

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, DC 20426

October 25, 2013

OFFICE OF ENERGY PROJECTS

Project No. 2485-063 – Massachusetts
Project No. 1889-081 – Massachusetts
FirstLight Hydro Generating Company

Mr. John S. Howard
Director- FERC Hydro Compliance
FirstLight Hydro Generating Company
Northfield Mountain Station
99 Millers Falls Road
Northfield, MA 01360

**Reference: Request for Clarification of September 13, 2012 Study Plan
Determination Letter**

Dear Mr. Howard:

On September 13, 2013, we issued our study plan determination for 20 of FirstLight Hydro Generating Company's (FirstLight) proposed 36 studies for the relicensing of the Turners Fall's Hydroelectric Project and the Northfield Mountain Pumped Storage Project. On October 7, 2013, FirstLight filed with the Commission a request that we clarify the staff recommendation on page B-14 of the study plan determination which required the installation of an additional water level logger near Transect No. 70,000, above the Schell Memorial Bridge. In its request, FirstLight notes that Transect No. 70,000 is only 1,986 feet downstream of FirstLight's proposed site at Transect No. 71,986.3.¹ As such, FirstLight is seeking clarification on: (1) whether we are requiring the installation of water level loggers at both Transect No. 71,986.3 and Transect No. 70,000; or (2) whether our information needs would be satisfied if only one of these water level loggers were installed. In the case of the latter scenario, FirstLight notes that it would like to retain a water level logger at Transect No. 71,986.3 because they have access at this site and it is the same location used to record water level data in 2012.

The area of the impoundment, in the vicinity of Transects 70,000 and 71,986.3, appears to be very dynamic with complex hydraulic characteristics, including the confluence of Pauchaug Brook and a significant hydraulic control of the Connecticut

¹ Given the proximity of the two transects; FirstLight believes that a water level logger at one of the two transects is adequate.

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River near that confluence. Additionally, historical aerial photographs demonstrate that this is an area of dynamic bed morphology. An analysis of aerial photographs for the area demonstrates the presence of complex hydraulics in the area, as they show the continual formation and degradation of sand and gravel bars over time.²

Due to the complex hydraulics in this area of the Turners Falls reservoir, verification of FirstLight's hydraulic models against the water level data from a single water level logger in this vicinity is not favorable. Therefore, to ensure the models adequately represent the associated hydraulics in this area, it is our recommendation and a requirement of the study plan determination, that FirstLight utilize its proposed site at Transect No. 71,986.3 and add a water level logger site at Transect No. 70,000. This should provide the necessary data to calibrate the models and verify the models are adequately representing the hydraulics within this reach.

If you have any questions please contact Ken Hogan at: (202) 502-8434, or email me at: Kenneth.Hogan@ferc.gov.

Sincerely,

Timothy J. Welch, Chief
West Branch
Division of Hydropower Licensing

cc: Mailing List
Public Files

² Aerial photos from 2001, 2004, 2006 and 2011 reviewed using Google Earth Pro 6.2.2.6613.

Document Content(s)

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