April 28, 2016

Mr. Michael Sale
Low Impact Hydropower Institute
704 Potters Falls Road
Wartburg, TN 37887

Subject: Recertification Recommendation for the School Street Hydroelectric Project

Dear Mike:

This letter contains my recommendation for recertification of the School Street Hydroelectric Project (P- 2539) (the "Project").

I. Recertification Standards

Chapter 2, Section 2.25 of the Low Impact Hydropower Institute (LIHI)'s Certification Handbook (Updated April 2014) regarding Applications for Recertification ("Recertification Standards") provides that a request for renewal of a previously-issued LIHI certification ("re-certification") will be granted at the conclusion of the term of the existing certification, so long as (1) there have been no "material changes" at the facility that would affect the certification and (2) LIHI's certification criteria have not been revised since the previous certification was issued by LIHI."

The process also states that if no information is missing from the Re-Certification application package, and if the Application Reviewer has determined that there are no material changes or changes in LIHI's criteria, than the project is eligible for recertification action by the Executive Director.

II. Adequacy of the Recertification Application Package

The School Street Hydroelectric Project (the "Project") received a license (P-2539) from the Federal Energy Regulatory Commission (FERC) from the Federal Energy Regulatory Commission in February 2007 through a collaborative Settlement Agreement. It is a run-of-river facility located on the Mohawk River, at the Cohoes Falls in New York. The project was initially certified by LIHI as "low impact" effective November 20, 2009 for a five year term (Certificate #63). At that time, the Project was, and remains, owned and operated by Brookfield Renewable Power, Erie Boulevard Hydropower, Limited Partnership (Applicant or Brookfield).

The current certification was extended by LIHI to December 31, 2015. The certification included three conditions:

1. Brookfield be required to submit to LIHI the results of the effectiveness testing required under the license and settlement agreement at the same time as such information is being submitted to resource agencies,

2. Any submittal include a statement from Brookfield that discusses how the effectiveness testing results demonstrate that downstream migrating fish are being safely passed, and

3. Brookfield submit to LIHI any comments prepared by resource agencies on their review of this effectiveness testing.

I have reviewed the materials submitted on December 19, 2014, in support of application for recertification of the School Street Hydroelectric Project. My review of the application found that for many criteria, data supporting the response given to the questions in the application was not sufficiently detailed. As such, an Intake Review was completed and submitted to the applicant in August 2015 to facilitate submission of the data needed to complete the recertification review. The majority of the missing data was received in September 2015, with follow-up information provided on February 4th and 14th 2016.

No comment letters on the application for recertification were received by LIHI by the deadline of February 8, 2016. Because of this fact, and the completeness of the new data submitted, which included copies of recent communications with the key resource agencies involved with this facility, I determined that additional consultation with pertinent agency representatives was only needed to confirm agency opinions on the fish passage issues at the Project. While not yet received by LIHI, on January 14, 2016, Brookfield requested comment from the NY Department of Environmental Conservation on their opinion of the Project's compliance with its WQC. Brookfield has committed to provide LIHI a copy of any communications received from NYDEC. Appendix A summarizes my consultation with the fisheries resource agencies.

In my opinion, the materials now in LIHI's possession are sufficient to make my recommendation to recertify the Project.

III. There have been no "material changes" at the facility that would affect the certification.

In accordance with the Recertification Standards, "material changes" mean non-compliance and/or new or renewed issues of concern that are relevant to LIHI's criteria. The following summarizes my review of these issues.

Compliance Status

My recertification assessment of the Project included review of Brookfield's compliance with the FERC License, WQC and the LIHI certification conditions, during the period of LIHI certification: November 20, 2009 through December 31, 2015 (LIHI's extension of the certification period). I also conducted a review of the information available in FERC's eLibrary for this Project for his period.

Brookfield, in their application to LIHI, certified that, with minor exception, they have operated in compliance with their FERC License and WQC. This was supported by review of the

documents provided, and those found in FERC's eLibrary. Four impoundment fluctuation excursions, the longest being 2.5 hours occurred since 2009, with the most recent being on November 13, 2014, which only lasted 28 minutes. The need for better communication with the owner of the upstream Project owners was cited as the remedy needed to minimize/eliminate future excursions. FERC did not find any of these as license violations. Given the limited frequency and non-impacting nature of these events, I believe the project is in compliance with LIHI's Flow Criterion.

Brookfield did not provide regular updates on their fish passage effectiveness testing as required by the Conditions contained in the initial LIHI certification. However, with the exception discussed below regarding juvenile herring testing, this data was provided as part of the follow-up information to support the recertification application and is discussed below.

Possible "Material Changes" and New/Renewed Issues of Concern

My initial review of the application submitted by Brookfield suggested that some potential compliance issues may exist under LIHI's Fish Passage and Protection and Cultural Resources criteria. Work conducted on the power canal in 2009 to "increase its capacity" also raised some question on whether or not that work constituted a "material change" that resulted in increased generation capacity of the Project, as did information that suggested Brookfield was planning on installing a sixth unit at the project within the next few years. I also requested an update of information regarding the presence of endangered and threatened species at the Project.

Additional Generation Capacity Question

In 2009, the power canal was excavated to remove approximately 44,000 cubic yards of material which included silt, sediment, and bedrock. Following relicensing, the Settlement Agreement required Erie to provide aquatic and aesthetic flows at the dam and fish attractant and fish passage flows at the fish separation chamber. Erie determined that the required environmental flows would increase the hydraulic gradient (headloss) between the upper gate house and lower gate house translating to an estimated annual generation of approximately 150,079 MW-hr., a reduction in generation of approximately 23,104 MW-hr. The canal excavation project removed silt and sediment that had been transferred to the canal over the many years of operation and also removed some bedrock to accommodate the environmental flows and minimize the headloss. The canal excavation project is estimated to have returned the projected annual generation to 173,000 MW-hr. Thus, this work did not constitute new generation as it only restored the ability of the units to generate the typical average annual MW-hrs.

With the issuance of the new license on February 15, 2007, the deadlines for commencing and completing the new powerhouse construction pursuant to Article 301 were originally February 15, 2009 and February 15, 2012, respectively. On January 22, 2009, and again on January 6, 2011, Erie filed a request for a two-year and three-year extension of time (EOT) on both of these deadlines which were granted by FERC, thus the EOT for commencing and completing the unit installation was extended to February 2014 and February 15, 2017, respectively. The new

powerhouse and associated "fish-friendly" turbine have not yet been installed at the Project, and Erie does not have immediate plans to commence with this effort. Erie is continuing to evaluate the feasibility of proceeding with the additional authorized unit given other ongoing site improvements and asset management priorities and will consult with FERC staff as to the appropriate means of moving forward with the additional unit installation, when and as appropriate. Thus, while installation of this "fish-friendly unit" was of key interest to LIHI as a means for safe downstream fish passage during its original certification considerations, its installation was an "option available" to Brookfield under the Settlement Agreement (Section 3.6) and the FERC License (Section 21). Likewise, the conditions set forth in the original LIHI certifications did not specify this as a required downstream fish passage method. See further discussion below regarding fish passage.

New or Renewed Issues of Concern

Fish Passage

Effective fish passage was a concern at this site during the initial certification, and thus the three conditions were issued. Downstream passage requirements were required in the FERC license as established in the Settlement Agreement (Sections 3.5 and 3.6). As identified in Section 3.6, "if passage effectiveness via the new unit, as determined by USFWS, NYSDEC in consultation with Licensee proves to be equal to or greater than that of the Phase I fishway, the Licensee will be permitted to operate the new (i.e. fish-friendly) unit as its primary means of fish passage. If the new unit proves to be less effective at safely passing fish than the Phase I fishway, the Licensee shall install racks and seasonal overlays across the new unit's intake and shall operate the Phase I fishway as the primary means of fish passage."

The agency plan for passage assessment at this site, as approved by the state and federal agencies (US Fish and Wildlife Service (USFWS) and New York Department of Environmental Conservation (NYDEC), included requirements for testing for downstream passage survival for resident fish, adult American eels, and juvenile and adult blueback herring and passage efficiency of juvenile and adult blueback herring. It should be noted that the Cohoes Falls represents a 90-ft high natural barrier that historically prevented this anadromous fish population from entering the Mohawk River. However, construction and operation of the Waterford Flight canal allows upstream migration and re-entry into the Mohawk River for downstream migration. The canal allows passage from downstream of the School Street dam to waters upstream of the Cresent Dam, located upstream of the School Street dam. Based on the summary provided below, it appears that safe downstream passage has been documented for all but juvenile herring. Thus, it is recommended that a condition be included to confirm that safe passage of juvenile herring is in fact addressed at the Project.

> Adult eel downstream survival – This study was completed in Oct 2011. The evaluation did not meet the target sample size of 90 eels; however, the 56 eels (of 105 released) that were evaluated exhibited 100% survival. 29 escaped the weir pool when dewatered and

another 20 escaped undetected. Study/passage results found satisfactory by USFWS via letter dated June 12, 2012 (see Appendix B) and that no further eel testing was required.

Resident fish downstream survival – Studies were completed in 2009 with the results reported and reviewed by the resource agencies in 2011. The species selected represented the range of warm water freshwater fishes (smallmouth bass, largemouth bass, rock bass, bluegill, yellow perch and various cyprinids) and body types available in the Project vicinity. Bypass survival of resident fish was generally high across test groups, body types and size classes. The overall survival for all fish tested was 93.57 percent. In a letter dated May 20, 2011 from David Stilwell of the USFWS (see Appendix B), and as confirmed by Steve Patch on March 16, 2016, the USFWS found these resident fish survival studies to be satisfactory. An email dated June 8, 2011 from Mark Woythal of NYDEC, contained in Appendix B) infers the same, although Mr. Woythal did not respond to my recent email inquiry. In a discussion on March 15, Mr. Woythal stated he preferred to not comment give the years that have passed since these studies.

Adult blueback herring downstream survival – These studies were completed in 2010. The 2011 report concluded that 81.8% of test herring conclusively exiting the power canal were passed via the fishway. The remaining valid test herring were entrained via the penstocks and turbines. Project passage survival was not calculated due to the potential for missed test fish which failed to meet the study assumptions. The study did document that at least 48% of the fish that passed the project also subsequently arrived at the Route 32 Bridge. However, due to several complicating factors, the report stated that this estimate was low. The letter and email and recent communication with Steve Patch identified above also addressed these studies and found that no further testing of adult herring were needed.

Juvenile blueback herring passage efficiency – Testing was conducted annually from 2011 through 2014 with unsatisfactory results for various reasons. Agency approval for more re-testing in 2015 was provided, however results from 2015 testing are not yet available. The 2011study was not completed in part due adverse weather conditions (Tropical Storm Irene). The 2012 study concluded that while the FDX PIT monitoring system was capable of detecting PIT tags in the downstream fish bypass, the evaluation of the bypass overall was not feasible due to the poor tagging survival of the juvenile blueback test herring. In 2013, downstream passage efficiency studies employed use of hydroacoustic technologies; however, an unusually low abundance of out-migrating herring in the river system, possibly due to high flows during the spawning season, prevented the collection of meaningful data to adequately assess passage efficiency. Studies were repeated in 2014 using an ARIS 3000 acoustic camera (ARIS) to monitor the fish with two flow scenarios. Low bypass efficiency of the bypass was found for both flow scenarios (6.83% at 120 cfs and 13.87 % at 230 cfs). Brookfield proposed that because 95.7% of the study was conducted when Unit 1 was inoperable, this may have affected fish's ability to be effectively guided to the bypass. As noted in a letter from USFWS dated June 8, 2015 in regard to the poor 2014 results found, "There were two

potential reasons why the data showed poor effectiveness: 1) a poorly-performing fishway, or 2) a poor study." (This letter is contained in Appendix B.) The reviewing agencies agreed that non-operation of Unit 1 could have been a factor in the poor testing results, and endorsed re-do of the studies in 2015. As noted in Attachment A, Mr. Steven Patch of USFWS noted that if better coordination had occurred between Brookfield and USFWS, he would have suggested not to conduct the 2014 studies due to Unit #1 not operating. The results of the 2015 studies are not yet available from Brookfield's consultant.

Juvenile blueback herring downstream survival – These studies were designed to be conducted along with the bypass efficiency testing discussed above. In part due to the 2012 study results, the agencies agreed that because of the fragile nature of juvenile herring, survival estimates of juvenile herring would be made from the results of the bypass efficiency testing results, rather than conducting additional survival testing on juveniles. This was confirmed by Steve Patch on March 16th 2016.

Cultural Resources

Questions regarding compliance with the Cultural Resources criterion arose with regard to the removal of the Conboy Avenue Bridge from its onsite project location. The Historic Properties Management Plan (HPMP) specifically acknowledges that removal of the Conboy Avenue Bridge from its current location is necessary and appropriate. Following HPMP required coordination with specified agencies, including the National Park Service, and local stakeholders, it was agreed that the bridge would be donated to the City of Cohoes, and transported to a suitable location per their direction. However, the City's plans changed and would not accept the bridge. Following consultation with appropriate stakeholders, it was approved by the interested stakeholders that the bridge would be stored onsite while a new "owner" was located, which has not yet occurred.

A second cultural resources concern involved the proposed transfer of a section of Project land to the Hiawatha Institute of Indigenous Knowledge (HIIK). This 3.38 acre parcel does affect any operational aspect of the Project, and does not include the actual Cohos Falls. On January 27, 2015, the New York State Historic Preservation Office (SHPO) filed a letter with FERC providing comments on the proposed transfer. The SHPO recommended that the FERC should consult with all interested parties, including the federally-recognized Indian Nations and the SHPO, to determine the property's eligibility for listing on the National Register of Historic Places and/or as a traditional cultural property, to assess the potential effect of the proposed property transfer, and to reach an agreement among the interested parties regarding the disposition of the property. The only challenge resulting from the consultation came from the Stockbridge -Munsee Community (SMC) who indicated they were not opposed to the transfer of land out of the Project boundary, but that they believed they should be the recipient of the land, and not HIIK, to ensure their continue right of access to the Cohos Falls. The Saint Regis Mohawk Tribe (SRMT) supported Erie's transfer of the parcel of land to the HIIK and expressed their disagreement with SMC's proposal that the land should be transferred to SMC. As part of

the analysis of the proposed removal from the Project boundary FERC determined that Erie's proposal to remove a 3.38 acre parcel from the project boundary would have no effect on Cohoes Falls or any other historic property in the vicinity of this parcel of land. FERC approval of removal of this parcel from the Project boundary, as a non-capacity license amendment, was issued April 1, 2016. Following additional stakeholder consultation, FERC restated its position that the parcel was not integral to project operation and the transfer would not have any effect on cultural resources through its approval. It is the reviewer's opinion that this assessment of no impact on cultural resources, and not the recipient of the land transfer, is important to compliance with LIHI's Cultural Resources criterion.

It is the reviewer's opinion that cultural resource concerns are being properly managed, and will likely be found in compliance with LIHI's criterion. One condition has been suggested to confirm this compliance expectation.

Endangered and Threatened Species

Updated data on protected species was provided. Only the Northern Long-eared Bat (a federal and state threatened species) may be found onsite. Based on past information from USWFS, the removal of large trees could affect this species if they occur onsite. Based on my discussions with Ian Borlang, such activities are not planned, and he is aware that interface with the USFWS should occur if large tree removal is needed.

No other new or ongoing issues of concern were found for the Project.

IV. LIHI's certification criteria have not been revised since the previous certification was issued by LIHI in 2009.

LIHI is in the process of revising its certification criteria and publishing a new Handbook, but the transition to the new certification processes will not be implemented until 2016. Facilities that have applied for recertification on or before December 31, 2015, are to be evaluated using the April 2014 version of LIHI's Certification Handbook.

It is my understanding that LIHI's April 2014 criteria being applied to this recertification, or the Board's interpretation of one or more criteria, that are applicable to the circumstances of the School Street Hydroelectric Project have not changed in meaningful ways since the date of the original certification.

V. Conclusion

In light of the above, I recommend recertification of the School Street Hydroelectric Project for an additional five-year period with the conditions noted below.

Condition 1. The facility owner shall provide LIHI with the results of the 2015 downstream bypass efficiency testing for juvenile blueback herring and continue consultation the USFWS

and NYDEC for the purpose of obtaining an updated assessment of the current fish passage effectiveness for that species at the facility. The result of Agency assessments may be: (a) that appropriate passage is being provided at the Project, (b) that effective fish passage effectiveness has not been demonstrated, or (c) that a recent decision has been made that passage at the site for juvenile herring is not needed, thus modifying the original commitments established in the Settlement Agreement and associated agency recommendations. If the 2015 testing is not found to be sufficiently effective and that downstream passage at the site is still required, then the owner shall inform LIHI of their plans to improve operations and continue testing. LIHI strongly recommends that all future testing be coordinated with the agencies to ensure they can participate in the testing. The results of the agency assessment of the 2015 studies shall be provided to LIHI within 60 days of their receipt by the Owner. Additional letters of correspondence from consultation with the USFWS and NYDEC on these passage issues shall also be provided to LIHI within 60 days of receipt by the licensee. LIHI reserves the right to suspend its certification if the agencies do not determine that safe passage is being provided and that such passage needs have not been waived.

Condition 2. If a decision is made to pursue installation of the sixth, fish-friendly generating unit at the Project within the next five years, the facility owner shall notify LIHI within 60 days of when FERC approves such an installation. Such installation may lead to a re-evaluation of potentially affected criteria, such as fish passage requirements.

Please contact me if you have any questions.

Sincerely,

Patricia B. McIlvaine

Attachment A
Resource Agency Communications

Date: March 15, 2016 (telephone call) and March 16 2016 (email)
Contact Person: Mr. Mark Woythal; New York State Department of Environmental Conservation
Contact Information: 518-402-8847; mswoytha@gw.dec.state.ny.us
Area of Expertise: Fish passage

When I inquired about the past studies on resident fish, American ell and adult herring, Mr. Woythal stated that he could not answer my questions because the studies were performed a number of years ago and he did not recall the details of the results. He did not respond to my email inquiry.

Date: March 16, 2016
Contact Person: Mr. Steve Patch; U.S. Fish and Wildlife Service
Contact Information: stephen_patch@fws.gov; (607) 753-9334
Area of Expertise: Fish passage

See attached email.

Print

Date: Wednesday, March 16, 2016 1:53 PM

From: Orvis, Curtis <curtis_orvis@fws.gov>

To: Patch, Stephen <stephen_patch@fws.gov>

Cc: pbmwork@maine.rr.com, Mark Woythal <mswoytha@gw.dec.state.ny.us>

Subject: Re: Question on School St Project Fish Studies

I concur with Steve's analysis to withhold certification until positive results on juvenile bbh testing are received and reviewed.
Curt

On Wed, Mar 16, 2016 at 1:36 PM, Patch, Stephen <stephen_patch@fws.gov> wrote:

1. Yes.

2. Yes.

3. Yes.

4. The last juvenile bbh testing showed that the fishway didn't work. However, they did the testing without the main guidance unit, Unit #1, working. In addition, apparently Units 2&3 were off during part of the study. Therefore, in our opinion, the fishway was not operating properly during the testing. We gave them the option of retesting last year. As has been the case for the last few years, we were not notified when the testing was being done (I actually don't know if it was done). Had they contacted us in 2014 about Unit 1 being offline, we would have said don't bother testing. In general, Brookfield's coordination with us on these studies has been poor. With that said, assuming they did the juvenile bbh study last year, we would need to see the results before we can comment further. I would recommend withholding recertification until the juvenile bbh results have been reviewed.

I am copying our fishway engineer, Curt Orvis, on this response in case he has anything additional to add.

On Wed, Mar 16, 2016 at 12:36 PM, <pbmwork@maine.rr.com> wrote:

Hi Steve

Following up on my call and message from yesterday, here are the specific questions I have regarding Brookfield's School Street project located on the Mohawk River in NY. Brookfield is seeking recertification from the Low Impact Hydropower Institute so your feedback on these fish passage issues is important to us. I am coping Mark on this email also has follow-up to the conversation he and I had.

1) As noted in the attached 2011 report, Brookfield conducted survival testing on resident fish species in 2009 and adult & juvenile herring in 2010, and American eel in 2009 and 2010. It appears that the USFWS letter dated May 20, 2011 from David Stilwell (see pdf page 118) and the email dated June 8 2011 from Mark (see pdf page 119) infers the testing conducted for adult herring and resident fish species is satisfactory but that more testing is needed for eel and juvenile herring.

Is this a accurate assessment of your findings of the resident fish and adult herring studies?

2) It's my understand that retesting was done on American eel in 2012 and based on a letter dated June 12, 2012 from USFWS (see attached), this testing was found to be sufficient and that no further eel testing was needed. Is this a correct assessment?

3) I am aware of the various bypass efficiency challenges and testing that was done for juvenile herring and that final results are not yet available from testing done in 2015. It was also suggested to me that because of the fragile nature of juvenile herring, that survival estimates of juvenile herring will be made from the results of the bypass efficiency testing results, rather than conducting additional survival testing on juveniles. Is this an accurate understanding?

4) Finally, do you believe that Brookfield is conducting good faith efforts in measuring the fish passage and protection concerns at this site in the recent years? Do you have any concerns regarding the LIHI recertification of this Project provided it was conditioned upon your finding of sufficient safe passage of juvenile herring?

> Hopefully by attaching these past communications I have made it easier for you to respond to my questions. Please feel free to do so either by email or by calling me at 207-688-4236. Please leave a message if I am not home if you call.
>
> Thanks for your help.
>
> Pat

--

Steve Patch
Fish & Wildlife Biologist
U.S. Fish & Wildlife Service
New York Field Office (Region 5)
3817 Luker Rd.
Cortland, NY 13045
(607) 753-9334 (voice)
(607) 753-9699 (fax)
http://nyfo.fws.gov (web)
stephen_patch@fws.gov (email)

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Curtis Orvis
Fish Passage Engineering
USFWS, Northeast Region, Fisheries
300 Westgate Center Drive
Hadley, MA 01035-9589

Tel: 413-253-8288 Cell: 413-404-3275

Attachment B
Resource Agency Letters on Fish Passage Studies

RECEIVED JUN 14 2012
6308-USFWS-BREG-101

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

June 12, 2012

Matthew Johnson, Compliance Manager
Brookfield Renewable Energy
New York East Operations Center
339B Big Bay Road
Queensbury, NY 12804

RE: School Street Hydroelectric Project (FERC #2539)
Fishway Effectiveness Testing

Dear Mr. Johnson:

The U.S. Fish and Wildlife Service (Service) has reviewed the February 23, 2012, "*School Street Hydroelectric Project (P-2539); Fishway Effectiveness Test Results*," received on February 27, 2012. The cover letter for the report indicated that we should contact Brookfield Power (Brookfield) if we had any questions or desired additional information. The letter also indicated that Brookfield welcomed the opportunity to discuss the outstanding studies of juvenile blueback herring. Since we determined that the report was adequate and no additional information on eel effectiveness testing was needed, we did not respond to Brookfield's letter. The Service has been waiting for Brookfield to contact us to set up the requisite meetings to discuss this year's juvenile blueback herring studies.

We are now approximately 2 months from the time the juvenile blueback herring study should be conducted and have not received any additional requests for meetings or consultation with Brookfield. In addition, at the recent National Fish Passage Conference in Amherst, Massachusetts, Brookfield's consultant, Kleinschmidt Associates, presented a talk on the results of the effectiveness tests for American eels at the School Street project. During conversations with staff of Kleinschmidt, our staff was informed that Kleinschmidt does not have a contract to conduct the juvenile blueback herring testing this year.

The juvenile blueback herring study is already overdue and should be rescheduled for 2012. If Brookfield has selected a consultant to undertake the effectiveness monitoring, they should arrange a meeting with the Service and the New York State Department of Environmental Conservation (NYSDEC) to ensure that the effectiveness tests will be properly undertaken and meet agency requirements. If Brookfield has not yet selected a consultant, we encourage you to complete this action in a timely fashion and arrange appropriate consultation with the Service and the NYSDEC.

RESPONDED WITH
LETTER 6308-BREP-USFWS-004
6/15/2012

We appreciate the opportunity to review the report and look forward to completing consultation with Brookfield to enable the study to be completed in a timely fashion in 2012. If you have any questions or desire additional information, please contact Steve Patch at 607-753-9334.

Sincerely,

ACTING FOR David A. Stilwell
Field Supervisor

cc: FERC, Washington, DC (K. Bose)
NYSDEC, Albany, NY (M. Woythal)
FWS, Hadley, MA (C. Orvis)

Stephen_patch@fws.gov
david_stilwell@fws.gov
Curtis_orvis@fws.gov

Faxed 5/20/11

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

May 20, 2011

RECEIVED
MAY 25 2011
bjs 1:15pm

Tim Lukas, Compliance Specialist
Erie Boulevard Hydropower, LP
Hudson River Operations
399 Big Bay Road
Queensbury, NY 12804

RE: School Street Hydroelectric Project (FERC #2539)
Review of Phase I Fishway Effectiveness Testing and Hydraulic Survey

Dear Mr. Lukas:

The U.S. Fish and Wildlife Service (Service) has reviewed the April 12, 2011, Draft Report for the School Street Project entitled *Phase I Fishway Effectiveness Testing and Hydraulic Survey*. The results of the study and proposed future studies were discussed at an interagency meeting held in Albany, New York, on May 17, 2011. Several options for obtaining American eels and a variety of options for tagging and monitoring juvenile blueback herring were discussed. As a result of that meeting, Erie Boulevard Hydropower, LP, intends to provide the Service and the New York State Department of Environmental Conservation with proposals on the best way to accomplish the juvenile blueback herring and American eel testing.

We have no comments on the existing report. We look forward to reviewing the proposals for future studies. Any modifications to the fishway or its operations can be determined after all the study results have been reviewed.

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

Sincerely,

Anne d. Secord

for David A. Stilwell
Field Supervisor

cc: NYSDEC, Albany, NY (M. Woythal)
FWS, Hadley, MA (C. Orvis)

From: Mark Woythal [mailto:mswoytha@gw.dec.state.ny.us]
Sent: Wednesday, June 08, 2011 1:41 PM
To: Lukas, Timothy
Subject: Re: FW: 20110520-DOI-01

Tim,

I have no additional comments on the School Street Fish Bypass Evaluation Report beyond those provided at the meeting. The meeting minutes accurately reflected the issues and outcomes discussed at the meeting.

Mark

Mark Woythal
Instream Flow Unit Leader

NY Dept of Environmental Conservation
Div. of Fish Wildlife & Marine Resources
Bureau of Habitat
625 Broadway, Albany, NY 12233-4756
mswoytha@gw.dec.state.ny.us
P (518) 402-8847
F (518) 402 9825

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EMailed 6/9/15

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

RECEIVED JUN 15 2015
RECEIVED JUN 15 2015

June 8, 2015

Ian Borlang, Compliance Manager
Atlantic Operations
Brookfield Renewable Power
399 Big Bay Rd.
Queensbury, NY 12804

RE: School Street Hydroelectric Project (FERC #2539)
06082015 **Juvenile Blueback Herring Downstream Passage Efficiency Evaluation Study Plan**

Dear Mr. Borlang:

The U.S. Fish and Wildlife Service (Service) has reviewed Brookfield's March 2015 *Juvenile Blueback Herring Downstream Passage Efficiency Report* (Report) for the School Street Hydroelectric Project (Project), located on the Mohawk River in Cohoes, New York. A conference call to discuss the study results was held among Brookfield, the Service, and the New York State Department of Environmental Conservation on May 9, 2015. The Report demonstrated very poor effectiveness of the fishway for successfully moving blueback herring (*Alosa aestivalis*) downstream around the Project's turbines. There were two potential reasons why the data showed poor effectiveness: 1) a poorly-performing fishway, or 2) a poor study.

The fishway was designed using Unit 1 as a key component of the guidance system. This unit is located closest to the fishway and is the first on/last off to provide attraction flow. During the 2014 study, Unit 1 was inoperable. It is likely that this situation negatively skewed the results. Therefore, all parties agreed that it was appropriate to conduct the study again in 2015.

Brookfield's June 5, 2015, email requests our concurrence with the proposal to repeat the study this year. The Service endorses this approach. We also concur that the study should be postponed if Units 1 through 3 (particularly Unit 1) become unavailable due to a forced outage. It does not make sense to conduct a study that is likely to produce questionable data. In all likelihood, if the study must be abandoned and rescheduled, it will be rescheduled for 2016.

We appreciate the opportunity to review the Report and the Study Plan. If you have any questions or desire additional information, please contact Steve Patch at 607-753-9334.

Sincerely,

for David A. Stilwell
Field Supervisor