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UNITED STATES OF AMERICA 130 FERC ¶ 62,213
FEDERAL ENERGY REGULATORY COMMISSION

Central Vermont Public Service Corporation Project No. 11478-012

ORDER ACCEPTING WATER QUALITY REPORT AND MODIFYING AND APPROVING REAERATION BAFFLE PLAN PURSUANT TO ARTICLE 403

(Issued March 11, 2010)

1. On December 1, 2009, Central Vermont Public Service Corporation (CVPS), licensee for the Silver Lake Hydroelectric Project (FERC No. 11478), filed its 2009 Dissolved Oxygen (DO) and Temperature Monitoring Report pursuant to license article 401(B) and the Reaeration Baffle Plan pursuant to license article 403.[1] The Silver Lake Project is located on Sucker Brook in Addison County, Vermont.

BACKGROUND

2. Article 401(B) requires the licensee to file with the Commission documentation of completion or notification of the various activities found in the Vermont Agency of Natural Resources (VANR) final water quality certification (WQC) Condition I, including the annual filing of a DO and temperature monitoring report pursuant to an approved water quality assurance/quality control (QA/QC) plan. The QA/QC control plan was approved by order dated December 1, 2009.[2] Condition I of the WQC requires the licensee to monitor DO and temperature conditions weekly from July through September, directly below Goshen Dam, and report the findings to the Commission by December 1st annually.

3. Article 403 requires the licensee to file for Commission approval, a plan for installing a reaeration baffle at the outflow of the Goshen control structure, if the DO and temperature monitoring report readings indicate a substandard water quality condition (less than 6.0 milligrams per liter (mg/l) and 70 percent (%) saturation). The plan has to, at a minimum, include functional design drawings showing the specifications of the reaeration screens and a schedule for screen installation and removal between July 1 and September 1, annually.

4. The licensee is required to also include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has

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[1] Order Issuing New License, issued February 26, 2009 (126 FERC ¶ 62,144).
[2] 129 FERC ¶ 62,169

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been prepared and provided to the VANR and the U.S. Fish and Wildlife Service (FWS), and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing is to include the licensee's reasons, based on site-specific information. Article 403 also reserved the right of the Commission to require changes to the plan.

LICENSEE'S FILING

5. In its 2009 annual report, the licensee indicated it had monitored DO and temperature conditions at the Silver Lake Project directly below the Goshen Dam outlet on a weekly basis from July through September in accordance with Condition I of the Vermont WQC and approved QA/QC plan. The results indicate that flow releases through Goshen Dam resulted in DO levels increasing substantially as the water from the reservoir bottom is discharged into Sucker Brook, even without baffle installation. The results also revealed that on three occasions the DO measurement collected from Sucker Brook were below the state standard of 70% saturation, ranging from 64.6% to 68.8% saturation. On these occasions, the Goshen Dam discharge was set at the minimum flow of 2.5 cubic feet per second (cfs) and the corresponding DO levels in Sucker Brook were above 6.0 mg/l.

6. To address the substandard conditions, the licensee proposes to install the reaeration baffle structure on an annual basis starting on July 1. The baffle would be maintained in place through the month of September as necessary to address the potential for required mitigation during extended dry periods. Based on the water quality measurements collected after baffle installation in 2009, it appeared that the baffle was effective at raising the DO at the outlet to levels that were in compliance with state water quality standards. The licensee believes that the annual installation of the baffle will be effective in maintaining DO levels in Sucker Brook downstream of Goshen Dam and that no additional remedial measures are necessary.

CONSULTATION

7. The licensee submitted the draft report and reaeration baffle plan to the VANR and the FWS on October 9, 2009. Comments were received from the VANR and the FWS on November 4 and 9, 2009, respectively. The VANR, with concurrence from the FWS, requested one sampling round during the next summer drought condition to determine whether the DO standards are being met under worse-case conditions for downstream water quality. The licensee agreed to conduct DO and temperature monitoring when the next summer drought conditions are encountered as described in the approved QA/QC

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plan. These conditions are defined as when the licensee is required to match outflows to inflows to the Sugar Hill reservoir after drawing the reservoir to elevation 8.0 feet below full pool pursuant to the summer operating rule curve. The results would then be reported to the VANR, FWS and the Commission.

DISCUSSION/CONCLUSION

8. The licensee's 2009 annual report of water quality monitoring at the Silver Lake project meets the requirements of article 401(B). The reaeration baffle plan was designed in consultation with the VANR and the FWS and should facilitate the maintenance of water quality standards in Sucker Brook, downstream of Goshen Dam. The licensee has also agreed to conduct a one time sampling of water quality during worst case summer drought conditions to confirm the effectiveness of the baffle structure. The results of this sampling will be filed with the VANR, FWS and the Commission. As such, we are reserving the Commission's right to make changes to the plan if the results indicate that state water quality standards are not being met.

The licensee's reaeration baffle plan meets the requirements of Article 403 and should be approved. While the plan includes a functional design drawing of the baffle structure, we are requiring the licensee to file a revised as-built Exhibit F drawing in accordance with the Commission's regulations.

<u>The Director orders</u>:

(A) Central Vermont Public Service Corporation's (licensee) Reaeration Baffle Plan for the Silver Lake Project, filed on December 1, 2009, is approved.

(B) Within 90 days of installation, the licensee shall file an as-built Exhibit F drawing of the reareation baffle structure in accordance the requirements of license article 202.

(C) The licensee shall conduct the weekly dissolved oxygen and temperature sampling during summer drought conditions as described in the approved water quality assurance/quality control (QA/QC) plan and file the results with the Commission by December 31, 2009. The report shall include consultation with the U.S. Fish and Wildlife Service and the Vermont Agency of Natural Resources and include their comments. If the results indicate that state water quality standards are not being met in Sucker Brook downstream of Goshen Dam, the licensee shall also file recommendations for any changes to the QA/QC plan with the Commission, after consultation with the agencies. The Commission reserves the right to require changes to the plan.

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(D) Unless otherwise directed in this order, the licensee shall file an original and seven copies of any filing required by this order with:

The Secretary
Federal Energy Regulatory Commission
Mail Code: DHAC, PJ-12.3
888 First Street, NE
Washington, D.C. 20426

(E) 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 CFR § 385.713.

Heather Campbell
Acting Director
Division of Hydropower Administration
and Compliance

Document Content(s)

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