UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;

Nora Mead Brownell, Joseph T. Kelliher,

and Suedeen G. Kelly.

Northeast Generation Company

Project Nos. 2576-040

2597-025

ORDER ON REHEARING

(Issued November 23, 2004)

- 1. On July 22, 2004, Northeast Generation Company (NGC) and the Candlewood Lake Authority (Candlewood) each filed a request for rehearing of the Commission's June 23, 2004 Order issuing a new license to NGC for the 114.9-megawatt (MW) Housatonic River Project No. 2576, located on the Housatonic River in Fairfield, New Haven, and Litchfield counties, in Connecticut.¹
- 2. NGC requests rehearing of requirements set out in license articles 401 (run of river operation at the Falls Village and Bulls Bridge developments), 402 (appropriate refill protocol for the Falls Village and Bulls Bridge developments following reservoir drawdowns), 403 (operating levels at Rocky River development's Candlewood Lake during winter drawdowns), 404 (appropriate leakage flows at the Shepaug tailrace), and

Although the new license was issued to the Northeast Generation Services Company, which is affiliated with NGC, NGC notes that it owns the projects and should be listed as the licensee. We so clarify.

 $^{^1}$ 107 FERC ¶ 61,305. The relicense order issued a single license for developments which were previously licensed separately as the 105.9-MW Housatonic Project No. 2576, 16 FERC ¶ 62,475 (1981), and the 9.0-MW Falls Village Project No. 2597, 16 FERC ¶ 62,285 (1981).

408 (site management under the project's recreation plan at the Bulls Bridge development). Candlewood argues that the license should be amended to give it a management role with respect to shoreline management, recreation, and occupancy under Articles 407, 408, and 413 equal to that of the licensee rather than the mere consultative role those articles provide for it.² As discussed below, rehearing is granted in part and denied in part.

Background

- 3. The project consists of five developments, situated from upstream to downstream as follows: Falls Village, Bulls Bridge, Rocky River, Shepaug, and Stevenson.
- 4. Falls Village development includes a small impoundment, a 0.3-mile-long bypassed reach, and a project powerhouse which discharges into the free-flowing Housatonic River. That free-flowing section, which includes a trout management area, extends about 20 miles to the Bulls Bridge development.
- 5. Bulls Bridge development includes a small impoundment, a 2-mile-long bypassed reach, and a powerhouse that discharges into a 6-mile-long free-flowing section of the Housatonic River. This section ends at the backwaters of the Rocky River development's Bleachery Dam. A portion of the Appalachian Trail borders the Bull Bridge Gorge along the western side of the Housatonic River, and the development provides easy access to the trail.
- 6. Rocky River is a pumped storage and generating development whose intake pumps water from the Housatonic River into Candlewood Lake (which is adjacent to the river) before it is released back to the Rocky River generating facilities and discharged into the Housatonic below Bleachery Dam.
- 7. Shepaug development's storage reservoir, Lake Lillinonah, is situated just below Bleachery Dam. Shepaug discharges directly below its dam and powerhouse into the backwater of the Stevenson development's reservoir, Lake Zoar. Stevenson discharges flow directly into a 0.8 mile free-flowing stretch of the Housatonic.

² On August 30, 2004, the United Sates Department of the Interior (Interior) filed a document styled "a brief on issues raised by [NGC's] request for rehearing." Interior's filing is, in effect, an answer to NGC's rehearing request. Under the Commission's regulations, answers to requests for rehearing are not permitted, 18 C.F.R. § 385.713(d)(1) (2004), and we therefore reject Interior's filing.

Discussion

A. <u>Article 401 – Run-of-River Requirement</u>

- 8. Ordering paragraph (D) of the license makes the license subject to conditions in a water quality certification issued by the State of Connecticut Department of Environmental Protection (Connecticut DEP) pursuant to section 401 of the Clean Water Act.³ The special terms and conditions of the certification require NGC to operate the Falls Village and Bulls Bridge developments in a run-of-river mode so that the outflow from those developments equals inflow on an instantaneous basis.⁴ However, NGC states that it was subsequently advised that Connecticut DEP interprets paragraph 1 of the certification to require submission and approval of a run-of-river release and monitoring plan before beginning run-of-river operation at the two developments.⁵ NGC states that based on this understanding, it has reverted to peaking operations pending a determination of what requirements must be met before implementation of run-of-river operations. On rehearing, it proposes to comply with the run-of-river requirement by preparing, in consultation with the Connecticut DEP and the U.S. Fish and Wildlife Service (FWS), a run-of-river operations plan.
- 9. The certification's special terms and conditions state, for both the Falls Village and Bulls Bridge developments:⁶

The Licensee shall operate the development in conformance with a run-of-river mode, so that the outflow from the project shall equal the inflow on an instantaneous basis.

Paragraph 1 of the certification's general terms and conditions requires NGC to prepare and implement a plan for monitoring run-of-river and pumping operations and minimum stream flow release requirements for review and approval by the Connecticut DEP.⁷

³ 33 U.S.C. § 1251 *et seq*. For the conditions, *see* Appendix A to the license. 107 FERC at 62,441-44.

⁴ See Appendix A, special terms and conditions, Falls Village, paragraph 1; and Bulls Bridge, paragraph 1. 107 FERC at 62,441-42.

⁵ See NGC's rehearing request at 1-2.

⁶ See n. 4, supra.

⁷ *Id.* at 62,443-444.

However, the certification nowhere specifies that the monitoring plan must be prepared, reviewed, or approved before run-of-river operation can begin.

10. To support its departure from the run-of-river requirement, NGC has referenced only an interpretation informally given by Connecticut DEP staff, not any official interpretation by the Connecticut DEP. In any event, once the certification has been submitted and adopted as part of the license, the Commission is the interpreter of the document; it is not subject to further interpretation by the state. Moreover, the plain language of the certification requires immediate compliance with the run-of-river requirements. Therefore, pursuant to the terms of its license and of the section 401 certificate, NGC must continue to operate the Falls Village and Bulls Bridge developments in a run-of-river mode, and also prepare a monitoring plan.

B. Article 402 -- Protocol for Refilling Reservoirs After Drawdowns

11. Article 402 requires that the licensee shall, during the refill of the Falls Village and Bulls Bridge reservoirs following reservoir drawdown for flashboard replacement, dam maintenance or emergencies, release specified minimum flows downstream of the powerhouse, or 90 percent of inflow, whichever is less. ¹⁰ The minimum flow

⁸ NGC references a conversation with Connecticut DEP's Natural Resources Bureau Chief.

⁹By letter dated July 8, 2004, the Commission's Division of Hydropower Administration and Compliance (Compliance Division) notified NGC of an allegation of noncompliance regarding run-of-river operations at the Falls Village and Bulls Bridge developments and directed it to provide the Commission with documentation of run-of-river operation at the developments. Citing the alleged Connecticut DEP interpretation, NGC acknowledged in its rehearing request that it had reverted to its prior peaking operations. Subsequently, on July 30, 2004, the Compliance Division issued a letter determining that neither the license nor the certification requires the Commission's approval of a flow monitoring plan prior to run-of-river operations at the two developments. Subsequent gage readings below the two developments, as set out at the U.S. Geological Survey web site for real time water data, http://waterdata.usgs.gov/nwis/rt, indicate NGC has returned to run-of-river operations.

Minimum flows at the two reservoirs are to be 634 cfs from November 1 to February 28, 2,536 cfs from March 1 to April 30, and 634 cfs from May 1 to June 30. From July to October, the minimum flows are to be 317 cfs at Falls Village reservoir, and 400 cfs at Bulls Bridge reservoir. 107 FERC at 62,434. These protocols are in keeping (continued)

requirements are intended to benefit downstream aquatic resources while also protecting aquatic resources within the reservoirs during the refill period. ¹¹

- 12. NGC argues that the reservoir protocols are based on incorrect assumptions about the flows likely to be available for reservoir refill, the time required for the refill, and the resulting loss of generation.
- 13. Specifically it argues that the Commission erred in its calculations of likely refill rates by: (1) basing its calculations of inflow for Falls Village and for Bulls Bridge on flows representative of the 9.0 mile long section of river below Falls Village development known as the Trout Management Area (TMA) study reach¹² and some location downstream of the Bulls Bridge's plant, respectively (locations which have a larger watershed than these reservoirs) rather than at the Falls Village and Bulls Bridge reservoirs; and (2) using mean flows (average flows) rather than median flows to calculate the refill rates. NGC requests that the Commission require it to develop, in consultation with FWS and Connecticut DEP, an operational plan for the refill protocol rather than the rigid refill protocol of Article 402.
- 14. NGC's principle complaint is that, during dry periods with low inflows, little water would be available, after the minimum flow requirements of Article 402 are met, to refill the impoundment. NGC states that 25 percent of the time, during September, refill of the Falls Village reservoir could take nearly two weeks to complete, resulting in lost generation for that period.
- 15. We agree with NGC that the appropriate inflow data to be used when calculating refill rates at Falls Village and Bulls Bridge would be inflows to the Falls Village and Bulls Bridge reservoirs. We also acknowledge that the use of mean and median flow values would yield different results when calculating refill rates. For example, use of median flow values for September would result in longer refill times than if the mean

with recommendations submitted by the Department of Interior, U.S. Fish and Wildlife Service (FWS) pursuant to section 10(j) of the FPA, 16 U.S.C. § 803(j).

¹² It maintains that inflows upon which the minimum flows are based are not Falls Village reservoir inflows but appear to be flows for the TMA study reach, which has a significantly larger watershed than the Falls Village reservoir. It maintains that the correct flows for the Falls Village reservoir are 373 cfs for August; 346 cfs for September; and 435 cfs for October.

¹¹ See Final Environmental Impact Statement (FEIS) at 3-53.

monthly value is used. However, for those instances when inflow is low enough to result in protracted refill periods, Article 402 provides relief.

16. Article 402 includes language that would allow NGC to modify the refill protocols for short periods of time upon agreement with the FWS and Connecticut DEP, and to then notify the Commission within 10 days of any such incident. Consultation of this sort already occurs as a result of the section 401 requirement for NGC to receive approval from the Connecticut DEP for suspension of run-of-river operations at Falls Village and Bulls Bridge for the purpose of lowering the project impoundment to perform maintenance activities. Because Article 402 provides a mechanism for NGC to modify the refill protocols when necessary, we will not delete the article. If NGC develops an alternative refill protocol as a result of consultation with FWS and Connecticut DEP, it can then file for an amendment of Article 402.

C. Article 403 -- Reservoir Operating Levels During Winter Drawdowns

- 17. Article 403 requires NGC to maintain Candlewood Lake at elevations between 425.1 feet and 427.6 feet National Geodetic Vertical Datum (NGVD) during the summer recreation season (Memorial Day through October 15), and permits, in winter months in alternate years, deep drawdowns to an elevation no less than 416.1 feet NGVD (to control the invasive plant species Eurasian Water Milfoil and for power generation) and midlevel drawdowns to an elevation of no less than 422.1 feet NGVD (to protect recreational facilities from ice damage). ¹³
- 18. On rehearing, NGC states that in its past practice, annual winter drawdowns have occurred in a range between 424.0 NGVD and 416.0 feet NGVD. It notes that the Final Environmental Impact Statement (FEIS) prepared by Commission staff stated that its proposed lake-level operations would be similar to current operations and that there was no need to further modify those operations. It also notes that the FEIS recommended establishment of a technical committee to address control measures for invasive species and to monitor effects of its measures on the resident fishery. Accordingly, NGC requests that Article 403 be modified to require that annual winter drawdowns occur, in accordance with its past practice and the recommendations of the FEIS, in a range between 424.0 feet NGVD and 416.0 feet NGVD, with the actual drawndown elevation

¹³ 107 FERC at 62,434. See also FEIS at 3-70.

limits in any given winter to be determined by NGC in consultation with a technical committee. ¹⁴

19. NGC's request is consistent with the recommendations of the FEIS, and will give NGC additional flexibility in determining the exact parameters of the annual drawdowns, with the exact level to be determined by NGC following consultation with the Technical Committee. The request is granted.

D. <u>Article 404 -- Appropriate Leakage Flows at the Shepaug Tailrace</u>

- 20. Currently, there is an estimated 100 cfs leakage flow from the Shepaug development powerhouse into the development's tailrace. Article 404 requires NGC to prepare a plan to maintain this 100 cfs flow. On rehearing, NGC objects to the requirement, arguing that we are imposing a minimum flow requirement, that there is no reliable or reasonable way to measure the flow, and that there is no evidence a minimum flow is needed for the Shepaug tailrace.
- 21. In fact, there is evidence that maintenance of the leakage flows is needed. The tailwaters to Shepaug Development are the backwaters of Lake Zoar, which has had low dissolved oxygen (DO) levels. The leakage flow ensures that at least some circulation of the project tailwater occurs during all operational modes, including non-generation periods, providing some relief for the low DO levels in Lake Zoar. ¹⁵
- 22. The 100 cfs estimate was submitted by NGC itself and we have reasonably relied upon it. However, Article 404 was only intended to require that the existing leakage flow, whatever it is, be maintained, and that no changes are made at the project which will alter the existing leakage flow without Commission approval. We will revise Article 404 to clarify that the 100 cfs is an estimate.

E. Article 408 – Site Management Under the Project's Recreation Plan

23. Article 408 requires NGC, within twelve months of issuance of the license, to file with the Commission, for approval, a Recreation Plan for the project. The plan is to

¹⁴ NGC proposes that the technical committee be comprised of NGC, representatives of the Connecticut Department of Environmental Protection, and Candlewood. *See* rehearing request at 4.

¹⁵ These benefits are expected to increase after the installation of the oxygen diffuser system in Lake Lillinonah, immediately upstream of the dam. *See* FEIS at 3-72-73.

include a provision for an "on-site management presence at Bulls Bridge Gorge during the summer and on weekends from April through October to monitor use, keep the area litter free, and provide information to the public." ¹⁶

- 24. On rehearing, NGC argues that the requirement is based on anticipated increased use of the nearby Appalachian Trail, but that the Appalachian Trail is located on National Park Service property, not on project property and that NGC should not be required to provide personnel or funding to address overcrowding or overuse of a non-project site.
- 25. NGC adds that, while it does not object to taking reasonable actions on its own property to assist in addressing Appalachian Trail concerns, it is not clear what activities it could perform on its own property that would do so.
- 26. While the licensee is not responsible for management and maintenance of the Appalachian Trail, which is, rather, the responsibility of the National Park Service, it does have a responsibility to deal with the likely increased public use of project lands, including use of an existing parking lot and enhanced facilities for recreation, during the peak periods Article 408 addresses. We will require that the licensee accomplish this goal, but will not mandate the means by which it does so. Article 408 will be amended accordingly.

F. Candlewood's Request for Co-Management Authority

27. Candlewood is a quasi-governmental agency¹⁷ whose stated mission is to provide, in cooperation with the State of Connecticut and NGC, lake, shoreline and watershed management that will foster the preservation and enhancement of recreational, economic, scenic, public safety and environmental values of Candlewood Lake.¹⁸ On rehearing, Candlewood contends that the exclusive authority over shoreline management, recreation

¹⁷ Candlewood is comprised of five municipalities which border Candlewood Lake, the upper reservoir of the project's Rocky River development, the City of Danbury, and the towns of Brookfield, New Fairfield, New Milford and Sherman, Connecticut.

¹⁶ 107 FERC at 62,436-37.

¹⁸ Candlewood states that its many responsibilities include monitoring of water quality, tracking and advising on detrimental shoreline development, removing hazards to navigations, and enforcing boating safety. *See* Rehearing request, at 2.

and occupancy around the lake granted NGC in license articles 407, ¹⁹ 408, ²⁰ and 413²¹ undercuts its own authority and leaves it with no clearly-defined mechanism by which to obtain resolution of disputes that may arise under these articles. It argues that NGC has, to date, taken a passive role concerning shoreline and lake management, relying on the local municipalities and Candlewood to enforce NGC's rights. Candlewood therefore requests that the Commission amend the three articles to give Candlewood decision-making and management authority equal to that of the licensee.

28. The Commission's jurisdiction under Part I of the Federal Power Act extends only to its licensee, ²² and a licensee must retain sufficient rights to enable the Commission, through the license, to carry out its regulatory responsibilities with respect to the project. ²³ Therefore, while NGC may engage or permit another entity – such as Candlewood — to carry out activities under its license, NGC must remain ultimately responsible for performance of conditions required by its license. ²⁴ Accordingly, Candlewood's request that the license be amended to give it decision-making and management authority under articles 407, 408, and 413, equal to that of the licensee, is denied. ²⁵

¹⁹ Article 407 requires the licensee to submit to the Commission, for approval, a shoreline management plan for managing shorelines and riverfront lands within the project boundary at each of the project developments, including Candlewood Lake. 107 FERC at 62,435-36.

²⁰ Article 408 requires the licensee to file with the Commission, for approval, a recreation plan for all project developments, including Candlewood Lake. 107 FERC at 62,436-38.

²¹ Article 413, the Commission's standard use and occupancy article, allows the licensee to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and water without prior Commission approval so long as the use and occupancy are consistent with the environmental values of the project.

²² Erie Boulevard Hydropower, L.P., 98 FERC ¶ 61,143 at 61,430 (2002).

²³ Connecticut Light and Power Company, 89 FERC \P 62,109 (1999).

²⁴ *Smith Falls Hydropower*, 56 FERC ¶ 61,279 (1991).

²⁵ In 1999, the Commission approved, at the project, a conservation restriction in favor of the five municipalities comprising Candlewood, for the purpose of ensuring the (continued)

29. We note, however, that Articles 407 and 408 require the licensee to consult with Candlewood. As a consulting party under these articles, Candlewood will be afforded an opportunity to comment and provide recommendations on both the shoreline management plan (Article 407) and the recreation plan (Article 408). The licensee is required to include documentation of its consultation with Candlewood, copies of its comments and recommendations, and descriptions of how Candlewood's comments and recommendations are accommodated by the plans, when submitting the plans to the Commission for review and approval. Furthermore, as a party to be consulted under Articles 407 and 408, Candlewood may intervene and be heard in the proceeding on the plans.

The Commission orders:

(A) The first paragraph of Article 403 of the license issued June 23, 2004, is revised to read as follows:

Article 403. Candlewood Lake operating levels. The licensee shall operate Candlewood Lake levels between elevations 425.1 and 427.6 feet National Geodetic Vertical Datum (NGVD) during the summer recreation season (Memorial Day through October 15) with a winter drawdown to an elevation in a range between 424.0 feet NGVD and 416.0 feet NGVD, with the caveat that actual drawdown elevation limits in any given winter are to be determined by the licensee in consultation with a technical committee comprised of the licensee, representatives of the Connecticut Department of Environmental Protection, the U.S. Department of the Interior, and the Candlewood Lake Authority.

(B) The first sentence of Article 404 of the license issued June 23, 2004, is revised to read as follows:

Article 404. *Shepaug minimum flows*. Within six months of license issuance, the licensee shall prepare a plan to maintain a leakage flow of approximately 100 cubic feet per second (cfs) from the Shepaug Development. The plan shall provide that the licensee will not alter project

scenic, recreational, and environmental values of the lake. However, in that instance, the conservation restriction reserved to the licensee all rights necessary to construct, operate, and maintain the project in accordance with the requirements of the project license. 89 FERC at 64,181.

operations or facilities in such a way as to reduce leakage flows without obtaining prior authorization from the Commission.

- (C) Article 408(c) of the license issued June 23, 2004, is revised to read:
 - (c) At Bulls Bridge Gorge, during the summer and on weekends from April through October, monitor use, keep the area litter free, and provide information to the public.
- (D) The requests for rehearing filed by Northeast Generation Company and the Candlewood Lake Authority are denied in all other respects.

By the Commission.

(SEAL)

Magalie R. Salas, Secretary.