# 128 FERC ¶ 62,105 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Massachusetts Water Resources Authority

Project No. 13400-000

#### ORDER GRANTING EXEMPTION FROM LICENSING (CONDUIT)

(Issued August 07, 2009)

## **Introduction**

1. On March 17, 2009, Massachusetts Water Resources Authority (applicant) filed an application to exempt the proposed 200-kilowatt (kW) Loring Road Hydroelectric Project from the licensing requirements set forth in Part I of the Federal Power Act (FPA). The small conduit hydropower project would be located on a water treatment distribution pipeline in Middlesex County, Massachusetts. The applicant owns all the land and structures necessary to develop and operate the project. The project would not occupy any federal lands. As discussed below, a conduit exemption is being issued for the project.

# **Project Description**

<sup>&</sup>lt;sup>1</sup> Under Part I of the FPA, 16 U.S.C. §§ 792-823 (2006), the Commission issues licenses to non-federal interests authorizing the construction, operation, and maintenance of water power projects on navigable waters of the United States, on federal lands, and on streams subject to Congress' jurisdiction. Pursuant to section 30 of the FPA, 16 U.S.C. § 823, the Commission is authorized to exempt from the licensing requirements of Part I of the FPA any facility (not including a dam or other impoundment) that is constructed, operated, or maintained for the generation of electric power and is located on non-federal lands and uses for generation only the hydroelectric potential of a manmade conduit, which is operated for the distribution of water for agricultural, municipal, or industrial consumption (and not primarily for the generation of electricity).

<sup>&</sup>lt;sup>2</sup> The application contained documentation that the applicant has the necessary property rights to develop the project.

- 2. The proposed Loring Road Hydroelectric Project consists of an existing valve chamber containing one proposed generating unit having an installed capacity of 200 kW, and appurtenant facilities. The applicant estimates that the project would have an average annual generation of 1,207,000 kW-hours that would be used on-site and any excess would be sold to a local utility.
- 3. The Loring Road Hydroelectric Project would be located on the applicant's existing water distribution system. The distribution system begins on the Wachusetts Reservoir (about 30 miles northeast of the proposed project's location). From the reservoir, water passes through a series of aqueducts, to a water treatment plant, and then to a covered storage reservoir. The water continues through a tunnel to an underground valve chamber where it runs through pressure-reducing valves to reduce the hydraulic pressure of the water. Once the pressure is reduced, the water flows through a second valve chamber that directs the flows to one of two storage tanks. From the tanks, the water discharges into a water supply conduit.
- 4. The proposed Loring Road Hydroelectric Project will replace the pressure reducing valves in the first valve chamber with a hydro-turbine generator. The generator will regulate flow and provide a constant pressure, in addition to energy recovery.

## **Background**

5. On April 14, 2009, public notice of the application was issued, establishing June 15, 2009, as the deadline for filing comments and motions to intervene. On June 10, 2009, the United States Department of Interior stated it had no comments on the project. No other comments or motions to intervene were filed in response to the notice.

#### **Section 30(c) Conditions**

6. Section 30(c) of the FPA<sup>3</sup> requires the Commission to include in its conduit exemptions such terms and conditions as may be prescribed by federal and state fish and wildlife agencies to prevent loss of, or damage to fish and wildlife resources and to otherwise carry out the purposes of the Fish and Wildlife Coordination Act (16 U.S.C. §§ 661-667e (2006)). Standard Article 2 of this exemption requires compliance with the terms and conditions prepared by federal or state fish and wildlife agencies to protect fish and wildlife resources. No federal or state fish and wildlife agency submitted terms and conditions for this exemption.

<sup>&</sup>lt;sup>3</sup> 16 U.S.C. § 823a(c) (2006).

## **Environmental Assessment**

7. Pursuant to section 380.4(a)(14) of the Commission's regulations, <sup>4</sup> Commission staff is not required to prepare an environmental assessment or an environmental impact statement for conduit exemption applications. Nonetheless, staff has considered the environmental information in the exemption application and other public comments, and finds that issuance of this order is not a major federal action significantly affecting the quality of the human environment.

#### **Administrative Conditions**

#### 1. Annual Charges

8. The Commission collects annual charges from exemptees for the administration of its hydropower program. Under the regulations currently in effect, projects, with an installed capacity of 1,500 kW or less, like this project, are not assessed an annual charge as explained in Article 7.

#### 2. Start of Construction

9. Article 8 states that the Commission may revoke the exemption if the exemptee fails to start construction of the facilities within two years of the date this exemption is issued or has not completed construction within four years.

# 3. Exhibit F and G Drawings

- 10. Although the Exhibit F drawings filed on March 17, 2009 are being approved, the Commission requires exemptees to file sets of approved project drawings on microfilm and in electronic file format. Article 9 requires the exemptee to file the Exhibit F drawings approved in Ordering Paragraph (C) in microfilm and electronic file format.
- 11. Ordering Paragraph (D) requires the exemptee to file revised Exhibit G drawings for Commission approval. The filed Exhibit G-1 and G-2 drawings show the project boundary enclosing all of the project works; however, the drawings must conform to the Commission's regulations, 18 C.F.R. §§ 4.39 and 4.41.
- 12. More specifically, the Exhibit G drawings must contain a minimum of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for GIS geo-referencing the project boundary drawing to the polygon data, and must be based on a standard map

<sup>&</sup>lt;sup>4</sup> 18 C.F.R. § 380.4(a)(14) (2009).

coordinate system. The spatial reference for the drawing (*i.e.*, map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor.

13. Under Article 10, the exemptee, within 90 days of completion of construction of the project facilities, is required to file revised Exhibit F and G drawings showing the asbuild conditions.

#### 4. Operation and Maintenance

14. Ensuring that the exempted project is fit for use is an important public interest function of the Commission. Article 11 is included, which states that if the exemptee causes or allows essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, the Commission may revoke the exemption.

# 5. <u>Exemptee Liability</u>

15. Section 10(c) of the FPA provides that licensees, and not the United States, are liable for "damages occasioned to the property of others by the construction, maintenance, or operation or the project works ...." To clarify that exemptees would be similarly liable, Article 12 is included, which states that the exemptee is liable for damages to the property of others.

#### 6. **Property Rights**

16. Pursuant to 18 C.F.R. § 4.31(c)(2)(ii), an applicant for exemption is required to demonstrate that, at the time it files its exemption application, it has sufficient rights to any non-federal land and facilities required for the construction and operation of the project. However, because an exemption is issued in perpetuity, Article 13 is included, which reserves the Commission's authority to revoke the exemption if in the future the exemptee fails to maintain sufficient rights to comply with the terms and conditions of the exemption.

# 7. Review of Final Plans and Specifications

17. To ensure that the exemptee is in constructing and operating a safe and adequate project, Article 14, requires the exemptee to file final contract drawings and specifications for the pertinent features of the project for Commission approval prior to commencing construction.

<sup>&</sup>lt;sup>5</sup> 16 U.S.C. § 803(c) (2006).

#### The Director orders:

- (A) The Loring Road Hydroelectric Project is exempted from the licensing requirements of Part I of the Federal Power Act, subject to the articles below.
  - (B) The project consists of:
- (1) All lands, to the extent of the exemptee's interests in those lands, enclosed by the project boundary shown by Exhibits G-1 and G-2 filed on March 17, 2009.
- (2) The following project works: an existing valve chamber that will contain one generating unit having an installed capacity of 200 kW, and appurtenant facilities. These project works are more specifically shown and described by those portions of Exhibits A and F below:

Exhibit A: Exhibit A, pages 2 through 6, filed on March 17, 2009.

Exhibit F: The following Exhibit F drawings filed on March 17, 2009.

Exhibit No.	FERC Drawing No.	Drawing Title
F-1	P-13400-1	Basement and First Floor Plan
F-2	P-13400-2	Section View
F-3	P-13400-3	Electrical One-Line Diagram and
		Control System Architecture

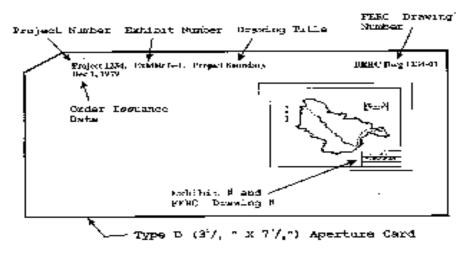
- (3) All of the structures, fixtures, equipment, or facilities used to operate or maintain the project, or other rights that are necessary or appropriate in the operation or maintenance of the project.
- (C) The Exhibits A and F described above are approved and made part of the exemption. The Exhibit G drawings filed on March 17, 2009, are not approved.
- (D) Within 45 days of the effective date of this exemption, the exemptee shall file, for Commission approval, revised Exhibit G-1 and G-2 drawings that comply with the Commission's regulations, 18 C.F.R. §§ 4.39 and 4.41.
- (E) This exemption is also subject to the articles set forth in Form E-1 entitled "Standard Terms and Conditions of Exemption from Licensing" (attached), and the following additional articles:
- <u>Article 7</u>. Administrative Annual Charges. The exemptee shall pay the United States annual charges, effective the first day of the month in which the exemption is issued, as determined in accordance with the provisions of the Commission's regulations

in effect from time to time, for the purpose of reimbursing the United States for the cost of administration of the Commission's hydropower program. The authorized installed capacity for that purpose is 200 kilowatts. Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kilowatts will not be assessed annual charges.

Article 8. Start of Construction. The Commission may revoke this exemption if actual construction of any proposed or required project works has not begun within two years or has not been completed within four years from the issuance date of the exemption. If an exemption is revoked under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing for the same project within two years of the revocation.

<u>Article 9</u>. Exhibit Drawings. Within 90 days of the date of issuance of this order, the exemptee shall file the approved exhibit drawings in aperture card and electronic file formats, as described below.

(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 Project-Drawing Number (i.e., P-13400-1 through P-13400-3) 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-1, etc.), Drawing Title, and date of this exemption 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 exemptee 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. Exhibit F drawings must be identified as (CEII) material under 18 C.F.R. § 388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this exemption, and file extension in the following format [e.g., P-13400-1, F-1, Basement and First Floor Plan, MM-DD-YYYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file FILE TYPE - Tagged Image File Format, (TIFF) CCITT Group 4 RESOLUTION - 300 dpi desired, (200 dpi min) DRAWING SIZE FORMAT - 24" X 36" (min), 28" X 40" (max) FILE SIZE - less than 1 MB desired

Article 10. Exhibit G and F Drawings. The exemptee shall file, within 90 days from completion of construction of the subject facilities, revised Exhibit F and G drawings showing the as-built conditions.

Article 11. Operation and Maintenance. The Commission may revoke this exemption if essential project property is removed or destroyed or becomes unfit for use, without adequate replacement; or if the project is abandoned or good faith project operation or maintenance is discontinued; or if the exemptee refuses or neglects to comply with the terms of the exemption and the lawful orders of the Commission.

Article 12. Liability. The exemptee shall be liable for all damages occasioned to the property of others by the construction, operation, or maintenance of the project works or works appurtenant or accessory thereto, constructed under this exemption and in no event shall the United States be liable therefore.

Article 13. Property Rights. The Commission reserves the right to require the exemptee to gain additional property rights, if such rights become necessary to develop, operate, or maintain the project or to achieve compliance with the terms and conditions of the exemption. The Commission may revoke this exemption if, at any time, the exemptee does not hold sufficient property rights in the land or project works necessary to develop, maintain, and operate the project.

Article 14. Contract Drawings and Specifications. The exemptee shall, at least 60 days prior to the start of construction, submit one copy to the Commission's Regional

Director and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the final contract drawings and specifications. The Commission may require changes in the plans and specifications to assure a safe and adequate project. The exemptee shall not start any construction activities before getting a prior authorization from the Commission's Regional Office.

- (E) The exemptee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.
- (F) This order is issued under authority delegated to the Director and constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 825 (2006), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2009). The filing of a request for rehearing does not operate as a stay of the effective date of this exemption or any of its requirements.

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

E-1 Form

# **Standard Terms and Conditions of Exemption from Licensing** 18 C.F.R. § 4.94 (2009)

Any exemption granted under § 4.93 of the Commission's regulations, 18 C.F.R. § 4.93 (2009), for a small conduit hydroelectric facility is subject to the following standard terms and conditions:

Article 1. The Commission reserves the right to conduct investigations under sections 4(g), 306, 307, and 311 of the Federal Power Act with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, or maintenance of the exempt facility. If any term or condition of the exemption is violated, the Commission may revoke the exemption, issue a suitable order under section 4(g) of the Federal Power Act, or take appropriate action for enforcement, forfeiture, or penalties under Part III of the Federal Power Act.

Article 2. The construction, operation, and maintenance of the exempt project must comply with any terms and conditions that the United States Fish and Wildlife Service and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish and wildlife resources or otherwise to carry out the purposes of the Fish and Wildlife Coordination Act, as specified in Exhibit E of the application for exemption from licensing or in the comments submitted in response to the notice of the exemption application.

Article 3. The Commission may revoke this exemption if actual construction of any proposed generating facilities has not begun within two years or has not been completed within four years from the effective date of this exemption. If an exemption is revoked under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing or a notice of exemption from licensing for the same project within two years of the revocation.

<u>Article 4</u>. In order to best develop, conserve, and utilize in the public interest the water resources of the region, the Commission may require that the exempt facilities be modified in structure or operation or may revoke this exemption.

<u>Article 5</u>. The Commission may revoke this exemption if, in the application process, material discrepancies, inaccuracies or falsehoods were made by or on behalf of the applicant.

Article 6. Before transferring any property interests in the exempt project, the exemption holder must inform the transferee of the terms and conditions of the exemption. Within 30 days of transferring the property interests, the exemption holder must inform the Commission of the identity and address of the transferee.

Document Content(s)	
P-13400-000.DOC1-	9

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