

186 FERC ¶ 62,163
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Green Mountain Power Corporation

Project No. 5261-023

ORDER ISSUING SUBSEQUENT LICENSE

(March 28, 2024)

INTRODUCTION

1. On August 27, 2021, Green Mountain Power Corporation (GMP) filed pursuant to Part I of the Federal Power Act (FPA),¹ an application for a subsequent license to continue operating and maintaining the 365-kilowatt (kW)² Newbury Hydroelectric Project No. 5261 (Newbury Project, or project). The project is located on the Wells River in the town of Newbury in Orange County, Vermont.³ The project does not occupy federal land.

2. As discussed below, this order issues a subsequent license for the project.

BACKGROUND

3. The Commission issued the original license for the project on September 8, 1983, and the license expired on August 31, 2023.⁴ Since the expiration date, GMP has

¹ 16 U.S.C. §§ 791(a)–825(r).

² 145 FERC ¶ 62,084. The Commission issued an order on November 4, 2013, authorizing an installed capacity of 365 kW after permitting the licensee to replace the two main turbine-generator units with a single main turbine-generator unit with a capacity of 315 kW, and to correct an error in the reported capacity of the minimum flow turbine from 30 to 50 kW.

³ Because the project is located on a stream over which Congress has jurisdiction under the Commerce Clause, affects interstate commerce through its connection to an interstate power grid, and involves construction after 1935, it is required to be licensed by the Commission pursuant to section 23(b)(1) of the Federal Power Act. *See* 16 U.S.C. § 817(1); *see also*, *Aquenergy Systems, Inc.*, 39 FERC ¶ 61,178 (1987), *aff'd Aquenergy Systems, Inc v. FERC*, 857 F.2d 227 (4th Cir. 1988).

⁴ *Newbury Hydro Co.*, 24 FERC ¶ 62,275 (1983). The license has been transferred

operated the project pursuant to section 16.21 of the Commission's regulations, pending the disposition of the application.⁵

4. On November 10, 2021, the Commission issued a public notice that was published in the *Federal Register*, accepting the application for filing, and setting January 9, 2022, as the deadline for filing motions to intervene and protests.⁶ The Vermont Agency of Natural Resources (Vermont ANR) filed a timely motion to intervene.⁷ The Connecticut River Conservancy filed a late motion to intervene on January 11, 2022, which was granted.⁸ American Whitewater filed a late motion to intervene on June 3, 2022, which was also granted.⁹ None of the intervenors oppose relicensing the project.

5. On April 6, 2022, the Commission issued a public notice that was published in the *Federal Register* indicating the application was ready for environmental analysis, and setting June 5, 2022, as the deadline for filing comments, recommendations, terms and conditions, and prescriptions.¹⁰ The U.S. Department of the Interior (Interior) filed a reservation of authority to prescribe fishways on June 3, 2022. The Vermont State

twice. In 2015, the license was transferred from Newbury Hydro Company to Newbury Hydro Company, LLC. *Newbury Hydro Co.*, 150 FERC ¶ 62,210 (2015). In 2016, the license was transferred from Newbury Hydro Company, LLC to Green Mountain Power Corporation. *Newbury Hydro Co., LLC*, 157 ¶ 62,133 (2016).

⁵ 18 C.F.R. § 16.21 (2023); *see also* Commission staff's September 21, 2023 Notice of Authorization for Continued Project Operation.

⁶ 86 Fed. Reg. 64,193 (Nov. 17, 2021). The Commission's Rules of Practice and Procedure provide that if a filing deadline falls on a Saturday, Sunday, holiday, or other day when the Commission is closed for business, the filing deadline does not end until the close of business on the next business day. 18 C.F.R. § 385.2007(a)(2) (2023). Because the 60-day filing deadline fell on a Sunday (i.e., January 9, 2022), the filing deadline was extended until the close of business on Monday, January 10, 2022.

⁷ Timely, unopposed motions to intervene are granted by operation of Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1) (2023).

⁸ *See* January 31, 2022, Notice Granting Late Motion to Intervene.

⁹ *See* August 4, 2022, Notice Granting Late Motion to Intervene.

¹⁰ 87 Fed. Reg. 21,655 (Apr. 12, 2022). Because the 60-day filing deadline fell on a Sunday (i.e., June 5, 2022), the filing deadline was extended until the close of business on Monday, June 6, 2022. 18 C.F.R. § 385.2007(a)(2) (2023).

Historic Preservation Office (Vermont SHPO), Vermont ANR, and American Whitewater filed comments and recommendations.

6. Commission staff issued an environmental assessment (EA) on September 26, 2023, analyzing the effects of the proposed project and alternatives to it, and setting a filing deadline of October 26, 2023, for comments. No comments were filed.

7. The interventions, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION AND OPERATION

A. Project Area

8. The 18-mile-long Wells River begins at the outlet of Lake Groton, flows south into Ricker Pond, and then continues southeast, joining the Connecticut River at the Village of Wells River, Vermont. The Wells River headwaters are located in Groton State Forest just west of Peacham, Vermont. The project is approximately 0.9 river miles upstream of the confluence of the Wells River with the Connecticut River. The Wells River watershed has a total drainage area of approximately 102 square miles, out of which 100 square miles (98%) is the Newbury Project dam drainage area.

9. The Newbury Project and the Wells River Project (FERC Exemption No. 4770) are the only hydroelectric projects located on the Wells River. There are also four other dams on the Wells River used for recreation and managed by the Vermont Department of Environmental Conservation (Vermont DEC).¹¹

B. Project Facilities

10. The Newbury Project dam is a 26-foot-high, 90-foot-long concrete gravity structure that includes a 73.3-foot-long spillway with a crest elevation of 458.9 feet, topped with two 5-foot-high (elevation 463.9 feet) pneumatic crest gates.¹² At a normal water surface elevation of 463.9 feet, the impoundment has a surface area of 11.4 acres. A 4-foot-wide, 8-foot-long steel sluice box, on the south side of the spillway and adjacent to the crest gates, serves as a downstream fish passage chute. Water from the spillway

¹¹ The four other dams impound Lake Groton, Ricker Pond, Noyes Pond, and Ticklenaked Pond.

¹² Unless otherwise stated, all elevations in this order are referenced to National Geodetic Vertical Datum of 1929 (NGVD 29).

and sluice box passes into a 590-foot-long bypassed reach, which then connects to the project tailrace, and finally into the Wells River.

11. Water can be released from the impoundment via the spillway, sluice box, or an 11.2-foot-wide, 9-foot-long intake structure, located on the south end of the dam. In front of the intake structure there is an 18-foot-wide, 6-foot-deep baffle, and a 10-foot-wide, 18.5-foot-high angled trash rack, with 1-inch clear bar spacing. The intake leads to a 5-foot-diameter underground penstock (main penstock). Flows through the main penstock are regulated by a 6-foot-wide by 6-foot-high slide gate, which is automatically operated based on the impoundment elevation. The main penstock extends about 435 feet downstream of the dam and connects to a 0.315-megawatt (MW) main turbine generating unit located inside a brick masonry mill building.¹³ Flows from the main turbine are passed to a 125-foot-long tailrace canal, which then joins the downstream end of the bypassed reach of the Wells River. About 75 feet downstream from the dam, the main penstock bifurcates to a 2.5-foot-diameter, 25-foot-long penstock which connects to a 0.05-MW minimum flow turbine generating unit.¹⁴ A 5-foot-wide by 7-foot-high knife gate regulates flows through the minimum flow turbine, which are passed into the 590-foot-long bypassed reach.

12. Project power is transmitted through two transmission lines: an approximately 410-foot long, 480-volt underground transmission line from the minimum flow turbine generator unit to a pole mounted step-up transformer bank located adjacent to a non-project section of the mill building, and a 130-foot-long, 480-volt underground line from the powerhouse to the same pole-mounted transformer bank. A 7-foot-long, above-ground line extends from the pole-mounted transformer bank to a utility pole where it connects to the grid.

¹³ The project powerhouse is located on the lower level of the non-project former Adams Paper Company Mill building. GMP leases a 32-foot by 36-foot section of the lower level of the mill building to house the main turbine generator unit, and a 32-foot by 36-foot section of the upper level to house switch gear for the main unit and provide office space.

¹⁴ The minimum flow turbine generator unit is located outside on the bank of the bypassed reach. The controls for the minimum flow unit switchgear, and for the pneumatic crest gates on the dam are located in an 8-foot by 24-foot building adjacent to the minimum flow unit and owned by GMP. A 5-foot by 4-foot gatehouse building, also adjacent to the minimum flow unit, houses controls for the minimum flow turbine knife gate.

C. Project Boundary

13. The current project boundary includes a total of 14.44 acres and follows the normal water surface elevation around the west end of the reservoir, a series of metes and bounds on the east end of the reservoir, and a series of metes and bounds which enclose the mill building, project works, tailrace, and most of the transmission lines.¹⁵ GMP leases from GRE, LLC, the project land, dam, and a mill building that encloses generating equipment.

14. As discussed below, GMP proposes to revise the project boundary to fully enclose the project's two transmission lines and remove portions of the mill building that do not include generating equipment. The change would result in the removal of 0.98 acres from the existing project boundary. The revised project boundary, as estimated by staff, would encompass 13.46 acres.¹⁶

D. Current Project Operation

15. The project operates in run-of-river mode such that outflow from the project approximates inflow on a continuous basis.¹⁷ GMP meets this requirement by

¹⁵ The number of acres in the current project boundary is a staff estimate based on information provided in the final license application and a letter filed by GMP on February 2, 2022. In the final license application, GMP indicates that the proposed project boundary includes 13.63 acres of land. Compared to the current project boundary, the proposed project boundary removes 1.04 acres associated with non-project buildings. The proposed project boundary also adds 0.23 acres associated with a hand-carry boating access area that GMP proposed, in the final license application, to provide recreational boating access.

¹⁶ On March 31, 2022, GMP filed revised Exhibit G maps that fully encompass the project transmission lines within the proposed project boundary. Using Geographic Information System data, staff calculated that the project boundary shown in the March 31, 2022 Exhibit G maps encompasses 13.69 acres. These maps included 0.23 acres of land for the hand-carry boating access area proposed in the final license application. Subsequently, in a letter filed on February 2, 2022, GMP indicated that the 0.23-acre site for the proposed hand-carry boating access area was no longer feasible for development due to the presence of cultural resources, and any alternative site would be determined in consultation. Therefore, the 0.23 acres is not included in staff's estimate of 13.46 acres of land within the proposed project boundary.

¹⁷ The current license does not include an article requiring run-of-river operation. However, GMP currently operates the project in a run-of-river mode, where outflow from the project approximates inflow.

minimizing fluctuations in the impoundment elevation. The main turbine generating unit is automatically operated and utilizes flows between 20 cfs and 134 cfs. Water released from the main unit bypasses a 590-foot-long section of the Wells River between the dam and the mill building. GMP provides a minimum flow to the bypassed reach of at least 50 cfs from April 15 to June 10, and at least 25 cfs during the remainder of the year (or inflow to the impoundment, whichever is less).¹⁸ Minimum flows in the bypassed reach are provided via a combination of discharge from a minimum flow turbine, spill over the pneumatic crest gate on the spillway, and discharge through the downstream fish passage chute. GMP also provides a year-round aesthetic spill flow of at least 5 cfs over the dam.¹⁹

16. The downstream fish passage chute is seasonally installed and operated by passing a flow of 20 cfs during the spring (April 1 to June 1) and fall (September 1 to November 15). The chute is installed by removing a 2-foot by 4-foot section of the pneumatic crest gate and attaching an 8-foot-long by 4-foot-wide sluice box that extends to the plunge pool. The impoundment is seasonally drawn down four times a year by 2.6 feet to install and remove the downstream fish passage chute. These drawdowns last about 6 hours, and minimum flows to the bypassed reach are provided through the minimum flow turbine during these drawdowns.

17. The minimum flow turbine is operated manually in full-off (gate closed) or full-on (gate open) mode which discharges 30 cfs into the bypassed reach. When the river flow is too low to operate the minimum flow unit (less than 30 cfs), GMP maintains the minimum flow in the bypassed reach by raising the impoundment elevation to send flow over the spillway. GMP can also use the downstream fish passage chute to provide up to 20 cfs to the bypassed reach.

18. GMP monitors operation using a Supervisory Control and Data Acquisition (SCADA) system that collects and records impoundment elevation, tailrace elevation, and turbine output at 15-minute intervals. By monitoring this data, GMP can adjust generation to minimize impoundment fluctuations and provide required minimum flow releases.

¹⁸ The existing minimum flows are required by Article 25 of the current license. *See Newbury Hydro Company*, 24 FERC ¶ 62,275, at Art. 25 (1983).

¹⁹ Although GMP provides the 5-cfs flow, the current license does not include an article requiring it.

E. Proposed Operation and Environmental Measures

19. To protect aquatic resources and water quality, GMP proposes to continue operating the project in a run-of-river mode, such that outflow approximates inflow on a continuous basis.
20. To protect water quality, GMP proposes to consult with Vermont ANR prior to conducting maintenance and repair work that has the potential to adversely affect water quality.
21. To protect water quality and aquatic resources, GMP proposes to consult with Vermont ANR regarding the timing and duration of periodic maintenance drawdowns of the impoundment and to maintain minimum flow requirements to the bypassed reach during any maintenance drawdowns.
22. To protect water quality and aquatic resources, GMP proposes to provide a minimum flow of 37 cfs at all times to the bypassed reach (instead of the current flow release of 50 cfs from April 15 to June 10 and 25 cfs the remainder of the year) via a combination of discharge from the minimum flow turbine, spill over the pneumatic crest gate on the spillway of the dam, and/or discharge through the downstream fish passage chute.
23. To protect fishery resources, GMP proposes to continue to seasonally install and operate the downstream fish passage chute during the spring (April 1 to June 1) and fall (September 1 to November 15).
24. To maintain fish passage downstream and provide operational flexibility, GMP proposes to provide 10 cfs through the downstream fish passage chute (instead of the current amount of 20 cfs) during the spring and fall.²⁰
25. To document compliance with the operating requirements of a subsequent license, GMP proposes to develop a flow management and monitoring plan, in consultation with the Vermont ANR, detailing how GMP will operate in run-of-river mode and comply with minimum flow and aesthetic spill flow requirements.

²⁰ The 10-cfs flow provided through the downstream fish passage chute would contribute to the proposed 37-cfs minimum flow in the bypassed reach, with an additional 30 cfs provided by the minimum flow unit, or an additional 27 cfs passed over the dam when the minimum flow unit is off.

26. To protect the endangered northern long-eared bat (*Myotis septentrionalis*), GMP proposes to limit the removal of trees at the project greater than or equal to 4 inches in diameter at breast height to the period of November 1 through April 14.²¹
27. To enhance aesthetics at the dam, GMP proposes to provide a 10-cfs aesthetic spill flow over the dam (instead of the current amount of 5 cfs) at all times.
28. To enhance recreation, GMP proposes to construct a hand-carry boating access area for recreational boaters upstream of the project dam, if feasible, at a location to be determined.
29. To protect cultural resources, GMP plans to develop a Historic Properties Management Plan (HPMP).

SUMMARY OF LICENSE REQUIREMENTS

30. This license, which authorizes 0.365-MW of renewable energy generation capacity, requires most of the proposed measures listed above, the conditions required by the Vermont DEC²² water quality certification (Appendix A), and the staff-recommended measures described below. Combined, these measures will protect geologic and soil resources, aquatic resources, terrestrial resources, water quality, threatened and endangered species, recreation and aesthetic resources, and cultural resources at the project.
31. To monitor compliance with the operational requirements of the license, this license requires GMP to include within the proposed flow management and monitoring plan provisions for monitoring and reporting compliance with all operating requirements of the license (e.g., run-of-river operation, minimum flow, aesthetic spill flow, downstream fish passage flow, impoundment water level, and timing of planned maintenance); maintaining a log of project operation; and reporting any deviations from the operating requirements to the Commission and Vermont ANR.
32. To protect federally listed and proposed bats, this license requires that GMP not remove or trim trees on project lands from May 1 through July 31 to protect tricolored bats (*Perimyotis subflavus*) during their roosting season, and not remove trees or trim

²¹ GMP's proposal references four inches in diameter at "base" height. Staff understands the intended reference to be 4 inches diameter at "breast" height.

²² Vermont DEC is a department within Vermont ANR, the administering authority for Vermont's Water Quality Certification program. Vermont DEC is responsible for issuing the certification.

trees equal to or greater than 3 inches diameter at breast height from April 15 through April 30, and from August 1 through October 31 to protect northern long-eared bats.

33. To prevent debris (e.g., woody debris or trash removed from trash racks, and tree cuttings or grass clippings from vegetation management) from accumulating at the project and degrading water quality, this license requires a debris disposal plan.

34. To enhance recreation opportunities at the project, this license requires GMP to develop an upstream hand-carry boating access plan that includes the requirements stipulated in Vermont ANR's certification condition F and additional provisions to implement best management practices, during construction, methods for preventing the establishment of invasive plants, and guidelines for detecting and treating invasive plant populations.

WATER QUALITY CERTIFICATION

35. Under section 401(a)(1) of the Clean Water Act (CWA),²³ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency has either issued a 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 the certification must become a condition of any federal license for the project.²⁴

36. On June 3, 2022, GMP applied to Vermont DEC for a water quality certification (certification) for the project. On June 6, 2022, Vermont DEC confirmed that GMP's application was received. On May 11, 2023, Vermont DEC issued a certification for the project with 12 conditions, which are set forth in Appendix A of this order and are incorporated into the license by ordering paragraph (E).

37. Four of the certification conditions (conditions A, J, K, and L) are general or administrative in nature and are not discussed further.

38. The remaining eight certification conditions require GMP to:

- a. Operate the project in an instantaneous run-of-river mode where outflow from the project equals inflow except for short-term unavoidable deviations such as during impoundment re-filling following planned or unplanned maintenance activities; provide 37 cfs, or inflow if less, into the bypassed reach year-round uninterrupted; when generating, spill 10 cfs continuously over the dam year-round into the

²³ 33 U.S.C. § 1341(a)(1).

²⁴ *Id.* § 1341(d).

bypassed reach; and when not generating, spill all inflow over the dam (Condition B).

- b. Develop and submit for Vermont DEC approval within 180 days of the effective date of this license, a flow management and monitoring plan that: (1) details how the project will operate in an instantaneous run-of-river mode while also complying with “conservation” flow requirements;²⁵ (2) includes a method for continuous monitoring and reporting of project flow releases, impoundment levels, and inflows; (3) includes a provision to maintain flow data so that it is available on a “near real-time basis;” and (4) includes procedures for reporting deviations from operating requirements to Vermont DEC within 15 days of the deviation (Condition C).
- c. Install and maintain the downstream fish passage chute from April 1 to June 1 and from September 1 to November 15. Consult with Vermont Fish and Wildlife Department (Vermont FWD) and the U.S. Fish and Wildlife Service (FWS) to ensure the fish passage chute meets all design requirements prior to replacement and file all design information with Vermont DEC (Condition D).
- d. Develop a plan for American eel passage that: (1) is initiated within one year of American eel passage being installed at the Wilder Hydroelectric Project (FERC No. 1892)²⁶ on the Connecticut River mainstem; (2) undergoes pre-development consultation with, and post-development review and approval by Vermont ANR and FWS; (3) contains detailed information about the method of passage which can include, but is not limited to, a trap and truck program or eel ramp installation; and (4) includes an implementation schedule with monitoring studies as needed (Condition E).
- e. Develop and finalize the design for a hand carry access area located upstream of the Newbury Project dam, in consultation with and approval by all appropriate stakeholders.²⁷ Construction of recreation access improvements are to be

²⁵ Vermont DEC does not define the term “conservation flow” in the certification. However, staff interprets “conservation flow” to be the certification requirement that GMP maintain a minimum flow of 37 cfs year-round into the bypassed reach.

²⁶ The Wilder Project (FERC No. 1892) is the first dam downstream of the Newbury Project and about 49 river miles away on the Connecticut River.

²⁷ Staff understand that the hand carry access area would provide access to and from the Wells River for recreational boaters.

completed within 4 years of the effective date of this license pending landowner and permit approvals (Condition F).

- f. Dispose of debris associated with project operation in accordance with state laws and regulations (Condition G).
- g. Notify and receive approval from Vermont DEC prior to conducting any project maintenance or repair work, including drawdowns below the normal operating range, if the work may result in a discharge, 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 of Vermont waters (Condition H).
- h. Avoid removal of trees greater than or equal to 3 inches diameter breast height from April 15 to October 31 to prevent any roost disruption of the northern long-eared bat. Consult with Vermont FWD and the FWS should tree clearing be required during the restricted time period (Condition I).

COASTAL ZONE MANAGEMENT ACT

39. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),²⁸ the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within six months of receipt of the applicant's certification.

40. The State of Vermont does not have a Coastal Zone Management Program. Therefore, a CZMA consistency certification is not required.

SECTION 18 FISHWAY PRESCRIPTIONS

41. Section 18 of the FPA²⁹ provides that the Commission must require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of Commerce or the Secretary of the Interior, as appropriate.

42. On June 3, 2022, Interior filed a letter requesting that the Commission include a reservation of authority to prescribe fishways under section 18 in any license issued for the project. Consistent with Commission policy, Article 407 of this license reserves the

²⁸ 16 U.S.C. § 1456(c)(3)(A).

²⁹ 16 U.S.C. § 811.

Commission's authority to require fishways that may be prescribed by Interior for the Newbury Project.

THREATENED AND ENDANGERED SPECIES

43. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)³⁰ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species or result in the destruction or adverse modification of their designated critical habitat.

44. Based on FWS's Information for Planning and Consultation (IPaC) website, the endangered northern long-eared bat has the potential to occur in the project area.³¹ Additionally, the tricolored bat, which is proposed for listing, may occur in the project area.³²

A. Northern Long-Eared Bat

45. Commission staff determined that the northern long-eared bat could be affected by vegetation management within the project boundary and construction of the proposed hand-carry boating access area.³³ Commission staff concluded that a seasonal clearing restriction for non-hazardous trees with diameters that are equal to or greater than 3 inches in diameter at breast height during the active season from April 15 through October 31, would protect the northern long-eared bat from adverse effects associated with project maintenance. Commission staff also concluded that consulting with the FWS and Vermont ANR on potential site locations for the proposed hand-carry boating access area would help ensure that the effects of the proposed hand-carry boating access area on northern long-eared bat and their habitats are minimized when the hand-carry boating access is constructed. With these measures in place, staff concluded that relicensing the project is not likely to adversely affect the northern long-eared bat.

³⁰ 16 U.S.C. § 1536(a).

³¹ See Commission staff's September 12, 2023, memorandum on List of Threatened and Endangered Species Generated by ECOS-IPaC Website; *see also*, IPaC, FWS, <https://ipac.ecosphere.fws.gov/> (accessed September 12, 2023).

³² 87 Fed. Reg. 56,381 (Sept. 14, 2022). Although proposed species are provided no special protection under the ESA, staff nevertheless provides an analysis of the action on tricolored bat because the species may become federally listed during the term of the subsequent license.

³³ EA at F-4.

46. Commission staff requested concurrence with a finding that relicensing the project is not likely to adversely affect the northern long-eared bat using the *Northern Long-eared Bat Rangewide Determination Key* (DKey) available through IPaC. By letter generated on September 18, 2023, FWS concurred with staff's determination.³⁴

47. As noted above and consistent with Commission staff's recommended seasonal clearing restriction, Vermont DEC's certification condition I (Appendix A) requires that the clearing of non-hazardous trees with a diameter at breast height of 3 inches or greater only occur between November 1 and April 14 to avoid any roost disruption of the northern long-eared bat. Further, Article 405 requires GMP to develop and implement a hand-carry boating access plan with measures to consult with the FWS and Vermont ANR on potential site locations before any construction activities occur to ensure that negative effects on northern long-eared bats and their habitats are minimized. Therefore, no further action under the ESA is required for this species.

B. Tricolored Bat

48. On September 14, 2022, FWS proposed to list the tricolored bat as an endangered species based upon the range-wide impacts of white-nose syndrome that have caused declines in affected colonies.³⁵ Critical habitat is not proposed for the species.

49. Tricolored bats are known, or believed to, occur in 39 states, including Vermont.³⁶ The active season for the tricolored bat is similar to the northern long-eared bat. During spring, summer, and fall, tricolored bats primarily roost among leaf clusters of live or recently dead trees and form summer maternity colonies where young are born.³⁷ May 1 through July 31 is the roosting season, for the tricolored bat.

50. Project maintenance and potential construction activities that may affect the tricolored bat are the same as those noted above for the northern-long eared bat.³⁸

³⁴ See Commission staff's September 18, 2023 memorandum on FWS's concurrence letter.

³⁵ 87 Fed. Reg. 56,381 (Sept.14, 2022).

³⁶ FWS, *Environmental Conservation Online System Tricolored Bat Species Profile*, <https://ecos.fws.gov/ecp/species/10515> (accessed October 25, 2023).

³⁷ FWS. 2021. Species Status Assessment Report for the Tricolored Bat (*Perimyotis subflavus*), Version 1.1. December 2021. Hadley, MA., https://www.fws.gov/sites/default/files/documents/Tricolored_Bat_SSA.pdf.

³⁸ EA at F-4.

Because the tricolored bat can roost in small understory trees among lichen, dead leaves, or foliage from May 1 through July 31, avoiding all tree removal and tree trimming activities during this period will be protective of the species at the project. Therefore, Article 404 requires this restriction for all non-hazardous trees.³⁹ Moreover, the requirement to consult with the FWS and Vermont ANR on potential site locations for the proposed hand-carry boating access area specified in Article 405 will limit any adverse effects from boating access construction on the tricolored bat. Therefore, staff concludes that relicensing the project is not likely to jeopardize the continued existence of the tricolored bat, and no further action under the ESA is required.⁴⁰

HISTORIC AND CULTURAL RESOURCES

A. National Historic Preservation Act

51. Under section 106 of the National Historic Preservation Act (NHPA)⁴¹ and its implementing regulations,⁴² federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (National Register), defined as historic properties, and afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

52. To satisfy its responsibilities under section 106 of the NHPA, the Commission executed a Programmatic Agreement (PA) with the Vermont SHPO. The Advisory Council filed a letter on November 24, 2023, stating that their participation in the

³⁹ Article 405 is more stringent than Vermont DEC's certification condition I (appendix A) during the period May 1 through July 31; therefore, Article 405 governs during this period. *See, e.g., Noah Corp.*, 57 FERC ¶ 61,170, at 61,601 (1991); *Carex Hydro*, 52 FERC ¶ 61,216, at 61,769 (1990) ("Pursuant to section 10(a) of the FPA, the Commission can impose in the license water quality conditions that are more stringent than those contained in a state's water quality certification." *Id.* at n.24).

⁴⁰ For species proposed for listing, a federal agency must confer with FWS only when the agency determines that its action would likely jeopardize the continued existence of the proposed species or destroy or adversely modify proposed critical habitat. 16 U.S.C. § 1536(a)(4).

⁴¹ 54 U.S.C. § 306108.

⁴² 36 C.F.R. pt. 800 (2023).

consultation to resolve adverse effects is not needed at this time, but that they can be contacted if needed.⁴³ GMP was invited to concur with the stipulations of the PA. The Vermont SHPO signed the PA on November 29, 2023. GMP concurred with the PA on December 8, 2023. A copy of the executed PA was issued on December 14, 2023.⁴⁴ The PA requires the licensee to develop an HPMP. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 408 requires the licensee to implement the PA and file for Commission approval an HPMP within one year of license issuance.

B. Tribal Consultation

53. On August 29, 2018, GMP provided the notice of intent (NOI) and pre-application document (PAD) for the project's relicensing to state-recognized tribes for review and comment.⁴⁵ GMP also provided the final license application to these tribes and the federally recognized Saint Regis Mohawk Tribe for review and comment.

54. There are no federally recognized tribes in Vermont. However, for the Newbury Project relicensing, Commission staff initiated consultation with the Saint Regis Mohawk Tribe by a letter issued September 1, 2017. No response has been received. The Tribe did not respond to the initial consultation letter, file any comments in the record of the proceeding, or request additional studies.

ENVIRONMENTAL JUSTICE

55. In conducting NEPA reviews of proposed hydropower projects, the Commission follows Executive Order 12898 and Executive Order 14096, which directs federal agencies to identify and address disproportionate and adverse human health or environmental effects of their actions on minority and low-income populations (*i.e.*, environmental justice communities).⁴⁶ Executive Order 14008 also directs agencies to

⁴³ See November 17, 2023, Comments of Advisory Council on Historic Preservation.

⁴⁴ See December 14, 2023, Letter to Advisory Council on Historic Preservation et al. providing the Executed Programmatic Agreement for the Newbury Hydroelectric Project P-5261.

⁴⁵ GMP provided the documents to the Elnu Tribe of the Abenaki, Nulhegan Band of the Coosuk Abenaki Nation, Traditional Koasek Abenaki Nation of the Koas, and Abenaki Nation at Mississquoi.

⁴⁶ Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994); Exec. Order No. 14,096, 88, Fed. Reg. 25251 (Apr. 21, 2023). While the Commission is not one of the specified agencies in Executive Order 12898, the Commission nonetheless addresses

develop “programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.”⁴⁷ Environmental justice is “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”⁴⁸ The term “environmental justice community” includes disadvantaged communities that have been historically marginalized and overburdened by pollution.⁴⁹

56. In the EA, Commission staff identified two environmental justice communities within a 1-mile radius of the project boundary and considered how the communities may be affected by continued project operation and noise, visual, and traffic impacts of the potential construction of the hand-carry boating access area.⁵⁰

57. In the EA,⁵¹ staff found that any construction activities associated with the hand-carry boating access area would be of short duration and minor in scope and would not create substantial noise or excessive construction traffic or affect visual resources within the identified environmental justice communities. Additionally, no housing residences are located within 500 feet of the dam. Although recreation use at the Newbury Project could increase with the potential public access facility, the site is remote and unlikely to

environmental justice in its analysis, in accordance with our statutory duties.

⁴⁷ Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Feb. 1, 2021). The term “environmental justice community” includes disadvantaged communities that have been historically marginalized and overburdened by pollution. *Id.* The term also includes, but may not be limited to, minority populations, low-income populations, or indigenous peoples. See EPA, *EJ 2020 Glossary* (Sept. 7, 2022), <https://www.epa.gov/environmentaljustice/ej-2020-glossary>.

⁴⁸ EPA, *Learn About Environmental Justice* (Sep. 19, 2023), [https://www.epa.gov/environmentaljustice/learn-about-environmental-justice#:~:text=Environmental%20justice%20\(EJ\)%20is%20the,environmental%20laws%2C%20regulations%20and%20policies](https://www.epa.gov/environmentaljustice/learn-about-environmental-justice#:~:text=Environmental%20justice%20(EJ)%20is%20the,environmental%20laws%2C%20regulations%20and%20policies).

⁴⁹ Environmental justice communities include, but may not be limited to minority populations, low-income populations, or indigenous peoples. See USEPA, *EJ 2020 Glossary* (Aug. 18, 2022), <https://www.epa.gov/system/files/documents/2024-02/ej-2020-glossary.pdf>.

⁵⁰ EA at 51.

⁵¹ *Id.*

attract long-term and sustained increases in traffic or impacts to recreational fishing opportunities that would adversely affect the identified communities. Therefore, relicensing the project as conditioned in this license would not result in a disproportionate and adverse impact on the environmental justice communities present within the project area.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES PURSUANT TO SECTION 10(J) OF THE FPA

58. Section 10(j)(1) of the FPA⁵² requires the Commission, when issuing a license, to include conditions based on recommendations submitted by federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,⁵³ to “adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)” affected by the project.

59. No section 10(j) recommendations were filed with the Commission for the relicensing of the Newbury Project.

SECTION 10(a)(1) OF THE FPA

60. Section 10(a)(1) of the FPA⁵⁴ requires that any project for which the Commission issues a license be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

A. Instantaneous Run-of-River Operation

61. Vermont DEC’s certification condition B requires GMP to operate the project in an instantaneous run-of-river mode where outflow equals, rather than approximates, inflow. In the EA,⁵⁵ Commission staff did not recommend this requirement because staff found no indication that the project is technologically or mechanically capable of operating under conditions where outflow from the project *equals* inflow on an

⁵² 16 U.S.C. § 803(j)(1).

⁵³ 16 U.S.C. §§ 661 *et seq.*

⁵⁴ 16 U.S.C. § 803(a)(1).

⁵⁵ EA at H-4 to H-5.

instantaneous basis such that a perfectly stable reservoir elevation would be maintained at all times.⁵⁶

62. Staff found that continuing to operate the project in a run-of-river mode where outflows approximate inflows at any given point in time would continue to minimize impoundment fluctuations, which would protect fish spawning areas from being dewatered, limit project related erosion along the impoundment shoreline, and ensure that downstream flows are similar to natural river flows.⁵⁷ Therefore, operating the project in a run-of-river mode such that outflow from the project *approximates* inflow would provide the same benefit to aquatic resources upstream and downstream of the project as operating the project in an instantaneous run-of-river mode as required by Vermont DEC certification condition B. Nonetheless, condition B is included in this license because it is mandatory under section 401(a) of the CWA.

B. Operation Compliance Monitoring

63. GMP proposes to develop a flow management and monitoring plan, in consultation with the Vermont DEC, detailing how GMP will operate the project in run-of-river mode and comply with minimum flow and aesthetic spill flow requirements. Certification condition C requires that GMP develop a flow management and monitoring plan that includes the following: (1) a method for continuous monitoring and reporting of flow releases at the project (including spill flows, turbine discharge, impoundment levels, and inflows); (2) provisions for flow data to “be available on a near real-time basis”; and (3) procedures for reporting deviations from operating requirements to Vermont DEC within 15 days of a deviation.

Flow Monitoring

64. In the EA,⁵⁸ staff did not recommend continuous monitoring of flows or making flow data available on a “near-real time basis.” Staff determined that GMP’s existing SCADA system, which is capable of monitoring impoundment water surface elevations,

⁵⁶ GMP maintains run-of-river operation by minimizing fluctuations in the impoundment using an automatic pond level control system, that measures changes in impoundment surface elevation and uses it as an indirect measure of flow. Because of these technical limitations and the inherent delay associated with the system adjusting project outflow to match inflow, regular, short-term deviations from instantaneous run-of-river are unavoidable. More typically, outflow from the project approximates inflow at any given point in time. EA at 22.

⁵⁷ EA at 22 and H-5.

⁵⁸ EA at H-1 and H-2.

tailrace elevation, and turbine output at 15-minute intervals, would be sufficient to monitor compliance with run-of-river operation, aesthetic spill flow, and minimum flow requirements. Staff determined that to comply with the certification condition C reporting requirements, GMP would need to install one new gage in the bypassed reach capable of continuously monitoring stream levels and transmit all flow release data in real time via the internet.⁵⁹ Staff estimated that installing and maintaining one new gage for monitoring bypassed reach flows and making all flow data available via the internet would add \$22,565 in annual costs compared to continuing to monitor impoundment levels using GMP's automated system, at an annual cost of \$500.⁶⁰ Because GMP's existing monitoring and control system would achieve the same compliance objectives at a lower cost, staff concluded that the benefits of the real-time flow monitoring would not be worth the higher costs. However, condition C is included in this license because it is mandatory under section 401(a) of the CWA.

Flow Management and Monitoring Plan

65. To enable the Commission to track compliance with the operating requirements of this license, in the EA,⁶¹ staff recommended that GMP develop an operation compliance monitoring plan that includes a detailed description of how the licensee would monitor compliance with the operational requirements of the license (i.e., run-of-river operation, impoundment levels, minimum flow, aesthetic spill flow, timing of planned maintenance, etc.), maintain a log of project operation, and report deviations from operating requirements to the Commission and Vermont DEC. Staff estimated that developing an operation and compliance monitoring plan would have an annual cost of \$1,366 and concluded that the compliance benefits would be worth the cost.⁶²

66. Article 402 requires that GMP include staff's recommended monitoring provisions in Vermont DEC's required flow management and monitoring plan. Article 402 also requires GMP to report deviations from operating requirements to the Commission in addition to Vermont DEC.

⁵⁹ EA at 25-26 and H-1.

⁶⁰ In the EA, Commission staff estimated the annual cost of installing and maintaining one new gage for monitoring bypassed reach flows and making all flow data available via the internet to be \$23,065 and the cost of continuing to use GMP's automated system to be \$500.

⁶¹ EA at 57.

⁶² EA at H-1 – H-2.

C. Project Maintenance and Repairs

67. GMP proposes to continue to conduct four planned annual drawdowns each year to install and remove the downstream fish passage chute, by lowering the impoundment by about 2.6 feet (surface elevation of 461.3 feet). GMP proposes to consult with the Vermont DEC on setting the timing and duration of the drawdowns in a manner that is protective of nearshore terrestrial and aquatic habitat. In addition, GMP proposes to consult with Vermont DEC prior to conducting project maintenance or repair work that has the potential to have an adverse effect on water quality.

68. In the EA,⁶³ Commission staff concluded that notifying and receiving feedback from Vermont DEC prior to conducting planned or unplanned drawdowns for maintenance or repairs would allow the agency to make recommendations to GMP to minimize erosion and sedimentation and adverse effects to water quality and aquatic resources that may result from such maintenance drawdowns. Therefore, Article 403 requires GMP to consult with Vermont DEC prior to conducting maintenance drawdowns or repair work that could adversely affect water quality and aquatic and nearshore terrestrial resources.

D. Downstream Fish Passage

69. Vermont DEC's certification condition D requires GMP to operate the downstream fish passage chute with a flow of 25 cfs from April 1 to June 1 and from September 1 to November 15. GMP proposes to operate the downstream fish passage chute using a flow of 10 cfs, during the same time periods. In the EA,⁶⁴ staff did not recommend operation of the downstream fish passage chute at all because: (a) there is no evidence that operation of the fish passage chute currently provides any benefit to Atlantic salmon or would provide any benefit under any subsequent license issued for the project;⁶⁵ (b) all resident fish species found in the vicinity of the project can maintain populations entirely within freshwater, and none require downstream passage to complete their life-cycle; and (c) the likelihood of fish experiencing impingement, entrainment, and turbine mortality at the project with or without operation of the downstream fish passage chute, is low. Consequently, staff did not recommend operation of the downstream fish passage at the project, concluding that the estimated increase in annual cost for GMP's proposal (\$5,817), and Vermont DEC's certification condition D requirement (\$5,961),

⁶³ EA at 17 and H-4.

⁶⁴ EA at H-5 and H-6

⁶⁵ There are currently no Atlantic salmon at the project and efforts to reintroduce Atlantic salmon into the Connecticut River basin have been terminated. *See* EA at 30.

would not be justified. Nonetheless, certification condition D is included in this license because it is mandatory under section 401(a) of the CWA.

E. American Eel Passage

70. Vermont DEC's certification condition E requires GMP to develop a plan within one year of American eel passage being installed at the Wilder Project (FERC Project No. 1892), to provide upstream and downstream American eel passage at the Newbury Project. Condition E requires that: (1) the plan be developed in consultation with Vermont ANR and FWS and include an implementation schedule; (2) the plan include provisions for monitoring studies and trap and truck, eel ramp installation, or other appropriate passage measures; and (3) any results of the plan be reviewed and approved by Vermont ANR and FWS.

71. In the EA,⁶⁶ staff determined that although there are some eels present upstream of the Wilder Project dam, there is no evidence that eels currently migrate to the Newbury Project, and therefore, eel passage is not warranted at this time. Staff also concluded that federal and state management efforts in the Connecticut River Basin will likely result in eels becoming more abundant over time and, should upstream eel passage be installed at the Wilder Project, eel abundance downstream of the Newbury Project may reach levels that would warrant installation of upstream and downstream eel passage during the term of any subsequent license issued.⁶⁷

72. As noted above, this license requires that GMP develop a plan, within one year of American eel passage being installed at the Wilder Project, to provide upstream and downstream American eel passage at the Newbury Project pursuant to Vermont DEC's certification condition E because it is mandatory under section 401 of the CWA.

F. Debris Disposal

73. Vermont DEC's certification condition G requires that "debris associated with Project operations shall be disposed of in accordance with state laws and regulations." In the EA,⁶⁸ staff recommended that GMP develop a debris disposal plan in consultation with Vermont DEC to avoid misunderstandings with project personnel, and guide how and when GMP removes and disposes of debris. Staff estimated that developing the plan would have an estimated annual cost of \$361 and found that the operational and resource benefits would be worth the cost. Article 406 requires that GMP develop and file for

⁶⁶ EA at 28.

⁶⁷ EA at 28-29.

⁶⁸ EA at H-2.

Commission approval a debris disposal plan that is consistent with the requirements of Vermont DEC's certification condition G and includes a detailed description of procedures for collecting, managing, and disposing of organic and inorganic debris at the project and an implementation schedule.

G. Hand-Carry Boating Access Plan

74. GMP proposes and American Whitewater recommends constructing a hand-carry boating access area for recreational boaters upstream of the project dam, if feasible, at a location to be determined. GMP also proposes to file an annual feasibility assessment with the Commission for a hand-carry boating access area until the access area is deemed infeasible or until construction of the area is completed. Vermont DEC's certification condition F requires that GMP develop and finalize designs for a boating access area located upstream of the project dam, in consultation with resource agencies, and that the access area be constructed within four years of the effective date of the issuance of a license.

75. In the EA, Commission staff determined that hand-carry boating access at the project impoundment would be beneficial, because there are no reasonable hand-carry take-outs for the 1.1-mile Lower Wells River whitewater run, located immediately upstream of the impoundment.⁶⁹ Staff concluded that developing a hand-carry boating access plan would provide public recreational boating access at the project and provisions for operating and maintaining the facility at the project over the term of a subsequent license.⁷⁰ Staff determined that provisions such as submitting annual feasibility assessments would help to foster the search for, and potential development of, adequate boating opportunities at the project.⁷¹ Further, staff determined that to help minimize erosion and sedimentation during boating access construction, GMP should incorporate best management practices, including erosion and sedimentation controls, such as installing silt fencing along the banks of the river, and revegetating areas disturbed during construction using native species.⁷² Additionally, staff determined that including wildlife protection measures in the plan would help ensure that the effects of construction and operation of the hand-carry boating access area on wildlife (including the federally

⁶⁹ EA at 40-41.

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² EA at 15.

endangered northern long-eared bat) and their habitats within the project area are minimized.⁷³

76. Therefore, in the EA, staff recommended the development of a hand-carry boating access plan that includes: (1) provisions to develop and finalize designs, including site selection, for a hand-carry boating access area in consultation with resource agencies; (2) a design plan, including the estimated length, width, and composition of the proposed access area, parking area, trail, and stairway; (3) best management practices that include, erosion and sedimentation controls and revegetating areas disturbed during construction using native species; (4) methods for preventing the establishment of invasive plants and guidelines for detecting and treating invasive plant populations; and (5) an implementation and construction schedule that includes constructing the hand-carry boating access area within 4 years of license issuance.⁷⁴ Staff also recommended that the plan include a provision to submit annual feasibility assessments to the Commission for a hand-carry boating access area until the access area is deemed infeasible or until construction of the area is completed. To further assist recreationists at the site, the plan should include provisions for recreation signage. In the EA, staff estimated that the annual cost of developing a hand-carry boating access plan would be \$1,361 and concluded that the benefits of the plan outweigh the cost.⁷⁵ Therefore, Article 405 requires that GMP develop a hand-carry boating access plan at the Newbury Project.

H. Aesthetic Spill Flows

77. Vermont DEC's certification condition B requires, and GMP proposes to provide, a continuous aesthetic spill flow of 10 cfs over the dam, or inflow, whichever is less. GMP's proposed and Vermont DEC's required 10 cfs aesthetic spill flow is in accord with the consensus reached during a virtual aesthetic flow evaluation meeting held on March 4, 2021.

78. In the EA, staff concluded that the flow would provide aesthetic value, which would be an enhancement of aesthetic resources relative to current conditions under a 5-cfs spill flow.⁷⁶ Further, a 10-cfs aesthetic spill flow would contribute to a year-round flow over the dam into the bypassed reach, which would benefit viewers of the project and aquatic resources. Staff determined that providing a 10-cfs aesthetic spill flow year-round would have no additional cost above that already occurring by the 5-cfs spill flow,

⁷³ EA at 37.

⁷⁴ EA at 57.

⁷⁵ EA at H-3.

⁷⁶ EA at 42-43.

and therefore, recommended a 10-cfs aesthetic spill flow. Therefore, Article 403 requires that GMP provide a year-round aesthetic spill flow over the dam of 10 cfs.

I. Vermont DEC Approval of Repairs

79. In the EA,⁷⁷ staff did not recommend GMP obtain Vermont DEC approval prior to unplanned emergency maintenance repairs (condition H). Requiring such approvals before commencing work would provide no direct benefits to environmental resources and could limit GMP's ability to complete needed repairs in a timely fashion. However, condition H is included in this license, because it is mandatory under section 401(a) of the CWA.

PROJECT BOUNDARY

80. Commission regulations require that all land and water necessary for the operation and maintenance of the project be included in the project boundary. Specifically, project boundaries enclose the project works that are to be licensed and are to include "only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources."⁷⁸

81. GMP proposes to modify the project boundary to remove all portions of a mill building that do not include generating equipment, and to fully enclose the project transmission lines. Staff estimates that the change would result in the net removal of 0.98 acres from the existing 14.44-acre project boundary. The project boundary would then include a total of 13.46 acres.⁷⁹ As noted in the EA,⁸⁰ the portion of the mill building proposed to be removed is not affected by project operation and does not serve any project purpose; therefore, the portion of the mill building proposed for removal should be removed from the project boundary. In addition, the transmission lines serve a project purpose and must be included in the project boundary.

82. Articles 203 and 205 require GMP to file revised Exhibits A and G, respectively, as discussed below in this order.

⁷⁷ EA at H-4.

⁷⁸ 18 C.F.R. § 4.41(h)(2) (2023).

⁷⁹ EA at 9.

⁸⁰ EA at 41.

ADMINISTRATIVE PROVISIONS**A. Annual Charges**

83. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA.

B. Financial Assurance

84. To confirm the importance of licensees maintaining sufficient financial reserves, Article 202 reserves the Commission's authority to require future measures to ensure that the licensee maintains sufficient financial reserves to carry out the terms of the license and Commission orders pertaining thereto.

C. Exhibit A Project Description

85. Commission regulations require that licensees file an Exhibit A as part of the license application to describe the project. The Exhibit A filed on March 25, 2022, is not approved as follows. Exhibit A does not reference elevations in a datum consistent with Exhibits F and G. Exhibit A references most elevations in mean sea level (msl) and should be revised to reference all elevations in NGVD 29, to be consistent with the Exhibit F drawings. Exhibit A identifies a factor to convert elevation from NAVD 88⁸¹ to NGVD 29, which is not consistent with conversion factors provided in other exhibits, such as Exhibit G-1 and G-2 filed March 31, 2022. The conversion factor should be checked and clearly defined in a revised Exhibit A. Exhibit A does not identify a 7-foot section of the above ground transmission line and Exhibit A does not include the details provided in GMP's March 25, 2022 response to Commission staff's February 23, 2022 additional information request at item 1 about the transmission lines. Exhibit A also does not describe the 18-foot wide by 6-foot-deep baffle in front of the intake structure, which is identified in the Exhibit F drawings filed on February 2, 2022. Also, the pages of Exhibit A are footnoted with a February 2022 date, which does not match the March 25, 2022 filing date. Therefore, Article 203 requires the licensee to file, within 90 days of the issuance date of this license, a revised Exhibit A that addresses the issues described above and includes an updated submission date.

D. Exhibit F and G Drawings

86. The Exhibit F drawings filed on February 2, 2022, are approved, and made a part of the license (ordering paragraph C). The Commission requires licensees to file sets of

⁸¹ NAVD 88 refers to the North American Vertical Datum of 1988.

approved project drawings in electronic file format. Articles 204 and 205 require the filing of these drawings.

87. The Exhibit G-1 and G-2 maps, filed on March 31, 2022, are not approved as follows. The exhibits do not label the intake, minimum flow turbine unit, downstream fish passage chute, trash rack, bypassed reach, and gate house. The scales shown in the Exhibit G maps do not match the lengths of the transmission lines described in Exhibit A. The Exhibit G map labels the project boundary contour elevation for the west bank of the impoundment as 464.7 feet NGVD 29, which is not consistent with the normal pool elevation 463.9 feet NGVD 29, nor is it consistent with information provided in other exhibits. The Exhibit G-1 and G-2 maps provide a conversion factor for NAVD 88 to NGVD 29 which is not consistent with other exhibits such as the Exhibit A and Exhibit F drawings. The Exhibit G-2 map provides an incomplete conversion factor for converting NAVD 88 to NGVD 29. Article 205 requires the licensee to file, within 90 days of the issuance date of this license, revised Exhibit G drawings with the above clarifications and modifications.

E. Modifications of Project Facilities

88. Article 301 requires the licensee to coordinate with the Commission's Division of Dam Safety and Inspections (D2SI) – New York Regional Engineer on any proposed modifications resulting from environmental requirements that would affect project works, dam safety, or project operation.

F. Commission Approval of Resource Plans and Filing of Amendments

89. In Appendix A of this order, there are certain certification conditions that do not require the licensee to file certain plans with the Commission, or that contemplate future changes to the project facilities or operation without the opportunity for prior Commission review. Article 401 requires the licensee to file the plans with the Commission for approval and to file amendment applications with the Commission prior to making changes to project facilities or operations, as appropriate.

G. Use and Occupancy of Project Lands and Waters

90. Requiring a licensee to obtain prior Commission approval for every use and occupancy of project land would be unduly burdensome. Therefore, Article 409 allows the licensees to grant permission, without prior Commission approval, for the use and occupancy of project lands and waters for such minor activities as landscape planting. Such uses must be consistent with the purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

STATE AND FEDERAL COMPREHENSIVE PLANS

91. Section 10(a)(2)(A) of the FPA,⁸² 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.⁸³ Under section 10(a)(2)(A), Commission staff identified and reviewed 16 comprehensive plans relevant to this project.⁸⁴ No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

92. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,⁸⁵ Commission staff evaluated GMP's record as a licensee with respect to the following: (A) conservation efforts; (B) safe management, operation, and maintenance of the project; and (C) need for power. As discussed below, this order adopts staff's findings in each of the areas.

A. Conservation Efforts

93. Section 10(a)(2)(C) of the FPA⁸⁶ requires the Commission to consider the applicant's electricity consumption improvement program, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity cost-effectively, taking into account the published policies, restrictions, and requirements of state regulatory authorities. GMP coordinates its project operation with ISO New England to supply its energy to GMP's retail customers and has several programs to promote conservation and energy efficiency for residential, commercial, and industrial customers. These programs include: (1) incentives for switching transportation to an electric vehicle; (2) home energy storage; (3) home and yard care rebates; (4) home heating and cooling rebates; and (5) business innovation incentives.⁸⁷ Therefore, given GMP's long-range electric resource planning and efficiency program described above, the project will be operating in a manner consistent with section 10(a)(2)(C) of the FPA.

⁸² 16 U.S.C. § 803(a)(2)(A).

⁸³ Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19.

⁸⁴ The list of applicable plans can be found in section 5.3 of the EA.

⁸⁵ 16 U.S.C. §§ 803(a)(2)(C); 808(a).

⁸⁶ *Id.* § 803(a)(2)(C).

⁸⁷ See <https://greenmountainpower.com/rebates-programs/>

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

94. Commission staff has reviewed GMP's record of management, operation, and maintenance of the Newbury Project pursuant to the requirements of 18 C.F.R. Part 12, the Commission's Engineering Guidelines, and the periodic Dam Safety Surveillance and Monitoring Reports. Commission staff concludes that the project works are in good condition, and that there is no reason to believe that GMP cannot continue to safely manage, operate, and maintain these facilities under a subsequent license.

C. Need for Power

95. To assess the need for power, staff looked at the needs in the operating region in which the project is located, which is the Northeast Power Coordinating Council's (NPCC) New England region of The North American Electric Reliability Corporation (NERC). NERC annually forecasts electric supply and demand nationally and regionally for a 10-year period. According to NERC's 2022 Long-Term Reliability Assessment, the net internal demand for this region is projected to increase by about 0.1% from 2022 to 2031.

96. Power generated at the Newbury Project would continue to help meet the power demand in the NPCC region in the short- and long-term. The project provides power that can displace non-renewable, fossil fuel-fired generation and contributes to a diversified generation mix. Displacing the operation of non-renewable facilities may avoid some power plant emissions and create an environmental benefit.

PROJECT ECONOMICS

97. In determining whether to issue a subsequent license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,⁸⁸ the Commission uses current costs to compare the costs of the project with the costs of the likely alternative source of 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.

⁸⁸ 72 FERC ¶ 61,027 (1995).

98. In applying this analysis to the Newbury Hydroelectric Project, Commission staff considered three options: a no-action alternative, GMP's proposal, and the project as licensed herein.⁸⁹

99. Under the no-action alternative, the project would continue to operate as it does now. The project has an installed capacity of 0.365 MW, a capacity benefit of 0 MW,⁹⁰ and generates an average of 1,076 MWh of electricity annually. The alternative source of power's annual cost to produce the same amount of energy and provide the same capacity benefit is \$76,826 in 2022 dollars.⁹¹ The average annual project cost is \$436,845. To determine whether the proposed project is currently economically beneficial, the project's cost is subtracted from the alternative source of power's cost. Therefore, the project costs \$360,019 more than the alternative source of power's cost.

100. As proposed by GMP, the project would have an installed capacity of 0.365 MW, a capacity benefit of 0 MW, and generate an average of 1,041 MWh of energy annually. The alternative source of power's cost to produce the same amount of energy and provide the same capacity benefit is \$74,363 in 2022 dollars. The total annual cost of operating the project as proposed by GMP would be \$447,193. Subtracting the total annual project cost from the alternative source of power's current cost, the project as proposed by GMP would cost \$372,831 more than the alternative source of power's cost.

⁸⁹ Details of Commission staff's economic analysis for the project as licensed herein, and for the other two alternatives, are included in section 4 of the EA.

⁹⁰ The term "capacity benefit" is used to describe the benefit a project receives for providing capacity to the grid, which may be in the form of a dependable capacity credit or credit for monthly capacity provided. In this instance, the project does not often generate during the summer months; therefore, staff estimated a capacity benefit of 0 MW valued at \$0.

⁹¹ The alternative source of power's cost is based on the current cost of providing the same amount of generation and capacity benefit from a natural gas-fired combined cycle plant, as reported by the most recent publication of The U.S. Energy Information Administration (EIA), *Annual Energy Outlook*. This analysis is based on The U.S. Energy Information Administration (EIA), *Annual Energy Outlook 2023*, for the Division 1, New England Region. As reported in Section 4 of the EA, the alternative source of power's cost is a combination of the cost of energy, \$71.42/MWh, and the capacity benefit which staff estimates to be \$0 based on a dependable capacity of 0 MW for the project.

101. As licensed herein with mandatory conditions and Commission staff's measures, the project will have an installed capacity of 0.365 MW, a capacity benefit of 0 MW and generate an average of 1,041 MWh of energy annually. The alternative source of power's cost to produce the same amount of energy and provide the same capacity benefit is \$74,363 in 2022 dollars. The total annual cost of operating the project would be \$472,986. Subtracting the total annual project cost from the alternative source of power's current cost, the project as licensed herein would cost \$398,623, more than the alternative source of power's cost.

102. In considering public interest factors, the Commission takes into account that hydroelectric projects are a renewable resource and offer unique operational benefits to the electric utility system (ancillary service benefits). These benefits include the ability to help maintain the stability of a power system, such as by quickly adjusting power output to respond to rapid changes in system load, and to respond rapidly to a major utility system or regional blackout by providing a source of power to help restart fossil fuel-based generating stations and put them back on line.

103. Although the analysis shows that the project as licensed herein would cost more to operate than our estimated cost of alternative power, it is the applicant who must decide whether to accept this license and any financial risk that it entails.

104. Although Commission staff's analysis does not explicitly account for the effects inflation may have on the future cost of electricity, the fact that hydropower generation is a renewable resource and relatively insensitive to inflation compared to fossil-fueled generators is an important economic consideration for power producers and the consumers they serve. This is one reason project economics is only one of the many public interest factors the Commission considers in determining whether, and under what conditions, to issue a license.

COMPREHENSIVE DEVELOPMENT

105. Sections 4(e) and 10(a)(1) of the FPA⁹² require the Commission to give equal consideration to power 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 must be such as in the Commission's judgment will be 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.

⁹² 16 U.S.C. §§ 797(e) and 803(a)(1).

106. The EA for the project contains background information, analysis of effects, and support for related license articles. Based on the record of this proceeding, including the EA and the comments thereon, licensing the Newbury Hydroelectric Project as described in this order will not constitute a major federal action significantly affecting the quality of the human environment. The project will be safe if operated and maintained in accordance with the requirements of the license.

107. Based on Commission staff's independent review and evaluation of the Newbury Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, the project as licensed herein is selected and found to be best adapted to a comprehensive plan for improving or developing the Wells River.

108. This alternative is selected because: (1) issuing a subsequent license will serve to maintain a beneficial and dependable source of electric energy; (2) the required environmental measures will protect or enhance water quality, fish and wildlife resources, terrestrial resources, recreational and aesthetic resources, and cultural resources; and (3) the 0.365 MW of electric capacity comes from a renewable resource that does not significantly contribute to atmospheric pollution.

LICENSE TERM

109. On October 19, 2017, the Commission established a 40-year default license term policy for licenses, effective as of October 26, 2017.⁹³ The License Term Policy Statement provides for exceptions to the 40-year default license term under certain circumstances: (1) establishing a shorter or longer license term if necessary to coordinate license terms for projects located in the same river basin; (2) deferring to a shorter or longer license term explicitly agreed to in a generally-supported comprehensive settlement agreement; and (3) establishing a longer license term upon a showing by the license applicant that substantial voluntary measures were either previously implemented during the prior license term, or substantial new measures are expected to be implemented under the subsequent license.

110. Because none of the above exceptions apply in this case, a 40-year license for the Newbury Project is appropriate.

The Director orders:

(A) This license is issued to Green Mountain Power Corporation (licensee), for a period of 40 years, effective the first day of the month in which this order is issued, to

⁹³ *Policy Statement on Establishing License Terms for Hydroelectric Projects*, 161 FERC ¶ 61,078 (2017) (Policy Statement).

operate and maintain the Newbury Hydroelectric Project. 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, described in the project description and the project boundary discussion of this order.

(2) Project works consisting of: (a) a 26-foot high, 90-foot-long concrete gravity structure with a 11.4-acre impoundment at a normal water surface elevation of 463.9 feet;⁹⁴ (b) a 73.3-foot-long spillway with a crest elevation of 458.9 feet, topped with two 5-foot-high (463.9 feet) pneumatic crest gates; (c) a 4-foot-wide, 8-foot-long steel sluice box, on the south side of the spillway and adjacent to the crest gates, providing seasonal flows for downstream fish passage; (d) an 11.2-foot-wide, 9-foot-long intake structure, with an 18-foot-wide, 6-foot-deep baffle, a 10-foot-wide, 18.5-foot-high angled trash rack, and a 6-foot-wide by 6-foot-high slide gate which is automatically operated based on the impoundment elevation; (e) a 5-foot diameter, 435-foot-long underground main penstock that connects to generating unit no. 1; (f) a 2.5-foot-diameter, 25-foot-long penstock that bifurcates off the main penstock and connects to generating unit no. 2; (g) a powerhouse located inside a brick masonry mill building, with a 0.315-megawatt (MW) horizontal Ossberger crossflow turbine (unit no. 1) and synchronous Hitzinger generator, with a minimum hydraulic capacity of 20 cubic feet per second (cfs) and maximum hydraulic capacity of 134 cfs discharged into a tailrace; (h) a 0.05 MW vertical fixed blade propeller minimum flow turbine and Induction Marathon generator (unit no. 2), with a hydraulic capacity of 30 cfs, discharged into the bypassed reach 75 feet downstream from the dam; (i) a 5-foot-wide by 7-foot-high knife gate that regulates flows through the minimum flow turbine; (j) a 590-foot-long bypassed reach between the dam and the project tailrace; and (k) a transmission line consisting of: (i) a 410-foot long, 480-volt underground transmission line, connecting the minimum flow turbine generator unit to a pole mounted step-up transformer bank located adjacent to a non-project section of the mill building; (ii) a 130-foot-long, 480-volt underground line connecting the powerhouse to the pole-mounted transformer bank; and (iii) a 7-foot-long, above-ground line connecting the transformer bank to the grid at a utility pole.

The project works generally described above are more specifically shown and described by those portions of Exhibit F shown below:

⁹⁴ Unless otherwise noted, all elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).

Exhibit F: The following Exhibit F drawings filed on February 2, 2022:

<u>Exhibit No.</u>	<u>FERC Drawing No.</u>	<u>Drawing Title⁹⁵</u>
F-1	P-5261-1001	Site Plan and Penstock Profile
F-2	P-5261-1002	Turbine Room Plan and Section
F-3	P-5261-1003	Fish Passage Plan
F-4	P-5261-1004	Dam and Minimum flow unit

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

(C) The Exhibit F drawings described above are approved and made part of this license. The Exhibit A and Exhibit G filed as part of the application for license do not conform to the Commission's regulations and are not approved.

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

Sections 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 conditions submitted by the Vermont Department of Environmental Conservation under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), as those conditions are set forth in Appendix A to this order.

(F) This license is also subject to the articles set forth in Form L-12, (October 1975), entitled "Terms and Conditions of License for Constructed Minor Project

⁹⁵ These exact drawing titles must be used in the filename when filing the electronic file format drawings required in license Article 204. Commission staff shortened the drawing titles due to filename character limits. There is no need to modify the titles as they appear on the drawings.

Affecting the Interests of Interstate or Foreign Commerce” (see 54 F.P.C. 1792, *et seq.*), as reproduced at the end of this order, and the following additional articles:

Article 201. *Administrative Annual Charges.* The licensee must pay the United States annual charges, effective the first day of the month in which this license is issued, and as determined in accordance with provisions of the Commission’s regulations in effect from time to time, for the purposes of reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 0.365 megawatts (MW). Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1.5 MW will not be assessed an annual charge.

Article 202. *Reservation of Authority to Require Financial Assurance Measures.* The Commission reserves the right to require future measures to ensure that the licensee maintains sufficient financial reserves to carry out the terms of the license and Commission orders pertaining thereto.

Article 203. *Exhibit A - Project Description.* Within 90 days of the issuance date of this license, the licensee must file, for Commission approval, a revised Exhibit A describing all principal project works necessary for operation and maintenance of the project. The revised Exhibit A must comply with section 4.61(c) of the Commission’s regulations, and include the following: (1) all elevations should be reported in National Geodetic Vertical Datum of 1929 (NGVD 29), and be checked to be consistent with the Exhibit F drawings; (2) clear identification of the factor to convert elevations from North American Vertical Datum of 1988 (NAVD 88) to NGVD 29 at the project location; (3) a description of the 7-foot-long, above ground transmission line from the transformer bank to the grid interconnection point; (4) the 18-foot wide by 6-foot deep baffle in front of the intake structure; (5) a detailed description of the transmission lines included in the March 25, 2022 response to Commission staff’s February 23, 2022 additional information request at item 1; and (6) revised dates in the Exhibit A footnotes to match the filing date. The licensee must revise the Exhibit A filed on March 25, 2022, and provide the Exhibit A in two forms: (1) a strikethrough format (i.e., strikethrough items to be removed and underline or bold items to be added to the exhibit) and (2) a final, clean copy incorporating the changes (i.e., without the strikethrough, underline, and bold notations).

Article 204. *Exhibit F Drawings.* Within 45 days of the date of issuance of this license, as directed below, the licensee must file the approved exhibit drawings in electronic file format.

The licensee must prepare digital images of the approved exhibit drawings in electronic format. Prior to preparing each digital image, the licensee must add the FERC Project-Drawing Number (i.e., P-5261-1001 through P-5261-1004) in the margin below the title block of the corresponding approved drawing. The licensee must **label and file**

the Exhibit F drawings as Critical Energy Infrastructure Information (CEII) material under 18 C.F.R. §388.113. The submission should consist of: (1) a public portion consisting of a cover letter; and (2) a CEII portion containing only the Exhibit F drawings. Each drawing must be a separate electronic file, and the file name must include: FERC Project-Drawing Number, FERC Exhibit Number, Drawing Title, date of this order, and file extension in the following format [P-5261-1001, F-1, Site Plan and Penstock Profile, MM-DD-YYYY.TIFF]. All digital images of the exhibit drawings must meet the following format specification:

IMAGERY: black and white raster file

FILE TYPE: Tagged Image File Format (TIFF), CCITT Group 4
(also known as T.6 coding scheme)

RESOLUTION: 300 dots per inch (dpi) desired, (200 dpi minimum)

DRAWING SIZE: 22" x 34" (minimum), 24" x 36" (maximum)

FILE SIZE: less than 1 megabyte desired

Article 205. Exhibit G Drawings. Within 90 days of license issuance, the licensee must file, for Commission approval, revised Exhibit G drawings enclosing within the project boundary, and labeling, all principal project works necessary for operation and maintenance of the project. Exhibit G must identify the intake, minimum flow turbine unit, downstream fish passage chute, trash rack, bypassed reach, and gate house. The Exhibit G drawings must be revised to reflect an appropriate scale that matches the transmission line measurements described in Exhibit A filed on March 25, 2022, and labeled appropriately where the lines are above ground or underground. All elevations in Exhibit G must be referenced to National Geodetic Vertical Datum of 1929 (NGVD 29). The Exhibit G drawings must provide the factor to convert North American Vertical Datum of 1988 (NAVD 88) to NGVD 29, and be consistent with Exhibits A and F, or provide justification for any differences noted. The project boundary contour elevation for the west bank of the impoundment must be checked for consistency with Exhibits A and F and be clearly labeled on the Exhibit G maps in NGVD 29. Exhibit G must include the topographic contour lines for ground elevation, list the vertical datum, and identify the spillway elevation. The Exhibit G drawings must comply with sections 4.39 and 4.41(h) of the Commission's regulations.

Article 301. Project Modification Resulting from Environmental Requirements. If environmental requirements under this license require modifications that may affect the project works or operations, the licensee must consult with the Commission's Division of Dam Safety and Inspections – New York Regional Engineer. Consultation must allow sufficient review time for the Commission to ensure that the proposed work does not adversely affect the project works, dam safety, or project operation.

Article 401. Commission Approval and Filing of Amendments

(a) Requirement to File Plans for Commission Approval.

Certain conditions of the Vermont Department of Environmental Conservation's (Vermont DEC) water quality certification (certification) issued pursuant to section 401 of the Clean Water Act (Appendix A) require the licensee to prepare plans in consultation with other entities for approval, and to implement specific measures without prior Commission approval. The following plans must be submitted to the Commission for approval by the deadline specified:

Vermont DEC Certification Condition	Plan Name	Consulting Agencies	Commission Due Date
C	Flow Management and Monitoring Plan	Vermont DEC	Within 9 months of the effective date of the license
E	American Eel Passage Plan	Vermont Agency of Natural Resources (Vermont ANR) and U.S. Fish and Wildlife Service (FWS)	Within 14 days of Vermont ANR and FWS approval of the American Eel Passage Plan

With each plan filed with the Commission, the licensee must include documentation that it developed the plan in consultation with the above-listed agencies and provide copies of any comments received, as well as its responses to each comment. The Commission reserves the right to make changes to any plan filed. Upon Commission approval, the plan becomes a requirement of the license, and the licensee must implement the plan, including any changes required by the Commission. Any changes to the above schedule or plans require approval by the Commission before implementing the proposed change.

(b) Requirement to File Amendment Applications.

Certain conditions of Vermont DEC's certification (Appendix A) contemplate long-term changes to project operations or facilities (e.g., conditions C, D). These changes may not be implemented without prior Commission authorization granted after the filing of an application to amend the license. In any amendment request, the licensee must identify related project requirements and request corresponding amendments or extensions of time as needed to maintain consistency among requirements.

Article 402. Flow Management and Monitoring Plan. The flow management and monitoring plan required by Vermont Department of Environmental Conservation's (Vermont DEC) water quality certification (certification) condition C (Appendix A) must include the following additional provisions:

- (1) a detailed description of how the licensee will monitor compliance with the operational requirements of Article 403 (*Project Operation*), including descriptions of the mechanisms and instrumentation or gages used (*i.e.*, type and exact locations of all flow and impoundment elevation monitoring equipment), impoundment elevations needed during run-of-river operation to provide the bypassed reach minimum flow, aesthetic spill flow, and flows

through the downstream fish passage chute, and procedures for maintaining and calibrating all compliance monitoring equipment;

(2) a provision to maintain a log of project operation; and

(3) an implementation schedule.

The licensee must obtain Vermont DEC's approval of the plan as required by Vermont DEC's certification condition C, and Article 401.

The Commission reserves the right to require changes to the plan. The licensee must not begin implementing the plan until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission.

Article 403. Project Operation and Maintenance. In addition to implementing the run-of-river operation, bypassed reach minimum flow, and aesthetic spill flow requirements of Vermont Department of Environmental Conservation's (Vermont DEC) water quality certification (certification) condition B (Appendix A), the licensee must consult with Vermont DEC prior to conducting planned or unplanned maintenance drawdowns and prior to repair work that could affect water quality and aquatic and nearshore terrestrial resources.

Reporting of Planned Deviations

Run-of-river operation, bypassed reach minimum flow, and aesthetic spill flow requirements of Vermont DEC certification condition B (Appendix A) may be temporarily modified for short periods, of up to 3 weeks, after mutual agreement among the licensee and Vermont DEC and Vermont Fish and Wildlife Department (collectively, resource agencies). After concurrence from the resource agencies and filing a report with Vermont DEC as required by Vermont DEC certification conditions C and H (Appendix A), the licensee must file a report with the Secretary of the Commission as soon as possible, but no later than 14 days after the onset of the planned deviation. Each report must include: (1) the reasons for the deviation and how project operations were modified, (2) the duration and magnitude of the deviation, (3) any observed or reported environmental effects and how potential effects were evaluated, and (4) documentation of consultation with the resource agencies. For planned deviations exceeding 3 weeks, the licensee must file a report with Vermont DEC and receive approval from Vermont DEC as required by Vermont DEC certification conditions C and H (Appendix A) and must file an application for a temporary amendment of the operational requirements and receive Commission approval prior to implementation.

Reporting of Unplanned Deviations

Run-of-river operation, bypassed reach minimum flow, and aesthetic spill flow requirements of Vermont DEC water quality certification condition B (Appendix A) may be temporarily modified if required by operating emergencies beyond the control of the licensee (*i.e.*, unplanned deviations). In addition to filing a report with Vermont DEC as required by Vermont DEC certification condition C (Appendix A), for any unplanned deviation from run-of-river operation, bypassed reach minimum flow, and aesthetic spill flow requirements that lasts longer than 3 hours or results in visible environmental effects such as a fish kill, turbidity plume, bank erosion, or downstream flooding, the licensee must notify the resource agencies within 24 hours, and the Commission within 14 days, and file a report as soon as possible, but no later than 30 days after each such incident. The report must include: (1) the cause of the deviation, (2) the duration and magnitude of the deviation, (3) any pertinent operational and/or monitoring data, (4) a timeline of the incident and the licensee's response, (5) any comments or correspondence received from the resource agencies, or confirmation that no comments were received from the resource agencies, (6) documentation of any observed or reported environmental effects and how potential effects were evaluated, and (7) a description of measures implemented to prevent similar deviations in the future.

In addition to filing a report with Vermont DEC as required by Vermont DEC certification condition C (Appendix A), for unplanned deviations from run-of-river operation, bypassed reach minimum flow, and aesthetic spill flow requirements lasting 3 hours or less that do not result in visible environmental effects, the licensee must file an annual report, by March 1, describing each incident that occurred during the prior January 1 through December 31 time period. The report must include for each 3 hours or less deviation: (1) the cause of the deviation, (2) the duration and magnitude of the deviation, (3) any pertinent operational and/or monitoring data, (4) a timeline of the incident and the licensee's response to each deviation, (5) any comments or correspondence received from the resource agencies, or confirmation that no comments were received from the resource agencies, and (6) a description of measures implemented to prevent similar deviations in the future.

Article 404. Protection of Tri-colored Bats. The licensee must not remove or trim trees on project lands from May 1 through July 31 to protect tricolored bats during their roosting season. Tree removal to ensure public or project safety during this period is not prohibited.

Article 405. Boating Access Plan. Within one year of license issuance, the licensee must file a report on the feasibility of constructing a hand-carry boating access area within the project boundary prepared in consultation with the Vermont State Historic Preservation Office (Vermont SHPO), Vermont Agency of Natural Resources (Vermont ANR), U.S. Fish and Wildlife Service (FWS), and Vermont Department of Environmental Conservation (Vermont DEC).

At a minimum, the report must include a description of each potential site considered, including each site's existing resources and uses, means of vehicular access, location, size, property owner, any specific property interests required by the licensee to develop and maintain the site, and any cultural resources that may be present on the site. The report must also include the licensee's findings on the feasibility of constructing a boating access area at each potential site.

Within two years of license issuance, the licensee must file with the Commission for approval, an upstream hand-carry boating access plan that includes the requirements of Vermont DEC's water quality certification condition F (appendix A of this license). The upstream hand-carry boating access plan must include, at a minimum, the following:

- (1) provisions to develop and finalize designs, including site selection, for the hand-carry boating access area in consultation with Vermont SHPO, Vermont ANR, and FWS, as required by Vermont DEC water quality certification condition F;
- (2) design plans that consider the needs of persons with disabilities;
- (3) estimates of the length, width, and composition of the proposed access area, including, but not limited to, a parking area (including any road access), signage, and trails;
- (4) a provision to implement best management practices that include erosion and sedimentation controls and revegetating areas disturbed during construction using native species;
- (5) a provision to, prior to commencing construction of the access site, secure the property rights for the site from a willing seller (if the land to be used is not owned by the licensee) in perpetuity;
- (6) prescribe methods for preventing the establishment of invasive plants and guidelines for detecting and treating invasive plant populations; and
- (7) include an implementation and construction schedule for constructing the hand-carry boating access area, pending landowner approval, within 4 years of

license issuance, as required by Vermont DEC water quality certification condition F.

The licensee must prepare the plan with the FWS, Vermont SHPO, Vermont DEC and Vermont ANR (collectively, the agencies). The licensee must include with the plan documentation of consultation, copies of 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 in the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons based on project-specific reasons.

The Commission reserves the right to require changes to the plan. The licensee must not begin implementing the plan until the Commission notifies the licensee that the plan is approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission.

Article 406. Debris Disposal Plan. Within six months of license issuance, the licensee must file, for Commission approval, a debris disposal plan that is consistent with the requirements specified in the Vermont Department of Environmental Conservation's (Vermont DEC) water quality certification condition G (Appendix A) and includes the following provisions:

- (1) a detailed description of the licensee's procedures for collecting, managing and disposing of organic and inorganic debris at the project; and
- (2) an implementation schedule.

The licensee must prepare the plan after consultation with the Vermont DEC and the Vermont Fish and Wildlife Department (collectively, agencies). The licensee must 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 must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

Article 407. Reservation of Authority to Prescribe 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 pursuant to section 18 of the Federal Power Act.

Article 408. Programmatic Agreement and Historic Properties Management Plan. The licensee must implement the “Programmatic Agreement Between the Federal Energy Regulatory Commission and the Vermont State Historic Preservation Officer for Managing Historic Properties that May be Affected by Issuance of a New License to Green Mountain Power for the Continued Operation of the Newbury Hydroelectric Project in Orange County, Vermont (FERC No. 5261-023),” executed on November 29, 2023, and including but not limited to the Historic Properties Management Plan (HPMP) for the project. Pursuant to the requirements of the Programmatic Agreement, the licensee must file, for Commission approval, an HPMP within one year of license issuance.

The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. In the event that the Programmatic Agreement is terminated, the licensee must continue to implement the provisions of its approved HPMP.

Article 409. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee must 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 must 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 must 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.

(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 must require multiple use and occupancy of facilities for access to project lands or waters. The licensee must 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 must: (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 must file with the Commission 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. No report filing is required if no conveyances were made under paragraph (c) during the previous calendar 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 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 file a letter with the Commission, 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 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 Commission's authorized representative, 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 must 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 must determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an 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 must not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee must 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 must not unduly restrict public access to project lands or 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 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 must be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.

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

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

(H) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 825l, and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2021). 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. The licensee's failure to file a request for rehearing constitutes acceptance of this order.

for
Terry Turpin
Director
Office of Energy Projects

Form L-12
(October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

**TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED
MINOR PROJECT AFFECTING THE INTERESTS OF
INTERSTATE OR FOREIGN COMMERCE**

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not

conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams

on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 7. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 8. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 9. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 10. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its

reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 11. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 12. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 13. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including

fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 14. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon the request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 15. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 16. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 17. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new

license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

Article 18. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

APPENDIX A**Water Quality Certificate Conditions
Issued by the Vermont Department of Environmental Conservation
(Issued May 11, 2023)****Decision and Certification**

The Department has examined the Project application and other pertinent information deemed relevant by the Department in order to issue a decision on this certification application pursuant to the Department's responsibilities under Section 401 of the federal Clean Water Act and 10 V.S.A. § 1253(h). After examination of these materials, the Department certifies that there is reasonable assurance that operation of the Project in accordance with the following conditions will not violate Standards; will not have a significant impact on use of the affected waters by aquatic biota, fish or wildlife, including their growth, reproduction, and habitat; will not impair the viability of the existing populations; will not result in a significant degradation of any use of the waters for recreation, fishing, water supply or commercial enterprises that depend directly on the existing level of water quality; and will be in compliance with sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, 33 U.S.C. section 1341, and other appropriate requirements of state law:

- A. **Compliance with Conditions.** The Applicant shall operate and maintain this Project consistent with the findings and conditions of this certification. The Applicant shall not make any changes to the Project or its operations that would have a significant or material effect on the findings, conclusions or conditions of this Certification without approval of the Department.

See finding 114 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-101.

- B. **Flow Management.** The Project shall be operated in instantaneous run-of-river mode. Instantaneous run-of-river operation means no utilization of impoundment storage and that outflow from the facility is equal to inflow to the impoundment on an instantaneous basis except for short term, unavoidable deviations.

The Applicant shall provide 37 cfs, or inflow if less, into the bypassed reach year-round. This flow shall not be interrupted. When generating, the Project shall spill 10 cfs continuously year-round in the bypass reach unless otherwise indicated in the flow management and monitoring plan (condition C). When the Project is not operating, all flow shall be spilled at the dam.

See findings 42, 43, 77, 106, 107, 129-133, and 147-151 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-304 & § 29A-306 (b)(3)(B) & § 306 (c)(3)(B)(i).

- C. **Flow Management and Monitoring Plan.** The Applicant shall develop within 180 days of the effective date of the FERC license, a flow management and monitoring plan detailing how the Project will operate in instantaneous run-of-river mode and manage flow seasonally to comply with the conservation flow requirements. The plan will also include a method for continuous monitoring and reporting (to allow records to be furnished upon request) of flow releases at the Project (conservation flow, spillage, and turbine discharge), impoundment levels and inflows. The plan shall include provisions for the flow data to be available on a near real-time basis.

The plan will include procedures for reporting deviations from prescribed operating conditions to the Department. Reports shall be made within 15 days after a deviation and will include, if possible, the causes, severity and duration of the deviation, observed or reported adverse environmental impacts from the incident, pertinent data, and measures to be taken to avoid recurrences.

The plan shall be subject to Department approval. The department reserves the right to review and approve any material changes made to the plan.

See findings 42, 43, 77-80, 105-107, 129-134, and 147-151 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-304 & § 29A-306(b).

- D. **Fish Passage.** The Applicant shall install and maintain the downstream fish passage facility from April 1st- June 1st and from September 1st – November 15th and maintaining additional measures (finding 127). Prior to replacement of the fish passage chute, the Applicant shall consult with the Fish and Wildlife Department and FWS with respect to the design, to determine the appropriate design meets requirements for safe, timely, and effective fish passage. The Applicant shall file the design information with the Department of Environmental Conservation for approval prior to commencement of work.

See findings 44, 59-69, and 120- 128 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-306(a-b).

- E. **American Eel Passage.** Within one year of American eel Passage being installed at the Wilder Hydroelectric Project on the mainstem of the Connecticut River, the Applicant shall initiate plans to develop passage. Before developing

the plan, the Applicant will consult with the Vermont Agency of Natural Resources and the FWS. The results of the plan will be reviewed and approved by the Vermont Agency of Natural Resources and the FWS. In addition to the method of passage, the Applicant shall include an implementation schedule which can include monitoring studies. The plan can include but is not limited to, a trap and truck program or eel ramp installation, or other appropriate measures.

See findings 59-69, and 120- 128 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-306(a).

- F. **Recreation.** The Applicant shall develop and finalize designs for a hand carry access area located upstream of the Newbury Hydroelectric dam (pending private landowner approval and consultation surrounding cultural resources). The designs shall be done in consultation with appropriate stakeholders. The Applicant shall construct recreation access improvements within 4 years of the effective date of the FERC license (pending landowner and permit approvals).

See findings 47, 100, 101, and 141- 145 for a statement of necessity 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A- 103(b)(1)(G).

- G. **Debris Disposal.** Debris associated with Project operations shall be disposed of in accordance with the Standards and applicable state laws and regulations.

See findings 10, 102, 103, and 146 for a statement of necessity. 10 V.S.A. § 1258 & Vt. Code R. 12 030 026 § 29A-303(1).

- H. **Maintenance and Repair Work.** For any Project maintenance or repair work, including drawdowns below the normal operating level to facilitate repair/maintenance work, plans shall be filed with the Department for prior review and approval, if said work may result in a discharge, have a material adverse effect on water quality, or cause less-than-full support of an existing use or a beneficial values or use of State waters.

See findings 62, 77, 95, 113, 122, and 139 for a statement of necessity. 10 V.S.A § 1258 & Vt. Code R. 12 0330 026 § 29A-103(a), § 29A-306(b) and § 29A-304(b).

- I. **Threatened and Endangered Species.** For activities requiring the clearing of trees 3-inches diameter breast height or greater, GMP shall abide by seasonal tree clearing restrictions and only clear trees between November 1st- April 14th to avoid any roost disruption of the Northern long-eared bat. Should tree clearing be required during the restricted time period (April 15th- October 31st), GMP will consult with the USFWS and VTFWD regarding removal.

See findings 46, 91-93, and 137-139 for a statement of necessity. 10 V.S.A. § 5403.

- J. **Compliance Inspection by Department.** The Applicant shall allow the Department to inspect the Project area at any time to monitor compliance with certification conditions.

See finding 114 for a statement of necessity. 10 V.S.A § 1258 & Vt. Code R. 12 0330 026 § 29A-104(a).

- K. **Posting of Certification.** A copy of the certification shall be prominently posed within the Project powerhouse.

See finding 114 for a statement of necessity. 10 V.S.A § 1258 & Vt. Code R. 12 0330 026 § 29A-104(a).

- L. **Modification of Certification.** 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.

See finding 114 for a statement of necessity. 10 V.S.A § 1258 & Vt. Code R. 12 0330 026 § 29A-104(a).