

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### Division of Environmental Permits, Region 6

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May 29, 2020

*Filed Electronically*

Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C 20426

Re: Comments on Draft License Application  
Gregory B. Jarvis Hydroelectric Project (P-3211)

Dear Secretary Bose:

The New York State Department of Environmental Conservation (DEC) has reviewed the electronically filed Draft License Application (DLA) submitted by the New York Power Authority (NYPA) for the relicensing of the Gregory B. Jarvis Hydroelectric Project (FERC No. P-3211) (Project). Pursuant to 18 CFR § 5.16(e), DEC provides the following enclosed comments on the DLA.

Thank you for the opportunity to comment on the DLA. If you have any questions, please contact Todd Phillips at 315-793-2710 or by e-mail at [todd.phillips@dec.ny.gov](mailto:todd.phillips@dec.ny.gov).

Sincerely,

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## **Exhibit A**

The current trashracks on the turbine intake structure and the sluice gate do not meet recommended specifications of 1-inch-clear-spaced trashracks that have been shown to be effective on many hydroelectric projects throughout New York State. Currently, the intake trashracks provide 5 3/8-inches of clear space and the trashracks over the sluice gate are listed as providing 3 1/2-inches of clear space. New licenses issued for projects throughout New York and the northeast have incorporated 1"-clear-spaced trashracks to physically exclude most adult fish from the turbines, provide alternate downstream passage routes, and other features (e.g., reduced approach velocities, adequate plunge pools, etc.) to encourage safe downstream fish passage.

## **Exhibit E**

Section 1.3.2 (Studies) states that after consultation with the DEC and the U.S. Fish and Wildlife Service (USFWS), NYPA filed its study plan for the Dissolved Oxygen Enhancement Study with FERC on 15 Jan 2020. The DEC looks forward to consulting with NYPA and their consultants to address appropriate PME measures upon reviewing the results of the Dissolved Oxygen Enhancement Study and the additional analysis for the Reservoir Fluctuation Field Study.

Section 3.1.1 (Existing Project Location and Lands) lists the Project boundary as approximately 2,794 acres while in Section 4.3.1.4 (Reservoir Shoreline and Streambanks) the DLA lists the Project boundary as approximately 2,709 acres. This discrepancy, and any subsequent analysis performed using either reported Project boundary area, should be addressed, and corrected in the Final License Application (FLA).

Section 3.1.2.2 (Non-Overflow Intake) reports that the calculated water velocity measured approximately 1-foot in front of the intake trashracks is 2.57 ft./sec. The intake structure trashracks are reported to have a clear rack spacing of 5 3/8-inches and the clear spacing of the trashracks on sluice gate no. 4 is reported to be 3 1/2-inches between bars. The current USFWS guidelines for the Fish Passage Engineering Design Criteria (2019) recommend a velocity near the intake to be 2.0 ft./sec or less and trashrack spacing to be no more than 1-inch clear spacing.

Section 4.3.1.2.2 (Surficial Geology) states that based on the results of the analysis, approximately fifty (50) percent of the area was covered by reservoir and therefore classified as water, while; Section 4.3.1.3 (Soils) states that based on the results of the analysis, approximately fifty-one (51) percent of the area was covered by the reservoir and therefore classified as water. This discrepancy, and any subsequent analysis performed using the non-matching percentages classified as water (50 vs 51) within the Project, should be addressed and corrected in the FLA.

Section 4.3.1.4 (Reservoir Shoreline and Streambanks) states that approximately 5,890 ft. (1.1 miles) of shoreline was classified as 'Potential Future Erosion' and approximately 14,955 ft. (2.8 miles) of shoreline was classified as 'Active or Eroded', indicating that erosion had occurred or is occurring. The DLA failed to address comments made by the DEC on the ISR and the Hinckley Reservoir Fluctuation Field Study regarding areas that clearly indicated additional shoreline erosion. Photographs on pages 46-48 in Section 3.6 (Erosion) of the Hinckley Reservoir

Fluctuation Field Study where information was classified as “Eroded Bank” should be classified as “Active Erosion”, clearly showing leaning vegetation, undercut banks, and active rill erosion.

Section 4.3.1.4 (Reservoir Shoreline and Streambanks) states that there is some limited streambank erosion downstream of the dam extending to the end of the Project boundary. However, Section 4.3.3 (Proposed Environmental Measures) indicates that NYPA intends to continue existing operating conditions in the new license and are not proposing any changes with respect to geology and soils resources. No PME measures are currently being proposed to ameliorate the erosion noted along the Hinckley Reservoir shoreline or the streambank erosion downstream of the dam. PME measures to address the erosion issues associated with the Project should be presented in the FLA.

Section 4.4.3 (Proposed Environmental Measures) indicates that upon completion of the Dissolved Oxygen Enhancement Study plan, filed with FERC on 15 Jan 2020, NYPA will propose measure(s) to improve stream dissolved oxygen concentration downstream of the Project tailrace when the Project is operating. The DEC looks forward to consulting with NYPA and their consultants to address appropriate PME measures upon reviewing the results of the Dissolved Oxygen Enhancement Study and the additional analysis for the Reservoir Fluctuation Field Study to address the issue of low dissolved oxygen and erosion associated with the Project.

Section 4.5.1.8 (Fish Entrainment and Turbine Passage Survival) states that the median monthly intake velocities at the Project are lowest during the late spring and summer and highest during the colder water period from late fall through early spring. Analysis of entrainment and impingement should account for species that breed during spring and summer seasons and account for the movement that correlates with such activity. Analysis should account for additional protection from possible impingement and entrainment of juvenile and adult life stages of a variety of fish species. As such, DEC recommends installation of 1-inch-clear-space trashracks over both the intake and the sluice gate meeting standards implemented by many other hydroelectric projects in New York State and the northeast.

Section 4.5.1.9 (Benthic Macroinvertebrates) identifies that during the 2018 Hinckley Reservoir Fluctuation Field Study, a minimal number of snails were observed throughout the study area. The DLA fails to address the fact that these were casual observations made during a fluctuation field study and not quantifiable results that would be produced from performing a formal macroinvertebrate study with approved methodology. Such methodologies can be found in DEC Standard Operating Procedure (SOP) #208-18 for the Biological Monitoring of Surface Waters in New York State which can be found at the following URL:

- [https://www.dec.ny.gov/docs/water\\_pdf/sop20818biomon.pdf](https://www.dec.ny.gov/docs/water_pdf/sop20818biomon.pdf)

Section 4.5.1.10 (Mussels) states that during the 2018 Hinckley Reservoir Fluctuation Field Study no live mussel concentrations or evidence of mussel presence were observed at any location in the study area. The DLA fails to address the fact that these were casual observations made during a fluctuation field study and not quantifiable results that would be produced from performing a formal Freshwater Mussel Study with approved methodology such as the 2018 West Virginia Mussel Survey Protocols which can be found at the following URL:

- <http://www.wvdnr.gov/Mussels/2018%20WV%20Mussel%20Survey%20Protocols.pdf>

NYPA proposes in Section 4.5.3 (Proposed Environmental Measures) to continue existing operating conditions in the new license and is not proposing any changes with respect to fish and aquatic resources. However, Section 4.5.4 (Unavoidable Adverse Impacts) clearly indicates that some entrainment of fish is likely to occur at the Project under its current configuration and existing operating conditions. NYPA is highly encouraged to work with both the NYSDEC and the USFWS to develop PME measures that would address the issues of fish entrainment and downstream passage.

Section 4.9 (Recreation, Land Use, and Aesthetic Resources) fails to mention any assessment of condition of the current recreational facilities with regards to Americans with Disabilities Act (ADA) guidelines and standards. This was a request made by the DEC in their 27 October 2017 review of the Notice of Intent to File Application for New License and Comments on the Pre-Application Document and Request for Studies for this Project. The DEC again reiterated the need for this type of assessment in their comments on the Proposed Study Plan on 12 March 2018.

- The Recreation and Public Access Study (RPAS) dated May 2019 demonstrated the following:
  - Section 4.2.1.1 (Power Authority Boat Launch) on page 27 of the RPAS indicated the following; “The site is not ADA compliant for boating as it does not provide adequate access to the water, such as a compliant boarding pier. The site also lacks dedicated ADA parking spaces, as well as a stable, firm, and slip resistant access way from the parking area to the water.”
  - Section 4.2.1.2 (Scenic Overlook) on page 28 of the RPAS indicated that although the parking lot is level, stable, firm, and slip resistant, the site does not have a designated ADA parking space with signage and access aisle, and therefore is not fully ADA compliant.
  - Section 4.2.3 (Informal Public Access Sites) on pages 28 – 32 the RPAS either found the sites to not be ADA compliant or were not assessed following the ADA guidelines and standards.

Section 4.9.1.3 (Proposed Environmental Measures) proposes to continue existing operating conditions in the new license. NYPA also states that it proposes to continue operation and maintenance of the Power Authority Boat Launch and Scenic Overlook. No changes are proposed to recreation resources. The DLA fails to address any updates or modifications that would make the formal sites ADA compliant and more user friendly such as improvements to restroom amenities and increased access and parking as mentioned by the user perceptions recorded during the Recreation and Public Access Study (Section 4.9.1.1). The NYPA owned and operated boat launch should be free to use by the public (no fee for parking) and improved to allow boats to access and launch at the reservoirs lowest operating elevation of 1,195 feet. The DLA also fails to mention any planned management or improvements of the informal sites that are being used by the public which equate to approximately one-quarter of the total recreational use in the study area. There is the opportunity for NYPA to improve access and usage of the informal sites. Most of the informal sites are on property owned by NYS Canal Corporation; now under the management of NYPA. While the DLA states that continued operation of the existing operating conditions will not result in unavoidable adverse impacts to land use resources, it is clear from the Recreation and Public Use Study results that adverse impacts to the land use resources in the

Project area are occurring and appropriate management plans are needed at this site to contend with the current and future recreational use.

Section 4.9.3.4 (Unavoidable Adverse Impacts) states that continued Project operation will not result in unavoidable adverse impacts to aesthetic resources. However, it is clear from the information provided in the Recreation and Public Use Study that adverse impacts to the aesthetics of the Project area are occurring and appropriate management plans are needed to contend with the current and future recreational use. This could include formalizing some of the informal public access that is occurring on the Project lands and appropriately managing and maintaining their use by the public. The DEC encourages NYPA to develop appropriate management plans and PME measures to address the informal public access that is currently affecting the resources within the Project area.

### **General Comment**

The DEC would like to continue to urge FERC to review the impacts of the Project and its peaking operations on the downstream sections of West Canada Creek. NYPA's claim that they pass what they are allowed to pass is semantically inaccurate. It is true that the Project must currently adhere to the 2012 Operating Diagram for discharge values. However, those discharge values are a daily average, allowing for extreme peaking periods. The DEC requests that FERC concurrently review the information provided by NYPA for this Project with information being filed for the West Canada Creek project (P-2709) located immediately downstream. The aquatic habitat in downstream sections of West Canada Creek would benefit if both projects were licensed to release daily average discharges at a constant rate or under higher constraints on peaking discharge.