

189 FERC ¶ 61,217
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Chairman;
Mark C. Christie, David Rosner,
Lindsay S. See and Judy W. Chang

Power Authority of the State of New York

Project No. 3211-010

ORDER ISSUING NEW LICENSE

(Issued December 19, 2024)

Introduction

1. On July 31, 2020, the Power Authority of the State of New York (NYPA) filed, pursuant to Part I of the Federal Power Act (FPA),¹ an application for a new license to continue operating and maintaining the 9-megawatt (MW) Hinckley Hydroelectric Project No. 3211. The project is located on West Canada Creek, near the Hamlet of Hinckley in the counties of Oneida and Herkimer, New York.² The project does not occupy federal land. As part of the license application, NYPA requested to change the name of the project to the Gregory B. Jarvis Power Project No. 3211 (Jarvis Project or project).

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

Background

3. The Commission issued the original license for the project on August 12, 1982, with an effective date of August 1, 1982, and an expiration date of July 31, 2022.³ Since

¹ 16 U.S.C. §§ 791(a) – 825(r).

² The project is located on West Canada Creek, a stream subject to the jurisdiction of Congress under its authority to regulate interstate commerce. *Power Auth. of the State of N.Y.*, 20 FERC ¶ 62,264, at 63,442 (1982). Therefore, it is required to be licensed pursuant to section 23(b)(1) of the FPA. 16 U.S.C. § 817(1).

³ *Power Auth. of the State of N.Y.*, 20 FERC ¶ 62,264.

the expiration date, NYPA has operated the project under an annual license pending the disposition of its license application.⁴

4. On January 12, 2022 (January 12 Notice), the Commission issued a public notice that was published in the *Federal Register*, accepting the application for filing, soliciting motions to intervene and protests, indicating that the application was ready for environmental analysis, and soliciting comments, recommendations, preliminary terms and conditions, and preliminary prescriptions.⁵ The notice set March 13, 2022, as the deadline for filing motions to intervene, comments, final recommendations, terms and conditions, and prescriptions. The New York State Department of Environmental Conservation (New York DEC) and U.S. Department of the Interior (Interior)⁶ filed timely notices of intervention.⁷ The New York State Council of Trout Unlimited (Trout Unlimited), Citizens for Hinckley Lake (Citizens) and Brookfield Renewable on behalf of Erie Boulevard Hydropower, L.P. (Erie) filed timely motions to intervene.⁸ Citizens opposes relicensing of the Jarvis Project.⁹

5. In a letter filed March 1, 2022, NYPA requested a 90-day extension of the deadline established by the January 12 Notice to formalize a settlement agreement, explaining that this would clarify the parties' position on various issues before the Commission's development of its environmental assessment. By letter order issued on March 10, 2022, Commission staff extended the initial filing deadline until June 11, 2022. Interior filed comments, recommendations, and a reservation of authority to prescribe fishways on June 10, 2022; New York DEC filed comments on June 13, 2022. No reply comments were filed by NYPA.

⁴ See 16 U.S.C. § 808(a)(1); see also Commission staff's August 18, 2022, Notice of Authorization for Continued Project Operation at 1.

⁵ 87 Fed. Reg. 2780 (Jan. 19, 2022).

⁶ Interior filed the notice of intervention on behalf of its component bureaus, the U.S. Fish and Wildlife Service (FWS) and Bureau of Indian Affairs.

⁷ Under Rule 214(a)(2) of the Commission's Rules of Practice and Procedure, New York DEC and Interior became parties to the proceeding upon timely filing of their notices of intervention. 18 C.F.R. § 385.214(a)(2) (2024).

⁸ Timely, unopposed motions to intervene are granted by operation of Rule 214(c) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1).

⁹ Citizens for Hinckley Lake October 19, 2023 Comments at 1.

6. On July 25, 2022, NYPA filed an Offer of Settlement (Settlement Agreement) on behalf of itself, New York DEC, and Interior.¹⁰ The Settlement Agreement addresses project operation, water quality, freshwater mussel protection during drawdowns, bald eagle protection, invasive species management, and recreation facility enhancements.¹¹

7. On August 1, 2022, the Commission issued a public notice that was published in the *Federal Register*,¹² setting August 22, 2022, as the deadline for filing comments on the Settlement Agreement. New York DEC, Trout Unlimited, Citizens, Interior, and Erie filed responsive comments. On September 1, 2022, NYPA filed reply comments. On September 1, 2022, and December 13, 2022, Trout Unlimited and Citizens, respectively, filed additional comments.

8. On September 6, 2023, pursuant to the National Environmental Policy Act,¹³ Commission staff issued a draft environmental assessment (draft EA), analyzing the effects of the proposed project and alternatives to it, and setting a deadline for comments of October 21, 2023.¹⁴ Timely comments on the draft EA were filed by Citizens. Interior, New York DEC, and NYPA filed late comments, but those comments were still considered in the final EA. On November 20, 2023, NYPA filed comments in response to Citizens, and Citizens filed reply comments on November 29, 2023. On March 28,

¹⁰ We clarify that the extension of the initial filing deadline until June 11, 2022, applied to comments, prescriptions, and terms and conditions from resource agencies and the public, and not the settlement agreement.

¹¹ The relevant portions of the Settlement Agreement are included in Appendix A to this order.

¹² 87 Fed. Reg. 48010 (Aug. 5, 2022).

¹³ 42 U.S.C. §§ 4321 *et seq.* See also 18 C.F.R. pt. 380 (2024) (Commission's regulations implementing NEPA).

¹⁴ The Commission is aware of the November 12, 2024, decision in *Marin Audubon Society v. Federal Aviation Administration*, 121 F.4th 902 (D.C. Cir. 2024), holding that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding. We note that section 380.1 of the Commission's regulations, 18 C.F.R. § 380.1, provides that the Commission will comply with the relevant CEQ regulations to the extent they are not inconsistent with the Commission's statutory requirements. We are continuing to review the *Marin Audubon Society* decision and may take such further action as is appropriate.

2024, Commission staff issued the final EA for the project. Citizens filed comments on the final EA on November 12, 2024.

9. Citizens opposes the relicensing of the project, and argue that the management of water levels at the Hinckley reservoir under the current 2012 Hinckley Reservoir Operating Diagram (2012 Operating Diagram) should be brought under the control of the licensee.¹⁵ Citizens argues that the Commission should find the current Settlement Agreement invalid because it did not include all interested parties and does not comprehensively address all issues relating to relicensing.¹⁶ Citizens further states that the New York State Canal Corporation (Canal Corporation), which dictates releases from the project reservoir, should be subject to the license, as it is a subsidiary of NYPA.¹⁷

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

Project Description

A. Project Area

11. The Jarvis Project is located on West Canada Creek, near the Hamlet of Hinckley in the counties of Oneida and Herkimer, New York. West Canada Creek originates from a series of lakes and tributaries in the Adirondack Mountains and flows approximately 75 miles to its confluence with the Mohawk River (Erie Canal).¹⁸ The total drainage area for West Canada Creek (the second largest tributary to the Mohawk River) is approximately 561 square miles, while the drainage area at the Jarvis Project is 372 square miles. From its headwaters in the Adirondack Mountains, West Canada Creek flows approximately 23 miles in a south-southwesterly direction before entering Hinckley reservoir. In addition to several minor tributaries, the main tributaries that feed West Canada Creek and Hinckley reservoir are the South Branch of West Canada Creek and Black Creek. The confluence of West Canada Creek and the South Branch of West

¹⁵ Citizens for Hinckley Lake August 11, 2022 Comments at 2. The 2012 Hinckley Reservoir Operating Diagram specifies the amount of flow to be released from Hinckley reservoir each day of the year based on daily reservoir levels. *See* Figure 3 of Commission staff's final EA.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ From Lock E-18 of the Erie Canal (in Jacksonburg, New York) to Lock E-7 (in Schenectady, New York), the Erie Canal is confluent with the Mohawk River.

Canada Creek is located approximately 11 miles upstream of Hinckley reservoir. Downstream of Hinckley reservoir, West Canada Creek continues in a south-southeasterly direction approximately 35 miles before draining into the Mohawk River (Erie Canal), near Herkimer, New York.

12. The Jarvis Project's dam, known as Hinckley dam, was built in the early 1900s, and commissioned in 1915, to provide a source of water (i.e., the Jarvis Project's reservoir, known as Hinckley reservoir) for the Erie Canal, which runs from the Hudson River to Lake Erie and includes portions of the mainstem Mohawk River.¹⁹ During the navigation season,²⁰ the Canal Corporation relies on releases from Hinckley dam, which are currently made by NYPA in accordance with the 2012 Operating Diagram (described below), to help ensure there are sufficient water depths for navigation in the eastern portion of the Erie Canal (i.e., east of Lake Oneida) and to provide water for vessel locks in the area.

13. Flows released from Hinckley reservoir travel 35 miles south, down West Canada Creek, before entering the Mohawk River (as noted above, a part of the Erie Canal) at Herkimer, New York. Given the easterly flow of the Mohawk River near Herkimer, water released from Hinckley reservoir, upon entering the canal, primarily travels eastward. However, during the navigation season, the Canal Corporation uses the Nine Mile Creek Feeder dam, located on West Canada Creek 1,500 feet downstream of the Trenton Dam tailrace of the West Canada Creek Project, FERC No. 2701 to divert a portion of the flow to an artificial diversion channel (the Nine Mile Creek Feeder canal) that leads to Nine Mile Creek, which enters the Erie Canal about 24 miles west of the entrance of West Canada Creek (*see* map in Appendix C). The supplemental flow diversions at the Nine Mile Creek Feeder dam typically range from 15 cubic feet per second (cfs) to 45 cfs (daily).²¹ The purpose of the flow diversions is to provide supplemental flows to the Rome summit section of the Erie Canal (in the vicinity of Locks E-21 and E-22), which has the highest elevation on the canal.

¹⁹ *Report to the Governor by the Hinckley Reservoir Working Group*, (April 30, 2008). https://www.health.ny.gov/environmental/investigations/hinckley_reservoir/docs/2008-04-30_report_to_the_governor.pdf. The dam was constructed after multiple parties entered into agreements to preserve water usage rights downstream.

²⁰ The navigation season on the Erie Canal is typically from early May through mid-November, but the exact dates are determined annually, and can be modified by, the Canal Corporation.

²¹ *See* final EA at 11.

14. In addition to Hinckley dam, there are five dams on West Canada Creek, all located downstream of the Jarvis Project, before West Canada Creek enters the Mohawk River. From upstream to downstream they are: (1) the Prospect and Trenton dams associated with the West Canada Creek Project (FERC No. 2701), located at river miles 31 and 33, respectively; (2) Nine Mile Creek Feeder dam (discussed above); and (3) two other dams associated with the Newport Hydroelectric Project (FERC No. 5196) and the Herkimer Hydroelectric Project (FERC No. 9709), approximately 13 and 26.5 river miles, respectively, downstream of the Nine Mile Creek Feeder dam.²²

B. Project Facilities

15. Hinckley dam consists of a north embankment section, a south embankment section, an ungated spillway, and a non-overflow concrete gravity section with an integrated intake structure. The 570-foot-long north and 2,600-foot-long south embankment sections have a maximum height of 53 feet and a crest width of 11 feet; the top of each embankment section is at an elevation of 1,242 feet.²³ The 400-foot-long by 83-foot-high cyclopean concrete overflow spillway is an ungated, ogee-type section with a crest elevation at 1,225 feet. Hinckley dam creates an impoundment (Hinckley reservoir) with a total storage capacity of about 77,029 acre-feet and a surface area of 2,709 acres at a normal pool elevation of 1,225 feet. Water from Hinckley reservoir passes through a 65-foot-long by 82-foot-high non-overflow intake structure (that includes trash racks with a clear spacing of 5.375 inches) and into a 15-foot-diameter penstock that bifurcates into two 90-foot-long, 10.5-foot-diameter penstocks. The penstocks lead to a powerhouse with two horizontal Kaplan turbine-generator units with a total rated capacity of 9 MW. The powerhouse is connected to two 50-foot-long generator leads to a step-up transformer that connects to an underground 200-foot-long transmission line.

16. Water exits the project powerhouse via draft tubes and enters a 280-foot-long tailrace. A 60-inch-diameter water pipe is located on the powerhouse side of the non-overflow intake structure and contains a sluice gate (gate 4) that acts as a low-level outlet for the project.²⁴ The trash racks covering gate 4 have a clear spacing of 3.5 inches. A penstock bypass valve adjacent to gate 4 can also act as a low-level outlet for the project; when opened, it has a fixed discharge capacity of around 700 cfs. In

²² See Figure 1 of Appendix C.

²³ All elevations for the Jarvis Project are referenced to the Barge Canal Datum (BCD). BCD elevations are 1.04 feet higher than elevations referenced to the National Geodetic Vertical Datum (NGVD 29), thus, 1,225.0 feet BCD = 1,223.96 feet NGVD 29.

²⁴ See Figures 2 and 4 of the final EA.

addition to being passed through the project's turbines, water from Hinckley reservoir can be released from the project dam through gate 4 or the penstock bypassed valve.

17. Hinckley reservoir serves as the sole source of drinking water for 130,000 people in the greater Utica area. The Mohawk Valley Water Authority withdraws up to 75 cfs (48.5 million gallons) per day from the reservoir at a gatehouse located on the spillway's south wing-wall that provides water to two water supply conduits that pass underneath the south embankment dam.

18. Project recreation facilities include the NYPA Scenic Overlook and Boat Launch. The NYPA Scenic Overlook is located adjacent to the dam, north of the spillway on the reservoir. The NYPA Boat Launch is located along the north side of Hinckley reservoir, approximately 0.4 mile north of the NYPA Scenic Overlook.

C. Current Project Operation and Control

i. Project Control

19. Citizens alleges that NYPA and the Canal Corporation are the same entity and should be subject to the licenses' requirement.²⁵ Citizens asserts that operating the reservoir to provide navigation flows under the 2012 Operating Diagram as proposed by NYPA leads to recreation, aesthetic, and erosion issues due to low water levels, and requiring the Canal Corporation to become a licensee would resolve those issues.²⁶ Citizens states that NYPA, as the Canal Corporation's parent company, should have the ability to dictate the Canal Corporation's water needs, and reduce reservoir outflows when inflows are low.²⁷ Citizens argues this case is analogous to the Hudson River-Black River Regulating District's (District) Great Sacandaga Lake Project No. 12252 connection to Erie Boulevard Hydropower, L.P.'s (Erie) E.J. West Project No. 2318.²⁸ Citizens requests clarification as to why the Commission treats the projects differently. In response, NYPA states that the Canal Corporation is a separate legal entity under New York law.²⁹

²⁵ Citizens for Hinckley Lake July 10, 2019 Comments at 1.

²⁶ *Id.* See also Citizens for Hinckley Lake November 12, 2024 Comments at 2.

²⁷ Citizens for Hinckley Lake November 11, 2023 Comments at 1.

²⁸ Citizens November 12, 2024 Comments at 2.

²⁹ NYPA November 20, 2023 Comments at 2.

20. The Commission has explained that a non-licensee holding title to project works that are subject to a license held by another entity need not necessarily be a co-licensee, as long as the licensee is able to obtain sufficient rights in the project works to operate and maintain the project.³⁰ As stated in the license application, NYPA holds all necessary rights to operate and maintain the project. In fact, the Commission has previously approved licenses where the licensee generates power by releases from the Canal Corporation's reservoirs while not requiring the Canal Corporation or the licensees of the project to alter established flow regimes for the canal system's navigation purposes.³¹

21. This case differs from Hudson River-Black River Regulating District's (District) Great Sacandaga Lake Project No. 12252³² and Erie Boulevard Hydropower, L.P.'s (Erie) E.J. West Project No. 2318,³³ cited by Citizens as analogous. The Commission first licensed Erie's E.J. West Project in 1963, and, on relicensing in 1993, determined that the upstream Conklingville Dam, owned and operated by the District as a feature of its Great Sacandaga Lake Project, was a part of the same "unit of development."³⁴ However, because the Conklingville Dam and other facilities making up the

³⁰ *Pub. Util. Dist. No. 1 of Snohomish Cnty., Wash.*, 121 FERC ¶ 61,269, at PP 6-7 (2007).

³¹ See e.g. *N.Y. State Elec. & Gas Co.*, 174 FERC ¶ 62,174 (2021) (issuing a new license to the Upper Mechanicville Project No. 2934, which generates power from the Canal Corporation's releases on the Champlain Canal). See also *Seneca Falls Power Corp.*, 78 FERC ¶ 62,113 (1997); *Rochester Gas & Elec. Co.*, 81 FERC ¶ 62,064 (1997).

³² *Hudson River-Black River Regulating District*, 100 FERC ¶ 61,319 (2002).

³³ *Erie Boulevard Hydropower, L.P.*, 100 FERC ¶ 61,321 (2002).

³⁴ *Hudson River-Black River Regulating Dist.*, 100 FERC ¶ 61,319 at PP 5-6. Section 3(11) of the FPA, 16 U.S.C. § 796(11) defines "project" as a "complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water-rights, rights-of way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit."

Great Sacandaga Lake Project were located on forest preserve and state park lands,³⁵ Erie was unable to acquire those lands for the E.J. West Project, and the Commission issued the District a separate license for the project.³⁶ Here, the Hinckley Reservoir is part of the Jarvis Project's unit of development, and, as discussed above, NYPA has obtained the necessary rights to operate and maintain that facility, which Erie could not do in the situation cited by Citizens.³⁷

22. Under the circumstances here, there is no reason for the Commission to require the Canal Corporation to become a co-licensee or obtain a separate license.

ii. Project Operation

23. NYPA uses the reservoir releases prescribed by the 2012 Operating Diagram to generate power at the project. The 2012 Operating Diagram specifies the amount of flow to be released from Hinckley reservoir each day of the year based on daily reservoir levels, and was developed to balance the historic joint operation of Hinckley reservoir for both power generation at the downstream West Canada Creek Project and other existing uses, interests, and rights to those water resources, including canal operations and as a drinking water source.³⁸ Unlike a traditional rule curve—in which flow releases from a storage reservoir typically cease when the reservoir water level drops below a certain target elevation (which may vary seasonally)—the 2012 Operating Diagram calls for releases from Hinckley reservoir on each day of the year, with daily flow releases ranging between 160 cfs and 1,800 cfs, depending on the elevation of Hinckley reservoir. These

³⁵ Federal Power Act (FPA) section 21 prohibits a licensee from using eminent domain to acquire lands that, prior to 1992, were owned by a state or political subdivision of a state and included in a public park, recreation area or wildlife refuge. *Hudson River-Black River Regulating Dist.*, 183 FERC ¶ 61,187, at P 5 n.13 (2023) (citing 16 U.S.C. § 814).

³⁶ The Commission issued the District an original license for the Great Sacandaga Lake Project on September 25, 2002. *Hudson River-Black River Regulating District*, 100 FERC ¶ 61,319.

³⁷ Final License Application, Ex. G.

³⁸ The Operating Diagram is the result of agreements among the Canal Corporation, State of New York, Mohawk Valley Water Authority, New York State Thruway Authority, and Erie, licensee of the West Canada Creek Project. The 2012 Operating Diagram replaced a previous (1920) version of the Operating Diagram that was in effect from 1921 through 2012. Note that NYPA is not a party to the legal agreements on which the 2012 Operating Diagram is based. *See* final EA at 9 & Figure 3 at C-2.

releases are made by NYPA at Hinckley dam via generation, gate no. 4, the penstock bypass valve, spill over the dam, or some combination thereof.

24. The Canal Corporation has the ability to prescribe daily flow releases that differ from those required by the 2012 Operating Diagram. For example, the Canal Corporation may authorize daily flow releases that are lower than those prescribed by the Operating Diagram to ensure that water levels (storage capacity) in the reservoir remain high enough to support other uses of the reservoir.

25. The Jarvis Project operates in either: (1) constant-release-mode or (2) peaking mode. When operating in a constant-release-mode, the total outflow from the project approximates the daily flow prescribed by the 2012 Operating Diagram. When operating in a peaking mode, NYPA ensures the daily average outflow from the project meets the daily flow prescribed by the 2012 Operating Diagram. When peaking, the project generates with lower outflows (no lower than 300 cfs—the minimum hydraulic capacity of a single unit) during non-peak demand hours and then generates with higher outflows (up to 1,800 cfs) during peak demand hours such that the daily average outflow from the project is equal to the daily outflow required by the 2012 Operating Diagram.

26. To optimize project economics and reduce wear on the turbines associated with bringing units on-line and off-line, NYPA keeps at least one unit running (and releasing at least 300 cfs at all times) when operating in a peaking mode. Therefore, peaking is generally limited to periods when prescribed outflows (from the 2012 Operating Diagram) exceed 550 cfs because at lower prescribed outflows, both units would need to be shut down during a portion of the day to ensure the daily average outflow from the project does not exceed that prescribed by the 2012 Operating Diagram. Peaking is least common during the navigation season because the prescribed flows (from the 2012 Operating Diagram) are lowest during this time to ensure that enough water remains in the reservoir throughout the summer to supply water to the Erie Canal in support of navigation.

27. The project's two horizontal Kaplan turbine units are each capable of operating between 300 cfs and 900 cfs, for a total maximum hydraulic capacity of 1,800 cfs. At flows within the operating range of the units (300 cfs to 1,800 cfs), the project provides outflow via generation. At flows within this range, the currently required continuous minimum flow of 160 cfs is also provided via generation.³⁹ When the prescribed daily

³⁹ Article 20 of the current license requires NYPA, in cooperation with the Niagara Mohawk Power Corporation, the New York State Department of Transportation, and the New York State Department of Environmental Conservation, to operate the Jarvis Project in such a manner as to provide a continuous minimum flow of 160 cfs in

flow is less than 300 cfs, or when the surface elevation of the reservoir is below an elevation of 1,195 feet, the project does not operate⁴⁰ and the minimum flow is released through gate 4. Gate 4 can be manually opened to different heights by on-site personnel; the maximum discharge capacity of the gate depends on the elevation of Hinckley reservoir and ranges from 490 cfs (at a reservoir elevation of 1,195 feet) to 720 cfs (at a reservoir elevation of 1,225 feet). Unlike the outflow from the turbines, the discharge from gate 4 enters the air and is thus re-aerated upon its release along the toe of the dam.⁴¹ During periods of high flow and when the reservoir elevation exceeds 1,225 feet (which only occurs about 12% of the time on an annual basis, mostly in April and May), outflow from the project is passed downstream via a combination of generation and spill over the dam.

28. The Jarvis Project is operated remotely from NYPA's Blenheim-Gilboa Pumped Storage Power Project (FERC Project No. 2685) and is visited and inspected weekly by NYPA staff. Twice each week, the project's settings, including the amount of flow through the turbines and its schedule of release (i.e., constant-release-mode or peaking) are adjusted to ensure the daily flow releases for the upcoming 3 to 4 days are consistent with the flows prescribed by the 2012 Operating Diagram.

29. During the navigation season, NYPA ensures that outflow from the Jarvis Project equals or exceeds the sum of the currently required 160-cfs minimum flow for West Canada Creek downstream of Nine Mile Creek Feeder dam and any diversion flows required by the Canal Corporation (at the Nine Mile Creek Feeder dam). For example, if the Canal Corporation determines that 30 cfs is needed for diversion at the Nine Mile Creek Feeder dam, the Canal Corporation notifies NYPA, and NYPA must ensure that outflow from the project during this period (including during any unit trips) is at least 190 cfs. Without such coordination (during the navigation season), flows in West Canada Creek downstream of the Nine Mile Creek Feeder dam could be less than 160 cfs.

30. Although the Jarvis Project and Erie's West Canada Creek Project occasionally operate in tandem (i.e., have the same peaking schedule), the two projects often operate

West Canada Creek downstream of the Nine Mile Creek Feeder dam, which is located 5.1 miles downstream of the Jarvis Project.

⁴⁰ Project generation typically ceases when the reservoir elevation is below 1,195 feet because, at these elevations, the prescribed releases from the 2012 Operating Diagram (at least from early July through mid-December) are generally less than the minimum hydraulic capacity of a single unit (300 cfs).

⁴¹ See Figure 4 of the final EA at C-3.

independently of one another.⁴² Accordingly, there can be a variety of outflow patterns (downstream of the West Canada Creek Project's Trenton Development) depending on the operation schedules of the two projects. For example, the largest flow fluctuations downstream of the Trenton Development's powerhouse would be expected when both projects are operating in tandem with the same peaking schedule. The West Canada Creek Project also has enough storage to re-shape or dampen (i.e., re-regulate) the flow patterns emanating from the upstream Jarvis Project.⁴³

D. Project Boundary

31. The project boundary encompasses about 2,795 acres and encloses the dam, intake structure, penstock, powerhouse, tailrace, a transformer connecting to a transmission line, appurtenant facilities, and Hinckley reservoir.

32. NYPA proposes to modify the project boundary to include the following existing facilities and roads necessary for operation and maintenance of the project: (1) the NYPA Boat Launch parking area at Hinckley reservoir; (2) the access road leading from State Route 365 to the powerhouse; and (3) the project interconnection point at the switchyard north of State Route 365. The total area enclosed by NYPA's proposed project boundary would increase from about 2,795 acres to about 2,799 acres.

E. Proposed Operation and Environmental Measures

33. NYPA proposes to operate the Jarvis Project as described in its July 31, 2020 license application and modified by the July 25, 2022 Settlement Agreement (Appendix A). The substantive proposed measures are described below.

34. To effectively accommodate and balance the historic joint operation of Hinckley reservoir for both power generation and other existing uses, NYPA proposes to operate the project using daily reservoir outflows prescribed by the Canal Corporation in accordance with the 2012 Operating Diagram or as otherwise directed by the Canal

⁴² Article 33 of the current license for Erie's West Canada Creek Project requires the licensee to provide a continuous minimum flow of 160 cfs or inflow to the project, whichever is less, as measured immediately downstream of the New York State Department of Transportation barge canal diversion weir (i.e., the Nine Mile Creek Feeder dam), for the purpose of protecting and enhancing aquatic resources in West Canada Creek.

⁴³ See Final License Application, Ex. E, 118 to 120.

Corporation; and adjust project operations on a twice-weekly basis to provide Canal Corporation-directed outflows (section 3.1 of the Settlement Agreement).

35. When operating the project in a peaking mode (i.e., with lower outflows during non-peak energy demand periods and higher outflows during peak demand periods), NYPA proposes to ensure the total daily average outflow from the project is equal to that prescribed by the 2012 Operating Diagram (section 3.1 of the Settlement Agreement).

36. To ensure that downstream aquatic habitat in West Canada Creek remains adequately watered, NYPA proposes to provide a minimum daily average reservoir outflow of 160 cfs on a year-round basis (section 3.3 of the Settlement Agreement).

37. To improve water quality downstream of the project and mitigate any water quality impacts caused by project operation, NYPA proposes to implement the Water Quality Management Plan (section 3.5 and Appendix B of the Settlement Agreement).

38. To protect freshwater mussels, hibernating amphibians and reptiles, and fish spawning, NYPA proposes to consult with and obtain written permission from New York DEC prior to conducting any construction-, maintenance-, or repair-related reservoir drawdowns and refills between October 1 and July 15; and ensure Hinckley reservoir is refilled to the proper water surface elevation (as determined by the Operating Diagram) by October 15 of each year (section 3.2 of the Settlement Agreement).

39. To provide the licensee, New York DEC, and Interior with a means to determine compliance with the project's minimum flow requirements, NYPA proposes to implement the Stream Flow and Water Level Monitoring Plan filed with the Settlement Agreement (section 3.4 and Appendix A of the Settlement Agreement).

40. To prevent the introduction and spread of invasive species, NYPA proposes to implement the Invasive Species Management Plan (section 3.7 and Appendix C of the Settlement Agreement).

41. To minimize project effects on federally protected species, NYPA proposes to implement the Bald Eagle Protection Plan (section 3.8 and Appendix D of the Settlement Agreement).

42. To enhance recreation opportunities, NYPA proposes to maintain the NYPA Boat Launch and Scenic Overlook, replace an informational kiosk at the NYPA Boat Launch, install and maintain improved directional signage at the NYPA Boat Launch and Scenic Overlook, provide seasonal temporary restroom facilities at the NYPA Boat Launch, make accessibility improvements to the NYPA Boat Launch by: (a) adding accessible parking spaces, (b) improving access routes to the boat launch areas, and (c) constructing

a floating dock, and extend the NYPA Boat Launch ramp to elevation 1,205 feet to be operable to elevation 1,208 feet (section 3.6 of the Settlement Agreement).

43. To enhance recreation opportunities at the NYPA Boat Launch, NYPA proposes to provide seasonal temporary restroom facilities (*i.e.* a portable toilet) and extend the boat ramp to an elevation of 1,205 feet, which would allow the launch to be operable at reservoir surface elevations up to 1,208 feet (Exhibit E, section 3.2 of the final license application).

44. To protect cultural resources, NYPA proposes to consult with the New York State Historic Preservation Office (New York SHPO) and Canal Corporation, as appropriate, in the event that project maintenance is required that could potentially have an adverse effect on cultural resources (Exhibit E, section 4.10.3 of the final license application).

Summary of License Requirements

45. This license, which authorizes 9 MW of renewable energy generation capacity, requires the proposed measures described above,⁴⁴ the staff-recommended modifications and additional measures described below, and the conditions required by New York DEC's water quality certification (certification) (Appendix B).

46. To continue supporting trout habitat and ensuring that downstream aquatic habitat in West Canada Creek remains adequately watered, including during any unit trips or project outages, this license requires NYPA to continue providing the 160-cfs minimum flow on a continual basis, rather than as a daily average as proposed by NYPA.

47. To verify compliance with the project's operational requirements, this license requires NYPA to develop an operation compliance monitoring plan that includes the general flow monitoring and calculation methods in NYPA's Stream Flow and Water Level Monitoring Plan, but also includes provisions for documenting compliance with the continuous 160-cfs minimum flow required for the project.

48. To protect freshwater mussels from aerial exposure during maintenance- or repair-related drawdowns of Hinckley reservoir, this license requires NYPA to consult with New York DEC and FWS prior to any planned project-related drawdowns of the reservoir (regardless of what time of year they occur) to determine if mussel protection measures are needed for the drawdown in question.

⁴⁴ Only those portions of the Settlement Agreement that are included in Appendix A are made part of this license.

49. To protect the federally listed northern long-eared bat, this license requires NYPA to avoid the removal of trees with diameters that are equal to or greater than 3 inches at breast height from April 1 through October 31.

50. To enhance recreation and public access at the project, this license requires NYPA to develop a recreation management plan, in consultation with stakeholders, to include: (1) a description of project recreation facilities; (2) a description of the operation and maintenance of the project facilities; (3) accessibility upgrades to the NYPA Boat Launch; (4) a provision to improve directional and informational signage; (5) a provision for NYPA to provide seasonal, temporary toilet facilities at the NYPA Boat Launch; (6) a provision for NYPA to extend the boat ramp at the NYPA Boat Launch; (7) a plan for improvements at the tailwater fishing area;⁴⁵ and (8) a description of how NYPA will monitor recreation use over the term of the license.

51. To ensure the project boundary encloses all lands, waters, works, and facilities necessary for operation and maintenance of the project, this license requires NYPA to revise the project boundary to enclose the tailwater fishing area.

52. Combined, these measures will protect or enhance aquatic, terrestrial, recreation, cultural resources, and threatened and endangered species at the project.

Water Quality Certification

53. Under section 401(a)(1) of the Clean Water Act (CWA),⁴⁶ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued water quality certification (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.

⁴⁵ To enhance recreational fishing at the project tailrace, this license requires NYPA to include a provision in the above referenced recreation management plan to maintain—as a recreation facility—an informal tailwater fishing area located downstream of the project tailrace including the installation of signage and trash receptacles and construction of an access path from an existing informal parking area to the fishing area at the edge of the shore to improve public safety and minimize erosion along the embankment.

⁴⁶ 33 U.S.C. § 1341(a)(1).

Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.⁴⁷

54. On March 11, 2022, NYPA applied to New York DEC for a certification for the Jarvis Project. New York DEC received the application the same day. On March 7, 2023, New York DEC denied without prejudice NYPA's request for certification because "the Commission's environmental review of the project pursuant to NEPA is ongoing and may result in changes to the project." On May 26, 2023, NYPA re-submitted its application for certification, which New York DEC received on the same day. New York DEC issued the certification on May 22, 2024.

55. The certification includes 53 conditions. Forty-two of the conditions are general or administrative in nature and are not discussed further, including: natural resource permit conditions 1-9 and 27-40; certification specific condition 1; general conditions 1 through 8; and other permittee obligations, items A through D.

56. The remaining eleven conditions of the certification require NYPA to: (1) operate the project in accordance with the 2012 Operating Diagram or as otherwise directed by the Canal Corporation, and adjust project operations on a twice-weekly basis to provide Canal Corporation-directed outflows (natural resource condition 10); (2) ensure (when operating in a peaking mode) that the total daily average outflow from the project is equal to that prescribed by the 2012 Operating Diagram (natural resource condition 11); (3) maintain a minimum daily average outflow from Hinckley reservoir of 160 cfs, and during the navigation season, maintain daily average reservoir outflows at no less than the sum of the 160-cfs minimum flow plus the amount of flow diverted by the Canal Corporation at the Nine Mile Creek Feeder dam (natural resource condition 12 and Article 402);⁴⁸ (4) consult with, and obtain permission from, New York DEC prior to conducting any maintenance- or repair-related drawdowns of Hinckley reservoir between October 1 and July 15 (natural resource condition 13 and Article 403);⁴⁹ (5) curtail or

⁴⁷ *Id.* § 1341(d). *See also Am. Rivers v. FERC*, 129 F.3d 99, at 107-09 (2d Cir. 1997). The Commission lacks authority to review or reject conditions contained in a state's water quality certification. *Id.*

⁴⁸ Article 402 of this license requires the (160-cfs) minimum flow (plus any navigation flows) to be released on a continuous basis rather than as a daily average; therefore, Article 402 is more stringent than natural resource condition 12 of the certification.

⁴⁹ Article 403 of this license requires NYPA to consult with New York DEC and FWS (concerning the protection of freshwater mussels) prior to any planned (maintenance- or repair-related) drawdowns of Hinckley reservoir, regardless of what

suspend the project operation requirements of conditions 10 and 11 if required by operating conditions beyond the control of the licensee, emergencies, or as otherwise directed by the NYSCC, or upon mutual agreement between NYPA and New York DEC (natural resource condition 14); (6) curtail or suspend the minimum flow requirements of condition 12 if required by operating conditions beyond the control of the licensee, emergencies, or as otherwise directed by the NYSCC, or upon mutual agreement between NYPA and New York DEC (natural resource condition 15); (7) manage stream flow and water levels at the project in accordance with the Stream Flow and Water Level Monitoring Plan filed with the Settlement Agreement (natural resource condition 16 and Article 404);⁵⁰ (8) implement the Water Quality Management Plan filed with the Settlement Agreement (natural resource condition 18); (9) implement recreation facility enhancements identified in section 3.6 of the Settlement Agreement (natural resource condition 17); (10) implement the Invasive Species Management Plan filed with the Settlement Agreement (natural resource condition 19); and (11) implement the Bald Eagle Protection Plan filed with the Settlement Agreement (natural resource condition 20).

57. The 53 conditions of the certification are set forth in Appendix B of this order and incorporated into the license by Ordering Paragraph (D). Article 401 requires the licensee to file, for Commission approval, amendment applications, as appropriate.

58. Citizens argues that the 2012 Operating Diagram required by natural resource condition 10, results in suboptimal reservoir levels for Hinckley reservoir.⁵¹ Citizens

time of year such drawdowns occur; therefore, Article 403 is more stringent than natural resource condition 13 of the certification, which only requires consultation prior to those drawdowns occurring from October 1 through July 15.

⁵⁰ Natural resource condition 16 of the certification refers to the Stream Flow and Water Level Monitoring Plan filed with the Settlement Agreement as the Stream Flow and Water Level “Management” Plan. Commission staff interprets that the plan referenced in the certification represents the same (Stream Flow and Water Level Monitoring Plan) filed with the Settlement Agreement.

⁵¹ Citizens July 10, 2020 Comments at 1. Citizens states that the 2012 Operating Diagram results in excessive releases of water leading to rapid drops in reservoir levels. *Id.* On November 12, 2024, Citizens filed comments on the Environmental Assessment for the West Canada Creek Project and in this docket reiterating its argument that the Canal Corporation should be included as a co-licensee and that the Hinckley reservoir should be managed in a way to optimize recreational uses. Citizens for Hinckley Lake November 12, 2024 Comments at 2.

recommended the Commission establish target water levels for the reservoir between April and October to maintain adequate water levels for recreational opportunities.⁵²

59. The certification requires NYPA to “operate the Project using daily reservoir outflows prescribed by the [Canal Corporation] in accordance with the NYSCC’s 2012 Operating Diagram.”⁵³ Citizens’ requested alternative to manage the reservoir to maximize recreational opportunities would be inconsistent with the required operation of the project under the water quality certification and we therefore cannot consider it.

60. New York DEC’s water quality certification incorporates off-license commitments included in section 4 of the Settlement Agreement (i.e., funds and committees for waterway modeling, habitat improvement, and recreation improvement).⁵⁴ In the final EA,⁵⁵ staff determined that such commitments) are not: (1) enforceable under the Commission’s regulations; (2) environmental measures; or (3) part of the federal action (relicensing the project). Nevertheless, because these provisions are included in New York DEC’s water quality certification for the project, they are included in this license.

⁵² Citizens December 13, 2022 Comments at 3 (requesting that the Commission require NYPA to maintain the reservoir above 1,220 feet in April, May, and June, at or above 1,218 feet in July and August, at or above 1,216 feet in September and 1,215 feet in October). *See also* final EA at O-8.

⁵³ Appendix B Condition 10.

⁵⁴ *See infra* at Appendix B Conditions 21 & 22 (requiring NYPA to establish a Jarvis Waterway Modeling Fund and Jarvis Waterway Modeling Committee to compile waterway models and assess water usage scenarios, which will serve as a tool to comprehensively assess the West Canada Creek waterway); Appendix B Conditions 23 and 24 (requiring NYPA to establish the Jarvis Habitat Improvement Fund and Jarvis Habitat Improvement Committee to be used for habitat improvement projects within West Canada Creek and Hinckley Reservoir); and Appendix B Conditions 25 and 26 (requiring NYPA to establish the Jarvis Recreation Improvement Fund and Jarvis Recreation Improvement Committee to make improvements within the West Canada Creek watershed and Hinkley Reservoir that are outside of those improvements required by the Commission).

⁵⁵ Final EA at 6, fn 9.

Coastal Zone Management Act

61. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),⁵⁶ the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state's coastal zone management 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 its receipt of the applicant's certification.

62. In an e-mail to NYPA dated June 25, 2020, the New York State Department of State concurred with NYPA that the Jarvis Project is not within the designated coastal zone of the State of New York and affirmed that it does not anticipate that relicensing the project will have any effects on coastal uses or resources.⁵⁷ Therefore, no consistency certification is required.

Section 18 Fishway Prescription

63. Section 18 of the FPA⁵⁸ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.

64. On June 10, 2022, Interior filed a request that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 405 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Jarvis Project.

Threatened and Endangered Species

65. Section 7(a)(2) of the Endangered Species Act of 1973⁵⁹ (ESA) 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 designated critical habitat.

⁵⁶ 16 U.S.C. § 1456(c)(3)(A).

⁵⁷ See License Application, Initial Statement, Appendix A.

⁵⁸ 16 U.S.C. § 811.

⁵⁹ 16 U.S.C. § 1536(a).

66. Based on the FWS's Information for Planning and Conservation (IPaC) system,⁶⁰ the federally listed endangered northern long-eared bat (*Myotis septentrionalis*) and the monarch butterfly (*Danaus plexippus*), a species proposed for listing as a threatened species on December 12, 2024,⁶¹ may both occur in the project area and are discussed below.⁶² There is no proposed or designated critical habitat for either species in the project area.

A. Northern Long-eared Bat

67. Routine project maintenance, including occasional removal of trees that are a threat to human life, property, or safe operation of the project (hazard trees), could affect summer roosting habitat for northern long-eared bats at the project. According to FWS guidance, northern long-eared bats in New York State are likely to be in hibernacula (i.e., caves, mines, etc.) and are not likely to occur in forested habitat during the period from November 1 through March 31.⁶³

68. In the final EA, Commission staff determined that tree removal associated with routine project maintenance may affect suitable summer habitat for the northern

⁶⁰ See Commission Staff's November 14, 2024 Memorandum on Updated List of Threatened, Endangered, Proposed, and Candidate Species, and Proposed and Final Critical Habitats under the Endangered Species Act. Staff filed previous versions of the official species list on August 25, 2022, December 12, 2022, and January 3, 2023, July 13, 2023, March 25, 2024, and August 1, 2024.

⁶¹ 89 Fed. Reg. 100,662 (Dec. 12, 2024).

⁶² An official species list generated via IPaC on March 25, 2024 indicated that the tricolored bat, a species proposed for listing under the ESA, had the potential to occur at the project. By letter filed on October 23, 2023, FWS concurred with staff's determination in the final EA that relicensing the project, with a recommended measure to limiting tree-clearing, is not likely to jeopardize the continued existence of the tricolored bat. However, as the IPaC database no longer indicates that the tricolored bat may occur at the project, staff determined that relicensing the Jarvis Project would have no effect on the tricolored bat, and, therefore, no further action under the ESA is required.

⁶³ See FWS, *Inactive season dates for northern long-eared bats (NLEB) in swarming/staging areas*, https://www.fws.gov/sites/default/files/documents/Inactive%20Season%20Dates%20for%20Swarming%20and%20Staging%20Areas_0.pdf (last accessed Dec. 5, 2024).

long-eared bat.⁶⁴ With inclusion of a tree-clearing restriction from November 1 through March 31 (with the exception of hazard tree removal), Commission staff determined that relicensing the Jarvis Project may affect, but is not likely to adversely affect the northern long-eared bat. By letter filed on October 23, 2023, FWS concurred with staff's determination. Article 406 requires NYPA to limit the clearing of trees with diameters at breast height equal to or greater than 3 inches to the November 1 through March 31 period, unless they are a project or public safety hazard. Therefore, no further action under the ESA is required for this species.

B. Monarch Butterfly

69. Routine maintenance, such as mowing, is conducted at the Jarvis Project facilities, including recreational facilities, during the growing season.⁶⁵ Therefore, it is unlikely that monarch butterfly habitat (e.g., milkweed species) is present in these areas.⁶⁶ However, in areas where routine vegetation maintenance does not occur, potential monarch butterfly habitat could be present but would not likely be disturbed by project operation or maintenance.⁶⁷

70. In the final EA, Commission staff determined that continued operation of the Jarvis Project would not be likely to jeopardize the continued existence of the monarch butterfly.⁶⁸ Therefore, no further action under the ESA is required.⁶⁹

⁶⁴ Draft EA at 33; final EA at 34-35.

⁶⁵ EA at 35.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ 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).

Historic and Cultural Resources

A. National Historic Preservation Act

71. Under section 106 of the National Historic Preservation Act (NHPA),⁷⁰ and its implementing regulations,⁷¹ federal agencies must consider the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places, defined as historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This process generally requires the Commission to consult with the State Historic Preservation Office (SHPO) to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

72. On August 29, 2017, Commission staff designated NYPA as its non-federal representative for the purposes of conducting section 106 consultation under the NHPA.⁷² Pursuant to section 106, and as the Commission's designated non-federal representative, NYPA initiated consultation with the New York SHPO to identify historic properties within the project's area of potential effects.

73. The project is located within the New York State Barge Canal Historic District and National Historic Landmark. The Hinckley dam and Hinckley reservoir are discontinuous contributing properties of the New York State Barge Canal Historic District and National Historic Landmark.

74. By letter dated September 20, 2017,⁷³ the New York SHPO stated that no historic properties, including archaeological and/or historic resources would be affected by relicensing the Jarvis Project. In the final EA, staff concluded that relicensing the project would not affect any historic properties located near the project.⁷⁴

⁷⁰ 54 U.S.C. § 306108.

⁷¹ 36 C.F.R. pt. 800 (2024).

⁷² See Commission staff's August 29, 2017 Notice of Intent to File License Application, Filing of Pre-Application Document, Commencement of Pre-Filing Process, and Scoping; Request for Comments on the PAD and Scoping Document, and Identification of Issues and Associated Study Requests.

⁷³ See NYPA's Response to Request for Additional Information filed on December 18, 2020.

⁷⁴ Final EA at 44.

75. Pursuant to the regulations implementing section 106 of the NHPA,⁷⁵ when an agency makes a finding of no adverse effect, the agency has fulfilled its responsibilities under section 106 and no further action is required. However, it is possible that unknown archaeological or cultural resources could be discovered during project-related operation, maintenance, or other activities that require land-disturbance. Therefore, to ensure the proper treatment of any potential archaeological or cultural resources that may be encountered during the term of the license, Article 408 requires NYPA to consult with the New York SHPO and the Canal Corporation prior to implementing any project modifications not specifically authorized by this license, and Article 409 requires NYPA to consult with the New York SHPO, Canal Corporation, Oneida Indian Nation, Oneida Nation, Saint Regis Mohawk Tribe, and any other interested federally recognized Tribe if any future discoveries of cultural resources are made.

B. Tribal Consultation

76. For the Jarvis Project relicensing, the Commission offered to initiate consultation with the Saint Regis Mohawk Tribe and Oneida Indian Nation of New York, by letters issued July 6, 2017. The Tribes did not respond to the initial consultation letters or follow up calls; nor did they file any comments on the record of the proceeding.

77. However, as discussed above, it is possible that unknown archeological or cultural resources could be discovered during project construction, operation, maintenance, or other project-related work involving land-disturbing activities. To ensure that Tribal concerns are addressed in the event of any unanticipated discoveries, Article 409 requires the licensee to consult with the Oneida Indian Nation, Oneida Nation, Saint Regis Mohawk Tribe, and any other interested federally recognized Tribe in the event of any unanticipated discoveries to determine the need for any cultural resource studies or measures.

Environmental Justice

78. In conducting NEPA reviews of proposed hydropower projects, the Commission follows Executive Orders 12898 and 14096, which direct federal agencies to identify, analyze, and address disproportionate and adverse human health or environmental effects of their actions on environmental justice communities.⁷⁶ Executive Order 14008 also directs agencies to develop programs, policies, and activities to address the disproportionate and adverse “human health, environmental, climate-related and other

⁷⁵ 36 C.F.R. § 800.5(b), (d) (2024).

⁷⁶ Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994); Exec. Order No. 14,096, 88, Fed. Reg. 25251 (Apr. 21, 2023).

cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.”⁷⁷ 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. The term “environmental justice community” includes communities that have been historically marginalized and overburdened by pollution, including minority populations, low-income populations, or indigenous peoples.⁷⁸

79. Commission staff used *Promising Practices for EJ Methodologies in NEPA Reviews (Promising Practices)*,⁷⁹ which provides methodologies for conducting environmental justice analyses throughout the NEPA process for this project. Additionally, consistent with U.S. Environmental Protection Agency (EPA) recommendations, Commission staff used EPA’s Environmental Justice Screening and Mapping Tool (EJScreen) as an initial screening tool to better understand locations that require further review or additional information regarding minority and/or low-income populations; potential environmental quality issues; environmental and demographic indicators; and other important factors.⁸⁰

⁷⁷ Exec. Order No. 14,008, 86 Fed. Reg. 7619, 7629 (Jan. 27, 2021).

⁷⁸ 18 CFR § 380.2(f) (2024).

⁷⁹ EPA, *Promising Practices for EJ Methodologies in NEPA Reviews* (Mar. 2016) (*Promising Practices*), https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

⁸⁰ EPA, *Purposes and Uses of EJScreen* (Jan. 9, 2024), <https://www.epa.gov/ejscreen/purposes-and-uses-ejscreen> (“Screening is a useful first step in understanding or highlighting locations that may be candidates for further review.”).

80. Consistent with Council on Environmental Quality (CEQ)⁸¹ and EPA⁸² guidance and recommendations, the Commission's methodology for assessing environmental justice impacts considers: (1) whether environmental justice communities (e.g., minority or low-income populations)⁸³ exist in the project area; (2) whether impacts on environmental justice communities are disproportionate and adverse and also whether impacts would be significant; and (3) possible mitigation measures. As recommended in *Promising Practices*, the Commission uses the 50% and the meaningful greater analysis methods to identify minority populations.⁸⁴ Specifically, a minority population is present where either: (1) the aggregate minority population of the block groups in the affected area exceeds 50%; or (2) the aggregate minority population in the block group affected is 10% higher than the aggregate minority population percentage in the county.⁸⁵

⁸¹ CEQ, *Environmental Justice: Guidance Under the National Environmental Policy Act* (Dec. 1997) (CEQ's *Environmental Justice Guidance*), <https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf>. CEQ offers recommendations on how federal agencies can provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. There were multiple opportunities for public involvement during the Commission's environmental review processes. See e.g. Notice of Intent to File License Application, Pre-Application Document, and Scoping was published in the *Federal Register* on September 5, 2017. 82 Fed. Reg. 41943 (Sept. 5, 2017) (soliciting comments); Notice of Application, 87 Fed. Reg. 2780 (same); Notice of Settlement Agreement, 87 Fed. Reg. 48010 (Aug. 5, 2022) (same); Notice of Availability of the Draft EA, 88 Fed. Reg. 62557 (Sept. 12, 2023) (same); and Notice of Availability of final EA, 89 Fed. Reg. 23005 (Apr. 3, 2024) (same).

⁸² See generally *Promising Practices*.

⁸³ See generally Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994). Minority populations are those groups that include: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. CEQ's *Environmental Justice Guidance* at 25.

⁸⁴ See *Promising Practices* at 21-25.

⁸⁵ Here, Commission staff selected Oneida and Herkimer Counties, New York as the reference communities to ensure that affected environmental justice communities are properly identified. See final EA, Table 4 at D-4.

81. CEQ's *Environmental Justice Guidance* also directs low-income populations to be identified based on the annual statistical poverty thresholds from the U.S. Census Bureau. Using *Promising Practices*' low-income threshold criteria method, low-income populations are identified as block groups where the percent of a low-income population in the identified block group is equal to or greater than that of the county.

82. To identify potential environmental justice communities during preparation of the EA, Commission staff used 2021 U.S. Census American Community Survey data⁸⁶ for the race, ethnicity, and poverty data at the state, county, and block group level.⁸⁷ Once staff collected the block group level data, as discussed in further detail below, staff conducted an impacts analysis for the identified environmental justice communities; and evaluated health or environmental hazards, the natural physical environment, and associated social, economic, and cultural factors to determine whether impacts were disproportionate and adverse on environmental justice communities and also whether those impacts were significant.⁸⁸ Commission staff assessed whether impacts on an environmental justice community were disproportionate and adverse based on whether those impacts were predominately borne by that community, consistent with *Promising Practices*.⁸⁹ Identified environmental justice communities, project impacts, and proposed mitigation measures are discussed below.

⁸⁶ U.S. Census Bureau, American Community Survey 2021 ACS 5-Year Estimates Detailed Tables, File# B17017, Poverty Status in the Past 12 Months by Household Type by Age of Householder, <https://data.census.gov/cedsci/table?q=B17017>; File #B03002 Hispanic or Latino Origin By Race, <https://data.census.gov/cedsci/table?q=b03002>.

⁸⁷ For this project, Commission staff determined the appropriate unit of geographic analysis for assessing project impacts on environmental justice communities is a one-mile radius around the project boundary. This distance is sufficient considering the limited scope of the proposed relicensing, limited construction activities, and the concentration of project-related effects within the project boundary. *See* Appendix B at B-25.

⁸⁸ An agency may determine that impacts are disproportionate and adverse, but not significant within the meaning of NEPA and in other circumstances an agency may determine that an impact is *both* disproportionate and adverse and significant within the meaning of NEPA. *See Promising Practices* at 33.

⁸⁹ There are various approaches to determining whether an action will cause a disproportionate and adverse impact, and one recommended approach is to consider whether an impact would be "predominantly borne by minority populations or low-income populations." *See id.* at 44-46.

83. There were multiple opportunities for public involvement during the Commission's environmental review process as described above in the Background section.⁹⁰ No entity provided comments or recommendations regarding the effects of the project on environmental justice communities.

84. In the final EA, Commission staff identified 5 block groups within the geographic scope of analysis, of which 2 block groups exceeded the defined threshold for minority or low-income communities and are therefore environmental justice communities.⁹¹ The two environmental justice communities identified were Census Tract 0115.02 Block Group 1, abutting the north-northeastern edge of the reservoir, and Census Tract 0115.04 Block Group 1, encompassing a majority of the eastern shore and northeastern portion of the reservoir.⁹²

85. As described in the EA, the project would have a range of impacts on the environment and on individuals living in the vicinity of the facilities and modification areas, including environmental justice populations.⁹³ The final EA described that the noise, visual, and traffic impacts from construction at the NYPA Boat Launch and Scenic Overlook and the tailwater fishing area would be of short duration and scope on environmental justice community members who recreate in these areas.⁹⁴ The final EA further describes that environmental justice community members who utilize the NYPA Boat Launch and Scenic Overlook are anticipated to benefit from recreational improvements to the area.⁹⁵ The EA also described overall project benefits including improved water quality and trout production, including for anglers who are residents within the environmental justice communities.⁹⁶

86. As addressed in the EA, construction activities related to improvements for the NYPA Boat Launch and Scenic Overlook and tailwater fishing area would not take place

⁹⁰ *See supra* PP 4-8.

⁹¹ Final EA at 47, C-10.

⁹² *Id.* at C-10.

⁹³ *Id.* at 47-48.

⁹⁴ *Id.*

⁹⁵ *Id.* at 14, 47.

⁹⁶ *Id.* at 47.

in the identified environmental justice block groups.⁹⁷ The EA concluded that anticipated adverse impacts on environmental justice communities from construction activities related to the project would be less than significant because of the limited scope of the project, temporary construction timeframe, and activities taking place outside of environmental justice block groups.⁹⁸ Therefore, we find the project would not result in a disproportionate and adverse impact on identified environmental justice communities.

Recommendations of Federal and State Fish and Wildlife Agencies Pursuant To Section 10(j) of The FPA

87. Section 10(j)(1) of the FPA⁹⁹ requires the Commission, when issuing a license, to include conditions based on recommendations submitted by federal and state fish and wildlife agencies pursuant to the Fish and Wildlife Coordination Act,¹⁰⁰ to “adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)” affected by the project.

88. In response to the Commission’s January 12, 2022 notice that the project was ready for environmental analysis, Interior, on June 10, 2022, filed fish and wildlife recommendations for the project pursuant to section 10(j).¹⁰¹ Subsequent to that filing, as noted above, NYPA, Interior, and New York DEC executed the Settlement Agreement. In its comments on the Settlement Agreement, filed August 18, 2022, Interior states it fully endorses the Settlement Agreement and that the agreed-upon measures therein update its June 10, 2022 10(j) recommendations.

89. This license includes conditions consistent with all of Interior’s August 18, 2022 fish and wildlife recommendations, as follows: (1) operate the project using the daily reservoir outflows prescribed by the Canal Corporation in accordance with the 2012 Operating Diagram or as otherwise directed by the Canal Corporation, and ensure (when the project is operating in peaking mode) that the total daily average outflow from Hinckley reservoir is equal to that prescribed by the Operating Diagram (natural resource conditions 10-11 and 14 of the certification); (2) maintain a daily average outflow from Hinckley reservoir of 160 cfs on a year-round basis (natural resource conditions 12 and

⁹⁷ Appendix B at B-25; *see also* final EA, tbl.4 at D-4.

⁹⁸ Final EA at 48.

⁹⁹ 16 U.S.C. § 803(j)(1).

¹⁰⁰ 16 U.S.C. §§ 661 et seq.

¹⁰¹ *See* March 10, 2022, order extending response deadline.

15 of the certification; Article 402);¹⁰² (3) consult with and obtain written permission from New York DEC prior to conducting any construction-, maintenance-, or repair-related reservoir drawdowns and refills of Hinckley reservoir between October 1 and July 15, and ensure the reservoir is refilled to the proper water surface elevation (as determined by the Operating Diagram) by October 15 of each year (natural resource condition 13 of the certification; Article 403);¹⁰³ (4) implement the Water Quality Management Plan filed with the Settlement Agreement (natural resource condition 18 of the certification); (5) implement the Stream Flow and Water Level Monitoring Plan filed with the Settlement Agreement (natural resource condition 16 of the certification; Article 404); (6) implement the Invasive Species Management Plan filed with the Settlement Agreement (natural resource condition 19 of the certification); and (7) implement the Bald Eagle Protection Plan filed with the Settlement Agreement (natural resource condition 20 of the certification).

Section 10(a)(1) of The FPA

90. Section 10(a)(1) of the FPA¹⁰⁴ 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. Operation Compliance Monitoring

91. NYPA proposes to implement the Stream Flow and Water Level Monitoring Plan filed with the Settlement Agreement. In the final EA,¹⁰⁵ staff recommended that the Stream Flow and Water Level Monitoring Plan include provisions for monitoring any

¹⁰² Article 402 of this license requires the 160-cfs minimum flow to be released on a continual basis, which is more stringent than (and subsumes) Interior's 10(j) recommendation that the (160-cfs) minimum flow be provided as a daily average.

¹⁰³ Article 403 of this license requires consultation (regarding freshwater mussels) prior to *any* planned drawdowns of Hinckley reservoir, regardless of what time of year they occur; is therefore, more stringent than (and subsumes) Interior's 10(j) recommendation that such consultation only occur for drawdowns occurring during a certain portion of the year (i.e., from October 1 through July 15).

¹⁰⁴ 16 U.S.C. § 803(a)(1).

¹⁰⁵ Final EA at 29 – 30 & J-2.

continuous minimum flow(s) that could be required for the project, finding that the benefits would justify the cost. Article 404 of this license requires NYPA to prepare and file, for Commission review and approval, an operation compliance monitoring plan that includes the general flow monitoring and calculation methods in NYPA's Stream Flow and Water Level Monitoring Plan, but also includes provisions for documenting both compliance with the continuous (160-cfs) minimum flow required by Article 402 and flow deviations (from the 2012 Operating Diagram) directed by the Canal Corporation.

92. Generally, hydropower license orders require deviation reporting, in part, so that the Commission can ensure compliance with license requirements, including minimum flows, so that the Commission is aware of, and may address, any negative environmental effects from changes to project operation.¹⁰⁶ As to the Jarvis Project, negative environmental effects can occur regardless of whether fluctuations are directed by the Canal Corporation, are required for project maintenance and repairs, or are the result of weather events. In all instances, the Commission has an interest in monitoring changes to ensure ongoing license compliance.¹⁰⁷ If, for example, the flow deviations were above or below those required by the 2012 Operating Diagram for extended periods of time at the direction of the Canal Corporation, then the Commission would need to be aware of this to ensure environmental conditions at the project do not degrade and to consider requiring NYPA to take preventative measures if necessary. Moreover, if a stakeholder were to assert to the Commission that the licensee was not operating its project in accordance with its license, then such an allegation would be investigated by Commission staff to determine if a violation of the license occurred and the required information would be useful in this regard.¹⁰⁸ Without the reports specifying the time and duration of deviations directed by the Canal Corporation, the Commission would not be able to ensure compliance with the project license.

93. We emphasize that, beyond provisions for deviations contemplated here, future changes to the 2012 Operating Diagram must also be communicated to the Commission for review and approval prior to implementation.

¹⁰⁶ *N.Y. State Elec. & Gas Co.*, 185 FERC ¶ 61,129, at P 11 (2023) (citing *Simpson Paper (Vt.) Co.*, 71 FERC ¶ 61,314, at 62,220 (1995)).

¹⁰⁷ *Lester C. Reed v. Ga. Power Co.*, 97 FERC ¶ 61,175, at 61,817 (2001) ("The public interest is served by ensuring that the licensee complies with the terms of its license.").

¹⁰⁸ See *Simpson Paper (Vt.) Co.*, 71 FERC at 62,220 (explaining that a purpose of the operational reporting requirements is to provide the Commission with information concerning deviations to determine whether or not the event is a violation of the license).

B. Freshwater Mussel Protection

94. Citizens expressed concerns that the drawdowns of the reservoir led to stranded mussels.¹⁰⁹ Natural resource condition 13 of the certification requires NYPA to consult with, and obtain approval from, New York DEC prior to planned maintenance- or repair-related drawdowns of Hinckley reservoir expected to occur between October 1 and July 15, to protect freshwater mussels, hibernating amphibians and reptiles, and fish spawning. The certification does not require consultation for the period July 16 through September 30, which includes the biologically important fertilization period (August) for Eastern floater, a freshwater mussel species found in Hinckley reservoir.¹¹⁰ In the final EA,¹¹¹ staff recommended that consultation regarding the potential effects of planned project-related drawdowns of Hinckley reservoir on aquatic resources be conducted prior to *any* drawdown—regardless of what time of year it occurs—finding that the benefits, including the year-round protection of Eastern floater during planned drawdowns, justify the cost. Article 403 of this license requires NYPA to consult with FWS and New York DEC prior to each planned project-related drawdown of Hinckley reservoir; to provide the resource agencies with a drawdown and refill plan (prior to each drawdown) that contains information on the nature and extent of each planned drawdown to help the licensee and resource agencies collectively determine if the drawdown would require any mussel protection measures.

C. Recreation Resources

i. Recreation Management Plan

95. NYPA proposes the following recreation enhancements at the project as part of the Settlement Agreement and in accordance with natural resource condition 17 required by New York DEC's certification: (1) operate and maintain the two existing project recreation facilities (NYPA Scenic Overlook and Boat Launch); (2) replace an informational kiosk at the NYPA Boat Launch; (3) install and maintain improved directional signage at the NYPA Boat Launch and Scenic Overlook; and (4) design and install accessibility upgrades to the NYPA Boat Launch including improving the parking lot, adding accessible parking spaces, improving access routes to the boat launch areas, and constructing a floating dock that extends to elevation 1,213 feet (natural resource condition 17). In addition, NYPA proposes to enhance recreation at the NYPA Boat Launch by providing seasonal temporary restroom facilities (i.e. a portable toilet) and

¹⁰⁹ Citizens for Hinckley Lake November 12, 2024 Comments at 9-10.

¹¹⁰ *Id.* at 27 – 28 & J-2.

¹¹¹ *Id.* at J-2.

extending the NYPA Boat Launch ramp to elevation 1,205 feet that would be operable to elevation 1,208 feet.

96. Citizens argues that extending the NYPA Boat Launch ramp would not enhance recreation as there are limited opportunities for safe and enjoyable boating due to low reservoir levels.¹¹² Citizens also expresses concern about hazards to recreational navigation within the reservoir, initially stating that NYPA must develop a plan for removing large debris in the reservoir,¹¹³ and recommends that NYPA install a buoy system to notify the public of hazards to navigation (e.g., rocks and sandbars).¹¹⁴ Citizens also states that extending the boat launch will not improve usage when the boat launch is “swallowed up by muck” and is difficult to drive across because the lakebed is flat in that area.¹¹⁵

97. In the final EA, staff determined that operation of the NYPA Scenic Overlook and Boat Launch, NYPA’s proposed improvements to signage, and the addition of temporary toilet facilities would enhance public recreation.¹¹⁶ In addition, extending the NYPA Boat Launch ramp to elevation 1,205 feet would allow it to operate down to elevation 1,208 feet and would provide visitors with approximately 33 days of additional use between May through October.¹¹⁷ Further, adding information regarding known boating hazards to the information kiosk at the NYPA Boat Launch would benefit public safety.¹¹⁸ The proposed accessibility improvements would provide all recreation users with an accessible floating platform and accessible parking, as well as improved access routes. Per Article 407, Citizens, as an interested stakeholder, may consult with NYPA on the development of the Recreation Management Plan to address its concerns and suggest improvements to the operation of the extended boat launch. The final EA also

¹¹² Citizens for Hinckley Lake August 11, 2022 Comments at 2; *see also* Citizens for Hinckley Lake November 12, 2024 Comments at 4-5.

¹¹³ Citizens for Hinckley Lake August 11, 2022 Comments at 2.

¹¹⁴ Citizens for Hinckley Lake October 19, 2023 Comments at 6-7.

¹¹⁵ Citizens for Hinckley Lake November 12, 2024 Comments at 4.

¹¹⁶ Final EA at J-3 – J-4.

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 37 & O-10.

concluded that the benefits of these improvements would justify the levelized annual cost of \$24,813 and we agree.

98. Citizens argues that the Commission is using inaccurate water level data in its analyses, conflating the operating regimes under the 1920 and 2012 Operating Diagrams, and ignores repeated deviations under the 2012 Operating Diagram.¹¹⁹ Citizens requests the Commission require NYPA to maintain guaranteed water levels throughout the spring, summer, and fall to help improve recreational uses of Hinkley reservoir.¹²⁰

99. In the final EA, Commission staff revised the draft EA to update the data Citizens believed was inaccurate.¹²¹ Staff found that the updated data is reasonably representative of the conditions present under the 2012 Operating Diagram, including deviations.¹²² Attempting to extrapolate reservoir levels based on excluding actual deviation flows would be of limited utility, because it would be too speculative to use as the basis for a reasonable conclusion. Staff also analyzed Citizens' proposed target water levels and found that the proposal would not provide any additional recreational user days at the project's boat launch or day use area.¹²³ Staff concluded that maintaining the suggested reservoir levels would provide some benefit to private dock owners but would not provide significant recreational opportunities to the public recreation areas, and therefore declined to recommend Citizens' proposal.¹²⁴

100. NYPA did not propose a recreation management plan; however, in its comments on the draft EA, NYPA stated that it did not oppose a recreation management plan. In the final EA, staff stated that a recreation management plan would be a comprehensive document that provides a framework for understanding how the project's recreational

¹¹⁹ Citizens for Hinckley Lake October 19, 2023 Comments at 5; *see also* Citizens for Hinckley Lake November 12, 2024 Comments at 2-4.

¹²⁰ Citizens for Hinckley Lake November 12, 2024 Comments at 2-5. Specifically, Citizens requests that reservoir levels be at or above 1,220 feet in April, May, and June; at or above 1,218 feet in July and August; at or above 1,216 feet for September; and at or above 1,215 feet through Columbus Day weekend every year. *Id.* at 3.

¹²¹ *Id.* at O-7.

¹²² *Id.*

¹²³ *Id.* at O-8.

¹²⁴ *Id.*

resources would be developed and managed throughout a license term.¹²⁵ Staff concluded that such a plan would be helpful to both NYPA and stakeholders to guide the development and management of recreational facilities and operations and avoid misunderstandings and would result in minimal additional cost to the project and we agree.

101. Article 407 requires the licensee to develop a recreation management plan in consultation with FWS, New York DEC, and Citizens that incorporates provisions for an inventory of project recreational facilities, a description of management and operating schedules, measures to enhance accessibility and to inform boaters of known boating hazards at the NYPA Boat Launch, and provisions for monitoring and consulting with parties over the term of any license issued.

ii. Tailwater Fishing Area

102. An informal tailwater fishing area is located downstream of the Jarvis Project outside of the Jarvis Project boundary and provides fishing access to the Jarvis tailrace. In the final EA,¹²⁶ staff noted that while fishing occurs at the site under current project operation, there were no facilities such as trash cans, restrooms, or signage. Staff concluded that maintaining the informal fishing area and installing signage and trash receptacles and formalizing a path from an existing parking area to the edge of the shore would reduce erosion along the embankment and provide an enhanced recreational experience at the tailwater fishing area. In addition, staff concluded that fishing conditions in the tailwater area would likely be enhanced under NYPA's proposed operation due to improved dissolved oxygen concentrations released from gate 4. Because the tailwater fishing area provides a public benefit attributable to the Jarvis Project that is likely to be enhanced under NYPA's proposed operation, the tailwater fishing area should be a Jarvis Project recreation facility and enclosed in the project boundary. The final EA also concluded that the benefits of these improvements would justify the levelized annual cost of \$2,993. Therefore, staff recommended it, and we agree.

103. The tailwater fishing area is on land owned by Erie, although it is not within the downstream West Canada Creek Project boundary. Because NYPA does not have rights to the land occupied by the tailwater fishing area, it will need to acquire rights from Erie. Therefore, Article 407 requires that the recreation management plan include provisions for improvements to the tailwater fishing area below the Jarvis Project tailrace, including installing signage, installing trash receptacles, and formalizing one of the three existing

¹²⁵ *Id.* at J-4 – J-5.

¹²⁶ *Id.*

pathways from the parking area to the fishing area by reducing the incline, upgrading the tread, and revegetating the other pathways. The plan must be developed in consultation with Erie, FWS, New York DEC, and Citizens.

D. State-Listed Species

104. Citizens commented on the draft EA that the current project operations harm common loon populations at Hinckley reservoir.¹²⁷ Citizens argues that frequent and extended project-related water level fluctuations affect wetlands within the reservoir and affect the ability of common loons to nest within the reservoir.¹²⁸

105. In the final EA, staff analyzed the potential effects of project operation on common loon populations.¹²⁹ Staff noted that large water level fluctuations during peak nesting periods may result in increased nest flooding, stranding, or predation.¹³⁰ Nesting common loons are able to respond to smaller or gradual increases in water levels, such as those that occur with the Jarvis project's peaking operations.¹³¹ Staff found that large, gradual changes in water levels would occur due to the 2012 Operating Diagram regardless of the operation of the Jarvis Project, and concluded that it is unlikely that common loons are significantly affected by the continued operation of the project.¹³²

Project Boundary

106. Project boundaries enclose the project works that are to be licensed and 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."¹³³

¹²⁷ Citizens for Hinckley Lake October 19, 2023 Comments at 3. *See also* Citizens for Hinckley Lake November 12, 2024 Comments at 3.

¹²⁸ Citizens for Hinckley Lake October 19, 2023 Comments at 3.

¹²⁹ Final EA at 32-33.

¹³⁰ *Id.* at 33.

¹³¹ *Id.*

¹³² *Id.*

¹³³ 18 C.F.R. § 4.41(h)(2) (2024).

107. NYPA proposes to modify the project boundary to include the following existing facilities and roads necessary for operation and maintenance of the project: (1) the NYPA Boat Launch parking area; (2) the access road leading from State Route 365 to the powerhouse; and (3) the project interconnection point at the switchyard north of State Route 365. In the final EA, staff addressed NYPA's objection¹³⁴ to incorporating the tailwater fishing area,¹³⁵ and concluded that including this land within the project boundary would ensure that facilities and land necessary for project operation and maintenance are recognized as project features and managed under a new license.¹³⁶ In addition, staff concluded that including the land associated with the tailwater fishing area within the project boundary would ensure that facilities and land necessary for project purposes (i.e., recreation) are recognized as project features and managed under a new license.¹³⁷

108. Article 205 requires NYPA to file a revised Exhibit G drawing that describes and shows the facilities as built, including the 0.12-acre tailwater fishing area.

Administrative Provisions

A. Annual Charges

109. The Commission collects annual charges from licensees for administration of the FPA and to compensate for the use and occupancy of federal lands. Article 201 provides for the collection of funds for administration of the FPA.

B. Reservation of Authority to Require Financial Assurance Measures

110. 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. Headwater Benefits

111. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 203 requires the

¹³⁴ NYPA October 23, 2023 Comments at 7.

¹³⁵ Final EA at 38-39.

¹³⁶ *Id.* at 38-39, J-5.

¹³⁷ *Id.*

licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

D. Exhibit F and G Drawings

112. The Commission requires licensees to file sets of approved project drawings in electronic file format. Ordering Paragraph (C) approves Exhibit F, and Article 204 requires the filing of these drawings in electronic format.

113. The project boundary in Exhibit G filed on July 31, 2020, shows NYPA's proposed boundary, including its proposed boundary modification to enclose the NYPA Boat Launch parking area, the access road leading from State Route 365 to the powerhouse, and the project interconnection point at the switchyard. However, the proposed boundary in Exhibit G does not include the tailwater fishing area recommended by staff. Article 205 requires the filing of a revised Exhibit G drawing with a project boundary that encloses the tailwater fishing area.

E. As-Built Exhibits

114. Where new construction or modifications to the project are involved (e.g., improvement of recreation facilities), the Commission requires licensees to file revised exhibits of project features as built. Article 206 provides for the filing of these drawings.

F. Project Land Rights Progress Report

115. Standard Article 5 set forth in Form L-10 requires NYPA to 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 maintenance and operation of the project, within five years. To monitor compliance with Article 5, Article 207 requires NYPA to file no later than four years after the effective date of the license, a report detailing its progress in acquiring title in fee or the necessary rights to all lands within the project boundary, including the tailwater fishing area. The report must include specific documentation on the status of the rights that have been acquired as of the filing date of the progress report, and a plan and schedule to acquire all remaining rights prior to the five-year deadline.

G. Final Design Documents

116. Article 301 requires the licensee to provide the Commission's Division of Dam Safety and Inspections (D2SI) – New York Regional Engineer with final plans and specifications, a supporting design report, a Quality Control and Inspection Program, a Temporary Construction Emergency Action Plan, and a Soil Erosion and Sediment Control Plan consistent with the Commission's engineering guidelines.

H. Cofferdam and Deep Excavation Construction Drawings

117. Article 302 requires the licensee to provide the Commission's D2SI – New York Regional Engineer with cofferdam or deep excavation construction drawings.

I. Modification of Project Facilities

118. Article 303 requires the licensee to coordinate any modifications that would affect project works or operation resulting from environmental requirements with the Commission's D2SI – New York Regional Engineer.

J. Use and Occupancy of Project Lands and Waters

119. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 410 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands 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.

K. Change of Project Name

120. On July 1, 2020, NYPA filed a request to change the project name to "Gregory B. Jarvis Power Project."

121. The project name change does not require our approval. However, the licensee should ensure that all references to the "Hinckley Hydroelectric Project" are changed, including but not limited to, the project's Part 8 signs, any safety signs with the project name on it, and any other directional signs. The new project name "Gregory B. Jarvis Power Project" should be used in reference to this project. Therefore, Article 208 requires the licensee to change project signage to reflect the new project name.

State and Federal Comprehensive Plans

122. Section 10(a)(2)(A) of the FPA¹³⁸ 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.¹³⁹ Under

¹³⁸ 16 U.S.C. § 803(a)(2)(A).

¹³⁹ Comprehensive plans are defined at 18 C.F.R. § 2.19 (2024).

section 10(a)(2)(A), Commission staff identified 9 comprehensive plans that are relevant to this project.¹⁴⁰ No conflicts were found.

Applicant's Plans and Capabilities

123. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,¹⁴¹ Commission staff evaluated NYPA's record as licensee with respect to the following: (A) conservation efforts; (B) compliance history and ability to comply with a new license; (C) safe management, operation, and maintenance of the project; (D) ability to provide efficient and reliable electric service; (E) need for power; (F) transmission services; (G) cost-effectiveness of plans; and (H) actions affecting the public. This order accepts staff's findings in each of the following areas.

A. Conservation Efforts

124. Section 10(a)(2)(C) of the FPA¹⁴² requires the Commission to consider the electricity consumption efficiency improvement program of the applicant, 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. Section 16.10 of the Commission's regulations requires an applicant for a new license to include in its application a discussion of its record in encouraging energy conservation.¹⁴³ NYPA sells all project power to National Grid, an electric utility. Given the limits of its ability to influence users of the electricity generated by the project, NYPA will operate the project in a manner that is consistent with section 10(a)(2)(C) of the FPA.

B. Compliance History and Ability to Comply with the New License

125. Based on a review of NYPA's compliance with the terms and conditions of the existing license, NYPA's overall record of making timely filings and compliance with its license is generally satisfactory. Therefore, NYPA can satisfy the conditions of a new license.

¹⁴⁰ The list of applicable plans can be found in section 5.4 of the final EA.

¹⁴¹ 16 U.S.C. §§ 803(a)(2)(C), 808(a).

¹⁴² *Id.* § 803(a)(2)(C).

¹⁴³ *See* 18 C.F.R. § 16.10 (2024).

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

126. Commission staff reviewed NYPA's record of management, operation, and maintenance of the Jarvis Project pursuant to the requirements of 18 C.F.R. pt. 12 of the Commission's Regulations and the most recent dam safety inspection report. Staff concludes that the dam and other project works are safe, and that there is no reason to believe that NYPA cannot continue to safely manage, operate, and maintain these facilities under a new license.

D. Ability to Provide Efficient and Reliable Electrical Service

127. Commission staff reviewed NYPA's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Staff's review indicates that NYPA maintains formal procedures for assuring satisfactory operation of the generating units and associated equipment to ensure they continue to perform in an optimal manner and to minimize effects on energy production. Therefore, NYPA is capable of operating the project to provide efficient and reliable electric service in the future.

E. Need for Power

128. To assess the need for power, staff looked at the needs in the operating region in which the project is located. The Jarvis Project is in the Northeast Power Coordinating Council (NPCC) – New York region of the North American Electric Reliability Corporation (NERC) and serves the region by providing 9 MW of capacity for local and regional power demand.

129. NERC annually forecasts electrical supply and demand nationally and regionally for a 10-year period. According to NERC's 2023 long-term reliability assessment report, annual peak demand in the NPCC-New York region is expected to range between 32,280 MW to 33,520 MW over the period of 2024 to 2033. During this same period, the anticipated reserve capacity margin (generating capacity in excess of demand) in the region is projected to range between 15.2% to 21.0% for peak demand. Although anticipated capacity margins would be above the target margin level of 15%, the project's power will continue to help maintain the stability of the power system and contribute to a diversified generation mix.

F. Transmission Services

130. Power from the project generators is transmitted by two underground 50-foot-long, 4.16-kilovolt (kV) generator leads to a 4.16/46-kV step-up transformer where project power is stepped up and transmitted via an underground 46-kV transmission line to a switchyard where power is transmitted to the distribution network

owned by National Grid. NYPA is proposing no changes that would affect its own or other transmission services in the region.

G. Cost Effectiveness of Plans

131. NYPA proposes environmental measures for the protection of fish and wildlife and enhancement of recreation resources at the project. Based on NYPA's record as the existing licensee, these plans are likely to be carried out in a cost-effective manner.

H. Actions Affecting the Public

132. NYPA provided opportunity for public involvement in the development of its application for a new license for the Jarvis Project. In addition to helping to meet regional power needs, NYPA provides recreation opportunities to the public such as a boat launch and scenic overlook facility.

Project Economics

133. In determining whether to issue a new 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 Corporation, Publishing Paper Division*,¹⁴⁴ 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.

134. In applying this analysis to the Jarvis Project, Commission staff considered three options: a no-action alternative, NYPA's proposal, and the project as licensed herein.¹⁴⁵ Under the no-action alternative, the project would continue to operate as it does now.

¹⁴⁴ 72 FERC ¶ 61,027 (1995).

¹⁴⁵ Details of staff's economic analysis for the project, as licensed herein and for the other two alternatives, are included in section 4.0 of the EA. All costs were escalated to 2024 dollars.

The project has an installed capacity of 9 MW, a capacity benefit of 5.2 MW,¹⁴⁶ and generates an average of 28,863 megawatt-hours (MWh) of electricity annually. The average annual project cost is about \$4,506,380, or \$156.13/MWh. When the estimate of average generation is multiplied by the alternative source of power's cost of \$82.33/MWh,¹⁴⁷ the alternative source of power's annual cost is \$2,376,291 in 2024 dollars. 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 \$2,130,089, or \$73.80/MWh, more to produce the same amount of power as the likely alternative source of power.

135. As proposed by NYPA, the levelized annual cost of operating the project is \$4,863,236 or \$209.55/MWh. The proposed project would generate an average of 23,208 MWh of energy annually and have a capacity benefit of 5.2 MW. When the estimate of average generation is multiplied by the alternative source of power's cost of \$90.19/MWh, the alternative source of power's annual cost is \$2,093,130, in 2024 dollars. Therefore, in the first year of operation, the project would cost \$2,770,107, or \$119.36/MWh, more to produce the same amount of power as the likely alternative source of power.

136. As licensed herein, the levelized annual cost of operating the project is \$5,016,641, or \$216.16/MWh. The proposed project would generate 23,208 MWh of energy annually and have a capacity benefit of 5.2 MW. When the estimate of average generation is multiplied by the alternative source of power's cost of \$90.19/MWh, the alternative source of power's annual cost is \$2,093,130, in 2024 dollars. Therefore, in the first year of operation, the project would cost \$2,923,512, or \$125.97/MWh, more to produce the same amount of power as the likely alternative source of power.

137. In considering public interest factors, the Commission takes into account that hydroelectric projects 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

¹⁴⁶ 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.

¹⁴⁷ The energy portion of the power cost (\$50.07/MWh of the \$82.33/MWh) is based on natural gas energy prices from the *Annual Energy Outlook 2023* published by the Energy Information Administration in March 2023. The capacity portion of the power cost is based on the annual cost of the hydro-equivalent natural gas-fired combined-cycle capacity, which staff estimated to be about \$179.08/kilowatt-year.

blackout by providing a source of power to help restart fossil-fuel based generating stations and put them back online.

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

139. Although the analysis does not explicitly account for the effects inflation may have on the future cost of electricity, the fact that hydropower generation is relatively insensitive to fuel costs and associated inflationary pressures 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 or not, and under what conditions, to issue a license.

Comprehensive Development

140. Sections 4(e) and 10(a)(1) of the FPA¹⁴⁸ 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.

141. 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 Jarvis Project, as described in this order, would 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.

142. Based on our independent review and evaluation of the Jarvis Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the final EA, the project as licensed herein is selected and found to be best adapted to a comprehensive plan for improving or developing West Canada Creek.

¹⁴⁸ 16 U.S.C. §§ 797(e), 803(a)(1).

143. This alternative is selected because: (1) issuing a new 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, recreation, and cultural resources; and (3) the 9 MW of electric capacity comes from a renewable resource that does not contribute to atmospheric pollution.

License Term

144. On October 19, 2017, the Commission established a 40-year default license term policy for licenses, effective as of October 26, 2017.¹⁴⁹ The 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 new license.

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

The Commission orders:

(A) This license is issued to the Power Authority of the State of New York (licensee), for a period of 40 years, effective the first day of the month in which this order is issued, to operate and maintain the Gregory B. Jarvis Power 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) 570-foot-long north and 2,600-foot-long south embankment dams with maximum heights of 53 feet and crest widths of 11 feet; (2) a 400-foot-long ogee-type, cyclopean concrete spillway with a maximum height of 83 feet and a crest elevation of 1,225 feet;¹⁵⁰ (3) an impoundment with a gross storage capacity

¹⁴⁹ *Pol'y Statement on Establishing License Terms for Hydroelectric Projects*, 161 FERC ¶ 61,078 (2017) (Policy Statement); 82 Fed. Reg. 49,501 (Oct. 26, 2017).

¹⁵⁰ All elevations for the project are referenced to the Barge Canal Datum (BCD). BCD elevations are 1.04 feet higher than elevations referenced to the National Geodetic

of approximately 77,029 acre-feet and a surface area of 2,709 acres at a normal pool elevation of 1,225 feet; (4) a 65-foot-long, 82-foot-high non-overflow concrete intake structure with trash racks with a clear spacing of 5.375 inches; (5) a 15-foot-diameter penstock that bifurcates into two 90-foot-long, 10.5-foot-diameter penstocks; (6) a 120-foot-long, 55-foot-wide, 43-foot-high semi-underground powerhouse located 200 feet downstream of the non-overflow intake structure; (7) two 4.5-megawatt horizontal Kaplan turbine-generator units; (8) a 60-inch-diameter water pipe with trash racks with a clear spacing of 3.5 inches and used as a low-level outlet; (9) a 280-foot-long tailrace; (10) two 4.16-kilovolt (kV) generator leads routed 50 feet underground to an aboveground 4.16-kV/46-kV step-up transformer; (11) an approximately 200-foot-long, 46-kV underground transmission line; and (12) appurtenant facilities.

(1) All lands to the extent of the licensee's interests in these lands, described in the project description and the project boundary discussion of this order.

(2) Project works consisting of:

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

Exhibit A: Exhibit A filed on July 31, 2020.

Exhibit F: The following Exhibit F drawings filed on July 31, 2020:

Exhibit No.	FERC Drawing No.	Drawing Title
F-1	P-3211-1001	Dam Plan
F-2	P-3211-1002	Dam Profile
F-3	P-3211-1003	Dam Sections
F-4	P-3211-1004	Intake Works
F-5	P-3211-1005	Powerhouse Plan and Section

Vertical Datum (NGVD 29); thus, the noted crest elevation of 1,225.0 feet BCD = 1,223.96 feet NGVD 29.

(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 Exhibits A and F described above are approved and made part of the license. The Exhibit G drawing filed as part of the application for license does not conform to Commission regulations and is not approved.

(D) The license is subject to the conditions submitted by the New York State 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 B to this order.

(E) This license is subject to the articles set forth in Form L-10 (October 1975), entitled, "Terms and Conditions of License for Constructed Major Project Affecting The Interests of Interstate or Foreign Commerce" (*see* 54 F.P.C. 1799 *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 the 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 9 megawatts.

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. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee must reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license. The benefits will be assessed in accordance with Part 11, Subpart B, of the Commission's regulations.

Article 204. Exhibit F Drawings. Within 45 days of the issuance date of this order, 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-3211-1001 through P-3211-1005) 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 CFR § 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, Filename Title, date of this order, and file extension in the following format [P-3211-1001, F-1, Dam Plan, MM-DD-YYYY.TIF]. All digital images of the exhibit drawings must meet the following format specification:

IMAGERY:	black & 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 the issuance date of this license, the licensee must file, for Commission approval, a revised Exhibit G drawing with a project boundary that encloses the tailwater fishing area. The Exhibit G drawing must comply with sections 4.39 and 4.51(h) of the Commission's regulations.

Article 206. As-built Exhibits. Within 90 days of completion of construction of the facilities authorized by this license, the licensee must file for Commission approval, revised Exhibits A, F, and G, as applicable, to describe and show those project facilities as built. If the licensee determines the previously approved exhibits reflect the as-built facilities and no revisions are necessary, the licensee must file a letter stating the approved exhibits reflect the as-built project facilities.

Article 207. Project Land Rights Progress Report. No later than four years after license issuance, the licensee must file a report with the Commission describing the status of acquiring title in fee or the rights for the rights needed to operate the project and to comply with the terms of the license for all lands within the project boundary. The report must provide an overview map of each parcel and summary table identifying the licensee's rights over each parcel within the project boundary. The report must also include specific supporting documentation showing the status of the land rights on all parcels of land within the project boundary that: (1) have been acquired up to the date of filing the report, including pertinent deeds, lease agreements, and/or bill of sale information that specifically verify the licensee's rights; and (2) the licensee's plan and

schedule for acquiring rights to all remaining project lands prior to the five-year deadline specified in Standard Article 5, including a history of actions taken, current owner information, the type of rights to be acquired whether in fee or by easement, and the timeline for completing property acquisition.

Article 208. *Project Signage.* Within six months of license issuance, the licensee must change all references to the “Hinckley Hydroelectric Project,” including but not limited to, the project’s Part 8 signs, any safety signs with the project name on it, and any other directional signs. All signage should reflect the new project name “Gregory B. Jarvis Power Project.”

Article 301. *Final Design Documents.* At least 60 days prior to the start of any construction, the licensee must file final design documents with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – New York Regional Engineer. The design documents must include: final plans and specifications, a supporting design report, a Quality Control and Inspection Program, a Temporary Construction Emergency Action Plan, and a Soil Erosion and Sediment Control Plan. The licensee may not begin construction until the D2SI – New York Regional Engineer has reviewed and commented on the documents, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

Article 302. *Cofferdam and Deep Excavation Construction Drawings.* Should construction require cofferdams or deep excavations, the licensee must: (1) have a Professional Engineer who is independent from the construction contractor, review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction; and (2) ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days before starting construction of any cofferdams or deep excavations, the licensee must file the approved cofferdam and deep excavation construction drawings and specifications, and the letters of approval with the Commission by eFiling to the Division of Dam Safety and Inspections (D2SI) – New York Regional Engineer.

Article 303. *Project Modification Resulting from Environmental Requirements.* If environmental requirements under this license require modification 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. *Filing of Amendment Applications.*

The New York State Department of Environmental Conservation’s (New York DEC) section 401 water quality certification (certification) (Appendix B) requires the

licensee to implement the following plans that were filed with the Offer of Settlement on July 25, 2022:

New York DEC Certification Condition No.	Plan Name
18	Water Quality Management Plan
19	Invasive Species Management Plan
20	Bald Eagle Protection Plan

The above plans are approved and made part of the license. Upon license issuance, the licensee must implement the plans. If the licensee wishes to modify any of the above plans, it must file, with the Commission, 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. Minimum flow. The licensee must release, at all times, a continuous minimum flow of 160 cubic feet per second (cfs) from the Jarvis Project. During the navigation season, the licensee must release a continuous minimum flow that is no less than the sum of 160 cfs, plus the amount of flow needed for diversion by the New York State Canal Corporation (at the Nine Mile Creek Feeder dam), for navigation purposes. The minimum flow must be provided via the powerhouse, sluice gate 4, the penstock bypass valve, spill over the dam, or any combination thereof.

Planned Deviations

The minimum flow requirements of this license may be temporarily modified for periods of up to three weeks, after mutual agreement between the licensee and the New York State Department of Environmental Conservation and the U.S. Fish and Wildlife Service (resource agencies, collectively); or as otherwise directed by the New York State Canal Corporation under Condition 15 of this license's water quality certification. After concurrence from the resource agencies, the licensee must file a report with the Secretary of the Commission as soon as possible, but no later than 14 calendar days after the onset of the planned deviation. Each report must include: (1) the reasons for the deviation and how project operation was modified; (2) the duration and magnitude of the deviation; (3) any observed or reported environmental effects; and (4) documentation of consultation with the resource agencies. For planned deviations exceeding three weeks, the licensee must file an application for a temporary amendment

of the operational requirements of this license and receive Commission approval prior to implementation.

Unplanned Deviations

The above minimum flow requirements may be temporarily modified if required by operating emergencies beyond the control of the licensee (i.e., unplanned deviations).

For any unplanned deviation that lasts longer than three hours or results in observed or reported environmental effects such as a fish kill, a turbidity plume, bank erosion, or downstream flooding, the licensee must file a report as soon as possible with the resource agencies, and with the Commission no later than 14 calendar 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 (7) where applicable, a description of measures implemented to prevent similar deviations in the future.

For unplanned deviations lasting three hours or less that do not result in observed or reported environmental effects, the licensee must file an annual report by January 31 of each year, describing each incident up to one month prior to the reporting date, including: (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; and (6) a description of measures implemented to prevent similar deviations in the future.

Article 403. Freshwater Mussel Protection. Prior to any planned project-related drawdown of the Jarvis Project's Hinckley reservoir, the licensee must consult with the New York State Department of Environmental Conservation (New York DEC) and the U.S. Fish and Wildlife Service (collectively, resource agencies), to determine if mussel protection measures are needed for the drawdown. At least 30 days prior to the planned drawdown, the licensee must provide the resource agencies with a drawdown and refill plan containing information on the nature and extent of each planned drawdown to help the licensee and the resource agencies collectively determine if the drawdown would require any mussel protection measures, such as the further monitoring of potentially affected areas, the re-location or salvage of freshwater mussels, or the return of stranded fish back to adequate water depths. Consistent with natural resource condition 13 of Appendix B, the licensee must conduct reservoir drawdown and refill activities at a gradual rate (with the specific values based on consultation) and refill Hinckley reservoir to its proper water surface elevation [as determined by the New York State Canal

Corporation (Canal Corporation)], by October 15, unless otherwise agreed upon by the New York DEC or as directed by the Canal Corporation. Within 60 days of completing any project-related planned drawdowns of Hinckley reservoir, a reservoir drawdown report must be filed with the Commission that summarizes the consultation process as well as any measures implemented at the project for the protection of freshwater mussels. Any changes to project operation or licensed project facilities (e.g., to accommodate or provide mussel protection measures) must be approved by the Commission before being implemented.

Article 404. Operation Compliance Monitoring. Within 15 months of license issuance, the licensee must file, for Commission approval, an operation compliance monitoring plan that describes how the licensee will document compliance with the operational requirements of this license. The plan must include the general flow monitoring and calculation methods of the Stream Flow and Water Level Monitoring Plan required by Condition 16 of Appendix B, and also include, but not necessarily be limited to, the following:

(1) a detailed description of how the licensee will document compliance with the operational requirements of this license, including the continuous minimum flow required by Article 401;

(2) the protocols or methods to be used for reporting monitoring data to the Commission;

(3) procedures for reporting to the Commission, on an annual basis, the dates of the navigation season on the Erie Canal no later than 30 days after the dates are determined by the New York State Canal Corporation; and

(4) procedures for reporting to the Commission, on an annual basis, the dates (if any) during which the New York State Canal Corporation directed the Power Authority of the State of New York to make daily releases made from Hinckley dam that were higher or lower than those required by the 2012 Operating Diagram (condition 10 of Appendix B).

The licensee must prepare the plan after consultation with the New York State Department of Environmental Conservation and the U.S. Fish and Wildlife Service (collectively, resource 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 resource 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 resource 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 plan is approved by the Commission. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

Article 405. *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 406. *Northern Long-Eared Bat Protection.* The licensee must only remove trees on project land equal to or greater than 3 inches diameter at breast height or conduct tree-trimming during the November 1 through March 31 period to prevent disturbing northern long-eared bats. Tree removal during the April 1 through October 31 period is not prohibited if the removal is necessary to ensure public or project safety (e.g., removing dead fall trees). If trees are removed during this time period on an emergency basis, the licensee must notify the U.S. Fish and Wildlife Service within two business days of the unplanned safety/emergency action and provide details of the action and response.

Article 407. *Recreation Management Plan.* Within 9 months of license issuance, the licensee must file, for Commission approval, a recreation management plan that includes, in addition to the provisions of Condition 17 of Appendix B and at a minimum:

(1) A description of the following project recreation facilities: boat launch, scenic overlook, and tailwater fishing area.

(2) A description of the operation and maintenance schedule for the project recreation facilities, including, but not necessarily limited to: (a) the operating season; (b) hours of operation; (c) annual and lifecycle maintenance; (d) trash removal; (e) licensee's seasonal installation and removal of restrooms at the project's boat launch; and (f) concessionaire operations at the project's boat launch.

(3) A discussion of how the needs of persons with disabilities were considered in the planning and design of all recreation facility improvements.

(4) In accordance with Condition 17 of Appendix B, a provision for the licensee to replace the informational kiosk at the boat launch and install and maintain improved directional signage at the boat launch and scenic overlook, including one sign north of

each site and one sign south of each site along New York State Route 365 to indicate the sites' locations ahead (signage at the informational kiosk must comply with FERC's recreational signage requirements at 18 C.F.R § 8.2) within 12 months of license issuance.

(5) A provision for the licensee to extend, within 12 months of license issuance, the project's boat ramp to elevation 1,205 feet.

(6) A provision to inform boaters of known boating hazards in Hinckley reservoir (e.g., posting information about the location of known boating hazards at the informational kiosk, deploying buoys at known boating hazards, etc.).

(7) Provisions for at a minimum, the following improvements to the tailwater fishing area: the installation of signage that complies with 18 C.F.R. §8.2, installation of trash receptacles, and improvements to one pathway from the parking area to the fishing area, including reducing the incline, upgrading the tread, and revegetating the other pathways.

(8) In accordance with Condition 17 required by the New York DEC certification, a provision for the licensee to design and install accessibility upgrades to the boat launch, including improvements to the existing boat launch parking lot (e.g., replacing deteriorated pavement, sealing cracks in the asphalt, etc.), the addition of two accessible parking spaces, a floating boat dock that will extend out to elevation 1,213 feet, and improved, accessible access routes (e.g., stable, firm, and slip resistant access ways) to a cartop launch area and the boat ramp within 24 months of license issuance.

(9) A provision describing how the licensee will monitor recreation use (including methods to be used) and filing a report with the Commission every 10 years on April 1, beginning 10 years after license issuance and continuing throughout the license term. The report must include an evaluation of the adequacy of existing recreation facilities, whether changes are warranted to address existing and projected future recreation needs, and a description of the methods used to determine existing and future needs.

The licensee must prepare the recreation management plan after consultation with U.S. Fish and Wildlife Service, New York DEC, Citizens for Hinckley Lake, and other interested stakeholders. 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 consulted entities, and specific descriptions of how the consulted entities' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the consulted entities 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 plan is approved by the Commission. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission. The plan may not be amended without prior Commission approval.

Within 90 days of completion of each recreational enhancement required by the recreation management plan, the licensee must file with the Commission a report documenting the completed recreational site. The documentation must show the completed recreation site including all constructed facilities. The documentation may include photographs, aerial photographs, drawings that reflect the as-built condition, or other methods, provided that the documentation clearly demonstrates the recreation site has been constructed in substantial conformity as required. The report must also include confirmation that the required recreation site, including all project recreation facilities and amenities, are located inside the project boundary. If any new recreation facilities are located outside the project boundary, the report must include a plan and schedule for filing revised Exhibit G drawings to incorporate the recreation facilities, including access roads, inside the project boundary. The licensee must operate and maintain the required recreation facilities for the term of this license.

Article 408. Protection of Cultural Resources. Prior to implementing any project modifications not specifically authorized by this license, including, but not limited to, maintenance activities, land-clearing or land-disturbing activities, or changes to project operation or facilities, the licensee must consult with the New York State Historic Preservation Office (New York SHPO) and New York State Canal Corporation (Canal Corporation) to determine the effects of the activities and the need for any cultural resource studies or measures. If no studies or measures are needed, the licensee must file with the Commission documentation of its consultation with the New York SHPO and Canal Corporation.

If a project modification is determined to affect a historic property, the licensee must file, for Commission approval, a historic properties management plan (HPMP) prepared by a qualified cultural resource specialist after consultation with the New York SHPO. In developing the HPMP, the licensee must use the Advisory Council on Historic Preservation and the Commission's *Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects*, dated May 20, 2002. The HPMP must include the following items: (1) a description of each historic property; (2) a description of the potential effect on each historic property; (3) proposed measures for avoiding or mitigating adverse effects; (4) documentation of the nature and extent of

consultation; and (5) a schedule for implementing mitigation and conducting additional studies.

The Commission reserves the right to require changes to the HPMP. The licensee must not implement any project modifications, other than those specifically authorized in the license, until informed by the Commission that the requirements of this article have been fulfilled.

Article 409. Protection of Previously Undiscovered Cultural Resources. If the licensee discovers any unidentified cultural resources during construction, operation, or maintenance of project works or other facilities at the project, the licensee must stop all land-clearing and land-disturbing activities in the vicinity of the resource and consult with the New York State Historic Preservation Office (New York SHPO), New York State Canal Corporation (Canal Corporation), Oneida Indian Nation, Oneida Nation, Saint Regis Mohawk Tribe, and any other interested federally recognized Tribes to determine the need for any cultural resource studies or measures. If no studies or measures are needed, the licensee must file with the Commission documentation of its consultation with the New York SHPO immediately.

If a discovered cultural resource is determined to be eligible for the National Register of Historic Places (National Register), the licensee must file, for Commission approval, a historic properties management plan (HPMP) prepared by a qualified cultural resource specialist after consultation with the New York SHPO, Canal Corporation, Oneida Indian Nation, Oneida Nation, Saint Regis Mohawk Tribe, and any other interested federally recognized Tribes. In developing the HPMP, the licensee must use the Advisory Council on Historic Preservation and the Commission's *Guidelines for the Development of Historic Properties Management Plans for FERC Hydroelectric Projects*, dated May 20, 2002. The HPMP must include the following items: (1) a description of each discovered property that is eligible to be listed in the National Register; (2) a description of the potential effect on each discovered property; (3) proposed measures for avoiding or mitigating adverse effects; (4) documentation of the nature and extent of consultation; and (5) a schedule for implementing mitigation and conducting additional studies. The Commission reserves the right to require changes to the HPMP.

The licensee must not resume land-clearing or land-disturbing activities in the vicinity of a cultural resource discovered during construction until informed by the Commission that the requirements of this article have been fulfilled.

Article 410. 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 they grant permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that they have 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 they grant 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 their 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.

(H) 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.

(I) 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. § 825*l*, and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2024). 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.

By the Commission.

(S E A L)

Debbie-Anne A. Reese,
Secretary.

Form L-10
(October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION
TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED
MAJOR 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. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is

transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

Article 7. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. 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 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 9. 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 10. 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 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. 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 13. 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 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. 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 16. 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 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational

facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. 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 19. 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 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 20. 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 21. 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 22. 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 23. 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**OFFER OF SETTLEMENT ON BEHALF OF POWER AUTHORITY OF THE
STATE OF NEW YORK, U.S. DEPARTMENT OF INTERIOR'S FISH AND
WILDLIFE SERVICE, AND NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION****Hinckley (Gregory B. Jarvis) Hydroelectric Project
FERC Project No. 3211****3.0 PROPOSED LICENSE MEASURES THAT PARTIES AGREE SHOULD
BE INCORPORATED INTO THE TERMS OF THE NEW LICENSE****3.1 Project Operations****3.1.1 General Agreements**

The Parties agree that the following article concerning Project operations should be incorporated into the New License issued by the FERC for the Project:

License Article 1: Project Operations

Upon issuance of the new license, the Licensee shall operate the Project using daily reservoir outflows prescribed by the New York State Canal Corporation (NYSCC) in accordance with the NYSCC's 2012 Hinckley Reservoir Operating Diagram (Operating Diagram) or as otherwise directed by the NYSCC.

The Licensee shall adjust Project operations on a twice-weekly basis to provide NYSCC-directed outflows as follows:

- 1) The Licensee shall not generate when NYSCC-directed outflows are below 300 cfs or when Hinckley reservoir water surface elevation levels are below elevation (El.) 1195 feet, and shall pass the outflow through a 60-inch sluice gate or a penstock bypass valve, both located at the bottom of the right non-overflow section on the upstream side of the dam (Gate No. 4).
- 2) When NYSCC-directed outflows are within the operating range of the Project units of 300 to 1,800 cubic feet per second (cfs), the Licensee shall provide those outflows through a combination of the turbine units, penstock bypass valve, and Gate No. 4. The ratio of flow released from turbine and penstock bypass valve discharge to Gate No. 4 releases shall be determined according to the Water Quality Management Plan in Article 5.

3) At NYSCC-directed outflows greater than 1,800 cfs, and when the reservoir water surface elevation level is greater than El. 1225, the Licensee shall pass outflow downstream through a combination of flow over the Project's spillway, through the Project's intake structures, penstock bypass valve, and through Gate No. 4, in accordance with the Water Quality Management Plan in Article 5.

The Licensee may operate in a peaking generation mode during peak energy demand periods by averaging the outflow required by the Operating Diagram over the course of the day. When operated in this manner, the Project shall generate with a lower outflow during non-peak demand periods and then generate with a higher outflow during peak demand periods, such that the total daily average flow is equal to the daily outflow prescribed by the Operating Diagram. The Licensee shall average the hours of peaking generation capacity (up to the maximum generating capacity of 1,800 cfs) with lowered non-peaking outflows during the remaining hours in the 24-hour period. When operating the Project in a peaking generation mode, the Licensee shall adhere to the Water Quality Management Plan presented in Article 5 and maintain non-peaking outflows no lower than the minimum flow of 160 cubic feet per second (cfs).

Project operation requirements may be curtailed or suspended if required by operating conditions beyond the control of the Licensee, emergencies, or as otherwise directed by the NYSCC. In addition, the requirements under this Article 1 may be curtailed or suspended for short periods upon prior mutual agreement between the Licensee and the New York State Department of Environmental Conservation (NYSDEC). In the event of any operating condition or emergency beyond the control of the Licensee, Project operations may be curtailed or suspended for only the time period necessary to rectify such an operating condition or emergency. The Licensee shall notify the NYSDEC by phone call or email as soon as possible, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of the requirements of this Article 1. The Licensee shall notify the Commission in writing within 10 days after any such curtailment or suspension, or by any period as established by the Commission.

3.1.2 Justification

The Parties understand that the Hinckley Reservoir is managed by the NYSCC and governed by the Operating Diagram, a product of binding agreements between the State of New York and other entities possessing legal rights to water resources in West Canada Creek. The Parties agree that this Agreement is not intended to have any influence on the NYSCC or NYSCC operations. Based on the multiple uses, interests, and water rights that exist at the Hinckley Reservoir and West Canada Creek, the Parties agree that operating the Project in accordance with Section 3.1.1 will effectively accommodate and

balance the historic joint operations of Hinckley Reservoir for both power generation and other existing uses, interests, and rights to those water resources.

3.2 Freshwater Mussel Protection

3.2.1 General Agreements

The Parties agree that the following article requiring the Licensee to conduct Project-related construction, maintenance, or repair work in accordance with freshwater mussel protection requirements in Hinckley Reservoir should be incorporated into the New License issued by FERC for the Project:

License Article 2: Freshwater Mussel Protection

Upon issuance of the new license, Hinckley Reservoir drawdown or refill activities needed by the Licensee for Project-related construction, maintenance or repairs shall not begin from October 1 to July 15 annually unless written permission is received from NYSDEC or due to conditions defined in this Article 2, to protect freshwater mussels, hibernating amphibians and reptiles and fish spawning. Unless otherwise agreed upon by the New York State Department of Environmental Conservation (NYSDEC) or as directed by the New York State Canal Corporation (NYSCC), by October 15 the impoundment must be refilled to the proper water surface elevation as determined by the NYSCC. Prior to any such drawdown or refill activities, the Licensee shall consult with NYSDEC and receive NYSDEC's written approval of its proposed drawdown and refill plan. NYSDEC shall respond to the Licensee's request for approval within 30 calendar days from the date of receipt of Licensee's drawdown plan.

Impoundment drawdown and refill operations needed by the Licensee for Project-related construction, maintenance or repair activities shall occur at a gradual rate (pursuant to the aforesaid consultation and approval) in order not to strand aquatic species, unless directed otherwise by the NYSCC or due to conditions defined in this Article 2. The Licensee's drawdown and refill plan shall address whether such activities require further monitoring by the Licensee of affected areas, the salvage of freshwater mussels, or returning any stranded fish back to adequate water conditions.

NYSDEC's Regional Natural Resources Supervisor, or other appointed Natural Resources staff, shall be notified in writing by the Licensee at least 30 days (or, if the Licensee demonstrates a need to perform work in fewer than 30 days, then as soon as reasonably practicable) prior to commencing any such construction, maintenance or repair work pertaining to water quality, compliance with water quality standards, or to the Licensee's 401 Certification. Additionally, the Licensee shall contact the assigned Region 6 Natural Resources staff within seven days prior to the work commencing (including, but not limited to, all drawdowns covered by this Article 2, and all

Project-related construction, maintenance, or repair activities pertaining to water quality, compliance with water quality standards, or the Licensee's 401 Certification) and within seven days after it is finished (start notification/end notification).

NYSDEC reserves the authority to temporarily prohibit the Licensee from commencing reservoir releases or drawdowns required by the Licensee under this Article 2 for Project-related construction, maintenance or repair work, or conducting in-water maintenance work (including dredging), due to NYSDEC's determination that such actions will cause the Project to be out of compliance with applicable water quality standards or the 401 Certification issued to the Licensee. The Licensee shall contact the assigned NYSDEC Natural Resources staff as soon as the Licensee finds that water quality conditions permit the release, drawdown or in-water work to be conducted without being out of compliance with water quality standards or the Licensee's 401 Certification. The NYSDEC Natural Resources contact person will then advise the Licensee if conditions permit commencing releases or drawdowns.

Mussel protection requirements related to Project construction, maintenance, and repair work may be curtailed or suspended if required by operating conditions beyond the control of the Licensee, emergencies, or as otherwise directed by the NYSCC. In addition, the requirements under this Article 2 may be curtailed or suspended for short periods upon prior mutual agreement between the Licensee and the NYSDEC. In the event of any operating condition or emergency beyond the control of the Licensee, mussel protection requirements may be curtailed or suspended for only the time period necessary to rectify such an operating condition or emergency. The Licensee shall notify the NYSDEC by phone call or email as soon as possible, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of the mussel protection requirements. The Licensee shall notify the Commission in writing within 10 days after any such curtailment or suspension, or by any period as established by the Commission.

3.2.2 Justification

Based on the NYSDEC's September 9, 2020 Summary of Informal Freshwater Mussel Survey in Hinckley Reservoir¹ and the Licensee's Hinckley Reservoir Informal Mussel Survey, September 2020,² freshwater mussels of the common species Eastern floater (*Pyganodon cataracta*) have been found in Hinckley Reservoir at water surface elevation levels below 1207'. The Parties agree that compliance with the requirements in

¹ See FERC Project No. 3211, Accession No. 20201112-3032, filed on November 11, 2020.

² See Accession No. 20201030-5167, filed on October 30, 2020.

Section 3.2.1 will limit potential impacts to freshwater mussels and other aquatic resources from reservoir drawdowns needed for Project-related construction, maintenance or repairs.

3.3 Minimum Flow

3.3.1 General Agreements

The Parties agree that the following article governing minimum flow requirements should be incorporated into the New License issued by FERC for the project:

License Article 3: Minimum Flow

Upon issuance of the new license, the Licensee shall operate the Project to maintain a minimum daily average reservoir outflow of 160 cubic feet per second (cfs). During the New York State Canal Corporation's (NYSCC) navigation season, the Licensee shall operate the Project to maintain daily average reservoir outflows at no less than the sum of the minimum flow of 160 cfs plus the amount diverted by the NYSCC into the Nine Mile Creek Feeder Canal downstream of the Project at the Nine Mile Creek Feeder Dam. The minimum flow shall be provided through a combination of flow over the Project's spillway, through the Project's intake structures and penstock bypass valve, and/or through a 60-inch sluice gate located at the bottom of the right non- overflow section on the upstream side of the dam (Gate No. 4). The Licensee shall maintain the 160 cfs daily average reservoir outflows year-round to ensure that downstream aquatic habitats in the West Canada Creek remain adequately watered.

Minimum flow requirements may be curtailed or suspended if required by operating conditions beyond the control of the Licensee, emergencies, or as otherwise directed by the NYSCC. In addition, the Licensee may curtail or suspend minimum flow releases for short periods upon prior mutual agreement between the Licensee and the New York State Department of Environmental Conservation (NYSDEC). In the event of any operating condition or emergency beyond the control of the Licensee, the Licensee may curtail or suspend minimum flow releases for only the time period necessary to rectify such an operating condition or emergency. For any unplanned deviation when the minimum release is less than 160 cfs and this condition lasts longer than three hours, or results in visible environmental effects such as a fish kill, the Licensee shall notify the NYSDEC by phone call or email as soon as possible, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of minimum flow releases. The Licensee shall notify the Commission in writing within 10 days after any such curtailment or suspension, or by any period as established by the Commission.

3.3.2 Justification

The West Canada Creek reach downstream of the Project provides habitat for fish and macroinvertebrates. Although average daily releases from Hinckley Reservoir have historically exceeded 200 cfs over 99% of the time, the minimum flow presented in Section 3.3.1 is consistent with the Operating Diagram and will support the historic management of Hinckley Reservoir as a seasonal storage reservoir. The Parties agree that the maintenance of the minimum flow presented in Section 3.3.1 to these reaches will effectively balance the protection of downstream aquatic habitat with the multiple uses, interests, and existing rights to water resources in the Hinckley Reservoir and West Canada Creek.

3.4 Stream Flow and Water Level Monitoring Plan

3.4.1 General Agreements

The Parties agree that the following article requiring the implementation of a Stream Flow and Water Level Monitoring Plan should be incorporated into the New License issued by the FERC for the project:

License Article 4: Stream Flow and Water Level Monitoring Plan

The Stream Flow and Water Level Monitoring Plan, filed on July 25, 2022, is approved and made part of the license and may not be amended without prior Commission approval. The Licensee must implement the plan upon issuance of the license.

3.4.2 Justification

The purpose of the Stream Flow and Water Level Monitoring Plan (SFWLMP), presented in Appendix A to this Agreement, is to provide the NYSDEC and USFWS a means to review how the Project complies with minimum flow requirements. Experience throughout the State has confirmed that the development of a SFWLMP and the associated gauging and data management activities are an essential component of a water flow management program. The SFWLMP will provide the tools necessary to verify the water flows required by this Agreement. Aside from providing the agencies a means to monitor flows, the SFWLMP will better enable the Licensee to ensure they are complying with flow requirements.

3.5 Water Quality Management Plan

3.5.1 General Agreements

The Parties agree that the following article requiring the implementation of a Water Quality Management Plan should be incorporated into the New License issued by the FERC for the project:

License Article 5: Water Quality Management Plan

The Water Quality Management Plan, filed on July 25, 2022, is approved and made part of the license and may not be amended without prior Commission approval. The Licensee must implement the plan upon issuance of the license.

3.5.2 Justification

The Water Quality Management Plan, developed based on study activities and in consultation with the NYSDEC and the USFWS and presented in Appendix B to this Agreement, includes measures for the Licensee to improve the water quality downstream of the Project to be in compliance with state water quality standards and mitigate any water quality impacts caused by Project operations.

3.6 Recreational Facility Enhancements

3.6.1 General Agreements

The Parties agree that the following article concerning recreational facility enhancements should be incorporated into the New License issued by the FERC for the project:

License Article 6: Recreational Facility Enhancements

The Licensee shall operate and maintain two existing Project recreation facilities, the Power Authority Boat Launch and Scenic Overlook, and will make the following recreational enhancements to those facilities:

1) Within 12 months after issuance of the new license, the Licensee shall replace the informational kiosk at the Power Authority Boat Launch and install and maintain improved directional signage at the existing Power Authority Boat Launch and Scenic Overlook, including one sign north of each site and one sign south of each site along New York State Route 365 to indicate the sites' locations ahead. Such signage shall comply with the FERC's recreational signage requirements.

2) Within 24 months after issuance of the new license, the Licensee shall design and install ADA-accessibility upgrades to the Power Authority Boat Launch. Such accessibility enhancements shall include improvements to the existing Boat Launch parking lot, the addition of accessible parking spaces, a floating boat dock that will

extend out to El. 1213 feet, and improved access routes to a cartop launch area and the existing boat ramp to facilitate boat launching.

3.6.2 Justification

The Parties agree that the enhancements described in Section 3.6.1 will improve the recreational experiences for the public at Hinckley Reservoir, expand equal access to the Project recreation facilities, and help to meet local recreational needs over the period of the New License.

3.7 Invasive Species Management Plan

3.7.1 General Agreements

The Parties agree that the following article requiring the implementation of an Invasive Species Management Plan should be incorporated into the New License issued by the FERC for the project:

License Article 7: Invasive Species Management Plan

The Invasive Species Management Plan, filed on July 25, 2022, is approved and made part of the license and may not be amended without prior Commission approval. The Licensee must implement the plan upon issuance of the license.

3.7.2 Justification

The Invasive Species Management Plan (ISMP), developed in consultation with the NYSDEC and the USFWS and presented in Appendix C to this Agreement, includes measures for the Licensee to prevent the introduction and/or spread of invasive species during Project construction, maintenance, and operational activities, as defined by the NYSDEC Office of Invasive Species Coordination. Although no invasive species were identified within the Project boundary during the licensing studies, the Parties agree that the development and implementation of an ISMP will be beneficial to help prevent the introduction of invasive species to the Project through recreation or construction activities.

3.8 Bald Eagle Protection Plan

3.8.1 General Agreements

The Parties agree that the following article requiring the implementation of a Bald Eagle Protection Plan should be incorporated into the New License issued by the FERC for the project:

License Article 8: Bald Eagle Protection Plan

The Bald Eagle Protection Plan, filed on July 25, 2022, is approved and made part of the license and may not be amended without prior Commission approval. The Licensee must implement the plan upon issuance of the license.

3.8.2 Justification

The Licensee has consulted with the USFWS and the NYSDEC and has identified the bald eagle as a species of concern that could be found within the Project area. The bald eagle is protected under the BGEPA and the MBTA and by the State of New York. Removal of trees could potentially affect bald eagles. The Bald Eagle Protection Plan, developed in consultation with the NYSDEC and the USFWS and presented in Appendix D to this Agreement, includes measures to reduce and minimize future Project-related impacts that may affect this species.

4 ADDITIONAL COMMITMENTS (NOT TO BE INCLUDED IN LICENSE)

4.1 Jarvis Waterway Modeling Fund

4.1.1 General Agreements

Within 60 days after issuance of the New License, the Licensee will establish the Jarvis Waterway Modeling Fund (JWMF) in the amount of \$350,000 (three-hundred-and-fifty thousand dollars). The JWMF will be used to compile a waterway model and assess various water usage scenarios of the Hinckley Reservoir and downstream reach of the West Canada Creek down to the New York State Canal Corporation's diversion weir at the Nine Mile Creek Feeder Dam (Waterway Model).

The Waterway Model is intended to be an informational tool for the Parties to comprehensively assess the West Canada Creek waterway system and its natural resources, guide the development of habitat and recreation improvement projects to be funded by the Habitat Improvement and Recreation Improvement Funds, evaluate potential Project operational changes within the scope of the Operating Diagram, and understand the effects of any future changes to other existing uses of Hinckley Reservoir.

Of the total funding amount for the JWMF, \$150,000 (one-hundred-and-fifty-thousand dollars) will be dedicated to the development and calibration of the Waterway Model and six production runs of selected scenarios using publicly available data. The JWMF will be deposited into an interest-bearing escrow account and will be administered by the Licensee. Further decisions regarding use of the fund shall be made in accordance with Section 4.1.2 below. The administrative costs

associated with the establishment and maintenance of the JWMF shall be paid from any interest accrued on the JWMF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Licensee.

4.1.2 Jarvis Waterway Modeling Committee

Within 60 days after issuance of the New License, the Licensee will convene the Jarvis Waterway Modeling Committee (JWMC), consisting of one voting representative from each of the Licensee, NYSDEC, and the USFWS (collectively, the “Executive Members”), which will establish all necessary and appropriate tasks for the JWMC, inclusive of the development of a schedule for future JWMC meetings. Additional non-voting committee members may be added or removed upon unanimous consent by the Executive Members.

The JWMC will identify the desired data inputs for the Waterway Model, which shall at a minimum include the available period of hydrologic record (1938-1957, 1960-78, 1987-present), applicable and available hydroelectric project operational information and hydraulic capacities in the study area, the 2012 Hinckley Reservoir Operating Diagram, Mohawk Valley Water Authority withdrawals and reservoir requirements, and climate change forecasting data. The JWMC will determine the various water usage scenarios to assess in the Waterway Model. The Licensee will be responsible for creating and delivering the model using the agreed-upon inputs and conducting production runs of the selected scenarios. The Licensee commits to conducting production runs for a minimum of six scenarios. Any remaining funds from the JWMF may be used to conduct additional scenarios, as agreed upon by the JWMC, until the fund is depleted.³ The Licensee will provide an annual accounting of the associated costs to the JWMC or upon a Party’s request. If the JWMC determines that no further scenarios are warranted, the JWMC may transfer any remaining balance in the JWMF to the Jarvis Habitat and/or Recreation Improvement Funds, as decided by the JWMC.

Additional decisions regarding the use of the JWMF and the development and use of the Waterway Model will be made by reaching consensus among all JWMC members where possible. When a consensus cannot be reached, decisions of the JWMC will be made by majority vote by its Executive Members.

The Licensee will provide administrative support for the JWMC. Members of the JWMC serve without compensation and will not be reimbursed for their time or expenses.

³ Each additional production run is estimated to cost approximately \$10,000.

The JWMC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to compile the model and conduct the production runs. The JWMC will be disbanded upon depletion of the JWMF or transfer of the remaining funds to the Jarvis Habitat and/or Recreation Improvement Funds, as decided by the JWMC.

4.2 Habitat Improvement Fund

4.2.1 General Agreements

Within 60 days after issuance of the New License, the Licensee will establish the Jarvis Habitat Improvement Fund (JHIF) in the amount of \$1,000,000 (one million dollars). The JHIF will be used for habitat improvement projects within the Hinckley Reservoir and West Canada Creek watersheds; however, no JHIF monies may be applied towards habitat improvement projects which are located within the project boundary of another FERC-authorized hydroelectric project. The JHIF will be deposited in an interest-bearing escrow account and will be administered by the Licensee or an entity mutually agreed-upon by the Jarvis Habitat Improvement Committee (JHIC). Decisions regarding use of the fund shall be made in accordance with Section 4.2.2 below. The administrative costs associated with the establishment and maintenance of the JHIF shall be paid from any interest accrued on the JHIF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Licensee.

4.2.2 Jarvis Habitat Improvement Committee

Within 60 days after issuance of the New License, the Licensee will convene the JHIC, consisting of one voting representative from each of the Licensee, NYSDEC, and the USFWS, which will establish all necessary and appropriate tasks for the JHIC, inclusive of the development of a schedule for future JHIC meetings. Decisions regarding the use of the JHIF will be made by reaching consensus among the JHIC members where possible, including but not limited to third-party contract management of the fund, which will be paid from any interest accrued on the JHIF or, if adequate interest is not accrued, the remainder will be paid at the Licensee's sole expense. When a consensus cannot be reached, decisions of the JHIC will be made by majority vote.

If the JHIC selects a habitat improvement project that will be located within the Project boundary, the JHIC will coordinate on any consultations with the FERC and support the Licensee's pursuit of any required FERC approvals and/or license amendments. The Licensee will seek any potential license amendments under this Section 4.2 pursuant to the procedures detailed in Section 2.10. Notwithstanding the preceding paragraph, the selection of a habitat improvement project within the Project boundary must be made by unanimous consent of all JHIC members.

The Licensee will provide administrative support for the JHIC. Members of the JHIC serve without compensation and will not be reimbursed for their time or expenses.

The JHIC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to construct a particular habitat improvement project. The JHIC will be automatically dissolved 30 calendar days after depletion of the JHIF unless the members decide that the JHIC is still essential for monitoring one or more of the selected projects funded by the JHIF or another purpose.

4.3 Recreation Improvement Fund

4.3.1 General Agreements

Within 60 days after issuance of the New License, the Licensee will establish the Jarvis Recreation Improvement Fund (JRIF) in the amount of \$250,000 (two-hundred-and-fifty thousand dollars). The JRIF will be applied toward recreation improvement projects within the Hinckley Reservoir and West Canada Creek watersheds; however, no JRIF monies will be applied towards recreation improvement projects which are a) located within the project boundary of the West Canada Creek Hydroelectric Project (Project No. 2701), b) the responsibility of another FERC-authorized project owner, or c) would require FERC approval under a FERC authorization other than the new license being sought by the Licensee. The JRIF will be deposited in an interest-bearing escrow account and will be administered by the Licensee or an entity mutually agreed- upon by the Jarvis Recreation Improvement Committee (JRIC). Decisions regarding use of the fund shall be made in accordance with Section 4.3.2 below. The administrative costs associated with the establishment and maintenance of the JRIF shall be paid from any interest accrued on the JRIF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Licensee.

4.3.2 Jarvis Recreation Improvement Committee

Within 60 days after issuance of the New License, the Licensee will convene the JRIC, consisting of one voting representative from each of the Licensee, NYSDEC, and the USFWS, which will establish all necessary and appropriate tasks for the JRIC, inclusive of the development of a schedule for future JRIC meetings. Decisions regarding the use of the JRIF will be made by reaching consensus among the JRIC members where possible, including but not limited to third-party contract management of the fund, which will be paid from any interest accrued on the JHIF or, if adequate interest is not accrued, the remainder will be paid at the Licensee's sole expense. When a consensus cannot be reached, decisions of the JRIC will be made by majority vote.

If the JRIC selects a recreation improvement project that will be located within the Project boundary, the JRIC will coordinate on any consultations with the FERC and

support the Licensee's pursuit of any required FERC approvals and/or license amendments. The Licensee will seek any potential license amendments under this Section 4.3 pursuant to the procedures detailed in Section 2.10.

The Licensee will provide administrative support for the JRIC. Members of the JRIC serve without compensation and will not be reimbursed for their time or expenses.

The JRIC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to construct a particular recreation improvement project. The JRIC will be automatically dissolved 30 calendar days after depletion of the JRIF unless the members decide that the JRIC is still essential for monitoring one or more of the selected projects funded by the JRIF or another purpose.

APPENDIX B**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION****Water Quality Certification Conditions****DEC Permit Number: 6-9906-00083/00005****Effective Date: May 22, 2024****Expiration: Concurrent with FERC license.****NATURAL RESOURCE PERMIT CONDITIONS****Plans and Notification Conditions**

1. **Jurisdictional Activity.** This Water Quality Certification authorizes activities associated with the maintenance and operation of the existing Hinckley (Gregory B. Jarvis) Hydroelectric Project, in accordance with the conditions contained herein. This Water Quality Certification is part of FERC's relicensing of FERC Project No. P-3211.
2. **Settlement Agreement.** This certification includes and incorporates the provisions of the Settlement Agreement, herein identified and attached to this Water Quality Certification as Appendix A, addressing new license terms and conditions, dated July 21, 2022, and filed with the Federal Energy Regulatory Commission (FERC) on July 25, 2022, to the extent that the agreement pertains to the Permittee's compliance with the New York State Water Quality Standards necessary and appropriate for issuance of, and compliance with, this permit.
3. **Conformance with Plans.** All activities authorized by this Permit shall be in strict conformance with the approved plans, including any approved amendments thereto, submitted by the Permittee or his agent as part of the Water Quality Certification application. Such approved plans were prepared by the Permittee and received by New York State Department of Environmental Conservation (NYSDEC) on May 26, 2023. The approved plans were included in the Settlement Agreement which was signed by the Permittee, NYSDEC, and the United States Fish and Wildlife Service (USFWS) and was submitted to FERC on July 25, 2022.
4. **Statement of Condition Necessity.** Appendix B attached hereto sets forth justifications and explanations that relate to the New York State Water Quality regulations (6 NYCRR Parts 701, 702, 703, and 704) pursuant to the Clean Water Act Section 401 Certification Rule, 85 Fed. Reg/55668 (September 27, 2023) (codified at 40 CFR Parts 121, 122, and 124).
5. **NYSDEC Contacts.** All matters concerning this Permit, including required notifications, and all applications for permit modifications are to be submitted to:

Bureau Director, Bureau of Energy Project Management
Division of Environmental Permits
NYSDEC
625 Broadway, 4th Floor
Albany, NY 12233-1750
hydro@dec.ny.gov
518-402-9167

All matters concerning Natural Resource Permit Conditions, including, but not limited to, submission of the information required by the Natural Resource Permit Conditions, the reporting of possible violations, and requests to deviate from timing windows in the Natural Resource Permit Conditions shall be submitted to:

Aquatic Habitat Manager, Bureau of Ecosystem Health
Division of Fish and Wildlife
NYSDEC
625 Broadway, 5th Floor
Albany, NY 12233-4756
hydro@dec.ny.gov
518-402-8872

6. **Notification Requirement for Project Maintenance, Repair, Construction, or Change in Operations.** The Permittee shall notify NYSDEC in writing at least 60 days prior to commencing any project maintenance, repair, construction, or change in operations pertaining to water quality, compliance with water quality standards, or this Water Quality Certification. The Permittee shall receive NYSDEC approval in advance of work commencing. All such requests shall be sent to the contacts listed in Natural Resources Permit Conditions #5, NYSDEC Contacts.

7. **Construction Stormwater SPDES.** All activities at the Project requiring ground disturbance greater than one acre must obtain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001), or subsequent SPDES Construction Stormwater General Permit.

Operating Conditions

8. **Precautions Against Contamination of Waters.** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate, or any other environmentally deleterious materials associated with the Project.

9. **No Interference with Navigation.** There shall be no unreasonable interference with navigation by the work herein authorized.

10. **Project Operations.** As identified on page 14, Section 3.1 of the Settlement Agreement, herein attached as Appendix A, the Permittee shall operate the Project using daily reservoir outflows prescribed by the New York State Canal Corporation (NYSCC) in accordance with the NYSCC's 2012 Hinckley Reservoir Operating Diagram (Operating Diagram) or as otherwise directed by the NYSCC. The Permittee shall adjust Project operations on a twice-weekly basis to provide NYSCC-directed outflows as follows:

- 1) The Permittee shall not generate when NYSCC-directed outflows are below 300 cfs or when Hinckley Reservoir water surface elevation levels are below elevation (El.) 1195 feet, and shall pass the outflow through a 60-inch sluice gate or a penstock bypass valve, both located at the bottom of the right non-overflow section on the upstream side of the dam (Gate No.4).
- 2) When NYSCC-directed outflows are within the operating range of the Project units of 300 to 1,800 cubic feet per second (cfs), the Permittee shall provide those outflows through a combination of the turbine units, penstock bypass valve, and Gate No. 4. The ratio of flow released from turbine and penstock bypass valve discharge to Gate No. 4 releases shall be determined according to the Water Quality Management Plan.
- 3) At NYSCC-directed outflows greater than 1,800 cfs, and when the reservoir water surface elevation level is greater than El. 1225, the Permittee shall pass outflow downstream through a combination of flow over the Project's spillway, through the Project's intake structures, penstock bypass valve, and through Gate No. 4, in accordance with the Water Quality Management Plan.

11. **Peaking Operations Allowable.** As identified on page 15, Section 3.1 of the Settlement Agreement, herein identified as Appendix A, the Permittee may operate in a peaking generation mode during peak energy demand periods by averaging the outflow required by the Operating Diagram over the course of the day. When operated in this manner, the Project shall generate with a lower outflow during non-peak demand periods and then generate with a higher outflow during peak demand periods, such that the total daily average flow is equal to the daily outflow prescribed by the Operating Diagram. The Licensee shall average the hours of peaking generation capacity (up to the maximum generating capacity of 1,800 cfs) with lowered non-peaking outflows during the remaining hours in the 24-hour period. When operating the Project in a peaking generation mode, the Permittee shall adhere to the Water Quality Management Plan and maintain non-peaking outflows no lower than the minimum flow of 160 cubic feet per second (cfs).

12. **Minimum Flow.** As identified on page 18, Section 3.3 of the Settlement Agreement, herein identified as Appendix A, the Permittee shall operate the Project to maintain a minimum daily average reservoir outflow of 160 cubic feet per second (cfs). During the NYSCC navigation season, the Permittee shall operate the Project to maintain daily average reservoir outflows at no less than the sum of the minimum flow of 160 cfs plus the amount diverted by the NYSCC into the Nine Mile Creek Feeder Canal downstream of the Project at the Nine Mile Creek Feeder Dam. The minimum flow shall be provided through a combination of flow over the Project's spillway, through the Project's intake structures and penstock bypass valve, and/or through a 60-inch sluice gate located at the bottom of the right non-overflow section on the upstream side of the dam (Gate No. 4). The Permittee shall maintain the 160 cfs daily average reservoir outflows year-round to ensure that downstream aquatic habitats in the West Canada Creek remains adequately watered.

13. **Freshwater Mussel Protection.** As identified on page 16, Section 3.2 of the Settlement Agreement, herein identified as Appendix A, Hinckley Reservoir drawdown or refill activities needed by the Permittee for Project-related construction, maintenance or repairs shall not begin from October 1 to July 15 annually unless written permission is received from NYSDEC to protect freshwater mussels, hibernating amphibians and reptiles and fish spawning. Unless otherwise agreed upon by the NYSDEC or as directed by the NYSCC, by October 15 the impoundment must be refilled to the proper water surface elevation as determined by the NYSCC. Prior to any such drawdown or refill activities, the Permittee shall consult with NYSDEC and receive NYSDEC's written approval of its proposed drawdown and refill plan. NYSDEC shall respond to the Permittee's request for approval within 30 calendar days from the date of receipt of Permittee's drawdown plan.

Impoundment drawdown and refill operations needed by the Permittee for Project-related construction, maintenance, or repair activities shall occur at a gradual rate (pursuant to the aforesaid consultation and approval) in order not to strand aquatic species, unless directed otherwise by the NYSCC or due to restrictions found within this condition. The Permittee's drawdown and refill plan shall address whether such activities require further monitoring by the Permittee of affected areas, the salvage of freshwater mussels, or returning any stranded fish back to adequate water conditions.

NYSDEC's contacts in Condition #5, shall be notified electronically by the Permittee at least 30 days (or, if the Permittee demonstrates a need to perform work in fewer than 30 days, then as soon as reasonably practicable) prior to commencing any such construction, maintenance or repair work pertaining to water quality, compliance with water quality standards, or this permit. Additionally, the Permittee shall contact the NYSDEC seven days prior to the work commencing (including, but not limited to, all drawdowns, and all Project-related construction, maintenance, or repair activities pertaining to water quality, compliance with water quality standards, or this permit) and

within seven days after it is finished (start notification/end notification). Notification shall be submitted in writing to the NYSDEC contacts found in Condition #5 of this permit.

NYSDEC reserves the authority to temporarily prohibit the Permittee from commencing reservoir releases or drawdowns required by the Permittee for Project-related construction, maintenance or repair work, or conducting in-water maintenance work (including dredging), due to NYSDEC's determination that such actions will cause the Project to be out of compliance with applicable water quality standards or this Permit. The Permittee shall contact the NYSDEC contacts identified in Condition #5 soon as the Permittee finds that water quality conditions permit the release, drawdown or in-water work to be conducted without being out of compliance with water quality standards or this Permit. The NYSDEC contact person will then advise the Permittee if conditions permit commencing releases or drawdowns.

Mussel protection requirements related to Project construction, maintenance, and repair work may be curtailed or suspended if required by operating conditions beyond the control of the Permittee, emergencies, or as otherwise directed by the NYSCC. In addition, the requirements of this Permit may be curtailed or suspended for short periods upon prior mutual agreement between the Permittee and the NYSDEC. In the event of any operating condition or emergency beyond the control of the Permittee, mussel protection requirements may be curtailed or suspended for only the time period necessary to rectify such an operating condition or emergency. As soon as possible, the Permittee shall notify the NYSDEC electronically by contacting the staff found in Permit Condition #5, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of the mussel protection requirements.

14. Curtailment or Suspension of Project Operations. As identified on page 15, Section 3.1 of the Settlement Agreement, herein identified as Appendix A, Project operation requirements may be curtailed or suspended if required by operating conditions beyond the control of the Permittee, emergencies, or as otherwise directed by the NYSCC. Project operations may also be curtailed or suspended for short periods upon prior mutual agreement between the Permittee and the NYSDEC. In the event of any operating condition or emergency beyond the control of the Permittee, Project operations may be curtailed or suspended for only the time period necessary to rectify such an operating condition or emergency. The Permittee shall notify the NYSDEC contacts listed in Natural Resources Permit Conditions #5 as soon as possible, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of operations.

15. Curtailment or Suspension of Minimum Flow. As identified on page 18, Section 3.3 of the Settlement Agreement, herein identified as Appendix A, minimum flow requirements may be curtailed or suspended if required by operating conditions beyond the control of the Permittee, emergencies, or as otherwise directed by the NYSCC. In addition, the Permittee may curtail or suspend minimum flow releases for short periods upon prior mutual agreement between the Permittee and the NYSDEC. In the event of any operating condition or emergency beyond the control of the Permittee, the Permittee may curtail or suspend minimum flow releases for only the time period necessary to rectify such an operating condition or emergency. For any unplanned deviation when the minimum release is less than 160 cfs and this condition lasts longer than three hours, or results in visible environmental effects such as a fish kill, the Permittee shall notify the NYSDEC contacts listed in Natural Resources Permit Conditions #5, NYSDEC Contacts, by phone call or email as soon as possible, but no later than five business days after any such operating condition or emergency resulting in curtailment or suspension of minimum flow releases.

16. **Stream Flow and Water Level Management Plan.** The Permittee will manage stream flow and water levels at the Project in accordance with the Stream Flow and Water Level Management Plan, as identified on page 19, Section 3.4 and Appendix A of the Settlement Agreement, herein identified as Appendix A.

17. **Recreational Facility Enhancements.** As identified on page 20, Section 3.6 of the Settlement Agreement, herein identified as Appendix A, the Permittee shall operate and maintain two existing Project recreation facilities, the Power Authority Boat Launch and Scenic Overlook, and will make the following recreational enhancements to those facilities:

1) Within 12 months after issuance of the new license, the Permittee shall replace the informational kiosk at the Power Authority Boat Launch and install and maintain improved directional signage at the existing Power Authority Boat Launch and Scenic Overlook, including one sign north of each site and one sign south of each site along New York State Route 365 to indicate the sites' locations ahead. Such signage shall comply with the FERC's recreational signage requirements.

2) Within 24 months after issuance of the new license, the Permittee shall design and install ADA-accessibility upgrades to the Power Authority Boat Launch. Such accessibility enhancements shall include improvements to the existing Boat Launch parking lot, the addition of accessible parking spaces, a floating boat dock that will extend out to El. 1213 feet, and improved access routes to a cartop launch area and the existing boat ramp to facilitate boat launching.

18. **Water Quality Management Plan.** The Permittee must implement the Water Quality Management Plan identified on page 19, Section 3.5 and Appendix B of the executed Settlement Agreement, herein identified as Appendix A.

19. **Invasive Species Management Plan.** As identified page 21, Section 3.7 and Appendix C of the Settlement Agreement, herein identified as Appendix A, the Permittee will implement an Invasive Species Management Plan (ISMP) developed in consultation with the United State Fish & Wildlife Service (USFWS) and DEC. The ISMP includes measures for the Permittee to prevent the introduction and/or spread of invasive species during construction, maintenance, and operational activities, as defined by the NYSDEC Office of Invasive Species Coordination.

20. **Eagle Protection Plan.** As identified on page 21, Section 3.8 and Appendix D of the Settlement Agreement, herein identified as Appendix A, the Permittee will implement the Bald Eagle Protection Plan developed in consultation with the USFWS and the NYSDEC to minimize the likelihood of any impacts to Bald Eagles from the Project.

21. **Jarvis Waterway Modeling Fund.** As identified on page 22, Section 4.1 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New Federal License, the Permittee will establish the Jarvis Waterway Modeling Fund (JWMF) in the amount of \$350,000 (three-hundred-and-fifty thousand dollars). The JWMF will be used to compile a waterway model and assess various water usage scenarios of the Hinckley Reservoir and downstream reach of the West Canada Creek down to the New York State Canal Corporation's diversion weir at the Nine Mile Creek Feeder Dam (Waterway Model). The Waterway Model is intended to be an informational tool to comprehensively assess the West Canada Creek waterway system and its natural resources, guide the development of habitat and recreation improvement projects to be funded by the Habitat Improvement and Recreation Improvement Funds, evaluate potential Project operational changes within the scope of the Operating

Diagram, and understand the effects of any future changes to other existing uses of Hinckley Reservoir. Of the total funding amount for the JWMF, \$150,000 (one-hundred-and-fifty thousand dollars) will be dedicated to the development and calibration of the Waterway Model and six production runs of selected scenarios using publicly available data. The JWMF will be deposited into an interest-bearing escrow account and will be administered by the Permittee. Further decisions regarding use of the fund shall be made by the Jarvis Waterway Modeling Committee. The administrative costs associated with the establishment and maintenance of the JWMF shall be paid from any interest accrued on the JWMF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Permittee.

22. Jarvis Waterway Modeling Committee. As identified on page 22, Section 4.1.2 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New License, the Permittee will convene the Jarvis Waterway Modeling Committee (JWMC), consisting of one voting representative from each of the Permittee, NYSDEC, and the USFWS (collectively, the “Executive Members”), which will establish all necessary and appropriate tasks for the JWMC, inclusive of the development of a schedule for future JWMC meetings. Additional non-voting committee members may be added or removed upon unanimous consent by the Executive Members.

The JWMC will identify the desired data inputs for the Waterway Model, which shall at a minimum include the available period of hydrologic record (1938-1957, 1960-78, 1987-present), applicable and available hydroelectric project operational information and hydraulic capacities in the study area, the 2012 Hinckley Reservoir Operating Diagram, Mohawk Valley Water Authority withdrawals and reservoir requirements, and climate change forecasting data. The JWMC will determine the various water usage scenarios to assess in the Waterway Model. The Permittee will be responsible for creating and delivering the model using the agreed-upon inputs and conducting production runs of the selected scenarios. The Permittee commits to conducting production runs for a minimum of six scenarios. Any remaining funds from the JWMF may be used to conduct additional scenarios, as agreed upon by the JWMC, until the fund is depleted. The Permittee will provide an annual accounting of the associated costs to the JWMC or upon a Party’s request. If the JWMC determines that no further scenarios are warranted, the JWMC may transfer any remaining balance in the JWMF to the Jarvis Habitat and/or Recreation Improvement Funds, as decided by the JWMC. Additional decisions regarding the use of the JWMF and the development and use of the Waterway Model will be made by reaching consensus among all JWMC members where possible. When a consensus cannot be reached, decisions of the JWMC will be made by majority vote by its Executive Members.

The Permittee will provide administrative support for the JWMC. Members of the JWMC serve without compensation and will not be reimbursed for their time or expenses.

The JWMC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to compile the model and conduct the production runs. The JWMC will be disbanded upon depletion of the JWMF or transfer of the remaining funds to the Jarvis Habitat and/or Recreation Improvement Funds, as decided by the JWMC.

23. Habitat Improvement Fund. As identified on page 23, Section 4.2 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New Federal License, the Permittee will establish the Jarvis Habitat Improvement Fund (JHIF) in the amount of \$1,000,000 (one million dollars). The JHIF will be used for habitat improvement projects within the Hinckley Reservoir and West Canada Creek watersheds; however, no JHIF monies may be applied towards habitat improvement projects which are located within the project boundary of another FERC

authorized hydroelectric project. The JHIF will be deposited in an interest-bearing escrow account and will be administered by the Permittee or an entity mutually agreed-upon by the Jarvis Habitat Improvement Committee (JHIC). Decisions regarding use of the fund shall be made by the JHIC. The administrative costs associated with the establishment and maintenance of the JHIF shall be paid from any interest accrued on the JHIF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Permittee.

24. **Jarvis Habitat Improvement Committee.** As identified on page 24, Section 4.2.2 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New License, the Permittee will convene the JHIC, consisting of one voting representative from each of the Licensee, NYSDEC, and the USFWS, which will establish all necessary and appropriate tasks for the JHIC, inclusive of the development of a schedule for future JHIC meetings. Decisions regarding the use of the JHIF will be made by reaching consensus among the JHIC members where possible, including but not limited to third-party contract management of the fund, which will be paid from any interest accrued on the JHIF or, if adequate interest is not accrued, the remainder will be paid at the Permittee's sole expense. When a consensus cannot be reached, decisions of the JHIC will be made by majority vote. If the JHIC selects a habitat improvement project that will be located within the Project boundary, the JHIC will coordinate on any consultations with the FERC and support the Permittee's pursuit of any required FERC approvals and/or license amendments. The Permittee will seek any potential license amendments pursuant to the procedures detailed in Section 2, beginning on page 7 of the Settlement Agreement, herein identified as Appendix A. Notwithstanding the preceding paragraph, the selection of a habitat improvement project within the Project boundary must be made by unanimous consent of all JHIC members. The Permittee will provide administrative support for the JHIC. Members of the JHIC serve without compensation and will not be reimbursed for their time or expenses. The JHIC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to construct a particular habitat improvement project. The JHIC will be automatically dissolved 30 calendar days after depletion of the JHIF unless the members decide that the JHIC is still essential for monitoring one or more of the selected projects funded by the JHIF or another purpose.

25. **Recreation Improvement Fund.** As identified on page 25, Section 4.3 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New Federal License, the Permittee will establish the Jarvis Recreation Improvement Fund (JRIF) in the amount of \$250,000 (two-hundred-and fifty thousand dollars). The JRIF will be applied toward recreation improvement projects within the Hinckley Reservoir and West Canada Creek watersheds; however, no JRIF monies will be applied towards recreation improvement projects which are a) located within the Project boundary of the West Canada Creek Hydroelectric Project (Project No. 2701), b) the responsibility of another FERC-authorized project owner, or c) would require FERC approval under a FERC authorization other than the new license being sought by the Permittee. The JRIF will be deposited in an interest-bearing escrow account and will be administered by the Permittee or an entity mutually agreed upon by the Jarvis Recreation Improvement Committee (JRIC). Decisions regarding use of the fund shall be made by the JRIC. The administrative costs associated with the establishment and maintenance of the JRIF shall be paid from any interest accrued on the JRIF; if adequate interest is not accrued, the remaining administrative costs shall be borne by the Permittee.

26. **Jarvis Recreation Improvement Committee.** As identified on page 25, Section 4.3.2 of the Settlement Agreement, herein identified as Appendix A, within 60 days after issuance of the New Federal License, the Permittee will convene the JRIC, consisting of one voting representative from each of the Permittee, NYSDEC, and the USFWS, which will establish all necessary and appropriate tasks for the JRIC, inclusive

of the development of a schedule for future JRIC meetings. Decisions regarding the use of the JRIF will be made by reaching consensus among the JRIC members where possible, including but not limited to third-party contract management of the fund, which will be paid from any interest accrued on the JRIF or, if adequate interest is not accrued, the remainder will be paid at the Permittee's sole expense. When a consensus cannot be reached, decisions of the JRIC will be made by majority vote.

If the JRIC selects a recreation improvement project that will be located within the Project boundary, the JRIC will coordinate on any consultations with the FERC and support the Permittee's pursuit of any required FERC approvals and/or license amendments. The Permittee will seek any potential license amendments pursuant to the procedures detailed beginning on page 7, Section 2 of the Settlement Agreement, herein identified as Appendix A.

The Permittee will provide administrative support for the JRIC. Members of the JRIC serve without compensation and will not be reimbursed for their time or expenses.

The JRIC may obtain matching funds or resources provided in-kind to reduce the amount of expenditures needed to construct a particular recreation improvement project. The JRIC will be automatically dissolved 30 calendar days after depletion of the JRIF unless the members decide that the JRIC is still essential for monitoring one or more of the selected projects funded by the JRIF or another purpose.

Project Maintenance and Construction

27. **In-Water Work Restriction.** In-water maintenance activities (including but not limited to, dredging, cofferdam construction or removal, etc.) involving the potential disturbance of the bed and/or banks of the West Canada Creek or Hinckley Reservoir, **shall not** occur from **September 15 to May 15** annually, unless otherwise authorized by NYSDEC in writing, in order to minimize impacts to fish spawning activities.

28. **No Work During High Flow.** No in-stream work shall occur during periods of high flow, except for work that occurs in dewatered areas behind temporary diversions, cofferdams or causeways, or to install temporary culverts or bridges for emergency access.

29. **Dredging.** Dredging **shall not** occur from **September 15 to May 15** annually, unless otherwise authorized by NYSDEC in writing. The Permittee shall install and maintain appropriate turbidity control structures while conducting any maintenance dredging activities associated with the Project. Appropriate turbidity control structures (such as, but not limited to, filter fabric or turbidity curtains weighted across the bottom and suspended at the top by floats) shall be positioned to enclose the work site before commencing dredging. The containment method shall remain in place and in functional condition during all phases of dredging operations and remain in place until after dredging has terminated and turbidity inside the containment area no longer exceeds ambient levels. During any portion of the dredging operation or prior to containment removal, if noticeable turbidity occurs outside the containment area, work shall cease until the containment method is repaired or reinforced and is functioning properly.

30. **Sediment Analysis and Disposal.** Dredging or other excavation shall not commence until the Permittee secures NYSDEC's written approval for the proposed dredge and disposal or interim holding locations for any sediments to be removed from the Project waters. If a proposed dredge is over 1500 CY, the Permittee shall sample the sediment which will be disturbed or removed from the Project's waters and test for contaminants. Sampling and testing shall be accomplished according to a protocol that is consistent with NYSDEC's Technical and Operations Guidance 5.1.9 or applicable guidelines/regulations. The sampling protocol shall include a disposal protocol based on

analytical sediment sampling results and current applicable regulations/guidelines. The sampling results are required to be submitted to NYSDEC at least 60 days prior to the commencement of dredging or work that will disturb sediment in the Project waters.

31. **Placement of Temporary Structures on Bed or Banks.** Before any cofferdam installation or other work commences which encroaches on the bed or banks of the West Canada Creek or Hinckley Reservoir, the proposed design of all such structures as they pertain to water quality, to compliance with water quality standards, and to this Permit shall be approved, in writing, by NYSDEC prior to installation. NYSDEC will conduct its review of the proposed design within 60 days after receipt of all materials it determines are necessary for completing such review.

32. **Temporary Dewatering Structures.** Where temporary dewatering is required or specified on the approved plans, temporary dewatering measures shall comply with the following:

- a. Temporary dewatering structures shall be constructed of clean material such as prefabricated impervious dikes/berms or sandbags. If stone is used, it shall be protected from erosion by plastic liners or filter fabric.
- b. Waters accumulated in isolated work areas shall be discharged to an upland settling basin or well vegetated area to provide for settling and filtering of solids and sediments. Return waters shall be as clear as the flowing water upstream of the work area.
- c. Temporary dewatering structures, including any plastic liners or filter fabric, and associated fill shall be completely removed, and the affected waters restored, immediately following the completion of work.
- d. To the maximum extent practicable, any fish or freshwater mussels trapped within the work area shall be netted/collected and relocated, alive and unharmed, to the water outside the work area. Invasive shellfish species, such as Zebra Mussels, need not be relocated.

33. **Temporary Work Areas.** Temporary causeways and work pads within regulated waters shall be constructed within the confines of a water control structure and shall consist of clean, non-erodible material such as stone, timber, or steel. The temporary causeways and work pads shall not be installed until the water control structure is in place and the area has been completely dewatered. The causeway or work pad shall be removed prior to the removal of the water control structure. Equipment staging and lay down areas shall not be located in wetlands, unless specifically authorized on the approved plans.

34. **Erosion and Sediment Control Plan, Goals and Performance Standards.** At least 60 days prior to commencing any major construction or maintenance activities within the Project boundary which could adversely affect water quality, the Permittee shall submit to NYSDEC for review and approval, an Erosion and Sediment Control Plan (ESCP). Work shall not commence until the Permittee receives NYSDEC's written approval of the ESCP. At a minimum, the Permittee shall ensure that the ESCP provides for implementing the following erosion and sediment/contaminant control measures any time during activities at the Project, such as maintenance, construction, operations, that could affect water quality:

- a. All erosion and sediment control measures shall be installed prior to work. Site preparation work shall not be undertaken until all required erosion control measures have been installed and are functioning properly. Siltation prevention measures (e.g. silt fencing, sediment traps or settling basins) shall be

installed and maintained during these activities to prevent movement of silt and turbid waters from the Project and into any watercourse, stream, water body or wetland.

- b. Effective erosion control measures shall be installed on the downslope of all disturbed areas (including, but not limited to construction/maintenance equipment staging areas, driveways, roads ramps or other areas where runoff would reach a waterbody) to prevent eroded material from entering any waterbody or wetland. Erosion control measures shall be maintained in a fully functional condition until the disturbed areas are fully stabilized. These erosion control measures are to be installed before commencing any activity involving soil disturbance, equipment staging or major construction/maintenance activities.
- c. Any in-stream work area shall be isolated from the flow of water and Permittee shall prevent discolored (turbid) discharges and sediments caused by excavation, dewatering and construction/maintenance activities from entering any waterbody or wetland.
- d. Exclude the use of heavy construction equipment below the mean high-water line until the work area is protected by an approved structure and dewatered.
- e. Stabilize any disturbed banks by grading to an appropriate slope, followed by armoring or vegetating as appropriate, to prevent erosion and sedimentation into any waterbody or wetland.
- f. Minimize soil disturbance, provide appropriate grading and temporary and permanent re- vegetation of stockpiles and other disturbed areas to minimize erosion/sedimentation potential.
- g. All areas of soil disturbance resulting from construction, maintenance or operations shall be seeded with an appropriate perennial grass, and mulched with straw immediately upon completion of the activity. Mulch shall be maintained until suitable vegetation cover is established.
- h. Protect all waters from contamination by deleterious materials such as wet concrete, gasoline, solvents, epoxy resins or other materials used in the construction, maintenance and operation of the Project.
- i. Ensure the immediate and complete removal of all dredged and excavated material from construction or maintenance from the bed and banks of all water areas to a NYSDEC approved upland disposal site.
- j. Ensure that all temporary fill and other materials placed in the waters of the river are completely removed immediately upon completion of construction, unless otherwise directed by NYSDEC.

35. **Turbidity Monitoring.** During activities related to maintenance or construction in or near the West Canada Creek or Hinckley Reservoir, the Permittee shall monitor the waters at a point immediately upstream of Project activities and at a second point no more than 200 feet downstream from any discharge point or other potential source of turbidity. The Permittee specifically agrees that if, at any time, turbidity measurements from the downstream locations exceed the measurements from the locations upstream of the work areas, all related construction on the Project will cease until the source of the turbidity is discovered and the cause is corrected. The Permittee is required to report any events where turbidity measurements for the downstream locations exceed

the measurements from the upstream locations to NYSDEC, within 24 hours of the incident.

36. **Work from Land.** Whenever feasible, bank grading and in-water removal or installation of material shall be carried out by land-based equipment rather than from the stream or reservoir. Generally, work shall proceed from the downstream end to the upstream end of the Project reach, unless specifically authorized on the approved plans.

37. **Equipment Cleaning.** To prevent turbid discharges and the potential introduction of invasive species into regulated waters from other areas, all equipment used in any project work area involving regulated waters will be inspected for, and cleaned of, any visible soils, vegetation, and debris before being used in the West Canada Creek or its tributaries, Hinckley Reservoir, or any other wetland or waterbody.

38. **Construction Access.** Construction access shall be by means that avoid aquatic sites, unless specifically authorized on the approved plans.

39. **Seed and Mulch Streambanks/Reservoir Banks and Work Areas.** Within one week of final grading, all areas of soil disturbance associated with the Project shall be seeded with an appropriate perennial grass seed and mulched with hay or straw, unless hydroseeded. Mulch shall be maintained until a suitable vegetative cover is established. If seeding is impracticable due to the time of year, a temporary mulch shall be applied and final seeding shall be performed at the earliest opportunity when weather conditions favor germination and growth, but not more than six months after Project completion.

40. **Maintenance of River Flows.** The Permittee shall operate the Project in accordance with this Permit. If adequate river flows are not maintained, the Permittee is required to notify the NYSDEC, as soon as possible, but no later than five business days after the incident.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. **Water Quality Certification.** NYSDEC hereby certifies that:

NYSDEC has reviewed the Permittee's Application for FERC License, additional information and addendums, and all other available pertinent information; and

a. The Project, as authorized and conditioned in this Water Quality Certificate (WQC), will comply with Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act as amended and as implemented by the limitations, standards and criteria of the New York State statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a); and

b. The Project will comply with applicable New York State effluent limitations, water quality standards and thermal discharge criteria set forth in 6 NYCRR Parts 700-706; and

c. This Water Quality Certification is issued pursuant to Section 401 of the Federal Water Pollution Control Act (33 USC 1341) and 6 NYCRR §608.9.

GENERAL CONDITIONS

1. **Facility Inspection by NYSDEC.** The Project, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of NYSDEC to determine whether the Permittee is complying with this Permit and the ECL.

Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The Permittee shall provide a person to accompany NYSDEC's representative during an inspection to the Project when requested by NYSDEC.

A copy of this Permit, including management plans, as well as the FERC License application, the FERC License and all pertinent maps, drawings and special conditions shall be available for inspection by NYSDEC staff at all times during such inspections at the Project. Failure to produce a copy of any of these documents upon request by a NYSDEC representative is a violation of this Permit.

2. Relationship of this Permit to Other NYSDEC Orders and Determinations.

Unless expressly provided for by NYSDEC, issuance of this Permit does not modify, supersede or rescind any order or determination previously issued by NYSDEC or any of the terms, conditions or requirements contained in such order or determination.

3. Applications for Modifications or Transfers. The Permittee shall submit a separate written application to NYSDEC for modification or transfer of this Permit. Such application shall include any forms or supplemental information NYSDEC requires. Any renewal, modification or transfer granted by NYSDEC shall be in writing.

4. Permit Modifications, Suspensions and Revocations by NYSDEC. NYSDEC reserves the right to exercise all available authority to modify, suspend or revoke this Permit. The grounds for modification, suspension or revocation include, without limitation:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the Permittee to comply with any terms or conditions of this Water Quality Certification;
- c. exceeding the scope of the Project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the Permit; and/or
- e. noncompliance with previously issued permit conditions, orders of the NYSDEC Commissioner, any provisions of the Environmental Conservation Law or regulations of NYSDEC related to the permitted activity, noncompliance with any license conditions.

5. Permit Transfers. Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer shall be submitted prior to actual transfer of ownership.

6. Adjudicatory Hearing/Acceptance. The Permittee has the right to object to conditions in this Permit through the adjudicatory hearing process. A hearing must be requested in writing within 30 calendar days of the date of the mailing of this Permit by writing to the Deputy Permit Administrator (as specified in Natural Resource Permit Condition #4). Failure to object to the conditions in this Permit shall be deemed acceptance by the Permittee.

7. State Not Liable for Damage. The State of New York shall in no case be liable for any damage for injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or

improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

8. **State May Require Site Restoration.** If any work, including, without limitation, the Project, authorized by this Permit has not been completed upon expiration or revocation of this Permit or the FERC License, the applicant shall, without expense to the State, and to such extent and in such time and manner as NYSDEC may with appropriate authority require, remove all or any portion of the uncompleted structure, stabilize the Project area consistent with the approved ESCP or fill and restore the site consistent with the approved ESCP. No claim shall be made against the State of New York on account of any such removal or alteration.

OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification. The Permittee expressly agrees to indemnify and hold harmless the State of New York, NYSDEC, its representatives, employees, and agents for all claims, suits, actions, and damages, to the extent attributable to the Permittee's acts or omissions in connection with the Permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the Permit whether in compliance or not in compliance with the terms and conditions of the Permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to NYSDEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the NYSDEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit. The Permittee is responsible for informing its independent contractors and subcontractors, employees, agents and assigns of their responsibility to comply with this Permit, including all conditions while performing any of the permitted activities on behalf of the Permittee, and such persons shall be subject to the same sanctions for violations of the ECL as those prescribed for the Permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits. The Permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this Permit.

Item D: No Right to Trespass or Interfere with Riparian Rights. This Permit does not convey to the Permittee any right to trespass upon the lands, or interfere with the riparian rights, of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to this Permit.

APPENDIX C

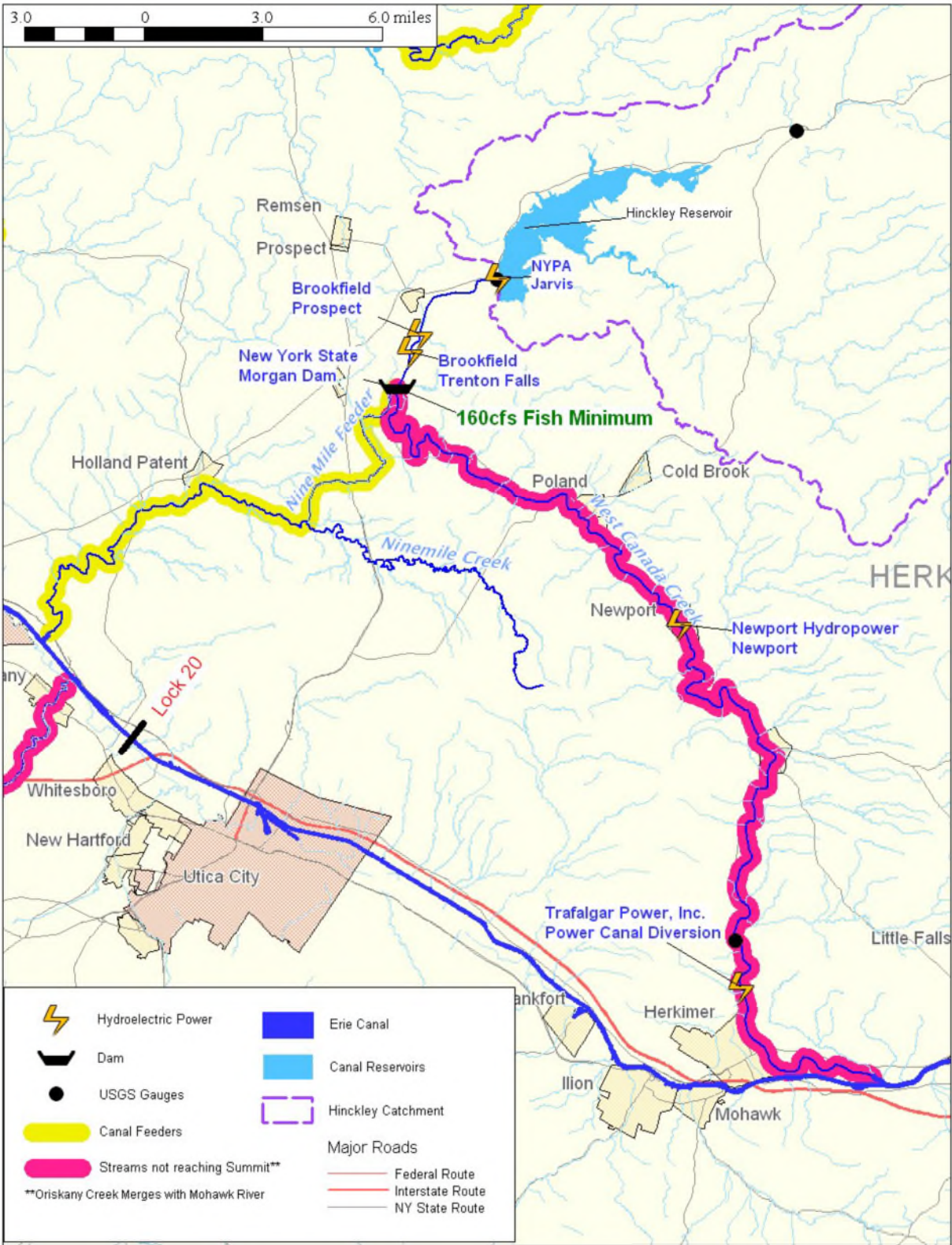


Figure 1. Map showing location of the Nine Mile Creek Feeder Dam on West Canada Creek, which is also known—and referred to (on this map) as the “Morgan Dam.” The Nine Mile Creek Feeder Dam is used by the New York State Canal Corporation to divert flow from West Canada Creek into Nine Mile Creek, which enters the Erie Canal (Mohawk River) farther west than West Canada Creek, and supplies water to the Rome summit section of the canal, in the vicinity of locks E-20 and E-21 (source: Report to the Governor by the Hinckley Reservoir Working Group. April 30, 2008. Available at: https://www.health.ny.gov/environmental/investigations/hinckley_reservoir/docs/2008-04-30_report_to_the_governor.pdf.)