



United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, New York 13045



May 27, 2020

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

**RE: Jarvis Hydroelectric Project (FERC #3211-009)
Review of Draft License Application**

Dear Secretary Bose:

The U.S. Fish and Wildlife Service (Service) has reviewed the New York Power Authority's (NYPA) March 3, 2020, *Draft License Application* (DLA) for the Jarvis Hydroelectric Project (Project) located at Hinckley Reservoir on West Canada Creek in Oneida and Herkimer Counties, New York. In general, the DLA adequately describes Project operations and potential impacts to fish and wildlife resources. However, as discussed below, the Service disagrees with some of the NYPA's conclusions.

Fish Entrainment and Turbine Passage Survival

Section 4.5.1.8 of the DLA discusses fish entrainment and turbine passage survival. The DLA (page 113) states that "...survival of any fish passing through the Project turbines is relatively high." However, the estimated survival rates are only 70.8% to 78.1% for fish greater than 8 inches in length. That equates to a 20-30% mortality rate, which is much higher than would be found in most fish passage facilities. Even the mortality rates for smaller fish are somewhat high (7-15%). The Service will be discussing fish protection measures with the NYPA throughout the rest of the relicensing process.

Peaking Operations

In Section 4.5.2, the DLA describes the minimal effects of peaking operations (less than a 4-inch daily drawdown) on the reservoir habitat. This daily fluctuation range is similar to many hydroelectric projects in New York. The greatest impacts from water level fluctuations in Hinckley Reservoir are related to the seasonal drawdowns, which are linked to canal operations and municipal water withdrawals. However, contrary to what is stated in the DLA, the peaking operations can have substantial effects on West Canada Creek downstream from Hinckley Dam.

The NYPA claims that downstream impacts are the responsibility of the West Canada Creek Project (FERC # 2701). However, the releases from Jarvis set up the flow regime for the entire West Canada Creek from Hinckley Reservoir to the junction with the Mohawk River. If the West Canada Creek Project operated in a strict run-of-river mode, any downstream fluctuations resulting from peaking operations at Jarvis would be automatically transferred downriver and would affect resources throughout the downstream reaches. In order for the Jarvis peaking operations to have no downstream effects, the NYPA is relying on the West Canada Creek Project to re-regulate the river to offset these effects. Although not strictly the NYPA's responsibility, it is clear that downstream impacts from flow fluctuations (i.e., peaking operations) are a cumulative effect that must be addressed in both licenses. The Service anticipates that the Federal Energy Regulatory Commission will examine the cumulative impacts from these two projects in determining the license conditions necessary at each project to protect the downstream aquatic resources.

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The Service appreciates the opportunity to comment on the DLA. If you have any questions or desire additional information, please contact Steve Patch at 607-753-9334.

Sincerely,

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Field Supervisor

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