

144 FERC ¶ 62,155
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Winchendon Hydroelectric LLC

Project No. 8012-007

ORDER AMENDING EXEMPTION FROM LICENSING (5 MW OR LESS)

(Issued August 22, 2013)

1. On April 5, 2013, Winchendon Hydroelectric LLC, exemptee for the Hunts Pond Dam Hydroelectric Project No. 8012, filed an application to replace two cross-flow turbines with a total generator nameplate capacity of 320 kilowatts (kW) with a single double regulated Kaplan unit with a generator capacity of 100 kW. In addition, the exemptee is proposing to conduct repairs and maintenance as required by the Commission's Division of Dam Safety, and to temporarily draw down the head pond reservoir elevation for these repairs. The project is located on Millers River in Worcester County, Massachusetts.

Background

2. The exemption for the Hunts Pond Dam Hydroelectric Project was issued February 19, 1985, and amended June 27, 1991.¹ The project currently consists of: (a) the existing 16-foot-high, 184-foot-long, concrete Hunts Pond dam; (b) the impoundment having a surface area of 13 acres, a storage capacity of 120 acre-feet, and a normal water surface elevation of 954.4 feet National Geodetic Vertical Datum (NGVD); (c) an intake structure; (d) a powerhouse containing two generating units having a total authorized installed capacity of 320 kW;² (e) a 200-foot-long 4.16-kV transmission line; and (f) appurtenant facilities. The annual generation of the project was originally estimated to be 593,663 kWh.

3. The additional capacity authorized in the June 27, 1991 Order Amending Exemption was never installed due to changes in ownership and bankruptcy. The current exemptee operates the project and maintains the facility at its original exemption capacity of 120 kW, and the project operates in a run-of-river mode.

¹*Mason & Parker Manufacturing Company, Inc.*, 30 FERC ¶ 62,181 (1985); and, *Mason & Parker Manufacturing Company, Inc.*, 55 FERC ¶ 62,301 (1991).

² The June 27, 1991 Order Amending Exemption authorized a change in the project's total nameplate capacity, from 120 kW to 320 kW.

Proposed Action

4. As stated in their April 5, 2013 filing, the exemptee intends to replace the two cross-flow turbines with a combined authorized installed capacity of 320 kW, with one new double-regulated Kaplan turbine and a 100 kW nameplate generator. With the turbine replacement, the design hydraulic capacity value will be reduced from the existing units at approximately 172 cubic feet per second (cfs) to the new unit at approximately 110 cfs. The operation of the site will remain run-of-river after the construction is completed. The exemptee reports that the historical data shows the energy production to be approximately 305,000 kWh per year. The exemptee states that the new Kaplan turbine is estimated to produce an additional 201,000 kWh per year more than the existing installed units, resulting in an estimated new annual production value of 506,000 kWh.

5. In addition to the turbine replacement, the exemptee plans to address maintenance and repairs to spalled concrete and stoplog and needle beam replacement at the dam, as required by the Commission's Division of Dam Safety's New York Regional Office (D2SI New York Regional Office). The exemptee plans to begin construction in the summer of 2013, with the possible project completion date of December 2013, or summer of 2014 if there are any construction delays.

6. In order to accommodate the maintenance and repairs as described above, the exemptee plans to temporarily draw down the head pond reservoir from a normal operating elevation of 954.6 feet NGVD to below the crest of the dam, located at 948.2 feet NGVD, with a lower limit of 944.48 feet NGVD, which is the bottom of the intake channel. The exemptee states that flows through the project will be coordinated with river flows and rain events to maintain minimum flows or inflow at all times.

Consultation

7. Prior to filing the amendment application with the Commission, the exemptee consulted with U.S. Fish and Wildlife Service (FWS) and the Massachusetts Division of Fisheries and Wildlife (Massachusetts DFW). Both agencies stated they had no objections to the proposed changes, with the understanding that the hydraulic capacity and the minimum flow requirement were not being altered.

8. The U.S. Department of the Interior (Interior), on behalf of the FWS, is requesting that Condition No. 2 of the August 24, 1984 mandatory terms and conditions for the project be modified as follows, to clarify that the mode of project operation should be instantaneous run-of-river:

The exemptee shall operate the project in an instantaneous run-of-river mode, whereby inflow to the project will equal outflow from the project at all times, and water levels above the dam are not drawn down for the purpose of generating power. Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the exemptee, or for short periods upon mutual agreement between the exemptee, the U.S. Fish and Wildlife Service, and the Massachusetts Division of Fisheries and Wildlife.

9. The Interior is also requesting that, based on Condition No. 8 of the mandatory terms and conditions³ for the project, the exemptee develop a compliance monitoring plan for its approval, within three months of completion of project construction.

Public Notice

10. On May 13, 2013, the Commission issued public notice that the amendment application was accepted for filing, and soliciting motions to intervene, protests, comments and terms and conditions. In response to the Commission's public notice, a filing was made by the Massachusetts DFW on May 31, 2013, stating it has no objection to the exemptee's proposal.

Administrative Conditions

Construction

11. To ensure a safe and adequate project, as shown in ordering paragraph (F), the exemptee must perform all turbine replacement work in consultation with the Commission's D2SI New York Regional Office. The exemptee shall not start any construction activities for the turbine replacement before receiving a prior authorization from the Commission's D2SI New York Regional Office.

12. In addition, as shown in paragraph (G), the exemptee shall conduct all maintenance and repairs to spalled concrete, stoplog and needle beam maintenance and replacement at the dam in coordination with the Commission's D2SI New York Regional Office. The exemptee shall not start any construction activities for the repairs and

³ On February 4, 1985, the Interior added an eighth condition to the project's mandatory terms and conditions.

maintenance required by D2SI, before receiving prior authorization from the Commission's D2SI New York Regional Office.

Discussion

13. Upon completion of the turbine replacement, the project will have a total installed capacity of 100 kW. The decrease in the generating capacity would not result in any additional adverse environmental effects. Therefore, the exemption will be amended, as stated in ordering paragraph (B), to show the project's total authorized nameplate capacity to be 100 kW.

14. In addition, the proposed drawdown for construction requested by the Commission's D2SI New York Regional Office will be authorized to occur for twelve weeks from the start of construction of the turbine replacement, along with maintenance and repairs to spalled concrete as required by D2SI. In ordering paragraph (C) we are granting a temporary drawdown to conduct the turbine replacement and necessary required repairs for twelve weeks from the start date of construction. In the event that the drawdown will need to last longer than twelve weeks, we are requiring the exemptee to file a request for an extension of time. Accordingly, ordering paragraph (H) of this order requires the exemptee to commence construction of the project works authorized in this order within 1 year of the issuance date of this order and shall complete construction within 2 years of the issuance date of this order.

15. The Interior's request to modify Condition No. 2 of the August 24, 1984 mandatory terms and conditions is within the scope of the Interior's right to modify the terms and conditions⁴, and is set forth in Appendix A of this order and incorporated into the exemption by ordering paragraph (D). In ordering paragraph (D), the Commission requires that the exemptee operate the project in an instantaneous run-of-river mode at all times, as required by the FWS. In addition, if the run-of-river mode is modified for an operating emergency or upon mutual agreement with the agencies, we are requiring the exemptee to notify Commission within 10 days of each such incident. In ordering paragraph (E), the Commission is requesting that the exemptee submit a compliance monitoring plan, as required by Condition No. 8 of the Interior's terms and conditions, for Commission approval within 3 months of the completion of construction of the proposed project changes.

⁴ As stated in Condition No. 6 of the Interior's mandatory terms and conditions, the Interior has the right to modify the terms and conditions as needed to protect fish and wildlife resources.

Conclusion

16. The exemptee's proposal to replace two cross-flow turbines with a total authorized capacity of 320 kW to a single double regulated Kaplan unit with a generator capacity of 100 kW would improve the efficiency of the project, while having no significant impact on the environment. In addition, the repairs to spalled concrete and stoplog and needle beam replacement at the dam are necessary and required by the Commission's D2SI New York Regional Office. The need to draw down the project head pond reservoir from a normal operating elevation is necessary to safely conduct the repairs and maintenance and to replace the turbines. The exemptee does not anticipate environmental impacts due to construction activities and has submitted all proposed activity to the FWS and Massachusetts DFW for review. Therefore, the amendment application will be granted, as considered herein.

The Director orders:

(A) The exemption for the Hunts Pond Dam Hydroelectric Project, FERC No. 8012, is amended as provided by this order, effective the day this order is issued.

(B) The project works as shown in paragraph (j) of Appendix A of the exemption are revised to the following:

The project consists of: (a) the existing 16-foot-high, 184-foot-long, concrete Hunts Pond dam; (b) the impoundment having a surface area of 13 acres, a storage capacity of 120 acre-feet, and a normal water surface elevation of 954.4 feet National Geodetic Vertical Datum (NGVD); (c) an intake structure; (d) a powerhouse containing one generating unit having a total authorized installed capacity of 100 kW; (e) a 200-foot-long 4.16-kV transmission line; and (f) appurtenant facilities. The annual generation of the project is estimated to be 506,000 kWh.

(C) The exemptee may temporarily reduce the head pond reservoir from a normal operating elevation of 954.6 feet NGVD to below the crest of the dam, located at 948.2 feet NGVD, with a lower limit of 944.48 feet NGVD. The drawdown is authorized for twelve weeks from the start of the project construction described above. If the temporary modification is to last longer than twelve weeks, a request must be filed with the Commission for an extension of time. In addition, a letter is to be filed with the Commission when normal operating conditions resume.

(D) The exemptee shall operate the project in an instantaneous run-of-river mode, subject to the conditions submitted by the U.S. Department of the Interior, as those conditions are set forth and modified in Appendix A to this order, whereby inflow to the project will equal outflow from the project at all times, and water levels above the dam are not drawn down for the purpose of generating power. Run-of-river operation may be

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temporarily modified if required by operating emergencies beyond the control of the exemptee, or for short periods upon mutual agreement between the exemptee, the U.S. Fish and Wildlife Service, and the Massachusetts Division of Fisheries and Wildlife. If the run-of-river mode is modified, the exemptee is required to notify the Commission within ten days of each such incident.

(E) The exemptee shall file, for Commission approval, a compliance monitoring plan. The compliance monitoring plan shall be filed within three months of completion of construction and shall show documentation of consultation with the U.S. Fish and Wildlife Service and the Massachusetts Division of Fisheries and Wildlife at least 30 days prior to filing.

(F) The exemptee must perform all work regarding the turbine replacement in consultation with the Commission's Division of Dam Safety and Inspections New York Regional Office. The exemptee shall not start any construction activities for the turbine replacement before receiving a prior authorization from the Commission's New York Regional Office.

(G) The exemptee must perform all work regarding the spalled concrete repairs as required by the Commission's Division of Dam Safety and Inspections New York Regional Office. The exemptee shall not start any construction activities for the required repairs and maintenance before receiving a prior authorization from the Commission's New York Regional Office.

(H) The exemptee shall commence construction of the project works authorized in this order within 1 year of the issuance date of this order and shall complete construction within 2 years of the issuance date of this order.

(I) This order 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 Federal Power Act, 16 U.S.C. § 8251 (2006), and the Federal Energy Regulatory Commission's regulations at 18 C.F.R. § 385.713 (2012). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The exemptee's failure to file a request for rehearing shall constitute acceptance of this order.

Kelly Houff
Chief, Engineering Resources Branch
Division of Hydropower Administration
and Compliance

APPENDIX A

U.S. Department of the Interior on behalf of
the U.S. Fish and Wildlife Service
Section 30(c) Conditions of the Federal Power Act
Filed on March 27, 2013

Modified Condition No. 2

1. The exemptee shall operate the project in an instantaneous run-of-river mode, whereby inflow to the project will equal outflow from the project at all times, and water levels above the dam are not drawn down for the purpose of generating power. Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the Exemptee, or for short periods upon mutual agreement between the Exemptee, the U.S. Fish and Wildlife Service, and the Massachusetts Division of Fisheries and Wildlife.

Document Content(s)

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