OFFICE OF ENERGY PROJECTS

Project No. 2539-045 – New York
School Street Hydroelectric Project
Erie Boulevard Hydropower, L.P.

March 20, 2020

VIA FERC Service

Daniel Maguire, PE
Compliance Manager
184 Elm Street
Potsdam, NY 13676

Subject: Fishway Effectiveness Evaluation Report, Article 401

Dear Mr. Maguire:

This acknowledges receipt of your January 10, 2020 filing containing your response to our November 14, 2019 request for additional information regarding your 2019 final Fishway Effectiveness Evaluation Report. Your report was required by Ordering Paragraph (B) of the Order Modifying and Approving Fishway Effectiveness Testing Plan Pursuant to Article 401.1 The report was to include any recommended changes in project operation or structures needed to enhance fish migration based on monitoring results.

According to your report, the best overall route of passage for juvenile blueback herring (JBBH), based on survival rate estimates, is turbine passage. You state that a bypass system is cost prohibitive and would not improve fish passage survival rates greater than turbine passage. The U.S. Fish and Wildlife Service (FWS) commented that an evaluation of the reasons for mortality in the fish bypass pipe or improvements to pipe survivability should be explored. Article 401 and the approved testing plan required that if you did not adopt a recommendation, your filing with the Commission must include your reasons for rejecting the recommendation, based on project specific information.

In your filing, you discuss the issues with possible improvements to the fish passage pipe noting that any enhancements, such as creating a smooth pipe by slip-lining, would entail significant costs with no guarantee that it would be successful. Installation would be required with additional costs in order to determine its effectiveness. The estimated costs of such an improvement was determined by your consultant to be in the

1 121 FERC ¶ 62,126 (issued November 20, 2007)
range of $750 K to $1.5 M. Further, this also has the possible effect of jeopardizing the existing passage for adult blueback herring, American eel, and resident species. Finally, you state that this type of installation would be a new and untested application of materials with unknown costs. Your filing explored the installation of a new trashrack system designed to direct juvenile JBBH towards the bypass. A new system would entail significant costs and incur additional maintenance and operational costs associated with debris due to smaller trashrack openings. In addition, modifications to the discharge pipe as well as effectiveness studies also would be necessary.

In your desktop study of JBBH survival through the project versus passage over Cohoes Falls, it was determined that survival through the units (75%) was greater than over the falls (63%). You note that peak migration often occurs during high flow events whereby most emigrating JBBH follow spill towards and over the falls. This was evident in several years of study in which the majority of emigrating JBBH did not enter the power canal.

The agencies did not agree with this conclusion by letters dated March 29, 2018 and June 20, 2018. Further, in its September 5, 2019 letter, the FWS agreed that testing was complete and that no additional testing was needed; however, they determined that the existing fishway was not effective at passing JBBH downstream and that an alternative means of passing JBBH is required. The FWS notes that while JBBH may be a non-native species introduced to the river by means of the NYS canal and lock system, they are managed as a key component of the ecosystem by the New York Department of Environmental Conservation (New York DEC). In addition, you note that the existing bypass system is successful in passing resident fish, American eel and Adult BBH, and that any modifications may have unintended consequences for these species while not assuring successful downstream passage of JBBH. According to your report, you believe that you have met the requirements of Article 401 and the obligations set forth in the approved fish bypass effectiveness plan.

We agree that the installation and testing of the downstream passage facility at the project meets the aforementioned requirements and further testing or exploration of additional alternatives is not recommended. The potential cost and unknown benefits of alternative measures outweigh the benefits of any possible additional passage. We agree that the present configuration of the existing downstream facility, passage through the units and over Cohoes Falls, provide an adequate means for successfully passing JBBH downstream of the project. The location and configuration of the School Street Project, with respect to its power canal and the 65-foot Cohoes Falls, provides additional complications for providing downstream passage. These factors and that the fact that JBBH are a non-native species, the uncertainty of any significantly improved efficiency with a slip-lined pipe, plus the substantial cost associated with the reconfigured downstream passage facilities advance our conclusion.
Thank you for your report and cooperation. Your report meets the requirements of license Article 401. If you have any questions, please contact Mr. Joseph Enrico at (212) 273-5917 or email at joseph.enrico@ferc.gov.

Sincerely,

[Signature]

Thomas J. Lovullo
Chief, Aquatic Resources Branch
Div. of Hydropower
Administration and Compliance