

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D.C. 20426
January 14, 2021

OFFICE OF ENERGY PROJECTS

Project No. 1892-030 – Vermont/New Hampshire
Project No. 1855-050 – Vermont/New Hampshire
Project No. 1904-078 – Vermont/New Hampshire
Great River Hydro, LLC

VIA FERC Service

Mr. John L. Ragonese
FERC License Manager
Great River Hydro, LLC
40 Pleasant St., Suite 202
Portsmouth, NH 03801

Reference: Deficiency of License Application and Additional Information Request

Dear Mr. Ragonese:

Great River Hydro, LLC's (Great River) applications for new licenses for the Wilder Hydroelectric Project No. 1892, Bellows Falls Hydroelectric Project No. 1855, and Vernon Hydroelectric Project No. 1904, filed on May 1, 2017 and amended on December 7, 2020, do not conform to the requirements of the Commission's regulations. A list of deficiencies is attached in Schedule A, pursuant to section 5.20(a)(2) of the Commission's regulations. Great River has 60 days from the date of this letter to correct the deficiencies in the applications.

In addition, requests for additional information made pursuant to section 5.21 of the Commission's regulations are attached in Schedule B. Please provide this information within 60 days from the date of this letter.

If the correction of any deficiency or requested information causes another part of the applications to be inaccurate, that part must be revised and refiled by the due date. Also, please be aware that further requests for additional information may be sent to Great River at any time before final action on the applications.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <https://ferconline.ferc.gov/eFiling.aspx>. For assistance, please contact FERC Online Support at FERCOnlinesupport@ferc.gov; call toll-free at (866) 208-3676; or, for TTY, contact (202) 502-8659. In lieu of electronic filing, Great River may submit a paper copy.

Project Nos. 1892-030, 1855-050
and 1904-078

2

Submissions sent via the U.S. Postal Service must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, D.C. 20426. Submissions sent via any other carrier must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The first page of any filing should include the applicable docket numbers P-1892-030, P-1855-050, and/or P-1904-078.

If Great River has any questions concerning this letter, please contact Steve Kartalia at (202) 502-6131, or via email at stephen.kartalia@ferc.gov.

Sincerely,



Nicholas Tackett, Chief
New England Branch
Division of Hydropower Licensing

Attachments: Schedule A – Deficiencies
Schedule B – Requests for Additional Information

Schedule A

Project Nos. 1892-030, 1855-050, and 1904-078

DEFICIENCIES

The following deficiencies have been identified after review of the final license applications (FLAs) for the Wilder, Bellows Falls, and Vernon hydroelectric projects. These deficiencies must be corrected within 60 days of the date of this letter.

Exhibit G

1. Section 4.41(h) of the Commission's regulations requires an Exhibit G that identifies the owners of lands within the project boundary. The Exhibit G maps included in the FLAs for the projects do not identify the landowners. Great River must provide the landowner identities and may refer to the Commission's guidance document, *Managing Hydropower Project Exhibits*, dated August 2014, in particular, appendix 3, page 28, which shows an example Exhibit G map with landownership identified. Given the number of landowners to be identified, the parcels may be identified on the maps and the landowner information can be provided on separate tables in Exhibit G.

Schedule B

Project Nos. 1892-030, 1855-050, and 1904-078

REQUESTS FOR ADDITIONAL INFORMATION

The following is a list of additional information needs that have been identified after review of the final license applications (FLAs) for the Wilder, Bellows Falls, and Vernon hydroelectric projects (projects). Please file the requested information within 60 days of the date of this letter unless specified otherwise below.

Cost of Environmental Measures

1. In Exhibit D for each project, in table D-1, costs are provided for proposed environmental measures. To ensure that staff apply these costs accurately in the economic analysis, please provide the capital and annual costs for each proposed measure in 2020 dollars in the years in which they would be incurred. If other measures are proposed that are not listed in table D-1, but are discussed elsewhere in the FLAs, costs need to be provided for them as well. Please provide a revised table D-1 for each project that lists all proposed measures, both environmental and non-environmental, with any associated capital and annual costs. If the measures are considered to have no appreciable cost, please provide a brief explanation.
2. In section 9 of Exhibit D for each project, Great River provides a list of proposed operational changes and their combined effects on annual generation (table D-3). For each proposed operational change (e.g., operate in accordance with operational flow regime; maintain continuous minimum flow), please provide an estimate of the associated effect on annual generation. This will allow staff to isolate effects of individual measures in the event that resource agencies, stakeholders, or staff identify alternatives to the proposed measures that have different effects on annual generation.

Aquatic Resources

3. On page 3-17 of the combined Exhibit E (which addresses all three projects), Great River states that “environmental effects of the proposed operation were evaluated using a combination of an hourly time-step spreadsheet simulation model, the Study 5 Operations model, recent hydrologic datasets, and historic operations data.” In Exhibit E sections 3.3 and 3.5.2.2, Great River evaluates the effects of its proposed operation by comparing simulated flows and water surface elevations (WSEL) under current conditions with proposed operations for four representative months (i.e., February, June, August, and November) of two representative years (2009 for high flow and 2015 for low flow). However, these evaluations do not provide a comprehensive picture of the simulated impoundment WSEL or the outflows for each of the representative months and years. To enable staff’s evaluation of effects of the proposed projects on impoundment WSEL and flow releases, please provide the following:

Schedule B

Project Nos. 1892-030, 1855-050,
and 1904-078

B-2

- a. Great River's spreadsheet simulation model, which is referenced on page 3-17 of the Exhibit E, and any documentation of this model's development, use, and limitations;
 - b. Simulated hourly WSEL for the Wilder, Bellows Falls, and Vernon impoundments for the two representative years (2009 and 2015) for current and proposed operations;
 - c. Simulated hourly releases from the Wilder, Bellows Falls, and Vernon dams (and Bellows Falls powerhouse if modeled) for the two representative years (2009 and 2015) for current and proposed operations;
 - d. Historic data corresponding to the simulated data provided in b and c, above; and
 - e. A comparison of flows expected in the Bellows Falls bypassed reach under the two flow scenarios.
4. In section 3.6.2.7 of Exhibit E, Great River discusses observations of adult sea lamprey utilizing the upstream fish passage facility at the Vernon Project (n = 2,440) in 2015. In Study 16 (Sea Lamprey Spawning Assessment),¹ Great River states that 18 of the radio-tagged sea lamprey from FirstLight's Turners Falls Hydroelectric Project and Northfield Mountain Pumped Storage Project relicensing studies were subsequently detected at the Vernon Project. Please confirm the total number of radio-tagged sea lamprey that utilized the Vernon Project's fish ladder, the date/time they were first detected near the ladder entrance, the data and time they entered the ladder, and the date/time they exited the ladder.
5. In section 3.6.2.8 of Exhibit E, Great River provides a summary of passage route selection of emigrating American eel at its Wilder Project. The number of eels that utilized Unit 3 to pass downstream is different between tables 3.6-36 and table 3.6-37. To assist staff's understanding of American eel passage route selection and survival at the Wilder Project, please explain the discrepancy between the two tables, and file revised tables and correct the supporting text as applicable.
6. On pages 3-413 through 3-420 of Exhibit E, Great River discusses the findings of the 2017 downstream adult American shad passage assessment, which are more thoroughly described in ILP Study 21 (American Shad Telemetry Study – Vernon Supplement to Final Study Report). However, it is unclear in Great River's Exhibit E

¹ Filed on October 14, 2016 with supplements filed on May 11, 2017 and May 1, 2018.

Schedule B

Project Nos. 1892-030, 1855-050,
and 1904-078

B-3

and the study report which fish successfully passed downstream through Vernon and were subsequently detected at the MS-01 station just upstream of Stebbins Island. Please indicate which fish in the 2017 study were subsequently detected at the MS-01 monitoring station to facilitate staff's understanding of adult American shad downstream passage at the Vernon Project.

Cultural Resources

7. In section 3.11.2.2 of Exhibit E, Great River states that the Vermont State Historic Preservation Officer (SHPO) has not yet issued its opinion regarding effects on architectural resources located in Vermont. Please file documentation of any additional consultation with the Vermont and New Hampshire SHPOs that has not already been filed on the record, including National Register of Historic Places eligibility recommendations of evaluated properties, assessment of effects to these properties, and consultation on measures to resolve adverse effects.

8. Great River's May 16, 2016 Traditional Cultural Properties (TCP) report states that additional tribal consultation would be necessary to identify TCPs. Great River's progress reports (filed on May 15, 2018, August 13, 2018, November 13, 2018) indicate that Great River was continuing consultation with tribes to identify TCPs. In section 3.11.1.4 and 3.11.2.4 of Exhibit E, Great River states that no project effects to TCPs have been identified and that no further consultation is being sought. Please provide documentation of consultation with Native American tribes regarding TCPs since May 2016, and information on any additional TCPs or project effects on TCPs identified through consultation with the tribes.

Document Content(s)

P-1892-030, 1855-050, -1904-078_AIR-Deficiency Letter.PDF.....1