

From: Stephen Hickey [mailto:sjh@essexhydro.com]
Sent: Wednesday, October 26, 2011 10:34 AM
To: Walsh, Ted
Cc: Jeffrey Cueto
Subject: Re: Fwd: RE: Newfound bypass flow follow up

As soon as possible

On 10/26/2011 10:26 AM, Walsh, Ted wrote:
Steve,
When will the owner implement this?

Ted

-----Original Message-----

From: Stephen Hickey [mailto:sjh@essexhydro.com]
Sent: Tuesday, October 25, 2011 2:50 PM
To: Walsh, Ted; Jeffrey Cueto
Subject: Fwd: Fwd: RE: Newfound bypass flow follow up

Ted,

Please see below the conditions imposed by USFWS and NHFG with regards to the Low Impact Hydropower Institute's pending certification of the Newfound Hydroelectric facility. KTZ Hydro, LLC, the new project owners, have agreed to implement these conditions. Please let me know if you need any additional information for inclusion in your water quality impact letter for the facility.

Thank you,
Steve

----- Original Message -----

Subject: RE: Newfound bypass flow follow up
Date: Tue, 25 Oct 2011 14:28:53 -0400
From: John A Magee <john.a.magee@wildlife.nh.gov>
To: <John_Warner@fws.gov>, "Stephen Hickey" <sjh@essexhydro.com>
CC: Bob King <bking@gaw.com>

I agree with that which John Warner wrote in his email dated Tuesday, October 25, 2011 8:57 AM.

Thank you,

John

John Magee
Fish Habitat Biologist
New Hampshire Fish and Game Department
11 Hazen Drive
Concord, NH 03301
p (603) 271-2744
f (603) 271-1438
john.a.magee@wildlife.nh.gov

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From: [John Warner@fws.gov](mailto:John.Warner@fws.gov) [<mailto:John.Warner@fws.gov>]

Sent: Tuesday, October 25, 2011 8:57 AM

To: Stephen Hickey

Cc: Bob King; John A Magee

Subject: Re: Newfound bypass flow follow up

Steve,

Based on our discussion yesterday and review of the information below, we have the following recommendations for LIHI Certification of Newfound Hydro.

We can support the Newfound Hydroelectric Project's application for certification by the Low Impact Hydropower Institute if the project owner agrees to the release of a minimum flow of 12.7cfs into the bypass reach. While the exact flow we identified in the field on October 6, 2011 as being acceptable is uncertain, the best approximation of that flow is 12.7 cfs and that discharge should be the target minimum flow. This bypass flow would be passed through a notch in the project flashboards close to the project's trash racks. We will want to review the flow in the field (likely next summer) to verify that the calculated flow achieves the habitat conditions we observed in the field and found acceptable. Newfound Hydro would need to coordinate with me and NHFGD to schedule the observations when river flows are appropriate. Adjustment of flows for observations may be needed to verify that the 12.7 cfs flow is adequate or some other flow is needed. Once a final flow is verified, it may be appropriate to install a staff gage in the lower bypass to permit verification of compliance with the correct flow. We can discuss this further at the time of the flow demonstration but would like Newfound to commit to installing a gage if its determined to be needed.

I believe that John Magee at New Hampshire Fish and Game is in agreement with the above.

Thanks - JW

John P. Warner
Assistant Supervisor, Conservation Planning Assistance and Endangered Species
New England Field Office, U.S. Fish and Wildlife Service

70 Commercial Street, Suite 300
Concord, NH 03301
(603) 223-2541 - ext.15

Susan Giansante

From: Warner, John <john_warner@fws.gov>
Sent: Wednesday, August 17, 2016 7:25 AM
To: Susan Giansante
Cc: john.a.magee@wildlife.nh.gov; Bob Gates; carol.henderson@wildlife.nh.gov
Subject: Re: Newfound Project LIHI Recertification

Susan - The Service concurs with LIHI Low IMPact Hydro Certification for teh Newfound Projec subject to the continued provision of 12.7 min bypass flow and provisions for providing eel passage in the future when needed -- JW

On Tue, Aug 16, 2016 at 9:35 PM, Susan Giansante <susan.giansante@eaglecreekre.com> wrote:

John Warner and John Magee-

Eagle Creek Renewable Energy (Eagle Creek), owns and operates the FERC licensed Newfound Hydroelectric Project (Newfound), FERC Project No. 3107, located on the Newfound River in the City of Bristol, County of Grafton, NH.

Under a previous owner, Newfound received a 5 year certificate from the Low Impact Hydropower Institute (LIHI) on May 13, 2011. By way of letter dated March 18, 2016, LIHI issued an extension of the certification term to Eagle Creek for Newfound to October 13, 2016 to enable applicants applying for certification time to absorb and understand the programmatic changes to the new LIHI handbook.

As a follow up to conversations with each of you, Eagle Creek is currently preparing its application for the recertification of Newfound. As with the previous certification, the applicant is required to address certain issues including ecological flows, upstream fish passage and downstream fish passage and seek comment from relevant agencies. Based on a conversation with Mike Sales from LIHI, and recent conversations with both of you, we request that the US Fish and Wildlife Service (Service) and New Hampshire Fish and Game Department (NHFGD) review the current practice for flows and fish passage and provide input that we will include in our LIHI recertification application.

Ecological Flow

As we discussed, included in the 2011 LIHI reviewer's report were e-mails from the Service and NHFGD supporting LIHI certification based on an agreed upon acceptable continuous minimum flow release in the bypass of 12.7 cfs. These e-mails are included for your reference, along with the reviewer's report. The flow

is currently released at the dam from a 12" notch in the flashboards with a length of 65". The 12.7 cfs minimum flow continues to be released in the bypass. Attached is a photo of the min flow release at the dam.

Upstream & Downstream Fish Passage

As we discussed, correspondence from the Service and NHFGD indicated that there were no plans for restoration activities for anadromous fish in the Newfound River. However, there may be a need for passage measures for catadromous American eel at a future date. In recent conversations with John Warner, it was confirmed, that as previously identified, it's premature to require either upstream or downstream passage measures at Newfound at this time, however, if improved upstream passage measures at downstream dams and/or better information on eel abundance in the Newfound River or Newfound Lake, eel passage may be warranted. Referenced correspondence from the Service and NHFGD is included for your reference.

Please let me know if you need any further information.

Thanks-

Sue

SUSAN GIANSANTE

EAGLE CREEK RENEWABLE ENERGY, LLC

MOBILE: 860-620-4527

E-MAIL: SUSAN.GIANSANTE@EAGLECREEKRE.COM



John P. Warner
Assistant Supervisor, Migratory Fish/Hydropower
New England Field Office, U.S. Fish and Wildlife Service
70 Commercial Street, Suite 300
Concord, NH 0330-5087
phone: 603-223-2541, Ext. 6420
fax: 603-223-0104

Susan Giansante

From: Magee, John <john.magee@wildlife.nh.gov>
Sent: Wednesday, September 7, 2016 1:19 PM
To: Susan Giansante
Cc: Henderson, Carol
Subject: RE: Newfound Project LIHI Recertification

Hi Susan. I defer to Carol Henderson, who is cc'd here.

John

John Magee
Fish Habitat Biologist
New Hampshire Fish and Game Department
11 Hazen Drive
Concord, NH 03301
P 603-271-2744
F 603-271-5829



From: Susan Giansante [<mailto:susan.giansante@eaglecreekre.com>]
Sent: Wednesday, September 07, 2016 1:00 PM
To: Magee, John
Subject: FW: Newfound Project LIHI Recertification

Hi John,

Just checking in to see if you need any further information, and if you would be able to provide input that we can use in our LIHI application for Newfound. Please feel free to contact me at 860-620-4527.

Thanks-
Sue

From: Warner, John [mailto:john_warner@fws.gov]
Sent: Wednesday, August 17, 2016 7:25 AM
To: Susan Giansante <susan.giansante@eaglecreekre.com>

Cc: john.a.magee@wildlife.nh.gov; Bob Gates <bob.gates@eaglecreekre.com>; carol.henderson@wildlife.nh.gov

Subject: Re: Newfound Project LIHI Recertification

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Please let me know if you need any further information.

Thanks-

Sue

SUSAN GIANANTE

EAGLE CREEK RENEWABLE ENERGY, LLC

MOBILE: 860-620-4527

E-MAIL: SUSAN.GIANANTE@EAGLECREEKRE.COM



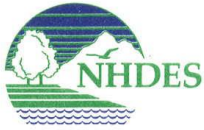
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John P. Warner
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The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



November 14, 2011

Fred Ayer, Executive Director
Low Impact Hydropower Institute
34 Providence Street
Portland, Maine 04103RE: Water Quality Status of Newfound River for Low Impact Hydropower Institute Certification of
Newfound Hydroelectric Project (FERC Project No. 3107), Newfound River

Dear Fred:

Essex Hydro Associates (EHA) has applied on behalf of KTZ Hydro, LLC, for Low Impact Hydropower Certification from the Low Impact Hydropower Institute (LIHI) for the Newfound Hydroelectric Project (FERC Project No. 3107) on the Newfound River in Bristol, NH. We understand that to receive LIHI certification, you require a statement from the New Hampshire Department of Environmental Services (DES) stating that the project is not causing or contributing to violations of state water quality standards. On May 24, 2011, DES sent EHA a letter stating what would be needed for DES to determine if the Newfound River in the vicinity of the Newfound Hydroelectric Project was or was not attaining standards. Specifically, the following was stated: "In order for DES to determine if the subject hydroelectric project is causing or contributing to water quality standard violations, additional monitoring and information is needed. In general, data / information is needed to address the following water quality concerns that are typically associated with hydropower projects:

1. Impact on ambient water quality criteria;
2. Impact of pond fluctuations on aquatic habitat;
3. Maintenance of adequate minimum flows to protect downstream aquatic life; and
4. Adequate upstream and downstream fish passage.

The purpose of this letter is to provide you with an assessment of data and information received from EHA in response to our letter of May 24, 2011 and, DES's conclusions as to whether or not the Newfound Hydroelectric Project is causing or contributing to New Hampshire surface water quality standard violations.

With regards to water quality, EHA, with the assistance of DES collected water quality data for dissolved oxygen, water temperature, total phosphorus and chlorophyll-a. Monitoring locations in the impoundment (00K-NFD) and in the downstream section of the river (00F-NFD) were monitored continuously for a minimum 10 day period in July 2011 for water temperature and dissolved oxygen using multi-parameter dataloggers. In addition, between June and August 2011, ten samples from each station were collected and tested by the DES laboratory for total phosphorus and chlorophyll-a. The sampling timeframe included periods of higher temperatures and relatively low flows.

DES has assessed the water quality data collected in 2011, and based on this assessment concludes that the water quality in the impoundment and downstream section of the Newfound River, under the dam's current operating conditions, do not appear to be violating existing water quality criteria for dissolved oxygen, phosphorus and chlorophyll-a. In the May 24, 2011 letter DES provided the assessment status

DES Web site: www.des.nh.gov

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

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for the parameters of concern for the reaches of the Newfound River upstream and downstream of the Newfound Hydroelectric Project. Table 1 provides an update to the current assessment status of the river reaches in question for the parameters collected this summer. Our assessments were based on the methodology described in the DES Consolidated Assessment and Listing Methodology (CALM)¹. This information will be used in the next Section 305(b)/303(d) Water Quality Assessment report which is expected to be issued by DES in early 2012. Please note that the assessment status listed in Table 1 could change if water quality criteria change and/or if additional data collected between now and the 2012 report indicate water quality violations. For example, data collected at lower flows and/or higher temperatures might result in a different assessment.

Table 1. Assessment Status for Water Quality Monitoring Parameters - Newfound Hydroelectric Project

Assessment Unit	Location	Parameter	Designated Use	Assessment Status based upon summer 2011 sampling
NHIMP700010603-04	Newfound Hydroelectric Dam Impoundment N. Main Street/Route 3A Bridge	Dissolved Oxygen (mg/L)	Aquatic Life	Fully Supporting
		Dissolved Oxygen (% Saturation)	Aquatic Life	Fully Supporting
		Chlorophyll-a	Primary Contact Recreation	Fully Supporting
			Aquatic Life	Indeterminate ^A
		Total Phosphorus	Aquatic Life	Indeterminate ^A
Water Temperature	Aquatic Life	No numeric criteria ^C		
NHRIV700010603-12	Downstream of Newfound Hydroelectric Dam ~500 feet downstream of dam	Dissolved Oxygen (mg/L)	Aquatic Life	Fully Supporting
		Dissolved Oxygen (% Saturation)	Aquatic Life	Fully Supporting
		Chlorophyll-a	Primary Contact Recreation	Fully Supporting
		Total Phosphorus	Aquatic Life	No numeric criteria ^B
		Water Temperature	Aquatic Life	No numeric criteria ^C

^A DES does have numeric water quality criteria for the aquatic life designated use for total phosphorus and chlorophyll-a in lakes/ponds and impoundments with characteristics similar to lakes/ponds but it can only be applied to waterbodies where the trophic class is known. For waterbodies where the trophic class is known the median total phosphorus and chlorophyll-a value is used to make the criteria comparison. The aquatic life designated use nutrient and chlorophyll-a criteria are depicted below with the median values for each parameter for the data collected at station 00K-NFD in assessment unit NHIMP700010603-04 during the summer of 2011.

	TP (ug/L)	Chl-a (ug/L)
Median 00K-NFD (2011)	4	1.2
Oligotrophic	< 8	< 3.3
Mesotrophic	≤ 12	≤ 5
Eutrophic	≤ 28	≤ 11

¹ 2010 Section 305(b) and 303(d) Consolidated Assessment and Listing Methodology. New Hampshire Department of Environmental Services. NHDES-R-WD-10-3. February, 2010. Available at <http://des.nh.gov/organization/divisions/water/wmb/swqa/documents/2010calm.pdf>.

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^B DES does not have numeric water quality criteria for nutrients in rivers or streams. The narrative criteria states that "Class B waters shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring."

^C Although there is currently no numerical water quality criteria for water temperature, NHDES is in the process of collecting biological and water temperature data that will contribute to the development of a procedure for assessing rivers and stream based on water temperature and its corresponding impact to the biological integrity of the waterbody.

On October 4, 2011 EHA provided DES with information regarding minimum flows and pond fluctuations at the Newfound Hydroelectric Project. EHA confirmed that the facility is operated as a fully automated run of river project. The project does not draw down the impoundment for purposes of power generation. Any fluctuations in the water level at the project are due to naturally occurring fluctuations in the Newfound River associated with varying levels of precipitation and discharge from Newfound Lake. Per the project's 1981 FERC license, the licensee is required to maintain a continuous minimum flow of 5 cfs in the bypass reach. The 5 cfs value for minimum flow in the bypass reach is the equivalent of the 7Q10 value for this section of the Newfound River.

In October of 2011, John Warner of the U.S. Fish and Wildlife Service and John Magee of the New Hampshire Fish and Game Department conducted a site inspection at the Newfound Hydroelectric Project to determine the impact of the bypass flows on aquatic life. As a result of the site visit, both USFWS and NHFG recommend a minimum flow of 12.7 cfs in the bypass reach. USFWS and NHFG support the Newfound Hydroelectric Project's application for LIHI certification if the project owner's agree to implement the recommended minimum flow in the bypass reach. This bypass flow will be passed through a notch in the project's flashboards close to the project's trash racks. EHA on behalf of KTZ Hydro, LLC have committed to implementing the minimum flow requirements by summer of 2012. Representatives from USFWS and NHFG will review the bypass flows once the recommended changes are made to achieve the minimum 12.7 cfs flow in the bypass reach. USFWS and NHFG reserve the right to request further adjustments to the minimum bypass flow requirements and may require the installation of a staff gage in the lower bypass to allow for verification of compliance. EHA on behalf of KTZ Hydro, LLC agree to abide by whatever minimum flow requirements are required by USFWS and/or NHFG and to install a staff gage if requested to do so. NHDES will contact USFWS and NHFG next summer to determine if the minimum flow requirements and potential staff gage requirements are being met.

Regarding the issue of fish passage, DES was provided with documentation from John Warner of the U.S. Fish and Wildlife Service (USFWS) and Carol Henderson of New Hampshire Fish and Game (NHFG) that there are currently no plans for restoration activities for anadromous fish in the Newfound River but there may be a need for passage measures for catadromous American Eel at a future date. Both agencies have concurred that the existing dam and operation appear to be passable by American Eel and that the proposed minimum bypass flows of 12.7 cfs will be appropriately protective of American Eel at this time. Both USFWS and NHFG have a position that LIHI certification be contingent upon an agreement by the owner to implement both upstream and downstream fish passage measures for American Eel in a timely manner if additional passage measures are found to be necessary by either agency. NHDES has received confirmation from EHA on behalf of the project owner that they commit to implementing fish passage measures when prescribed by USFWS and/or NHFG and agree to undertake such consultations, design development, and construction in a timely manner after notification of such necessity.

In summary, based on the current operation of the dam, current water quality standards, the water quality data collected in 2011 and information provided to DES by EHA, it appears the Newfound River immediately upstream and downstream of the Newfound Hydroelectric Project is attaining water quality standards at this time. As previously noted, however, please note that this assessment could change in the future should a change in water quality criteria and/or new data indicate water quality violations. It could also change if the NHFG and/or USFWS conclude in the future that the project is not in compliance with upstream or downstream fish passage requirements or if minimum bypass flow requirements change.

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Should you have any questions or require additional information please contact me at (603)271-2083
(ted.walsh@des.nh.gov).

Sincerely,



Ted Walsh, Surface Water Monitoring Coordinator
NH DES Watershed Management Bureau

Cc (via email): Steve Hickey, Essex Hydro Associates, LLC
Carol Henderson, New Hampshire Fish and Game
John Magee, New Hampshire Fish and Game
John Warner, USFWS

OD-ORDER, 17 FERC ¶62,208, Newfound Hydroelectric Company, Project No. 3107-001, (Nov. 06, 1981)

Newfound Hydroelectric Company, Project No. 3107-001

[63,339]

[¶62,208]

Newfound Hydroelectric Company, Project No. 3107-001

Order Issuing License (Minor)

(Issued November 6, 1981)

William W. Lindsay, Director, Office of Electric Power Regulation.

The Newfound Hydroelectric Company has filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Newfound Hydroelectric Project, FERC No. 3107. The project would be located on the Newfound River in Grafton County, New Hampshire.

Notice of the application has been published and comments have been received from interested Federal, State and local agencies. No protests or petitions to intervene have been received, and none of the agencies objected to issuance of the license.

The Proposal: The proposed project would consist of: (1) a diversion weir (presently breached) located adjacent to New Hampshire Route 3A in Bristol, New Hampshire; (2) a new 800-footlong water conveyance facility, leading to (3) a new powerhouse located approximately 800 feet downstream of the Water St. Bridge; and (4) appurtenant works. The installed capacity would be approximately 1,487 kW. Applicant estimates that the average annual generation would be 7,400 megawatt-hours.

Safety and Adequacy: The proposed diversion structure would utilize a concrete base surmounted by 5-foot high wooden flashboards supported by solid steel pins, spaced 3 feet from center to center. The flashboards would be designed to fail when overtopped by 1 foot of water. Under flood flows, failure of the flashboards will have essentially no effect on the streamflow regime of the river. The project structures would be low hazard. The spillway capacity is adequate. It is concluded that the project, under conditions of this license, will be safe and adequate.

Economic Feasibility: The project will be operated run-of-the-river and generate an estimated average of 7,400,000 kWh of energy annually at an estimated cost of 59.6 mills/kWh. Applicant proposes to sell all of the project power to the Public Service Company of New Hampshire. It is concluded that the project is economically feasible based on the current New Hampshire PURPA rate of 77 mills/kWh.

Environmental Considerations: No Federally-listed endangered or threatened plant or animal species have been identified within the project boundary.

The U.S. Fish and Wildlife Service has determined that the river does not provide suitable habitat for anadromous fish. ²

The State Historic Preservation Officer (SHPO) has identified an inactive paper mill just outside of the project boundary as potentially eligible for inclusion on the National Register of Historic Places. The Applicant states that it will cooperate with SHPO to determine the precise nature of impacts on historic resources and appropriate mitigation measures. In the event that archeological resources are found during project construction, the Applicant would notify the SHPO, request his evaluation, and cooperate in mitigating any adverse impacts on those resources. In accordance with standard Commission practice, ³ Article 19 of this license requires cultural resources protection measures in the event of any future

construction or development at the project, other than the project development considered and authorized here.

Construction would cause engine exhaust emissions, increased noise, soil erosion, and stream sedimentation, but these effects would be minor and transitory. The 5-cfs minimum flow released continuously below the diversion weir would mitigate any adverse effects of project operation. On the basis of the record, including agency comments and our staff's independent analysis, it is found that issuance of a license for this project, would not constitute a major Federal action significantly affecting the quality of the human environment.

Other Aspects of Comprehensive Development: Based on our staff's analysis, it is concluded that the project will make good

[63,340]

use of the flow and fall of the Newfound River, is not in conflict with any planned or potential development, and will be best adapted to the comprehensive development of the Merrimack River Basin under present conditions upon compliance with the terms and conditions of the license.

License Term: The proposed construction of this project at the site of a breached weir is similar to relicensing an existing project at which a significant amount of new development is proposed. Therefore, consistent with the Commission's policy, a 50 year license term is reasonable in this instance. ⁴

Other Considerations: Applicant requested that its initial license application be treated as an application for exemption. The Commission, in issuing Order No. 106, on November 7, 1980, specifically afforded a project owner only a limited time to request that a license application be treated as one for exemption. In this case, notice of the application had been given, the period for filing protests or petitions to intervene had expired, and the application for license had been substantially processed at the time the request was filed. To grant the requested waiver would be inconsistent with Order No. 106 and would have in effect required the processing of a second application. In the preamble of Order No. 106, the Commission stated that pending applications could not be so revised if notice of application for license had expired. For these reasons, the Applicant's request that its license application be treated as an exemption application is denied.

The project would be located in the floodplain of the Corps Franklin Falls Flood Control Dam. The Corps requested a special article be included as part of the license freeing the Corps of responsibility for any flood damages to the project facilities up to elevation 395 feet National Geodetic Vertical Datum. Special Article 23 addresses this concern.

It is ordered that: (A) This license is issued to the Newfound Hydroelectric Company (Licensee) of Bristol, New Hampshire, under part I of the Federal Power Act (Act), for a period of 50 years, effective the first day of the month in which this order is issued, for the reconstruction, operation, and maintenance of the Newfound Hydroelectric Project No. 3107, located in Grafton County, New Hampshire, on the Newfound River, and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Newfound Hydroelectric Project consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

Exhibit	FERC No.	Showing
K	3107--1	Site Plan
K	3107--2	General Location

(2) Project works consisting of: (a) a diversion weir surmounted by wooden flashboards, totalling 10 feet in height; (b) a 0.23-acre reservoir with a storage capacity of 0.69 acre-feet; (c) a concrete intake channel; (d) a powerhouse containing two generating units (870 kW and 617 kW); a 6-foot diameter wooden penstock 420 feet long; (f) a 30-foot-wide tailrace extending 175 feet to the confluence of the Newfound and Pemigewasset Rivers; (g) a 160-foot-long underground cable from the powerhouse to an existing pole of the power purchaser, Public Service Company of New Hampshire; and (h) appurtenant works.

The location, nature and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits that also form a part of the application for license and that are designated and described as:

Exhibit	FERC No.	
L	3107--	Showing
1	3	Powerhouse Plan and Section
2	4	Profile and Detail (Diversion Weir, Penstock, Powerhouse)
3	5	Plan, Section and Elevation (Diversion Weir)
4	6	Electro--Mechanical Diagram

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits K and L, designated in ordering paragraph (B) above, are approved and made a part of the license.

[63,341]

(D) Pursuant to Section 10(i) of the Act, it is in the public interest to waive the following Sections of Part I of the Act, and they are excluded from the license:

Section 4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the Act that are waived here; 10(c), insofar as it relates to depreciation reserves 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(E) This license is also subject to Articles 1 through 18 set forth in Form L-15 (revised October, 1975), entitled "Terms and Conditions of License for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce," attached to (See 54 FPC 1883) and made a part of this license. The license is also subject to the following additional articles:

Article 19. The Licensee shall, prior to the commencement of any construction at the project, cooperate with the New Hampshire State Historic Preservation Officer (SHPO) to assess the significance of the Newfound Hydroelectric Building and its associated structures, and to avoid or mitigate impacts to these

facilities. The Licensee shall make available funds in a reasonable amount for any such assessment or mitigation measures as required. If any previously unrecorded archeological or historical sites are discovered during the course of construction or development of any project works or other facilities at the project, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historical resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

Article 20. The Licensee shall commence construction of the proposed project within one year of the date of issuance of the license and shall complete construction within two years from the start of construction.

Article 21. The Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse, and water conveyance structures, 60 days prior to start of construction. The Director, Office of Electric Power Regulation may require changes in the plans and specifications to assure a safe and adequate project.

Article 22. The Licensee shall within 90 days of completion of construction, file in accordance with the Commission's Rules and Regulations revised Exhibit L drawings showing the project as-built.

Article 23. The Licensee shall have no claim under this license against the United States arising (1) from the effect of any changes made in the pool levels of the Franklin Falls Flood Control Dam and (2) from any flood damages to the project facilities up to elevation 395 feet National Geodetic Vertical Datum.

Article 24. The Licensee shall pay the United States the following annual charges, effective the first day of the month in which this license is issued:

For the purpose of reimbursing the United States for the cost of the administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 1980 horsepower.

Article 25. (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands

[63,342]

and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall

Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

(F) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7 (d) (1979), *as amended*, 44 Fed. Reg. 46449 (1980). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission.

Failure of the Licensee to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this license, the license shall be signed for the Licensee and returned to the Commission within 60 days from the date of issuance of this order.

-- Footnotes --

¹ Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under 18 C.F.R. §375.308 (1980), *as amended* by 46 Fed. Reg. 14119 (1981).

² The New Hampshire State Water Supply and Pollution Control Commission issued a water quality certificate for the project, in accordance with Section 401 of the Federal Water Pollution Control Act.

³ See S.D. Warren, Project No. 2897, Order Denying Rehearing (issued Feb. 19, 1980).

⁴ Montana Power Company, Order Issuing New License (Major), Project No. 2301 (issued October 5, 1976).



New Hampshire Fish and Game Department

11 Hazen Drive, Concord, NH 03301-6500
Headquarters: (603) 271-3421
Web site: www.WildNH.com

TDD Access: Relay NH 1-800-735-2964
FAX (603) 271-1438
E-mail: info@wildlife.nh.gov

Glenn Normandeau
Executive Director

November 7, 2011

Mr. Stephen Hickey
Essex Power Services, Inc.
on behalf of KTZ Hydro LLC
55 Union Street, 4th Floor
Boston, MA 02108

RE: Newfound River, Bristol

Dear Mr. Hickey:

Staff from the Department either conducted a site walk and/or reviewed the proposed LIHI hydro project on the Newfound River in Bristol and offer the following information for your files:

"The NH Fish and Game Department has no specific data on the occurrence of American eel in the Newfound River or its watershed. However, American eel are well known to be able to get around large waterfalls like the one in the bypass of the Newfound River. The existing dam and operation appear to be passable by American eel, and as such, the Department expects that the 12.7 cfs bypass flow agreed to be released by the Newfound Hydroelectric Project will be appropriately protective of American eel at this time. There is no evidence that the project has caused the extirpation of American eel from the Newfound River. Fish passage, for species other than American eel, is currently a low priority for the NH Fish and Game Department at this site due to the impassable waterfall in the bypass reach."

In addition, the Department does agree with the US Fish and Wildlife Services' recommendation noted in John Warners' email dated November 7th (copied to the Department), 2011, that "the LIHI certification should be contingent upon an agreement by the licensee to implement both upstream and downstream passage measures for American eel in a timely manner if passage is found to be necessary by the Service and/or NHFGD.

I hope this information has been helpful. If you need any additional information, please do not hesitate to contact me at 603-271-3511. Thank you.

Sincerely;



Carol B. Henderson
Environmental Review Coordinator

From: John_Warner@fws.gov [mailto:John_Warner@fws.gov]
Sent: Monday, November 07, 2011 10:54 AM
To: Stephen Hickey
Cc: Rolland Zeleny; John A Magee; Walsh, Ted; ompompanoo@aol.com
Subject: Re: Request for comment re fish passage at Newfound Hydro

Hi Steve - Here are our comments on fish passage needs at Newfound Hydro:

At this time there are no plans for restoration activities for anadromous fish in the Newfound River. However, there may be a need for passage measures for catadromous American eel at a future date. The Service agrees with the NH Fish and Game Department that there are no specific data on the occurrence of American eel in the Newfound River or its watershed. However, American eel are known to be able to get around large waterfalls and dams like the one in the bypass reach of the project and the project site may currently be passable to some extent by American eel. However, existing passage measures for American eel at downstream dams on the Merrimack River system is limited. While eel passage facilities are in place at Amoskeag Dam and in planning at Lawrence Dam, good passage is not available at all downstream facilities at this time. Although some eels ascend the river past dams without passage, we are uncertain how many eels migrate to the Newfound River and attempt upstream passage at the project site. Likewise, we have no information on the success rate of any passage attempts or outmigrant numbers from Newfound Lake.

Therefore, it is premature to require either upstream or downstream passage measures at the Newfound Hydro facility at this time. Based on improved upstream passage measures at downstream dams and/or better information on eel abundance in the Newfound River or Newfound Lake, eel passage may be warranted. We recommend that LIHI Certification be contingent upon an agreement by the

licensee to implement both upstream and downstream passage measures for American eel in a timely manner if passage is found to be necessary by the Service and/or NHFGD.

Please let me know if you need this in a letter format.

-- jw

John P. Warner
Assistant Supervisor, Conservation Planning Assistance and Endangered Species
New England Field Office, U.S. Fish and Wildlife Service
70 Commercial Street, Suite 300
Concord, NH 03301
(603) 223-2541 - ext.15
(603) 223-0104 - FAX

www.fws.gov.northeast/newenglandfieldoffice

▼ Stephen Hickey <sjh@essexhydro.com>

Stephen Hickey
<sjh@essexhydro.com>

ToJohn_Warner@fws.gov

11/01/2011 02:07 PM

ccJohn A Magee
<john.a.magee@wildlife.nh.gov>, Rolland
Zeleny <indigoharbor@yahoo.com>

SubjectRequest for comment re fish passage at
Newfound Hydro

Dear Mr. Warner and Mr. Magee,

As you are aware, Essex Power Services, Inc. (EPSI) has been hired by KTZ Hydro, LLC, the owner, operator and licensee of the Newfound Hydroelectric Project (the Project) located on the Newfound River in the town of Bristol, County of Grafton, NH to write an application to the Low Impact Hydropower Institute ("LIHI") for the low impact certification of the Project. As a requirement of the LIHI application, applicants are required to seek comment from the relevant hydroelectric agencies regarding the Project's compliance with the requirements of its FERC license or exemption. In addition to the comments you provided regarding bypass flows, LIHI has requested the project seek any comments you have regarding the Project's compliance with the upstream and downstream fish passage requirements of its license (FERC Project No.3107). At the time the license was issued in November of 1981, the U.S. Fish and Wildlife Service (USFWS) determined

that the Newfound River does not provide suitable habitat for anadromous fish. No state or federal agency has recommended fish passage be installed at the Project to date.

I have attached a copy of the Newfound Hydroelectric project license for your reference.

Thank you in advance for your comments.

Sincerely,

Stephen Hickey
Essex Power Services, Inc.
on behalf of Newfound Hydroelectric Company
55 Union Street, 4th Floor
Boston, MA 02108
tel: 617-367-0032



To: susan giansante
65 Madison Avenue, Suite 500
Morristown, NJ 07960

Date: 6/7/2016

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 6/7/2016
NHB File ID: NHB16-1810

Applicant: susan giansante

Location: Tax Map(s)/Lot(s):
Bristol

Project Description: Checking the Newfound Hydroelectric Project vicinity for threatened and endangered species for LIHI recertification.

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 6/6/2017.



MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB16-1810





NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, Concord, NH 03301-3570
TDD Access: Relay NH 1-800-735-2964
www.nh.gov/dhhr

603-271-3483
603-271-3558
FAX 603-271-3433
preservation@dcr.nh.gov

June 1, 2011

Stephen Hickey
Essex Power Services, Inc.
55 Union Street, 4th Floor
Boston, MA 02108

Re: Newfound Hydroelectric Project, Water Street, Bristol, NH
RPR #2959

Dear Mr. Hickey:

In conformance with 36 CFR 800.4(c)(1) and (2) of the Advisory Council on Historic Preservation procedures, 36 CFR Part 800: Protection of Historic Properties, staff of the Division of Historical Resources has reviewed the materials you submitted regarding the proposed project. The DHR understands that your organization is requesting a review to determine if normal operating procedures will affect historic properties.

Edna Feighner, Archaeologist and Review and Compliance Manager, has reviewed the Request for Project Review Form and concurs that no archaeological survey is necessary at this time. The property and its associated features appear to be more than fifty years old. The property has not been previously evaluated and therefore it is unknown as to whether or not the property is eligible for listing in the National Register of Historic Places.

Based on an understanding that this "project" merely entails normal operating procedures, the project as described will constitute "No Adverse Effect" under 36 C.F.R. Part 800.5(a)(1). However, should any future project have the potential to alter character-defining features or entail ground disturbing activities, additional Section 106 coordination may be required that may include the preparation of a New Hampshire Inventory Form or archaeological studies.

Should you have any questions or concerns, please feel free to call Nadine Peterson, Preservation Planner, at 603-271-6628.

Sincerely,

Elizabeth H. Muzzey
Director/State Historic Preservation Officer

EHM:nmp

cc: Bristol Historic District Commission
Town of Bristol