

**Amended Final Application for New License for  
Major Water Power Project—Existing Dam**

**Bellows Falls Project (FERC No. 1855)**

**EXHIBIT C: CONSTRUCTION HISTORY AND PROPOSED  
CONSTRUCTION**

**June 2023 Revision**

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## **EXHIBIT C: CONSTRUCTION HISTORY AND PROPOSED CONSTRUCTION**

*Section 5.18(a)(5)(iii) of Title 18 of the Code of Federal Regulations (CFR) refers to Section 4.51 (License for Major Project—Existing Dam) for a description of information that an applicant must include in Exhibit C of its license application. Exhibit C is a construction history and proposed construction schedule for the Project.*

*Section 4.51(d) Exhibit C is a construction history and proposed construction schedule for the Project. The construction history and schedules must contain:*

*(1) If the application is for an initial license, a tabulated chronology of construction for the existing project's structures and facilities described under paragraph (b) of this section (Exhibit A), specifying for each structure or facility, to the extent possible, the actual or approximate dates (approximate dates must be identified as such) of:*

- (i) Commencement and completion of construction or installation;*
- (ii) Commencement of commercial operation; and*
- (iii) Any additions or modifications other than routine maintenance; and*

*(2) If any new development is proposed, a proposed schedule describing the necessary work and specifying the intervals following issuance of a license when the work would be commenced and completed.*

### **C1 Construction History**

This is not an application for an initial license; however, a brief overview of the Project's construction history is provided below.

#### **C1.1 Original Construction**

The Bellows Falls Project was originally constructed in 1927 (see Exhibit E, Section 3.11, *Cultural and Historic Resources*). The original license for the Bellows Falls Project was issued jointly to New England Power Company, Bellows Falls Hydro-Electric Corporation, and the Connecticut River Power Company on October 13, 1943. New England Power Company subsequently purchased all of the physical properties and franchise of Bellows Falls Hydro-Electric Corporation and became the Licensee, as authorized by the Federal Power Commission (predecessor to the Federal Energy Regulatory Commission [FERC]) under its Order dated July 9, 1948. The original license expired on June 30, 1970. The Project operated under annual licenses until the license was renewed on August 3, 1979.

## **C1.2 Modifications/Additions to the Project**

On October 5, 1978, FERC approved a Settlement Agreement concerning fish passage facilities for Atlantic Salmon at the Bellows Falls Project and at the upstream Wilder Project (No. 1892), and for Atlantic Salmon and American Shad at the downstream Vernon Project (No. 1904). The settlement was executed on December 30, 1977, among the Licensee; the States of Massachusetts, Connecticut, New Hampshire, and Vermont; U.S. Fish and Wildlife Service; and four non-governmental organizations (the Environmental Defense Fund; the Massachusetts Public Interest Research Group, Inc.; For Land's Sake; and Trout Unlimited). The settlement called for staged design, construction and operation of passage facilities at the three Projects; Bellows Falls' construction schedule was dependent upon a trigger number of 30 returning adult salmon to the downstream Holyoke Project (FERC No. 2004). The upstream fish ladder and visitor center with fish ladder viewing windows was subsequently completed and operation began in 1984.

On July 26, 1990, the Licensee entered into a Memorandum of Agreement with the Connecticut River Atlantic Salmon Commission for permanent downstream fish passage facilities for the Wilder, Bellows Falls, and Vernon Projects. A downstream fish diversion boom located in the canal forebay was installed in 1996, and downstream passage is provided via the forebay trash/ice sluice skimmer gate, and by a supplemental sluice pipe.

On February 27, 1998, FERC approved the transfer of the license from New England Power Company to USGen New England, Inc.

Under a multi-license amendment dated November 19, 1998, regional electrical transmission facilities were removed from the Project, including three step-up transformers and adjacent switchyards. At that time, the powerhouse was automated and began operations via remote control from a consolidated hydro operations center in Wilder, Vermont.

On January 21, 2005, FERC approved a change in the Bellows Falls Project boundary to remove a small piece of land with an office building (currently, the Great River Hydro North Walpole office) from the Project. On February 5, 2005, FERC approved another Project boundary change to removed 8.8 acres and historic structures from the Project boundary to facilitate subsequent transfer to the Bellows Falls Historical Society.

On January 24, 2005, FERC approved the transfer of the license to TransCanada Hydro Northeast Inc.

On December 4, 2012, construction was completed on a new generator step-up transformer substation to the west of the powerhouse. Generator leads run overhead by cable tray approximately 180 feet (ft) from the powerhouse to the 6.9-kilovolt (kV) switchgear building. Overhead conductors (6.9 kV) exiting the switchgear building connect with two step-up transformers. Overhead conductors

(115 kV) from the high side of the transformers extend approximately 120 ft to a bus and disconnects. Other electrical equipment is owned by the regional transmission company, New England Power Company, doing business as National Grid. Three oil-filled transformers located adjacent to the downstream face of the powerhouse, also owned by New England Power were retired from service and removed from the Project area. The substation was placed into service on August 20, 2013.

Under a Purchase and Sale Agreement, dated November 1, 2016, Great River Hydro NE, LLC agreed to acquire all of the equity interests in TransCanada Hydro Northeast Inc. On January 10, 2017 FERC authorized the transaction under Section 203(a)(1)(A) of the Federal Power Act (158 FERC ¶62,019). In furtherance of the acquisition, the licensee was converted to a limited liability company. Accordingly, the licensee applied for FERC approval to transfer the licenses for Project Nos. 1855 (Bellows Falls), 1892 (Wilder), 1904 (Wilder), 2077 (Fifteen Mile Falls) and 2323 (Deerfield River) from TransCanada Hydro Northeast Inc. to TransCanada Hydro Northeast LLC. On February 22, 2017, FERC approved the transfer of the licenses to TransCanada Hydro Northeast LLC, pending submittal of evidence of the conversion and the signed acceptance sheet (158 FERC ¶62,119). On April 18, 2017, TransCanada Hydro Northeast LLC filed the acceptance sheet and evidence of the conversion as required by the February 22, 2017 Order. The transaction closed on April 19, 2017.

On April 19, 2017, TransCanada Hydro Northeast LLC was renamed Great River Hydro, LLC and provided written notice of the name change to FERC by filing dated April 24, 2017, so that FERC could revise its records to accurately reflect the name change of the licensee of the Project as Great River Hydro, LLC.

## **C2 Schedule for Proposed Project Development**

Great River Hydro intends to construct a new concrete intake structure with an affiliated control house at the dam and install a new 680kW minimum flow turbine generator that will discharge the proposed 300 cfs minimum flow into the bypassed reach below. The project will also include electrical interconnection to the local distribution utility in Vermont. Exhibit A Figures A-10 through A-13 shows the location and preliminary drawings of the new proposed minimum flow unit on the dam.

The schedule for constructing the proposed 680kW, 300 cfs minimum flow is contingent on FERC issuance of a new License authorizing the additional development and subsequent authorization to commence construction. Assuming the construction commences within 1 year of License issuance, the new unit should be commissioned within two years from the start date. ~~not proposing any new construction or new development at the Bellows Falls Project at this time.~~

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