont, the water quality certification includes provisions requiring Barton Village to:

- Operate the project in a true run-of-the-river mode. When the facility is not operating, all flows shall be spilled at the dam.
- Release a flow of 45 cfs, or inflow if less, into the bypass at all times.
- Maintain Pensioner Pond at or above elevation 1,140.94 feet mean sea level (the top of the flashboards) at all times.

⁶ 33 U.S.C. § 1341(a)(1).

⁷ 33 U.S.C. § 1341(d).

⁸ See *American Rivers, Inc. v. FERC*, 129 F.3d 99 (D.C. Cir. 1997).

- When restoring the elevation of Pensioner Pond, release at least 90 percent of instantaneous inflow below the project. While the pond is being refilled, bypass flow requirements shall be met at all times.
- Develop and file a flow management plan.
- Develop a plan for continuous monitoring and reporting of flow releases at the project (bypass flow release and turbine discharge), impoundment levels, and inflows.
- Provide a turbine rating curve.
- Replace flashboards at four-year intervals.
- Develop a plan for proper disposal of debris associated with project operation.
- Allow public access to the project lands.
- Construct and maintain recreational facilities consistent with a recreation plan.
- Upon a written request by the Vermont ANR, design and implement erosion control measures.

SECTION 18 FISHWAY PRESCRIPTIONS

17. Section 18 of the FPA provides that the Commission shall require a licensee, at its own expense, to construct, operate, and maintain such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.⁹ By letter dated May 8, 2003, the Secretary of the Interior requested reservation of its authority to prescribe, through the U.S. Fish and Wildlife Service (FWS), the construction, operation, and maintenance of appropriate fishways at the Barton Village Hydroelectric Project. Consistent with the Commission's policy, Article 405 reserves the Commission's authority to require such fishways that may be prescribed by Interior, through the FWS, for the Barton Village Hydroelectric Project.

⁹ 16 U.S.C. § 811.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

18. Section 10(j)(1) of the FPA¹⁰ requires the Commission, when issuing a license, to include conditions based upon recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,¹¹ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.

19. Interior filed recommendations for license conditions that were considered in the Section 10(j) process in this proceeding.¹² Commission staff analyzed Interior's recommendations in the EA.

20. By letter dated April 23, 2004, staff informed Interior it would not adopt Interior's reservoir refilling plan and asked Interior if staff's alternative recommendations on these issues, as described in the EA, are acceptable to Interior. On May 12, 2004 the U.S. Fish and Wildlife Service responded agreeing with staff that Vermont ANR's reservoir refill protocol is more conservative and they had no objection to the Commission adopting the Vermont ANR protocol.

21. The license issued here for the Barton Village Project includes conditions consistent with all of Interior's section 10(j) recommendations. These conditions require: (1) operation of the project in run-of river mode such that inflow equals outflow on an instantaneous basis (article 401); (2) release of bypass minimum flows of 45 cfs, or inflow (article 401); (3) reservoir refilling plan after reservoir drawdown (article 402); (4) development and implementation of a plan to monitor (a) instantaneous instream flow in the bypass reach, and (b) reservoir levels (article 404); and (5) maintaining a stable pool year-round (article 401).

HISTORIC PROPERTIES UNDER THE NATIONAL HISTORIC PRESERVATION ACT

¹⁰ 16 U.S.C. § 803(j)(1).

¹¹ 16 U.S.C. § 661 *et seq.*

¹² See letter filed May 8, 2003, for Interior recommendations submitted under Section 10(j) of the FPA.

22. Section 106 of the National Historic Preservation Act requires the Commission to take into account the effects that a new license may have on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. As part of a new license application for this project, a cultural resources inventory was conducted by Barton Village to identify existing and potential historic properties within the project area. The preliminary inventory and staff's analysis determined that there are existing and potential future project-related adverse effects that may occur on historic properties within the project area. As a result, and in order to fulfill the requirements under Section 106, the Commission executed a Programmatic Agreement (PA), on March 22, 2004, with the Vermont State Historic Preservation Officer to have Barton Village file for the Commission's approval a final Phase 1A Archeological study within nine months of the effective date of this license, and a Historic Properties Management Plan within one year of the effective date of this license. Article 408 of the license requires implementation of the PA.

OTHER ISSUES

A. Run-of-River Operation

23. Barton Village proposed to operate the project as a run-of-river (ROR) project as it is currently and voluntarily operated. FWS and Vermont ANR recommend that the project be operated in a ROR mode and stable water levels be maintained in Pensioner Pond. In the water quality certification Vermont ANR requires true ROR, we interpret it to mean inflow equals outflow on an instantaneous basis. Operating the project in a ROR mode would continue to provide stability to Pensioner Pond's water levels. Stable water levels in Pensioner Pond would promote good water quality and consequently healthy aquatic habitats over that of a peaking operation. This is accomplished by reducing the potential for shoreline and streambank erosion and increased turbidity in the reservoir and downstream of the project's dam. Article 401 requires that the Barton Village Project be operated in a run-of-river mode.

B. Minimum Flows

24. Barton Village proposes that the minimum flows in the bypassed reach would be increased to a continuous 45 cfs or inflow to Pensioner Pond, whichever is less. FWS and Vermont ANR recommend the same minimum flow release proposed by Barton Village. Because the minimum flow would be increased from the current level of 21 cfs from June 15 to September 15, and 10 cfs at all other times of the year, the water quality

in the bypassed reach and downstream of the project in the Clyde River would likely be improved over those experienced under the current conditions.

25. Increased flows in the bypassed reach would likely improve dissolved oxygen levels downstream of the project as flows are spilled over the dam's crest and through increased turbulence and rapids within the bypassed reach. Additionally, the increased volume of water within the bypassed reach would likely reduce warming during the summer months by lessening the effect of solar radiation. Larger volumes of water require greater amounts of solar energy than do smaller amounts of water to accomplish the same amount of thermal warming. For these reasons, we believe that Barton Village's proposal would protect and enhance the water quality of the Clyde River downstream of the project. Article 401 requires the release into the bypassed reach of a minimum flow of 45 or the inflow to Pensioner Pond, whichever is less.

C. Recreation

26. To maintain and enhance recreation opportunities at the project, article 407 of the license requires that Barton Village file a recreation plan. The plan should include Barton Village's proposals to: (1) provide two parking areas for approximately five cars each near the powerhouse; (2) construct and maintain a footpath to provide public access to the bypassed reach; (3) provide and maintain an access path to Charleston Pond for angling and launching carry-in boats.

27. In addition, Barton Village proposes to seek approval from adjacent landowners to construct a canoe/kayak take-out above the dam and for the development of a primitive campground near the southern shore of Charleston Pond. Staff concurs with this proposal and believes that a canoe/kayak take-out and a campground would provide additional benefits for public recreation and increase recreational enjoyment at the site. Therefore, article 407 also requires Barton Village to include documentation of its efforts to obtain landowner approval, and any plans and schedules to provide the canoe/kayak take-out and the campground facilities. In accordance with § 2.7 of the Commission's Regulations, if constructed, these facilities should be included in the project boundary. If Barton Village is unsuccessful in acquiring the necessary landowner approval, the article requires it to identify potential alternative canoe/kayak take-out sites and alternative campground sites and include any plans and schedules to implement such alternatives.

28. Finally, article 407 requires the recreation plan provide information regarding the plan and schedule for implementing the proposed facilities, a description of how the needs of individuals with disabilities were considered in the design and construction of

the proposed facilities, appropriate maps showing the types and location of the proposed facilities, and measures to address signage, erosion, litter, debris removal, and sanitation issues at the project.

D. Administrative Conditions

29. Section 10(e) of the FPA¹³ provides that the Commission shall assess licensees annual charges to reimburse the United States for the costs of administering Part I of the FPA. However, at this time the Commission does not assess administrative annual charges for projects with less than 1,500 kW authorized installed capacity;¹⁴ accordingly, since the installed capacity for this project is 1,400 kW, no annual administrative charge will be assessed.

E. Other Measures

30. Based on staff recommendations in the EA and/or requirements in Vermont ANR's WQC, I am also including provisions for: (1) turbine rating curve (article 301); (2) flow management plan (article 403); and (3) debris disposal plan (article 406).

COMPREHENSIVE PLANS

31. Section 10(a)(2) of the FPA¹⁵ requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.¹⁶ Accordingly, federal and state agencies filed a total of 28 comprehensive plans for the state of Vermont that address various resources in the state. Of these, we identified and reviewed twelve of the plans relevant to this project.¹⁷ No conflicts were found.

¹³ 16 U.S.C. § 803(e).

¹⁴ 18 CFR § 11.(b)(1).

¹⁵ 16 U.S.C. § 803(a)(2)(A).

¹⁶ Comprehensive plans for this purpose are defined at 18 C.F.R § 2.19 (2003).

¹⁷ See Section VIII of the Barton Village EA for a list of the relevant plans.

COMPREHENSIVE DEVELOPMENT

32. Sections 4(e) and 10(a)(1) of the FPA,¹⁸ require the Commission, in acting on applications for license, to give equal consideration to the power and development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be in the Commission's judgment best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

33. In determining whether a proposed hydroelectric power project will be best adapted to a comprehensive plan for developing a waterway for beneficial public uses, pursuant to Section 10(a)(1), the Commission considers a number of public interest factors, including the projected economic benefits of project power.

34. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,¹⁹ the Commission employs an analysis that uses current costs to compare the costs of the project and likely alternative power, with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license. In making its decision, the Commission considers the project power benefits both with the applicant's proposed measures and with the Commission's modifications and additions to the applicant's proposal.

35. As proposed by Barton Village, the project would produce an average of 4,147,000 kWh of electricity annually at an annual cost of about \$117,200 (28.2 mills/kWh). The annual value of power would be about \$158,400 (38.2 mills/kWh).²⁰ To

¹⁸ 16 U.S.C. §§797(e) and 803(a)(1).

¹⁹ 72 FERC ¶ 61,027 (1995).

²⁰ Estimate of the avoided cost of energy provided by Barton Village.

determine if the project would be economically beneficial, we subtract the project's cost from the value of the project's power, thereby yielding an annual net benefit of \$41,200 (10.0 mills/kWh).

36. As licensed with staff recommended measures and the measures required in the WQC, the project would produce an average of 4,147,000 kWh of energy annually at an annual cost of about \$119,980 (28.9 mills/kWh). The annual power value would be about \$158,400 (38.2 mills/kWh). Thus, the project's power would cost about \$38,420 (9.3 mills/kWh) less than currently available alternative power.

37. Our evaluation of the economics of the proposed action and the proposed action with additional staff-recommended measures shows that project energy would cost less than alternative energy. However, project economics is only one of the many public interest factors that are considered in determining whether or not to issue a license, and operation may be desirable for other reasons. For example, some other public interest factors are to (1) diversify the mix of energy sources in an area; (2) promote local employment; and (3) provide a fixed-cost source of power and reduce contract needs.

38. In analyzing public interest factors, the Commission takes into account that hydropower projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout.

39. Ancillary benefits are now mostly priced at rates that recover only the cost of providing the electric service at issue, which do not resemble the prices that would occur in competitive markets. As competitive markets for ancillary benefits begin to develop, the ability of hydropower projects to provide ancillary services to the system will increase the benefits of the projects.

40. The EA contains background information, analysis of effects, and the support for related license articles. Based on my independent review and evaluation of the Barton Village Hydroelectric Project, recommendations from the resource agencies, and the no-action alternative, as documented in the EA, I have selected the proposed Barton Village Hydroelectric Project, with the staff-recommended measures, as the preferred alternative.

41. This alternative was selected because: (1) issuance of the license would provide a beneficial, dependable, and inexpensive source of electric energy; (2) the required environmental measures would protect and enhance fish and wildlife, water quality, recreational, and cultural resources; and (3) the 1,400 kW of electric energy generated from the renewable resource would offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

42. The design of this project is consistent with the engineering standards governing dam safety. The project would be safe if operated and maintained in accordance with the requirements of this license.

43. Based upon a review of the agency and public comments filed on the project, and the staff's independent analysis pursuant to Sections 4(e), and 10(a)(1) of the FPA, I conclude that issuing a license for the Barton Village Project, with the required environmental measures and other special license conditions, will be best adapted to the comprehensive development of the Clyde River for beneficial public uses.

LICENSE TERM

44. Section 15(e) of the FPA, 16 U.S.C. § 808(e), provides that any new license issued shall be for a term of not less than 30 years nor more than 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigative and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects which propose extensive measures of these kinds.

45. In 1994, the Commission codified its longstanding policy to "coordinate the expiration dates of licenses to the maximum extent possible, to maximize future considerations of cumulative impacts . . . in contemporaneous proceedings at relicensing."²¹ The Commission uses its discretion to apply its two license-term policies flexibly in a manner that makes sense according to the facts of each licensing proceeding. See Consolidated Papers, Inc., 83 FERC ¶61,279 at 62,158 (1998).

²¹ See Policy Statement on Use of Reserved Authority in Hydropower Relicenses to Ameliorate Cumulative Impacts, 59 Fed. Reg. 66,714 (December 28, 1994), FERC Stats. & Regs. Preambles ¶31,010 at 31,219 (December 14, 1994); and 18 C.F.R. § 2.23 (2003).

46. Barton Village does not propose any new capacity or construction at the Barton Village Project, nor does the cost of environmental measures justify a long license term. The operations of the Barton Village Project are interrelated with those of the Clyde River Project. The Clyde River Project received a 40-year license on November 21, 2003, effective November 1, 2003,²² and expiring October 31, 2043. Issuance of a 39-year license for the Barton Village Project will provide an opportunity for a comprehensive evaluation of the use of the waterway for hydropower production and other resources when the Barton Village license expires in 2043. Therefore, this order issues a new license for the Barton Village Project for a 39-year term.

The Director Orders:

(A) This license is issued to the Barton Village (licensee) to operate and maintain the Barton Village Hydroelectric Project, for a period of 39 years, effective October 2, 2004. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, shown by Exhibit G filed September 27, 2002:

Exhibit G Drawing	FERC No. 7725-	Showing
G-1	1001	Project Area Map

(2) Project works consisting of: (1) a 77-foot-long, 24-foot-high masonry and concrete gravity dam; (2) 1.5-foot-high flashboards extending 57 feet across a concrete spillway; (3) a 187-acre impoundment at elevation 1,140.9 feet mean sea level; (4) a 665-foot-long, 7-foot-diameter steel penstock; (5) two 105-foot-long, 5.5 and 5.8-foot-diameter steel penstocks; (6) a powerhouse with two units having a total installed capacity of 1.4 MW; (7) two tailraces; (8) two underground 2.4-kV transmission lines; and (9) other appurtenant facilities.

²² Citizens Utilities Company, 105 FERC ¶ 62,119.

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The project works generally described above are more specifically described in Exhibit A of the application and shown by Exhibit F:

Exhibit F Drawing	FERC No. 7725-	Showing
F-1	1002	Principal Project Works

(3) All of the structures, fixtures, equipment, or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibits A, F, and G described above are approved and made part of this license.

(D) The following sections of the FPA are waived and excluded from the license for this minor project:

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the FPA that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(E) This license is subject to the water quality certification conditions issued by the Vermont Agency of Natural Resources on May 19, 2003 under Section 401 of the Clean Water Act, as those conditions are set forth in the Appendix to this order.

(F) This license is subject to the articles set forth in Form L-9 (October 1975), entitled "Terms and Conditions of License for Constructed Minor Project Affecting Navigable Waters of the United States," and the following additional articles.

Article 201. Administrative Annual Charge. The licensee shall pay the United States the following annual charges, effective as of the first day of the month in which the license is issued:

For the purposes of reimbursing the United States for the Commission's

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administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 1,400 kilowatts (kW). Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kW will not be assessed an annual charge.

Article 202. Exhibit Drawings. Within 45 days of the of the effective date of this license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (e.g., P-7725-1001) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office.

b) The licensee shall file two separate sets of exhibit drawings in electronic format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. The drawings must be identified as (CEII) material under 18 CFR §388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension [e.g., P-7725-1001, G-1, Project Boundary, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4
RESOLUTION – 300 dpi desired, (200 dpi min)
DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max)
FILE SIZE – less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a minimum of three known reference points, arranged in a triangular format. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown and identified on the drawing.

c) The licensee shall file three separate sets of the project boundary vector data in a geo-referenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format) with the Secretary of the Commission, ATTN: OEP/DHAC. The file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-7725, boundary vector data, MM-DD-YYYY.SHP]. The geo-referenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. A single electronic boundary data file is preferred and must contain all reference points shown on the individual project boundary drawings. The latitude and longitude coordinates, or state plane coordinates, of each reference point must be shown. The data must be accompanied by a separate text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension [e.g., P-7725, project boundary metadata, MM-DD-YYYY.TXT].

Article 301. Turbine Rating Curve. Within 90 days of the effective date of this license, the licensee shall develop a plan to determine a turbine rating curve. The licensee shall file three copies of the plan with the Secretary of the Commission and one copy with the Commission's New York Regional Office. The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified that the plan is approved. Upon Commission approval, the licensee shall develop a turbine rating curve pursuant to the approved plan and file it in the same method as described above.

Article 401. Run-of-River Operation/Minimum Flows. The licensee shall operate the project in a run-of-river mode and provide the minimum flows in accordance with Condition B in the Appendix to this order, except as allowed in Condition C of the Appendix to this order.

Run-of-river operation and minimum flows may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement between the licensee and the Vermont Agency of Natural

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Resources. If the project's operation or flows are so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 402. Impoundment Refilling. In the event of an impoundment drawdown resulting from operating emergencies, or after flashboard failure and replacement, the licensee shall refill of the project's impoundment as described in Condition C of the Appendix to this order.

This condition may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement between the licensee and the Vermont Agency of Natural Resources. If this condition is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. Flow Management Plan. Within 210 days of the effective date of the license, the licensee shall file for Commission approval, a flow management plan that has been developed in a manner consistent with Condition D of the Appendix to this order.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service and the Vermont Agency of Natural Resources. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 404. Impoundment and Flow Monitoring Plan. Within 210 days of the effective date of the license, the licensee shall file for Commission approval, a monitoring plan for impoundment and flow management. The plan shall be developed in a manner consistent with Condition E of the Appendix to this order.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, the U.S. Geological Survey and the Vermont Agency of Natural

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Resources. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 405. *Reservation of Authority for Fishways.* Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior under Section 18 of the Federal Power Act.

Article 406. *Debris Disposal Plan.* Within 120 days of the effective date of the license, the licensee shall file for Commission approval, a debris disposal plan in accordance with Condition H of the Appendix to this order.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service and the Vermont Agency of Natural Resources. The plan shall consider sluicing natural woody debris from the project trash racks or dam to downstream reaches, as a method of removal. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. The plan shall not be implemented until the licensee is notified that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 407. Recreation Plan. Within thirteen months from the effective date of the license, the licensee shall file, for Commission approval, a recreation plan that has been developed in a manner consistent with Condition K of the Appendix to this order.

The plan shall include proposed measures to: (1) provide two parking areas near the powerhouse; (2) construct and maintain a footpath to provide access to the bypass reach; and (3) provide and maintain an access path to Charleston Pond. In addition, Barton Village shall seek approval from adjacent landowners to provide a canoe/kayak take-out above the dam and to develop a primitive campground near the southern shore of Charleston Pond. As such, the plan shall include documentation of Barton Village's efforts to obtain the needed landowner approval for the canoe/kayak take-out and the campground facility, including consultation with the landowner, any agreements reached regarding the use of the lands, and any plans and schedules to construct and maintain the canoe/kayak take-out and the campground site. If Barton Village is unsuccessful in acquiring the necessary landowner approval, the plan shall identify potential alternative canoe/kayak take-out sites and alternative campground sites and include any plans and schedules to implement such alternatives. In addition, the plan shall include measures to address signage, erosion, litter, debris removal, and sanitation issues at the project.

The plan shall also include, at a minimum, the following information: (1) a detailed plan and schedule for implementing the proposed measures; (2) a description of how the needs of individuals with disabilities were considered in the design and construction of any new facilities; and (3) appropriate maps and drawings showing the type and location of the proposed measures in relation to the project's existing recreation facilities and the project boundary.

The licensee shall prepare the plan after consultation with the Vermont Agency of Natural Resources (Vermont) and the U.S. Fish and Wildlife Service (FWS). In addition, the licensee shall include with the plan documentation of consultation with Vermont and FWS, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-clearing or ground-disturbing activities associated with the recreation plan shall begin until the licensee is notified that the plan is approved. The plan shall not be implemented

until the licensee is notified that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 408. *Historic Properties Management Plan.* The licensee shall implement the “Programmatic Agreement Among the Federal Energy Regulatory Commission and the Vermont Historic Preservation Officer for Managing Historic Properties that May be Affected by a License Issuing to Barton Village, Inc. for the Continued Operation of the Barton Village Hydroelectric Project in Orleans County, Vermont (FERC No. 7725-005)”, executed on March 22, 2004, and including but not limited to the Historic Properties Management Plan (HPMP) for the project. In addition to the requirements of this Programmatic Agreement, the licensee shall file for the Commission’s approval; 1) a final Phase IA Archeological Study within nine months of the effective date of this order, and 2) an HPMP within one year of the effective date of this order. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the HPMP, the licensee shall obtain approval from the Commission and the Vermont State Historic Preservation Officer before engaging in any ground-disturbing activities or taking any other action that may affect any historic properties within the project's area of potential effects.

Article 409. *Use and Occupancy.* (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article.

If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

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(b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement.

To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project impoundment. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was

conveyed. If no conveyance was made during the prior calendar year, the licensee shall so inform the Commission and the Regional Director in writing no later than January 31 of each year.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year.

At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or

approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(G) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to the filing. Proof of service on these entities must accompany the filing with the Commission.

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(H) This order is issued under authority delegated to the Director and is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in Section 313 of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing of this order shall constitute acceptance of this license.

J. Mark Robinson
Director
Office of Energy Projects

**APPENDIX
WATER QUALITY CERTIFICATION CONDITIONS**

**STATE OF VERMONT
AGENCY OF NATURAL RESOURCES &
WATER CONTROL BOARD**

- A. **Compliance with Conditions.** The applicant shall operate and maintain this project consistent with the findings and conditions of this certification, where those findings and conditions relate to protection of water quality and support of designated and existing uses under Vermont Water Quality Standards and other appropriate requirements of state law.
- B. **Flow and Water Level Management.** Except as provided in Condition C below, the facility shall be operated in a true run-of-the-river mode. When the facility is not operating, all flows shall be spilled at the dam.

A flow of 45 cfs, or inflow if less, shall be released into the bypass at all times.

Except as provided in Condition C below, Pensioner Pond shall be maintained at or above elevation 1,140.94 feet msl (the top of the flashboards) at all times, except under circumstances when the Vermont Department of Environmental Conservation (Department) has granted special approval or the flashboards have failed.

- C. **Flow Management During Pensioner Pond Refill.** When restoring the elevation of Pensioner Pond after replacement of failed flashboards, or an approved drawdown related to dam maintenance or an emergency, the applicant shall release at least 90 percent of instantaneous inflow below the project. While the pond is being refilled, bypass flow requirements shall be met at all times. Normal flashboard replacement shall be done without lowering the pond level.
- D. **Flow Management Plan.** The applicant shall develop a flow management plan detailing how the project will be operated to comply with the conservation flow and water level limitations described above. The plan shall include information on how the project will be managed to control lag times and avoid related non-compliance with the conservation flow requirements, how downstream fish passage will be provided, and procedures for reporting deviations from prescribed operating conditions. The plan shall be developed in consultation with the Department and the U.S. Fish and Wildlife Service, and a draft shall be submitted to the Department for review within 180 days of the issuance of a federal license. The final plan shall be subject to Department

approval. The Department reserves the right of review and approval of any material changes made to the plan at any time.

- E. **Monitoring Plan for Impoundment and Flow Management.** The applicant shall develop a plan for continuous monitoring and reporting of flow releases at the project (bypass flow release and turbine discharge), impoundment levels, and inflows. The plan shall include procedures for reporting deviations from prescribed operating conditions. The applicant shall maintain continuous records of flows and impoundment levels and provide such records on a regular basis as per specifications of the Department. The plan shall be developed in consultation with the Department and the U.S. Fish and Wildlife Service, and a draft shall be submitted to the Department for review within 180 days of the issuance of a federal license. The final plan shall be subject to Department approval. The Department reserves the right of review and approval of any material changes made to the plan at any time.
- F. **Turbine Rating Curves.** The applicant shall provide the Department with a copy of the turbine rating curves, accurately depicting the flow/production relationship, for the record within one year of the issuance of a federal license.
- G. **Flashboards.** The applicant shall replace flashboards at four-year intervals. In addition, the flashboards shall be inspected annually following spring runoff, and damaged boards replaced as necessary.
- H. **Debris Disposal Plan.** The applicant shall develop a plan for proper disposal of debris associated with project operation, including trashrack debris. The plan shall be developed in consultation with the Department, and a draft shall be submitted to the Department for review within 90 days of the issuance of a federal license. The final plan shall be subject to Department approval. The Department reserves the right of review and approval of any material changes made to the plan at any time.
- I. **Maintenance and Repair Work.** Any proposals for project maintenance or repair work shall be filed with the Department for prior review and approval, if said work may have a material adverse effect on water quality or cause less-than-full support of an existing use or a beneficial value or use of State waters.
- J. **Public Access.** The applicant shall allow public access to the project lands for utilization of public resources, subject to reasonable safety and liability limitations. Such access should be prominently and permanently posted so that its availability is made known to the public. Any proposed limitations of access to State waters to be imposed by the applicant shall first be subject to

written approval by the Department. Access may be restricted without prior approval when an immediate threat to public safety exists. In those cases, the applicant shall so notify the Department and shall file a request for approval, if the restriction is to be permanent or long term, within 14 days of the restriction of access.

- K. **Recreational Facilities.** Recreational facilities shall be constructed and maintained consistent with a recreation plan. The plan shall include an implementation schedule and, where appropriate, details on erosion control. The plan shall be developed in consultation with the Department, and a draft shall be submitted to the Department for review within one year of the issuance of a federal license. The final plan shall be subject to Department approval. The plan shall be updated at the end of each subsequent six-year period. The Department reserves the right of review and approval of any material changes made to the plan at any time.
- L. **Erosion Control.** Upon a written request by the Department, the applicant shall design and implement erosion control measures as necessary to address erosion occurring as a result of use of the project lands for recreation. Any work that exceeds minor maintenance shall be subject to prior approval by the Department and FERC.
- M. **Compliance Inspection by Department.** The applicant shall allow the Department to inspect the project area at any time to monitor compliance with certification conditions.
- N. **Posting of Certification.** A copy of this certification shall be prominently posted within the project powerhouse.
- O. **Approval of Project Changes.** Any change to the project that would have a significant or material effect on the findings, conclusions or conditions of this certification, including project operation, must be submitted to the Department for prior review and written approval where appropriate and authorized by law and only as related to the change proposed.
- P. **Reopening of License.** The Department may request, at any time, that FERC reopen the license to consider modifications to the license as necessary to assure compliance with Vermont Water Quality Standards.
- Q. **Continuing Jurisdiction.** The Department reserves the right to add and alter the terms and conditions of this certification, when authorized by law and as

appropriate to carry out its responsibilities with respect to water quality during the life of the project.