

82 FERC ¶ 62,178

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Northern States Power Company )

Project No. 2587-017

ORDER DELETING ARTICLE 415

MAR 13 1998

Northern States Power Company, licensee for the Superior Falls Project, filed for Commission approval on September 16, 1997, a request to delete article 415 of the license. 1/ The project is located on the Montreal River in Iron County, Wisconsin, and Gogebic County, Michigan.

Article 415, as amended, requires the licensee to consult with the U.S. Fish and Wildlife Service (FWS), the Wisconsin Department of Natural Resources (WDNR), and the Michigan Department of Natural Resources (MDNR), regarding 1990-91 water quality monitoring data. The licensee shall file a report with the Commission which identifies whether these agencies agree that the project meets Wisconsin's and Michigan's standards for dissolved oxygen concentrations (DO) in the tailrace area of the project, and whether the requirement for water quality monitoring, as required by the original license, 2/ can be deleted.

REQUEST TO DELETE ARTICLE 415

The licensee's September 16, 1997 report included DO data collected biweekly from the reservoir and in the project's tailrace from August 7, through October 19, 1990, and from February 18, through October 8, 1991. Upstream and downstream water temperature data was also provided from November 11, 1990 through October 21, 1991. Lastly, DO data (1983-1990) collected by the WDNR at their water quality monitoring station approximately 900 feet upstream from the dam was included. Based upon this data, the licensee requested that article 415 be deleted.

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1/ See Order on Rehearing, issued on March 31, 1997 (78 FERC ¶ 61,363).

2/ See Order Issuing New License, issued on January 19, 1995 (70 FERC ¶ 62,029). Article 415 requires the licensee to consult with FWS, WDNR, and MDNR and develop a plan to monitor DO and water temperature downstream of the project from September through November for a minimum of three years.

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## AGENCY COMMENTS

The Michigan Department of Environmental Quality (MDEQ), MDNR, and the WDNR, commented on the licensee's request in letters dated June 18, August 4, and August 7, 1997, respectively. The FWS did not comment on the report.

The WDNR states the water quality data collected upstream and downstream of the project indicate that Wisconsin's water quality standards for cold water communities and Great Lakes communities have been met over the period of record. Since no substantial difference exists between measurements taken above and below the dam, the WDNR concludes the impoundment has negligible, if any, effect on water quality or the coldwater aquatic communities in the project area. The required aesthetic minimum flow to the bypassed reach may enhance water quality in the tailwaters by aerating a greater portion of the river's discharge from late spring to early fall when higher temperatures could limit DO. The WDNR states additional monitoring for three years from September-November would provide little useful information. The WDNR supports deletion of article 415 of the license.

The MDEQ states there is no evidence for serious DO depletion from project operation and since it only affects a river reach of approximately 800 feet, no additional monitoring is warranted.

The MDNR states the available information is inadequate to make a determination on the impact of project operations on DO. Specifically, the MDNR states that (1) upstream-downstream comparisons of the 1990 data are incorrect because the upstream location is within the impoundment's influence zone; (2) diurnal fluctuations are not taken into account; (3) one year of data collection is insufficient given year-to-year variability; and (4) the data collected upstream from 1983-1990 lacks corresponding downstream data necessary for comparison. The MDNR states the data reveals the DO standard was approached on several occasions with DO saturations falling into the 80-90% saturation range. The MDNR concludes that additional sampling would likely have identified violations of this standard. The MDNR recommends continuous monitoring for DO and water temperature for May through October for three years.

## DISCUSSION

The water quality data provided with the licensee's report for 1990-91 indicate upstream and downstream DO and temperature remained within state standards throughout the entire fall spawning period (September-November). The WDNR and MDEQ concur

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that additional water quality monitoring is not necessary. The MDNR, however, states the data provided in the licensee's report is limited and recommends monitoring from May through October for three years.

Article 415 of the license limits any required monitoring of DO and water temperature downstream of the project to September through November for three years. During this time, coldwater species from Lake Superior use the tailwater area for spawning. Data collected during this period for 1990-1991, indicates downstream DO ranged from 7.8-12.8 mg/l, with an average of 9.9 mg/l, again meeting state standards. Percent DO saturation ranged from 84-108.

Given the project's small, shallow reservoir, stratification of the impoundment is not expected. <sup>3/</sup> In addition, aeration of water as it flows through the project's 1,100-foot-long bypassed reach should enhance downstream DO during the summer months through October 15. <sup>4/</sup> In general, the bypassed channel has a steep gradient with many rapids and several waterfalls. The largest waterfall, approximately 650 feet upstream of the powerhouse, has a vertical fall of about 50 feet.

Considering the project's features and the data included with the licensee's report, water quality downstream of the powerhouse meets state standards during the fall spawning period from September through November. Therefore, the licensee's request to delete article 415 of the license, should be granted.

The Director orders:

(A) Article 415 of the license is deleted.

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<sup>3/</sup> The project reservoir is approximately 17-acres with approximately 81 acre-feet. Further, the reservoir is shallow with an average depth of only 4.8 feet (maximum depth of 18 feet).

<sup>4/</sup> Article 404 requires the licensee to release a minimum of 8 cubic feet per second (cfs) from the Saturday before Memorial Day and October 15. On weekends and holidays between 8 a.m. and 8 p.m. during this period, the licensee is required to release 20 cfs.

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(B) 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 CFR § 385.713.



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Director  
Office of Hydropower Licensing