



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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

July 12, 2013

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

Comments to Updated Proposed Study Plan (PSP) submitted by FirstLight June 28, 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 submits specific comments with respect to a limited number of items in the PSP.

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

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Certification. While MassDEP would use the information from the studies it has requested in its consideration of an Application for a Water Quality Certification, it will likely require additional information at the time of that review. Studies sought by FRCOG, CRWC and others will provide additional information from FirstLight for the MassDEP's review of that application and likely reduce MassDEP's need to request additional information in connection with its review of that application. As a result, MassDEP has included highlights from those stakeholder letters within this comment letter.

I. Section 3.1.1 *2013 Full River Reconnaissance Study*

See Stakeholder Comment Section Below.

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

The Department has requested FirstLight to 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.

III. Section 3.2.1 *Water Quality Monitoring Study*

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 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

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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.

#### IV. Stakeholder Comment Letters

FRCOG and CRWC have provided MassDEP copies of draft comments that each expects to submit to FERC on the updated PSP prior to the July 15, 2013 deadline. It is clear that MassDEP, FRCOG and CRWC are in agreement that the process historically used by FirstLight to study erosion (the FRR) has not generated sufficient reliable information upon which MassDEP can issue a Water Quality Certification. FRCOG and CRWC further indicate an inability of other agencies (i.e. ... NOAA - National Marine Fisheries) to carry out their regulatory obligations based upon the historic work and the information to be generated by the updated PSP as proposed.

MassDEP, in light of its position that the Full River Reconnaissance (FRR) has not generated information sufficient to allow the issuance of a Water Quality Certification, submitted a March 1, 2013 letter to FERC which stated that "the various studies conducted to date, lacked sufficient scope, data and/or quality controls to MassDEP to rely on them as they exist or to support an expansion of the scope as a cost effective approach". In its March 1, 2013 letter, MassDEP included requests for studies for both sediment transport and water quality. Inherent to both studies is the issue of erosion.

The attachment to MassDEP's March 1, 2013 letter stated general study goals of assessing measures to minimize sediment transport and to investigate bank instability. Resulting information needs to provide information sufficient for MassDEP to "understand current and proposed effects on water level fluctuations, both natural and anthropogenic, and to identify sites where biostabilization techniques or other measures may be beneficial to water quality." The comments further stated general objectives including; "mapping and scientific descriptions of active and recent bank erosion, analysis of prior stabilization area, soils analysis, fixed recoverable data transects with periodic revisiting and data collection, water levels/pool fluctuations, soil scientist analysis and land use mapping".

MassDEP's comments further state with respect to FirstLight's Erosion and Sediment Control Plan that "MassDEP anticipates working with stakeholders to address specific needs and to ensure that all subsequent observations and evaluations are based upon scientifically reproducible geomorphologic criteria that has been established and is free from potential observer bias or prejudice. In this manner all parties will be able to contrast and compare the same data and make more meaningful assessments." CRWC and FRCOG identify a lack of detail with respect to methodology and deliverables in the updated PSP and concerns that this results in

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a lack of scientific reliability and value, including value to MassDEP in reviewing an Application for a Water Quality Certification.

MassDEP's review of draft comments of FRCOG and CRWC were made in light of MassDEP's general principals stated in its request for studies and MassDEP's stated commitment to work with stakeholders. Further, MassDEP is cognizant of its impending obligation to issue a Water Quality Certification and the opportunity for public participation, including the right to appeal any Water Quality Certification issued by MassDEP. As a result of that review, MassDEP wishes to express its support of the principals and requests in the letters it expects FRCOG and CRWC to submit to FERC.

MassDEP's study request, although providing general specific principals for the studies and information sought, is not overly detailed as to the extent of the information sought, the manner of collection (methodologies) or the specific information and formats that should be presented (deliverables). Instead, MassDEP sought to ensure that "subsequent observations and evaluations are based upon scientifically reproducible geomorphologic criteria that has been established and is free from potential observer bias or prejudice. In this manner all parties will be able to contrast and compare the same data and make more meaningful assessments." In other words, MassDEP's comments do not design the studies; the comments merely provide general guidance for such studies and include MassDEP and stakeholder participation in developing those specifics.

The comments of FRCOG and CRWC seek inclusion of details in the PSP that MassDEP anticipated would be addressed with stakeholder input, as set forth in MassDEP's March 1, 2013 Comments. In their comments, FRCOG and CRWC seek, among other things: (1) specific time of year requirements and/or time durations for studies, (2) a more specific identification/description of erosion events for both type and stage (i.e. ... Fields model of 4 types and 6 stages rather than a single "mass wasting" category), (3) a written and visual (photos) description of erosion, (4) analysis and inclusion of historic data, (5) a photographic log of riverbanks (6) image logs over time, (7) installation of water level monitors with sufficient duration, specific locations and frequency readings, and (8) clearly identifiable deliverables; all appear consistent with MassDEP's generally stated goals for scientific data that can be compared and contrasted in order to make more meaningful assessments. It is also consistent with study goals stated by MassDEP with respect to fluctuations within the Turners Falls Pool and correlation with slopes and soil response, development of future stabilization projects, as well as the guiding principal of scientifically based work.

In addition, CRWC provides a number of comments requesting clarification of information in the PSP which should be considered. Further, CRWC's comments identify portions of the study related to issues such as: fish passage, habitat, migration and spawning; impacts on odenate and other state-listed species; impacts on mussels; and impacts on eel. Although those areas are not

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within MassDEP's expertise, it will rely on its sister agencies at the Division of Fisheries and Wildlife (including the Natural Heritage and Endangered Species Program) with respect to these issues as MassDEP reviews FirstLight's Application for a Water Quality Certification. Finally, CRWC identifies studies of TransCanada as a model for FirstLight's studies due to the level of detail and the benefits that might be derived from a similar approach by FirstLight and the ability to compare the data.

MassDEP urges FERC to give due consideration to its comments as well as the comments and requests of FRCOG, CRWC and MassDEP's sister agencies (as well as other commenters) as the information generated would be consistent with MassDEP's study requests and expected to provide valuable information for consideration by MassDEP with respect to First Light's forthcoming Application for a Water Quality Certification. It would likely expedite the issuance of the Water Quality Certification as the information would address comments and questions that MassDEP can reasonably expect from FRCOG, CRWC, MassDEP's sister agencies and others, if the information that they have requested is not generated as part of this study process.

Respectfully,



Michael J. Gorski  
MassDEP  
Regional Director  
Western Region

Document Content(s)

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