126 FERC ¶ 61,025 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Suedeen G. Kelly, Marc Spitzer,

Philip D. Moeller, and Jon Wellinghoff.

FirstLight Hydro Generating Company

Project Nos. 2485-051 and

1889-070

ORDER ON REHEARING

(Issued January 15, 2009)

1. On October 29, 2008, FirstLight Hydro Generating Company (FirstLight), licensee for the Northfield Mountain Pumped Storage Project No. 2485 and the Turners Falls Project No. 1889, filed a request for rehearing of Commission staff's letter order issued on September 30, 2008. In that order, staff required FirstLight to submit a plan of action showing a reduction in the rate of erosion in the Turners Falls Reservoir by the next scheduled full river reconnaissance in 2009. FirstLight argues that such a requirement violates terms of the project licenses, is not supported by substantial evidence, and is unreasonable, arbitrary, and capricious. For the reasons discussed below, we grant rehearing in part and clarify the requirement.

Background

2. The 1,080-megawatt (MW) Northfield Mountain Pumped Storage Project No. 2485 is located on the Connecticut River in the towns of Northfield and Irving, in Franklin County, Massachusetts. The project includes an upper reservoir on Northfield Mountain with a normal storage capacity of 17,050 acre-feet, and an underground powerhouse containing four pump-turbine generators with a rated capacity of 270 MW each. For its lower reservoir, the project uses a stretch of the Connecticut River that forms the reservoir, known as the Turners Falls Reservoir, for FirstLight's Turners Falls

Project No. 1889. The Northfield Mountain Project is located about five and one-half river miles upstream from the Turners Falls Project. 2

- 3. The Turners Falls Project No. 1889 is located on the Connecticut River in Franklin County, Massachusetts; Windham County, Vermont; and Cheshire County, New Hampshire. The project consists of two dam sections joined by an island, the Turners Falls Reservoir, and two powerhouses, one with an installed capacity of 5.693 MW and the other with an installed capacity of 62.016 MW. The licenses for both projects expire in 2018.
- 4. Releases from the Turners Falls Reservoir are coordinated with the operation of the Northfield Mountain Project and flood control regulation of the U.S. Army Corps of Engineers. To provide the storage capacity for pumped storage operations of the Northfield Mountain Project, the water level of the jointly-used Turners Falls Reservoir varies from a minimum elevation of 176.0 feet to a maximum elevation of 185.0 feet mean sea level.
- 5. To address riverbank erosion in the Turners Falls Reservoir, FirstLight's predecessor, Northeast Utilities Service Company, filed on September 15, 1998, an Erosion Control Plan (ECP) pursuant to Article 19 and Article 20 of the licenses for the Turners Falls and Northfield Mountain Projects, respectively.³ The ECP describes how

¹ The Northfield Mountain Project is operated primarily as a peaking facility, generating power during peak load periods by releasing water through the pump-turbine generator units to the Turners Falls Reservoir and then pumping water back up to the upper reservoir for storage during periods of low or off-peak electrical load.

² An original license for the Turners Falls Project was issued in 1944, and a new 38-year license for the project was issued in 1980. *Western Massachusetts Electric Company*, 11 FERC ¶ 61,124 (1980). A 50-year license for the Northfield Mountain Project was issued in 1968. *Western Massachusetts Electric Company*, *et al.*, 39 FPC 723 (1968). The licenses were transferred in 1982 (*The Hartford Electric Light Company*, *et al.*, 21 FERC ¶ 62,329 (1982)). In 1999, the licenses were transferred to Northeast Generation Company (*Connecticut Light and Power Company*, *et al.*, 89 FERC ¶ 62,130 (1999)). In 2007, the licenses were amended to reflect name changes for the licensee, first to NE Hydro Generating Company (118 FERC ¶ 62,080 (2007)) and then to FirstLight Hydro Generating Company (119 FERC ¶ 62,035 (2007)).

³ See Ordering Paragraph (D) of the Project No. 1889 license, 11 FERC at 61,270 (incorporating Standard Form L-3, entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States," 54 FPC 1817, 1823 (1975)); and Ordering Paragraph (D) of the Project No. 2485 license (incorporating Standard Form L-4, entitled "Terms and Conditions of License for (continued...)

erosion sites along the Turners Falls Reservoir will be rated for severity based on several physical characteristics, and ranked or prioritized for treatment.⁴ Under the ECP, erosion sites with the highest severity ratings will generally have the highest priority for repair.⁵

- 6. Commission staff modified and approved the ECP in a letter order issued on March 25, 1999. The order stated that changes may be required if it is apparent that the plan is not controlling erosion, the in-place erosion control measures are not effective, or the erosion control measures are not advancing at a rate that will alleviate the moderate to severe erosion sites. On June 21, 1999, the licensee filed a revised ECP to incorporate staff's modifications.
- 7. On February 2, 2005, the licensee filed a report summarizing the results of a full river reconnaissance performed in November 2004. By letter order dated June 28, 2005, Commission staff notified the licensee that, based on the report, the pace of stabilization of moderately and severely eroded shoreline was lagging behind the rate of erosion and requested that the licensee submit a plan of action by which it would be able to show a reduction in the shoreline erosion rate of the Turners Falls Reservoir by the next scheduled full river reconnaissance in 2009.
- 8. The licensee did not submit the plan of action, and instead stated that it had retained a fluvial geomorphologist to study erosion in the reservoir and to provide guidance on the ECP in order to make effective use of erosion control measures, and that it would file any necessary amendments to the ECP following completion of the study.

Unconstructed Major Project Affecting Navigable Waters of the United States, 39 FPC 795, 800 (1968).

⁴The ECP notes that classification of riverbank conditions regarding erosion and stability provides necessary information to determine the extent of riverbank potentially needing repair and a basis for prioritizing sites for repair. ECP section 2.0 at 2.

⁵ The ECP requires the licensee to reassess and re-evaluate erosion every three to five years and to periodically revise the prioritized list of sites to be repaired. ECP at 7.

⁶ The letter order also modified the ECP to include an ad hoc committee to advise the licensee in planning, evaluating, and prioritizing erosion control work.

⁷ Staff approved the revised plan by letter order of July 8, 1999.

⁸ See letters from the licensee to Commission staff filed August 17, 2005, and February 10, 2006.

While the erosion control study was being conducted, the licensee filed periodic progress reports before filing a final erosion control study report on December 19, 2007.

- 9. On March 28, 2008, FirstLight filed a status report on implementation of its ECP in which it stated that it continues its commitment to implementation of the plan and that it does not propose to make any major changes in how it implements the plan. FirstLight further stated that it remains committed to conducting erosion repairs to address the concerns and expectations of landowners whose property is adjacent to the project shorelines. It also provided a schedule of repair work for the next several years. ¹⁰
- 10. Several landowners and stakeholders have filed letters, complaining of the licensee's reduction in the amount of shoreline to be repaired and its current schedule, which postpones the repair dates for certain erosion sites, including sites that are severely eroded.¹¹
- 11. On September 30, 2008, Commission staff issued a letter order requiring FirstLight to prepare, in consultation with the Connecticut River Streambank Erosion Committee, ¹² and file, within 90 days of the date of the order, a plan of action showing a rate of reduction in erosion in the Turners Falls Pool by the next scheduled full river reconnaissance in 2009. The order requires that the plan include a revised implementation schedule for the erosion control projects that gives the highest priority for repair to erosion sites with the highest severity ratings. The order further requires the licensee to file with the plan, for identification and reporting purposes, a standardized reporting format to alleviate confusion regarding the names of erosion sites and the length (in linear feet) of work completed or scheduled for completion.

⁹ The licensee did not propose any amendments to the ECP.

¹⁰ See FirstLight's Status Report on Erosion Control Plan Implementation for the Northfield Mountain and Turners Falls Projects at 3, filed March 28, 2008 (March 28, 2008 Status Report).

¹¹ See, e.g., letters from the Town of Gill Conservation Commission (Gill), filed August 17, 2007, and April 15 and September 8, 2008.

¹² The Connecticut River Streambank Erosion Committee is a subcommittee of the Franklin Regional Council of Governments and the Franklin Regional Planning Board of Franklin County, Massachusetts, which have worked closely with the licensee to develop and implement bank stabilization projects to address erosion occurring on the Connecticut River and have raised funds for bioengineering treatment of eroded sites.

12. On October 29, 2008, FirstLight filed a timely request for rehearing of the September 30 letter order.

Discussion

13. On rehearing, FirstLight objects on several grounds to the order's requirement for an action plan to show a rate of reduction in erosion in the Turners Falls Reservoir. Specifically, FirstLight contends that it is responsible only for erosion caused by the projects, and the requirement at issue does not distinguish between project-induced and non-project-induced erosion. FirstLight cites to the Commission's decision in *Bangor Hydro Electric Company*, which requires the licensee to address only project-induced shoreline erosion or erosion caused by project operations, but not erosion caused by natural phenomena, such as flood flows, run-off, and wind-driven wave action. In

In addition, FirstLight cites to *New York Power Authority*, 120 FERC ¶ 61,266 (2007), as standing for the proposition that a licensee is not required to remedy erosion at a site if project operations are not the primary cause of the erosion. In that case, however, the Commission concluded that the newly-relicensed project was not the primary cause of erosion affecting a community and did not require that the licensee provide additional mitigation when it was already providing mitigation in the form of habitat improvement projects, some of which would reduce shoreline erosion and restore areas subject to erosion.

¹⁵ FirstLight alleges that natural causes (e.g., flood flows, the spring freshet), not project operation, are the primary cause of erosion in the Turners Falls Reservoir. The record contains evidence to the contrary. *See* July 28, 1994, Commission staff letter to licensee from Mark Robinson, Director, Division of Project Compliance and Administration ("The rapid daily drawdown of 3 feet or more is a major contributor to the rapid river bank erosion now taking place . . . as shown by the bank stability study."); and April 17, 1996 filing of the Franklin County Commission ("[F]luctuating water levels have in fact been repeatedly recognized by the [U.S. Army Corps of Engineers] to be a significant factor causing erosion in the Turners Falls Pool.")

¹³ FirstLight states that it does not have any objection to the order's requirement for a standardized reporting format, and it does not express an objection to the requirement for a revised implementation schedule.

 $^{^{14}}$ 83 FERC ¶ 61,037, at 61,090 (1998). FirstLight also cites to two Commission staff actions (*Wisconsin Public Service Corporation*, 79 FERC ¶ 62,219, at 64,678 (1997); and a letter dated July 3, 1997, in the City of Holyoke's Project No. 2004), but these staff actions were not tested on rehearing, and thus do not constitute Commission precedent.

addition, FirstLight argues that the timing of this requirement is unreasonable because it would take many years, not months, to achieve the result of reducing the erosion rate. FirstLight further contends that there is not substantial evidence to support staff's conclusion that erosion control measures are not keeping pace with the rate of erosion.

- 14. It is true that Articles 19 and 20 of the project licenses require the licensee to implement reasonable measures to prevent soil erosion associated with the construction, operation, and maintenance of the projects. It is also true that the Commission has limited the responsibility of licensees to controlling and mitigating erosion caused by project operation, and not erosion caused by natural phenomena associated with the presence of the project. To
- 15. However, perhaps recognizing the difficulty in segregating the precise causes of riverbank erosion in the Turners Falls impoundment, FirstLight chose to address shoreline erosion in a more comprehensive and coordinated manner. FirstLight framed the scope of its erosion control measures when it developed the ECP, and the ECP does not distinguish between project and non project-related erosion. The ECP identifies erosion sites to be repaired based on the severity of the erosion, not based on the cause of

In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution.

Article 20 of the Northfield Mountain Project states in pertinent part:

The Licensee shall be responsible for and shall take reasonable measures to prevent soil erosion on lands adjacent to the stream and to prevent stream siltation or pollution resulting from construction, operation or maintenance of the project.

¹⁶ Article 19 of the Turners Falls Project license states in pertinent part:

¹⁷ See Duke Power Company, 33 FERC ¶ 61,321 (1985).

¹⁸ See, e.g., licensee's filing of August 4, 1995, at 14 ("[T]he forces that drive erosion are difficult to segregate and . . . the solutions are best attempted on a co-funded basis."); licensee's filing of February 26, 1996, point-by-point response to comment letters, at 2, 5, 7, 9 ("Riverbank erosion in the Turners Falls Pool is generally recognized as a complex event with flooding and spring freshets being significant natural causes. The amount of previous, or future, erosion caused by bank failure from water level fluctuations is unknown.")

the erosion. Staff's September order requires FirstLight to do nothing new and no more than what it committed to do in its approved ECP. The requirement that FirstLight reduce and keep pace with the rate of erosion has been an ongoing requirement and one that is fully consistent with FirstLight's ECP, as modified and approved in staff's letter order of March 25, 1999. That order provided that changes may be required if it is apparent that erosion control measures are not advancing at a rate that will alleviate the moderate to severe erosion sites. FirstLight did not object to, or seek rehearing of, this 1999 provision. ¹⁹

16. As to the arguments regarding the timing of the action plan requirement and the conclusion as to whether the pace of stabilizing eroding shoreline was lagging behind the rate of erosion, we will clarify the timing and nature of the requirement that FirstLight file a plan of action to reduce the rate of erosion. If the full river reconnaissance demonstrates that erosion control measures are not advancing at a pace that will alleviate the moderate to severe erosion sites, FirstLight shall submit, with its full river reconnaissance report, a plan showing the measures the licensee will take to catch up and keep pace with the rate of erosion.

The Commission orders:

- (A) The request for rehearing or, in the alternative, request for reconsideration, filed by FirstLight Hydro Generating Company in this proceeding on October 29, 2008, is granted to the extent set forth in this order and clarified as set forth below, and is otherwise denied.
- (B) The letter order issued in this proceeding on September 30, 2008, is revised to add, in lieu of the first full paragraph on page 4, the following:

The next full river reconnaissance report that is to be filed in 2009 should inform us on whether the licensee has caught up with the rate of erosion in the Turners Falls Pool. If the reconnaissance report shows that erosion control measures are not keeping pace with the rate of erosion in the Turners Falls Pool, the licensee shall file with the report a plan of action showing the steps the licensee will take to show a reduction in the rate of erosion in the Turners Falls Pool. The plan should include a revised implementation schedule for the erosion control projects, based on the ECP's guideline of giving the highest priority for repair to erosion sites with the highest severity ratings. The plan shall be prepared after

¹⁹ To the extent Firstlight seeks revision of its ECP, it must file an application to amend its license.

consultation with the Connecticut River Streambank Erosion Committee (CRSEC) and shall include comments and specific descriptions of how the comments were incorporated into the plan, or the reasons for not including them. Allow 30 days for the CRSEC to comment and make recommendations before filing the plan with the Commission.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.