

122 FERC ¶ 62,181  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Green Mountain Power Corporation

Project No. 2674-029

ORDER AMENDING LICENSE, APPROVING AS-BUILT EXHIBITS,  
AND REVISING ANNUAL CHARGES

(Issued February 26, 2008)

On April 5, 2007, Kleinschmidt Associates, on behalf of the Green Mountain Power Corporation, licensee for the Vergennes Hydroelectric Project, FERC No. 2674, filed as-built Exhibit A and Exhibit F drawings reflecting turbine rehabilitation at Plant 9. The project is located on Otter Creek in the City of Vergennes, Addison County, Vermont. The project does not occupy any federal lands.

BACKGROUND

On May 3, 2006, the licensee filed a letter stating its intent to perform turbine rehabilitation work at Plant 9 of the Vergennes Project. By letter dated May 16, 2006, the Commission informed the licensee that the proposed modifications were considered maintenance activities and therefore, did not require an amendment of the license at that time. In addition, the May 16, 2006 letter requested the licensee to file within 90 days after completion of the rehabilitation work, revised Exhibit A and any necessary exhibit drawings to reflect the as-built conditions.

REVIEW

*Revised Exhibits*

In the April 5, 2007 filing, the licensee submitted a revised Exhibit A describing the two refurbished turbine generating units at Plant 9. The revised exhibit also states that the refurbished units do not require surge towers. Therefore, the project description has been updated to reflect that the two surge towers, as authorized in the project license, have been removed. The revised Exhibit A accurately reflects the as-built conditions of the project, conforms to the Commission's rules and regulations, and is approved by this order.

The filing also includes revised and new Exhibit F drawings showing the as-built conditions at the project. In addition to an index sheet, the licensee filed ten drawing sheets; however, three of them (2, 3, and 4) are not approved by this order. These three

drawings depict plan and section details of the demolition or removal of items at Plant 9, which do not warrant Commission approval. Our review of the remaining Exhibit F drawings finds that they conform to the Commission's rules and regulations, and are approved by this order. Ordering paragraph (D) of this order requires the licensee to file the approved drawings in aperture card and electronic file formats.

### *Installed Capacity*

The April 5, 2007 filing states that the turbine rehabilitation work, which was done in 2005 and 2006, has resulted in an improvement in the generating capacity of both Unit 1 and Unit 2 at Plant 9. The licensee expects these efficiency improvements to increase the average annual generation at the Vergennes Project by 2,388 MWh, an approximately 23 percent increase over the existing average annual generation. A breakdown of the ratings of the generating units before (existing) and after refurbishment, as well as the dates of commencement of operation of the refurbished units, are shown in Table 1 below.<sup>1</sup>

Table 1.

Powerhouse (Plant 9) Unit No.	Existing Generator Capacity (kW)	Refurbished Generator Capacity (kW)	Existing Turbine Capacity (kW)	Refurbished Turbine Capacity (kW)	Date of Commencement of Operation
Unit 1	700	800	738	852	January 16, 2007
Unit 2	700	800	738	852	January 24, 2006

Section 11.1(i) of the Commission's regulations states that the authorized installed capacity means the lesser of the ratings of the generator or turbine units. The rating of a generator is the product of the continuous-load capacity rating of the generator in kilovolt-amperes (kVA) and the system power factor in kW/kVA. The rating of a turbine is the product of the turbine's capacity in horsepower (hp) at best gate (maximum efficiency point) opening under the manufacturer's rated head times a conversion factor of 0.75 kW/hp.

Our review of the capacity ratings of the refurbished units found that the ratings for the two turbines are greater than the generator ratings for each unit. Pursuant to section 11.1(i) of the regulations, the authorized capacity of the two units should be based on the ratings of the generators. To reflect the change in generating capacity in the

<sup>1</sup> On February 22, 2007, Kleinschmidt Associates, on behalf of the licensee, made a filing in support of its request for certification for a renewable energy production tax credit for the efficiency improvements due to the turbine rehabilitation work done at Plant 9. The filing states that Unit 1 and Unit 2 were placed into service on January 16, 2007, and January 24, 2006, respectively.

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project license, this order revises the installed capacity and the annual charges under Article 201.<sup>2</sup> Section 11.1(d)(6) of the Commission's regulations state that the assessments commence on the date of commencement of project operation. In the event that project operation commences during a fiscal year, the charges will be prorated based on the date on which operation commenced.

The Director orders:

(A) The license for the Vergennes Hydroelectric Project, FERC No. 2674, is amended as provided by this order, effective the day this order is issued, unless otherwise stated.

(B) The revised Exhibit A filed on April 5, 2007, conforms to the Commission's rules and regulations, and is approved and made part of the license.

(C) The following Exhibit F drawings filed on April 5, 2007, conform to the Commission's rules and regulations, and are approved and made part of the license. Superseded exhibits are eliminated from the license.

<b>Exhibit No.</b>	<b>FERC Drawing No.</b>	<b>Licensee's Drawing No.</b>	<b>Drawing Title</b>	<b>Superseded FERC Drawing No.</b>
F-6	2674-1009	1	Vergennes No. 9 Turbine Rehabilitation Existing General Site Plan	–
F-7	2674-1010	5	Vergennes No. 9 Turbine Rehabilitation New Turbine Civil Plan	2674-1002
F-8	2674-1011	6	Vergennes No. 9 Turbine Rehabilitation New Turbine – Mounting Bracket Plan, Sections and Details	–
F-9	2674-1012	7	Vergennes No. 9 Turbine Rehabilitation New Turbine and Frame Civil Assembly	2674-1002
F-10	2674-1013	8	Vergennes No. 9 Turbine Rehabilitation New Turbine and Frame Mechanical Assembly	–
F-11	2674-1014	9	Vergennes No. 9 Turbine Rehabilitation New Turbine Transverse Sections	–
F-12	2674-1015	10	Vergennes No. 9 Turbine Rehabilitation New Turbine Support Steel Framing Details	–

<sup>2</sup> The existing total installed capacity at the Vergennes Project is 2,400 kW (1,400 kW at Plant 9 and 1,000 kW at Plant 9B). With the 100 kW increase in capacity at both Unit 1 and Unit 2 at Plant 9, the total installed capacity at the Vergennes Project increases from 2,400 kW to 2,600 kW.

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(D) Within 45 days of the date of issuance of this order, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (i.e., P-2674-1009 through P-2674-1015) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-6, etc.), Drawing Title, and date of this order shall be typed on the upper left corner of each aperture card. See Figure 1.

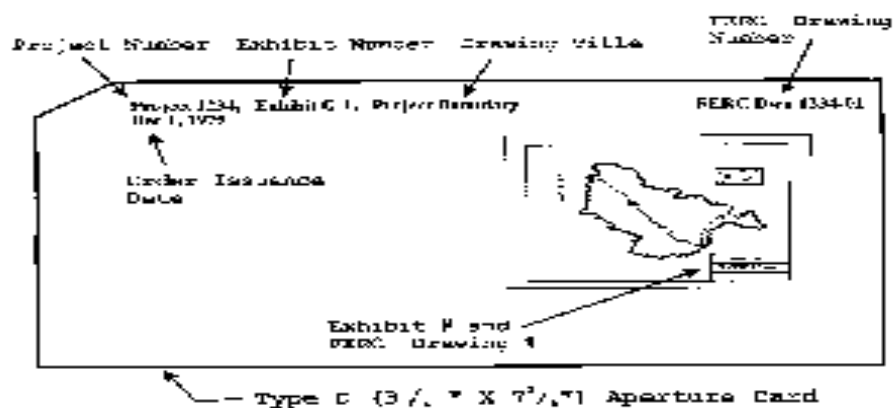


Figure 1. Sample Aperture Card Format

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office.

b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. Each drawing must be a separate electronic file, and the file name shall include: FERC Drawing Number, FERC Exhibit, Drawing Title, date of this order, and file extension [i.e., P-2674-1009, F-6, Vergennes No. 9 Turbine Rehabilitation Existing General Site Plan, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

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IMAGERY - black & white raster file  
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4  
RESOLUTION – 300 dpi  
DRAWING SIZE FORMAT – 24” X 36” (min), 28” X 40” (max)  
FILE SIZE – less than 1 MB

(E) Ordering paragraph (B)(2) of the license is revised, in part, to read as follows:

Project works consisting of:...(e) the south forebay, with trashracks, headgates, and two, 10-foot-diameter penstocks; (f) the south powerhouse, Plant 9, with two, 800-kW generating units;...

(F) Article 201 of the license is amended to read as follows:

The licensee shall pay the United States an annual charge for the purposes of reimbursing the United States for the cost of administering Part I of the Federal Power Act, as determined by the Commission. The authorized installed capacity for that purpose is 2,500 kW effective January 24, 2006, and 2,600 kW effective January 16, 2007.

(G) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

William Guey-Lee  
Chief, Engineering and Jurisdiction Branch  
Division of Hydropower Administration  
and Compliance