February 9, 2016

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

Subject: Recertification Recommendation for the West Branch St. Regis Hydroelectric Project

Dear Mike:

This letter contains my recommendation for recertification of the West Branch St. Regis Hydroelectric Project (P- 10461) (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 ("recertification") 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 West Branch St. Regis Hydroelectric Project (the "Project") received a license (P-10461) from the Federal Energy Regulatory Commission (FERC) from the Federal Energy Regulatory Commission in September 2002 through a collaborative Settlement Agreement.

The project was initially certified by LIHI as "low impact" effective September 14, 2005 and recertified by LIHI effective September 14, 2010, each for five year terms. The current recertification was extended by LIHI to December 31, 2015. The recertification included one condition, which is noted below. The condition was included because of the inability of the NYDEC to comment on the recertification application due to the sudden departure of the staff member familiar with the Project. No comments were received by LHI from the NYDEC by December 31, 2012 relative to this condition.

"Should the NYDEC determine by December 31, 2012 that, in their opinion, there are significant issues that may challenge the ability of the Project to meet LIHI criteria's as a

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"low impact facility", comments to this effect will be provided to LIHI. Should such comments be received, LIHI would re-assess the appropriateness of this recertification."

The Project was, and remains, owned and operated by Brookfield Renewable Power, Erie Boulevard Hydropower, Limited Partnership (Applicant or Brookfield) through this past certification period.

I have reviewed the materials submitted on December 1, 2015, in support of application for recertification of the West Branch St. Regis Hydroelectric Project. My review of the application found that most required data was provided, although a limited amount of additional supporting detail relative to two LIHI criteria were required, along with some additional resource agency contacts.

The majority of the missing data was received by January 8th and completed by January 26th 2016. As part of the review process, I consulted with all pertinent agency representatives, along with Trout Unlimited as noted in Attachment #1. I also reviewed the LIHI file containing the original certification and 2010 recertification files and FERC's public information file on the Project. One comment letter on the application from the USFWS was received by LIHI by the deadline of February 8, 2016. A copy can be found at the end of Attachment #1. An email was received from the USFWS in response to a question I asked for clarification on the comment letter. That email is also contained in Attachment #1.

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

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.

Compliance Status

My recertification assessment of the Project included review of Brookfield's compliance with the FERC License, WQC and the LIHI certification condition, during the period of LIHI certification: September 14, 2010 through December 29, 2015. As noted above, the LIHI's recertification condition provided an additional period for the NYDEC to comment on the 2010 recertification but none were provided at the time.

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, those found in FERC's eLibrary and more importantly, by the resource agencies and Trout Unlimited reached during this review process. The following non-compliance events were reported:

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- May 2013 non-compliance with the Allens Falls impoundment levels occurred which was found to be the result of insufficient monitoring of the gate modifications made at the upstream Parishville development to ensure return of the impoundment level to the required level. All resource and FERC notifications were made. Since no environmental impacts occurred and no similar events had occurred at the Project, FERC stated that no violation would be issued.
- September 2015 non-compliance with their minimum flow requirements occurred. The event was properly notified to the resource agencies and FERC. No environmental effects were found and FERC determined that Brookfield was not in violation of their license.
- Two communication outages associated with the SCADA system used to monitor operations were reported in January 2014 and April 2015. Based on follow-up information provided by Brookfield, neither outage resulted in non-compliance with a license or WQC requirements or an environmental or safety concerns at the Project. Appropriate notification was made to FERC.

Given the limited frequency and non-impacting nature of these events, I believe the project is in compliance with LIHI's Flow Criterion.

New/Renewed Issues of Concern

The recertification process resulted in the identification of that the Northern long-eared bat (*Myotis septentrionalis*) potentially occurs in the vicinity of the Project, but no habitat in the project area is currently designated or proposed for designation as critical habitat. The Northern long-eared bat is federally listed as threatened. As noted in the email from Mr. Steve Patch of USFWS, there is no concern for impacts to the bat unless tree removal is planned, which according to Mr. Ian Borlang of Brookfield, is not planned.

A New York state threatened species, the Fernald's Sedge (*Carex merritt-fernaldii*) was found onsite in in 1987 and again in 2004 according to a discussion with Nicholas Conrad of the New York Natural Heritage Program. The typical habitat for the Fernald's Sedge includes sandy or gravelly roadsides and ditch banks, sand barrens, gravel and sand pits, and rock ledges, always in relatively sterile acidic soils (Rothrock and Reznicek 2001). According to the NYNHP Conservation Guide, "this is a disturbance-loving plant that may appear at a site for a short period of time and then return to the seed bank." The Guide also states "that there are currently no threats known to Carex merritt-fernaldii in New York and no management is currently needed. Mr. Conrad stated that the lack of newer records is as likely due to the lack of follow-up observations, than absence of the species. He stated that within current regulations of the DEC, authority to mandate protection of or management of state-listed species is only triggered if a state permit is needed at a site.

Having been found onsite in in both 1987 and 2004 in the same area near the roadway leading to the powerhouse and not far from the pipeline, it appears that operational and maintenance

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activities that have traditionally been occurring in this area have not prevented the species from growing. The nature of the species to often appear 'for a short time and then return to the seed bank", suggests that it could re-occur in the future even if it was not onsite currently. Currently, manual vegetation maintenance practices are primarily used to control growth along the pipeline. To help facilitate possible continued existence of this species onsite, a condition as noted below has been recommended.

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 2010.

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 West Branch St. Regis 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 West Branch St. Regis Hydroelectric Project for an additional five-year period with the condition noted below. An enhancement fund in the amount of an initial contribution in 2005 of \$5000 followed by annual contributions of \$750 for the term of the License has been established and is being met. However, I do not recommend that an additional three years of certification is appropriate as this fund does not provide equivalent benefits of a 200-foot buffer zone for at least 50% of the shoreline, including all of the undeveloped shoreline, dedicated for conservation purposes.

The following condition is recommended in regard to the onsite presence of Fernald's Sedge:

"Should the maintenance activities along the powerhouse roadway and pipeline right-of-way be significantly altered, such as widespread herbicide application, widening of the roadway or placement of fill adjacent to the roadway where the plant has been observed, the Applicant shall consult with the NYDEC regarding potential impacts to the species. If such change occurs during this LIHI certification term, the Applicant shall provide LIHI the results of these consultations along with evidence of implementation of any requirements mandated by the NYDEC to protect this species if it is onsite. The Annual LIHI Compliance Statement shall address whether or not such changes have occurred for the subject annual statement period."

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Please contact me if you have any questions.

Sincerely,

Patricia B. McIlvaine

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Attachment 1 Resource Agency and Non-Governmental Organization Communications

The following lists direct consultation initiated by the Reviewer and a summary of these communications. A summary of conversations or the email received in response to my inquiry can be found at the end of this Attachment.

LIHI CRITERION	PRIMARY CONTACT INFORMATION
Flows	Mr. Chris Balk; New York State Department of Environmental Conservation (NYDEC) Region 6
	Mr. Steve Patch; U.S. Fish and Wildlife Service
	Mr. William Wellman, Trout Unlimited
	Mr. Chris Balk; New York State Department of Environmental
Water Quality	Conservation
	Mr. Steve Patch; U.S. Fish and Wildlife Service
Fish Passage & Protection	Mr. Chris Balk, NYDEC. Region 6
	Mr. William Wellman, Trout Unlimited
Watershed Protection	None required.
	Mr. Steve Patch; U.S. Fish and Wildlife Service
Threatened &	Mr. Nicholas Conrad NYDEC, New York Natural Heritage
Endangered Species	Program
Cultural Resources Protection	None required
Recreation	None required
Facilities Recommended for Removal	None required

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RECORD OF CONTACTS

Date: Jan. 5, 2016 (email) and Feb.2, 2016 telephone call

Contact Person: Mr. Chris Balk; New York State Department of Environmental Conservation

Contact Information: cjbalk@gw.dec.state.ny.us; (315) 785-2293

Area of Expertise: Water quality and flows

See attached Jan 5, 2015 email for flows and water quality response. On Feb. 2, 2016 Chris Balk confirmed to me that the DEC supports the position offered by the USFWS regarding no need for fish passage at this time at West Branch St. Regis Project.

Date: Jan. 11, 2016

Contact Person: Mr. Steve Patch; U.S. Fish and Wildlife Service Contact Information: stephen_patch@fws.gov; (607) 753-9334 Area of Expertise: Fisheries, flows and protected species

See attached letter and email.

Date: Jan. 4, 2016

Contact Person: Mr. William Wellman; Trout Unlimited

Contact Information: wellman1985@charter.net

Area of Expertise: Fisheries and flows

See attached email.

Date: Jan. 27, 2016

Contact Person: Lance Durfey, Region 5 Fisheries Biologist Contact Information: lance.durfey@dec.ny.gov; (518) 897-1291

Area of Expertise: Fisheries

Mr. Durfey advised me that the Project which is in both Region 5 and 6 would be handled by Region 6. He forwarded by email to Lawrence Ambeau of Region 6.

Date: Feb. 1, 2016

Contact Person: Lawrence Ambeau Contact Information: (315)785-2247

Area of Expertise: Fisheries

Mr. Larwrence Ambeau advised me that typically the DEC aligns with the position of the USFWS on fish passage needs but he would have Jessica Hart from his staff confirm that position to me. Jessica Hart forwarded my inquiry to Chris Balk. (see above for response.)

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Date: Feb. 2, 2016

Contact Person: Nicholas Conrad, New York Natural Heritage Program, Information Resources

Coordinator Program

Contact Information: (518) 402-8944; naturalheritage@dec.ny.gov

Area of Expertise: State Protected Species

Nicholas Conrad stated that the observations made at the site of Fernald Sedge were made in 1987 and 2004; the data was provided by a contractor to the Heritage Program. In response to my question, he stated the Heritage Program policy requires that such observations made on private property are done with the permission of the property owner and that any observations are shared with the property owner, but that the Heritage Program does not specifically follow-up to make sure this is done. The lack of newer records is as likely due to the lack of follow-up observations, than absence of the species. He stated that within current regulations of the DEC, authority to mandate protection of or management of state-listed species is only triggered if a state permit is needed at a site.

Print

Date: Tuesday, January 5, 2016 12:47 PM

From: Balk, Christopher J (DEC) <christopher.balk@dec.ny.gov>

To: pbmwork@maine.rr.com <pbmwork@maine.rr.com>

Cc: Borlang, lan <lan.Borlang@brookfieldrenewable.com>, Garrett, Robert

<Robert.Garrett@brookfieldrenewable.com>, Daoust, Daniel <Daniel.Daoust@brookfieldrenewable.com>

Subject: RE: Certification Application for the West Branch St. Regis Project

Hello Pat,

My apologies for the tardiness of this response. I am new to the hydro program and I had a misunderstanding in some of the direction I received with regard to the LIHI program. Again, my apologies to Ian as well.

With regard to the operation of the Allens falls and Parishville projects, the 401 WQC is still current and DEC is unaware of any operational contraventions to its conditions. I understand that early-on (when the most recent 401 was first issued), we had one problem with the minimum flows but that it was corrected promptly. We have no objection at this time to the continued certification of these Projects under the LIHI program.

Best regards,

Christopher J. Balk
Region 6 Habitat Manager
New York State Department of Environmental Conservation
Watertown Headquarters
317 Washington Street
5th Floor
Watertown, NY 13601
P: 315-785-2263 | Christopher.Balk@dec.ny.gov
www.dec.ny.gov | |

----Original Message----

From: pbmwork@maine.rr.com [pbmwork@maine.rr.com]

Sent: Monday, January 04, 2016 12:52 PM

To: Balk, Christopher J (DEC)

Subject: Certification Application for the West Branch St. Regis Project

Good afternoon

I have been assigned as the reviewer for Brookfield's application for recertification of thier West Branch St. Regis hydropower Project (P-10461)under the Low Impact Hydropower Institute's (LIHI) program. This project is comprised of two hydroelectric developments (Allens Falls and Parishville) located along the West Branch St. Regis River within St. Lawrence County, New York.

Based on materials provided by Ian Borlang, Brookfield's Compliance Manager for this Project, I understand that he sent a letter to you on November 3, 2015, regarding the current status for the Project under its WQC requirements, but had not yet heard from you when they filed their application with LIHI. As a key requirement of LIHI's certification program is feedback from the resource agencies knowledgable of the Project, I would appreciate hearing from you regarding the following questions. You can either respond by email or we can schedule a time to talk over the phone.

1) To your knowledge, is the West branch St. Regis project in compliance with conditions issued pursuant to its Section 401 water quality certification?

- 2) Is the WCQ still current or has it been modified since its issuance on November 2, 2001?
- 3) Are there any new issues associated with water quality of flows that have arisn regrading this project in the past five years?
- 4) Do you have any concerns about continued certification of this Project under LIHI's program?

I will try calling you later this week to see if you would prefer talking through these issues, or you can simply email me back. As I am working only on a part-time basis as a private contractor to LIHI, hence this private email address. If you have a preferred time for me to call, please send me that date and time.

Thanks
Pat McIlvaine

Print

Date: Monday, January 11, 2016 1:09 PM

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

To: pbmwork@maine.rr.com

Subject: Re: Recertification review of Brookfield's West Branch St Regis Project

The only concern would be tree cutting, but there are no known plans to cut trees.

On Mon, Jan 11, 2016 at 12:37 PM, <pbmwork@maine.rr.com> wrote:

Good afternoon Steve

I received a copy of the letter you coordinated for the West Branch St. Regis project. (see attached) Can you confirm that the final statement that there are "no concerns" could also be applied to the issue of endangered species? I understand that the IPaC Trust Resource Report for this site only showed the possible presence of the Northern Long-eared Bat in the area, but that no critical habitat for the bat is in the area. I don't want to make any assumptions since my initial email to you referenced fisheries and flows.

Thanks Pat

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---- "Patch wrote:
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- > Although I see no problems with the re-certification, official comments
- > must be sent on letterhead signed by our supervisor. Do you have a mailing
- > address I can send these to?

>

> On Mon, Jan 4, 2016 at 1:15 PM, <pbmwork@maine.rr.com> wrote:

>

> > Good afternoon

>>

- >> I have been assigned as the reviewer for Brookfield's application for
- >> recertification of thier West Branch St. Regis hydropower Project
- >> (P-10461)under the Low Impact Hydrpower Institute's (LIHI) program. This
- > > project is comprised
- > > of two hydroelectric developments (Allens Falls and Parishville) located
- >> along the West Branch St. Regis River within St. Lawrence County, New York.

>>

- >> As a key requirement of LIHI's certification program is feedback from the
- >> resource agencies knowledgable of the Project, I would appreciate hearing
- > > from you regarding the following questions, as they pertain to your area of
- >> expertise. Please note that a seperate email has been issued to Mr. Chris
- >> Balk of New York State Department of Environmental Conservation

>>

- >> You can either respond by email or we can schedule a time to talk over the >> phone.
- >>
- >> 1) To your knowledge, is the West branch St. Regis project in compliance
- > > with its any conditions issued pursuant to flows to enhance riverine fish
- > > species?
- > >
- >> 2) The application state that to date, neither upstream or downstream
- >> passage is required for the project for either anadromous fish nor American
- >> eel. Can you confirm this is accurate?
- >>
- >> 3) Are there any new issues associated with flows or fisheries that have
- > > arisn regrading this project in the past five years?
- > >
- >> 4) Do you have any concerns about continued certification of this Project
- > > under LIHI's program?

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> >
>> I will try calling you later this week to see if you would prefer talking
>> through these issues, or you can simply email me back. As I am working only
>> on a part-time basis as a private contractor to LIHI, hence this private
>> email address. If you have a preferred time for me to call, please send me
>> that date and time. Mr. Wellman, if you prefer that we talk, could you
>> please send me a phone number to reach you at?
>>
>> Thanks
> > Pat McIlvaine
>>
>>
>
>
> --
> 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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Steve Patch
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stephen patch@fws.gov (email)



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road Cortland, NY 13045

January 8, 2016

Ms. Dana Hall Low Impact Hydropower Institute PO Box 194 Harrington Park, NJ 07640

Attn: Pat McIlvaine

RE: West Branch St. Regis River Hydroelectric Project (FERC #10461)
Low Impact Hydro Recertification

Dear Ms. Hall:

The U.S. Fish and Wildlife Service (Service) has reviewed the January 4, 2016, email request for comments on the recertification of the West Branch St. Regis Hydroelectric Project (Project) located on the St. Regis River in St. Lawrence County, New York. To the best of our knowledge, Brookfield Renewable Energy (Brookfield) is operating the Project consistent with their license requirements. Our responses to specific questions follow.

1. To your knowledge, is the West Branch St. Regis River Project in compliance with any conditions issued pursuant to flows to enhance riverine fish species?

Shortly after relicensing, the Allens Falls development was not meeting minimum flow requirements. The problem was traced to an inaccurate gate release measurement and clogging of the release structure with debris. Brookfield responded by installing pins that the operators could view to ensure that minimum flow requirements were being met. They also modified the gate curve and instructed their operators to keep the release gate debris-free. Trout were stocked in the river as mitigation. We have had no reports of inaccurate releases since the corrective measures were taken.

2. The application states that to date, neither upstream or downstream passage is required for the project for either anadromous fish or American eel. Can you confirm this is accurate?

This is accurate. There are no American eel or anadromous fish species in this portion of the St. Regis River. Downstream passage was not required because the reservoirs contain

primarily warmwater fish species while the riverine reaches downstream have excellent trout fisheries.

3. Are there any new issues associated with flows or fisheries that have arisen regarding this project in the past five years?

There have been no new flow issues or fishery-related issues at this Project.

4. Do you have any concerns about continued certification of this Project under LIHI's program?

The Service has no concerns at this time.

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

Sincerely,

David A. Stilwel

ce: TU, Plattsburgh, NY (W. Wellman) NYSDEC, Watertown, NY (L. Ambeau)

Print

Date: Monday, January 4, 2016 3:44 PM

From: William Wellman < wellman 1985@charter.net>

To:

Cc: Stephen Patch <stephen_patch@fws.gov>, Ronsgonefishing@aol.com

Subject: Re: Recertification review of Brookfield's West Branch St Regis Project

Pat: This responds to your inquiry regarding West Branch St.Regis Project P-10461:

- 1. To my knowledge, the project is in compliance with all of its license conditions regarding enhancement flows.
- 2. To my knowledge, no upstream or downstream passage is required for anadromous fish and American Eels.
- 3. No new issues regarding flows nor fisheries on this Project have come to my attention in the last five years. There was a prior problem with inaccuratly commputed minimum flows that was corrected by Brookfield.
- 4. I have no concerns about continued certification of the Project under LIHI's program.

Let me knlw if youn need more. bill
On Jan 4, 2016, at 1:15 PM, <pbmwork@maine.rr.com> <pbmwork@maine.rr.com> wrote:

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> Good afternoon
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> I have been assigned as the reviewer for Brookfield's application for recertification of thier West Branch St. Regis hydropower Project (P-10461)under the Low Impact Hydropower Institute's (LIHI) program. This project is comprised > of two hydroelectric developments (Allens Falls and Parishville) located along

the West Branch St. Regis River within St. Lawrence County, New York. >

> As a key requirement of LIHI's certification program is feedback from the resource agencies knowledgable of the Project, I would appreciate hearing from you regarding the following questions, as they pertain to your area of expertise. Please note that a seperate email has been issued to Mr. Chris Balk of New York State Department of Environmental Conservation

> You can either respond by email or we can schedule a time to talk over the phone.

> 1) To your knowledge, is the West branch St. Regis project in compliance with its any conditions issued pursuant to flows to enhance riverine fish species?

- > 2) The application state that to date, neither upstream or downstream passage is required for the project for either anadromous fish nor American eel. Can you confirm this is accurate?
- > 3) Are there any new issues associated with flows or fisheries that have arisn regrading this project in the past five years?
- > 4) Do you have any concerns about continued certification of this Project under LIHI's program?
- > I will try calling you later this week to see if you would prefer talking through these issues, or you can simply email me back. As I am working only on a part-time basis as a private contractor to LIHI, hence this private email address. If you have a preferred time for me to call, please send me that date and time. Mr. Wellman, if you prefer that we talk, could you please send me a

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phone number to reach you at?
> Thanks
> Pat McIlvaine
>
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