



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

DEVAL L. PATRICK
Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

August 28, 2013

Re: Northfield Mountain Pumped Storage Project, FERC No. 2485-063
Turners Falls Project, FERC No. 1889-081

Comments to Revised Proposed Study Plan (PSP) submitted by FirstLight August 14, 2013.

Section 3.1.1 *2013 Full River Reconnaissance Study*

Section 3.1.2 *Northfield Mountain/Turners Falls Operations Impact on Existing Erosion and Potential Bank Instability*

Section 3.2.1 *Water Quality Monitoring Study*

Stakeholder Comment Letters

Dear Secretary Bose:

The Massachusetts Department of Environmental Protection (MassDEP) has participated in the Proposed Study Plan (PSP) process through formal written requests, attendance at public hearings and discussions with FirstLight Hydro Generating Company (FirstLight) and others. MassDEP's study requests made March 1, 2013 focused on its regulatory obligation to issue a Water Quality Certification in 2018 and preliminary information that it will want to consider in the process of issuing a Water Quality Certification. MassDEP appreciates the efforts of FirstLight in adopting requests of MassDEP and its further revisions of those requests in response to MassDEP's comments at public hearings. MassDEP has reviewed the Revised Proposed Study Plan (submitted by FirstLight August 14, 2013 (Revised Study Plan) and it submits specific comments with respect to a limited number of items in the Revised Proposed Study Plan.

In the course of those public hearings and in subsequent communications with stakeholders, primarily the Franklin Regional Council of Governments (FRCOG) and Connecticut River

Watershed Council (CRWC), MassDEP has heard requests for additional studies (or more specifically revised study methodologies and deliverables) related to streambank erosion and other issues which will be considered by MassDEP in its issuance of a Water Quality Certification. While MassDEP would consider the information from the studies it has requested in its consideration of an Application for a Water Quality Certification, it must reserve the right to require additional information at the time of that review.

I. Section 3.1.1 2013 Full River Reconnaissance Study.

a. Dynamic Relationship.

MassDEP anticipates an interactive and dynamic relationship with FirstLight as part of the Water Quality Certification Application process. MassDEP envisions work under the Revised Proposed Study Plan to be a source of information for the submittal of a robust Application for a Water Quality Certification. As such, MassDEP envisions and proposes an interactive process in the Revised Proposed Study Plan where MassDEP is involved has an ongoing role in the data collection process under the Revised Proposed Study Plan to maximize the usefulness of the data to MassDEP in fulfilling its statutory duties. In short, MassDEP anticipates continued involvement with FirstLight and continued refinement of comments directly to FirstLight throughout the implementation of the Revised Proposed Study Plan to ensure that sound scientific data is available to MassDEP for the evaluation of the Water Quality Certification. MassDEP has specifically discussed this dynamic/interactive approach with FirstLight who also anticipates continued active involvement with MassDEP.

b. Bank Erosion.

Bank erosion is identified by some stakeholders as the primary concern associated with the operation of the project. It is also identified by MassDEP as an issue of primary concern and consideration with respect to its issuance of a Water Quality Certification. As stated by many stakeholders, the bank erosion must be the subject of a rigorous and sound scientific investigation. Much of the comment from stakeholders has focused on the concern that the information to be obtained and presented is insufficiently detailed or reported in a manner that lacks sufficient detail and is therefore scientifically insufficient.

MassDEP throughout the process had focused on its desire for a rigorous and scientifically sound investigation with a focus on properly qualified professionals working on the banks of the river. Further, MassDEP has stated its desire that information collected for the FERC Relicensing through the Proposed Study Plan (PSP) be useful to MassDEP in issuing a Water Quality Certification. Although MassDEP recognizes that the addition of MassDEP technical staff to surveys under 3.1.1 and 3.1.2

present logistical difficulties, it is MassDEP's desire and intention to attend the initial site inspections (perhaps multiple days) for the bank evaluations performed by FirstLight's consultants pursuant to the Revised Proposed Study Plan to ensure that the information gathered is sufficient to allow FirstLight to submit a comprehensive Application for a Water Quality Certification. Regardless of the specific reporting format required by FERC in the Revised Proposed Study Plan, MassDEP seeks to have the underlying data from which it can extract information if not within the required reporting format. MassDEP has specifically stated to FirstLight that the "comments" section of its forms should be sufficient to allow detailed description, photos and drawings as this section will likely provide the most valuable information for the MassDEP.

With respect to the qualifications, MassDEP believe that it is imperative that an experienced and qualified geo-technical engineer and an experienced and qualified geo-technical hydraulics engineer be participants in the survey work under 3.1.1 and 3.2.2.

MassDEP has discussed the concept of attending the initial inspections with FirstLight (both boat surveys and land surveys) for the purpose of ensuring the collection of sufficient data and FirstLight is agreeable to MassDEP's participation.

c. The Full River Reconnaissance (FRR).

As stated by MassDEP throughout the process, for the purposes of issuing a Water Quality Certification, MassDEP does not find significant value in the information obtained through the FRR as performed historically or as proposed for 2013, with the exception of the land based work expected in the FRR of 2013. MassDEP does not anticipate a substantial reliance on the data from the FRR in its review of the Water Quality Certification. Consequently, MassDEP would not oppose the 2013 FRR as a stand alone document rather than being part of the Revised Proposed Study Plan, if FERC were so inclined.

- The one element of the 2013 FRR which is of interest to the Department is the shoreline survey by boat, to the extent that this is an element of the bank erosion study. Coordination of this boat survey work with the survey work on the banks is critical and the two should be viewed as related and not exclusive tasks. It has been suggested by MassDEP to FirstLight that the boat and land based observations in the FRR be combined into a single effort to ensure that key scientific observations by all staff be optimized and more efficient. This is expected to reduce the overall cost from having to conduct two separate surveys as is proposed in the RSP. Further, that the boat survey work not be limited to evaluation from the boat and that the participants disembark to make observations on land where appropriate. As part of the "interactive process" outlined above, MassDEP would intend to be part of the boat survey and that such survey include

some limited on-shore work as necessary and appropriate to ensure that the boat survey is effective in its evaluations.

d. Interim Report.

Stakeholders cite the PSP for TransCanada and the provisions that call for an interim report and suggests that a similar interim report be required by FirstLight. As part of the interactive process described above, MassDEP sees a value in the opportunity to review draft reports related to Water Quality issues. For example, to the extent that bank / erosion study work is performed in Fall 2013 (after leaf-off) that review and comment by MassDEP prior to Spring 2014 (before leaf-out) provides an opportunity for a review of information and reporting format by MassDEP prior to the Spring 2014 work. Such a process would allow MassDEP and FirstLight to address gaps in information, revise proposed work and will likely to result in a more efficient Water Quality Certification process. MassDEP has raised this concept of a Draft Report from FirstLight for the purpose of ensuring the collection of sufficient data with FirstLight for its consideration. In addition, MassDEP has also suggested that others (stakeholders) be provided the opportunity to review drafts submitted to MassDEP and comment to FirstLight upon the document as well.

e. Collection of Data.

First Light calls a limited window of collection of water level monitor data in task 4a from August 2013 through November 2013. Collection of a full year's data is sought in light of the potential for significant variation in both the River and Project operation over the course of a year is appropriate.

FirstLight calls for the placement of water level monitors in various locations. Stakeholder comments seek additional water level monitors and placement in specific locations. As part of the interactive process, MassDEP may request monitors at specific locations through its dynamic process with FirstLight.

The frequency of collection of data should be of sufficient frequency so as to accurately depict the changes in flow and elevation of the River and the rate of those changes.

f. Transects.

The Revised Proposed Study Plan calls for the development of replicable transects based upon the data obtained by FirstLight. MassDEP suggests that FirstLight proposed the Transect locations it selects together with the basis for such selection for submittal to MassDEP in draft form. Consistent with the interactive process, MassDEP would review the proposed locations and provide such additional locations as it may believe area

appropriate for transects in light of its obligations to issue a Water Quality Certification. It is the intention of MassDEP to make use of prior established transects if they can be reproduced in the field and are useful for anticipated site stabilization work.

II. Section 3.1.2 Northfield Mountain/Turners Falls Operations Impact on Existing Erosion and Potential Bank Instability.

Under this section data gathered under Task 1 will be used later at Task 4 for more detailed field studies and data collections. This will ultimately provide the data that identifies specific problem reaches for which these sites will be evaluated to identify the causes of erosion at Task 6. To the extent that all data collected and reviewed at Task 1 is comprehensive, including an analysis of past stabilization efforts along the river specifically included in the FRR, Task 1 will enable the resource agencies to target specific sites for detailed study. Actual transect selections will be undertaken at Task 4.

III. Section 3.1.3 Sediment Management Plan.

The Department reiterates its July 12th request that FirstLight evaluate strategies to manage and minimize sediment release from the power canal at Turners Falls during dewatering activities. FirstLight will be conducting the related study 3.3.12 entitled: "*Evaluate Frequency and Impact of Emergency Water Control Gate Discharge Events and Bypass Flume Events on Shortnose Sturgeon Spawning and Rearing Habitat in the Tailrace and Downstream of Cabot Station.*" and will evaluate the impact of these events on sediment transport and bottom velocities within known shortnose sturgeon spawning and rearing habitat below Cabot Station. The Department recommends our request for strategies evaluation be added as an additional task within Study 3.3.12 if sediment transport is shown to be a problem downstream of Cabot Station.

IV. Section 3.2.1 Water Quality Monitoring Study.

MassDEP reiterates the comment in its July 12, 2013 comments that in 2001, the U.S. EPA approved New York and Connecticut's Long Island Sound (LIS) dissolved oxygen Total Maximum Daily Load. Nutrient loading has been established as a cause for low dissolved oxygen levels observed in Long Island Sound. The Department believes actions taken to minimize nutrient loading is justified now while establishing the quantity of nutrients released from the Project site serves little purpose. Nutrient sampling therefore has not been requested in this study.

The Department has requested FirstLight determine the level of contamination in sediment impeded impounded by the Turners Falls dam. FirstLight is not proposing to perform this work due to the availability of sediment analysis data taken from the Northfield Mountain Hydroelectric Project in 2010. FirstLight believes this data adequately characterizes sediment

found at the Turners Falls dam. The Department disagrees. The Millers River enters the Connecticut River between Northfield Mountain and Turners Falls and has sediment contaminated with PCBs to a level that has caused a ban on eating fish taken from the river. In addition there are several municipal and industrial wastewater treatment plants that discharge to the Millers River. We recommend the FERC keep sediment sampling at the Turners Falls dam a part of the water quality monitoring study.

V. Conclusion.

MassDEP urges FERC to give due consideration to the comments, particularly MassDEP's desire for an ongoing interactive process with FirstLight. MassDEP believes that its ability to engage in an ongoing and interactive process will result in a robust Application for a Water Quality Certification from FirstLight. Further, MassDEP believes that such a process will allow MassDEP to consider input from stakeholders in this process such as; FRCOG, CRWC and MassDEP's sister agencies (as well as other commenters) throughout the implementation of the Revised Proposed Study Plan and likely address concerns that might otherwise arise in the Water Quality Certification process.

Respectfully,



Brian D. Harrington
MassDEP

Deputy Regional Regional Director
Bureau of Resource Protection
Western Region