VERMONT

Vermont Department of Environmental Conservation *Agency of Natural Resources*

Water Quality Division
103 South Main Street, 10 North [phone] 802-241-3468
Waterbury, VT 05671-0408 [fax] 802-241-4537
http://www.vtwaterquality.org

DISTRIBUTED ELECTRONICALLY

October 20, 2010

Michael J. Scarzello, P.E.
Central Vermont Public Service Corporation
77 Grove Street
Rutland, VT 05701

RE: Carver Falls Hydroelectric Project – FERC Project No. 11475
Amended Water Quality Certification

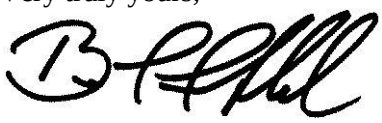
Dear Mr. Scarzello:

Attached you will find the water quality certification amendment for the Carver Falls Hydroelectric Project, issued today by the Department of Environmental Conservation. Please note that all conditions of the original certification issued on December 5, 2008 remain in effect.

This decision is subject to appeal to the Environmental Court for a period of 30 days.

Please contact me should you have any questions.

Very truly yours,



Brian T. Fitzgerald
Streamflow Protection Coordinator

Attachment

c: Meghan Purvee, Esq., VANR
Melissa Grader, USFWS
Ralph Abele, USEPA
Mark Woythal, NYDEC
William Little, Esq., NYDEC
Jason George, Gomez and Sullivan Engineers

Water Quality Certification Amendment
(33 U.S.C. §1341)

In the matter of: Central Vermont Public Service Corporation
77 Grove Street
Rutland, VT 05701

APPLICATION FOR CARVER FALLS HYDROELECTRIC PROJECT

The Vermont Department of Environmental Conservation (Department) has reviewed a water quality certification amendment application dated June 17, 2010 and filed by Central Vermont Public Service Corporation (CVPS), the licensee for the Carver Falls Hydroelectric Project (FERC Project No. 11475). The licensee is seeking authorization to replace one of the project turbines with a new unit that will increase the project's hydraulic and generation capacity. The original water quality certification for the project was issued on December 5, 2008 and a federal license was granted on February 25, 2009.

In addition to the application, the Department considered information contained in an updated Exhibit E (Environmental Report) filed with FERC by CVPS on August 16, 2010.

In accordance with 10 V.S.A. § 1004, the current application is subject to review under the Vermont Water Quality Standards adopted by the Water Resources Panel that became effective on January 1, 2008 (Standards, Section 1-01. Applicability and Definitions).

The Department placed the application on public notice on September 1, 2010 and accepted comments through October 7, 2010.

The Department, based on the application and record before it, makes the following findings and conclusions.

Findings

1. The Carver Falls Hydroelectric Project is located on the Poultney River in the towns of West Haven, Vermont and Hampton, New York.
2. The project powerhouse houses two turbines. Unit 1, manufactured by S. Morgan Smith, is rated at 1,700 horsepower and has a maximum hydraulic capacity of 162 cfs. Unit 2, manufactured by American Hydro, is rated at 1,250 horsepower at its hydraulic capacity of 92 cfs. The turbines drive 1,050 kW Westinghouse and 800 kW Allis-Chalmers generators, respectively.
3. The proposal is to replace Unit 1 with turbine manufactured by Norcan Hydraulic Turbine that is rated at 1,946 horsepower. The new unit has a maximum hydraulic capacity of 177 cfs, increasing total station hydraulic capacity by 15 cfs.
4. The new turbine will be connected to the existing generator. Peak output of the facility is expected to increase from 1,900 kW to 2,251 kW.

5. Condition B of the water quality certification issued by the Department on December 5, 2008 requires the project to operate in strict run-of-river mode except in limited circumstances specified in Condition C.
6. Condition B further specifies bypass flows of 18.5 cfs from May 16 to March 31 and 50.0 cfs from April 1 to May 15 (or inflow, if less, for both periods). Finally, Condition B requires spillage over the dam to support aesthetics during specified periods.

Analysis

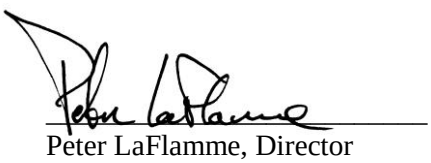
7. The project will continue strict run-of-river operation, so downstream flows will not be affected by the turbine upgrade.
8. The turbine upgrade will allow the project to utilize an additional 15 cfs of inflow which currently would spill into the bypass once inflow exceeds the current station hydraulic capacity plus the bypass flow (seasonally, 272.5 cfs or 304 cfs). With the upgrade, that 15 cfs could be routed through the units rather than spilled.
9. Bypass flow requirements for support of aquatic habitat will not be changed, so aquatic habitat in the bypass will continue to be fully supported.
10. The time periods when additional bypass flows are required to support aesthetics will not be changed.
11. The limited change in the time periods when bypass flows exceed the bypass conservation flow requirements will not have a measurable effect on aquatic habitat in the bypass.

Decision and Certification

Based on its review of the applicant's proposal and the above findings, the Department concludes that the proposed modifications at the Carver Falls Hydroelectric Project will comply with the Vermont Water Quality Standards and will be in compliance with sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, 33 U.S.C. §1251 et seq., as amended. All conditions in the original December 5, 2008 water quality certification issued for the project remain in effect.

Dated at Waterbury, Vermont this
20th day of October, 2010

Justin G. Johnson, Commissioner
Department of Environmental Conservation

By 
Peter LaFlamme, Director
Water Quality Division

Document Content(s)