



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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Cortland, NY 13045



March 6, 2018

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
Mail Code: DLC, HL-11.2
888 First St., NE
Washington, DC 20426

**RE: Gregory B. Jarvis Power Project (FERC #3211)
Review of Proposed Study Plan**

Dear Ms. Bose:

The U.S. Fish and Wildlife Service (Service) has reviewed the New York Power Authority's (Authority) December 12, 2017, filing of a *Proposed Study Plan* (PSP) for the Jarvis Hydroelectric Project (Jarvis Project), located at Hinckley Reservoir on West Canada Creek in Oneida and Herkimer Counties, New York. The Service has the following comments on the PSP.

GENERAL COMMENTS

The Authority has declined to conduct any studies related to impacts from water level fluctuations in Hinckley Reservoir, citing the fact that outflows are controlled by the New York State Canal Corporation (NYSCC) and that the Authority merely passes those outflows through a turbine, thus resulting in no direct impacts to reservoir water levels. The Service and many other stakeholders requested a variety of studies related to water level fluctuations. These study requests were related to impacts to fish and wildlife habitats and wetlands, erosion, and recreational use of the reservoir. The Federal Energy Regulatory Commission (FERC) must rule on whether the Jarvis Project is responsible for, or contributes to, Hinckley Reservoir water level fluctuation impacts. If the FERC indicates that the Authority is responsible for all, or a portion of, these impacts, then the Service believes that the Authority should conduct all of the requested studies. The Service, the New York State Department of Environmental Conservation (NYSDEC), and some other stakeholders have provided adequate justifications for these studies.

The Authority cites the 2012 Operating Diagram as the basis for not conducting studies for fluctuation-related impacts. The Authority indicates that the 2012 Operating Diagram is based on litigation and determines the reservoir fluctuation guidelines that the Authority must follow. The Jarvis Project originally operated under the 1920 Operating Diagram, which was modified in

2012. The 1920 Operating Diagram was part of the original license. It is not clear whether the FERC incorporated the 2012 Operating Diagram into the license.¹

The Authority provides several rationalizations for why the FERC must protect the existing uses of the reservoir when developing license conditions. These rationalizations include case-specific litigation such as the Lynchburg Decision in 1994 and PacifiCorp in 2003, as well as recent legislation like the Hydropower Policy Modernization Act of 2017 that is designed to promote new hydropower development at existing dams. However, only a small portion of the flow in West Canada Creek is needed to meet water supply needs for the Mohawk Valley Water Authority (MVWA) and canal operations. The FERC could alter the way the Jarvis Project is operated while still protecting the existing uses. For example, the Jarvis Project is currently required to provide a minimum base flow of 160 cubic feet per second (cfs), as measured downstream of Brookfield Renewable's (Brookfield) West Canada Creek Project (FERC #2701) (WCC Project). That base flow requirement is not part of the NYSCC's operating requirements, yet it is part of both FERC licenses. Under relicensing, that flow requirement could be altered without impacting the existing uses.

There is precedent in New York for the FERC to require dam operators who provide headwater benefits to hydroelectric projects² to license their operations. In 2002, while relicensing the E.J. West Project (FERC #2318) at Conklingville Dam on Great Sacandaga Lake to Brookfield's predecessors, the FERC required the dam's operator, the Hudson River Black River Regulating District (District), to license the Conklingville Dam (FERC #12252). The Conklingville Dam provides headwater benefits to a variety of downstream users. The dam's rule curve was modified via a basinwide settlement agreement. In addition, the FERC also modified the way the District receives its income and how it charges downstream users for headwater benefits.

The FERC also required Brookfield's predecessor to license the Carry Falls Project (FERC #2060) on the Raquette River, which is a water supply reservoir that provides headwater benefits to many downstream hydropower operations but does not have any hydropower production at Carry Falls, itself. The operating rule curve for the Carry Falls Reservoir was modified during the relicensing process.

On the Mongaup River, the FERC requires Toronto Reservoir and Cliff Lake to be licensed as part of the Swinging Bridge Project (FERC #10482), even though there are no hydropower facilities on either of those two reservoirs. Both reservoirs are used to provide water for downstream hydropower operations. It is conceivable that the operating regime of those two reservoirs will be modified during the ongoing relicensing of the Swinging Bridge Project.

The Authority does not propose to conduct a base flow study, claiming that their peaking operations have no impacts on downstream flows. However, the 160 cfs base flow requirement below the WCC Project is a condition of both the Jarvis Project license and the WCC Project license. In fact, the Jarvis Project is essentially responsible for any downstream flow

¹ We were unable to find any records in eLibrary indicating that the license was amended to incorporate the 2012 Operating Diagram.

² Hinckley Dam releases provide headwater benefits to the WCC Project (Prospect and Trenton), as well as to the Newport (FERC #5196) and Herkimer (FERC #9709) Hydroelectric Projects

fluctuations. The Authority indicates that the Prospect and Trenton developments of the WCC Project can utilize the peaking flows provided by the Jarvis Project. Thus, the two projects operate in tandem and any flow fluctuations are passed downriver.

Even if the new license issued to Brookfield for the WCC Project requires the WCC Project to be operated in a strict run-of-river mode or some similar fashion, the flow fluctuations caused by the Jarvis Project peaking operations would be passed downstream, since inflow must equal outflow. The only way that the flow fluctuations at the Jarvis Project would not be passed downstream is if the new license for the WCC Project requires Brookfield to attenuate the incoming flows and smooth out the downriver fluctuations. It is not clear at this point in the relicensing processes whether that option is even feasible. Since that condition is currently not a requirement for the WCC Project, the downriver flows directly mimic the Jarvis Project peaking operations, thus making the Jarvis Project directly responsible for any downstream impacts.

It is clear that the operations of the two projects are directly linked and that they have cumulative impacts on the fish and wildlife habitat and recreational use of West Canada Creek. In addition, the agreement between the NYSCC and Brookfield cited by the Authority in their cover letter provides a direct link between Hinckley Reservoir operations and downstream hydropower production. Since the relicensing of the WCC Project is just getting underway, the two projects will be undergoing the Integrated Licensing Process (ILP) concurrently. There may be an opportunity for the two licensees to work together to share studies and study costs, since some study requirements will overlap and the projects jointly impact the resources. In addition, the FERC has a unique opportunity to improve fish and wildlife habitat and recreational use of West Canada Creek and Hinckley Reservoir via the two concurrent ILPs.

SPECIFIC COMMENTS

Section 3.2 Tailwater Water Quality Study

The goal of this study is to determine if the Jarvis Project has an effect on downstream water quality. The objective is to collect water quality data in the tailrace. However, the location shown on Figure 3.2.7-1 (page 34) shows the sonde located in an area where spillage would mix with the tailrace release. The sonde should be located directly in the tailrace or there should be two sondes to compare tailwater releases with overall Jarvis Project releases (which would include spillage).

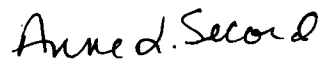
The Authority intends to compare the tailrace water quality data with existing data from Hinckley Reservoir. It would be more useful to have a data sonde in the reservoir collecting data at the same time as the tailrace data are being collected to allow a direct one-on-one comparison, since water quality data likely vary day to day and year to year. This would be especially true if 2018 turns out to be an abnormal year in any way. The Authority indicates (page 32) that they will compare the tailwater data with “(a)vailable reservoir water quality data collected by other parties (e.g., MVWA, NYSDEC, etc.) for the monitoring period, if any,....” However, there is no guarantee that any such data will be collected (note the qualifier “if any” in the quote), since there are no apparent regulatory requirements for this type of monitoring.

SUMMARY

The Authority has proposed to conduct a minimal number of studies and believes that Jarvis Project operations have limited impacts on the fish and wildlife resources both in Hinckley Reservoir and in the downstream reaches of West Canada Creek. The downstream WCC Project is just now commencing relicensing and will be relicensed concurrently with the Jarvis Project. The two projects clearly have cumulative impacts on the downstream reaches of West Canada Creek, and appear to have impacts in Hinckley Reservoir. We request that the FERC make a timely determination of what issues are under their purview in these two ILPs and whether the NYSCC will be required to license Hinckley Dam so that both the Authority and Brookfield (and the NYSCC, if necessary) can be required to conduct the studies necessary to provide the data needed to address the individual project impacts as well as the cumulative impacts.

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

Sincerely,



for David A. Stilwell
Field Supervisor

cc: Jarvis Service List
NYPA, White Plains, NY (C. Brady)
NYSDEC, Watertown, NY (R. McDonald)
NYSDEC, Utica, NY (T. Phillips)
DOI, Newton, MA (A. Tittler)

Document Content(s)

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