

UNITED STATES OF AMERICA 81 FERC ¶ 62,241  
FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Electric Power ) Project No. 2357-014  
Company ) and 2394-017

ORDER APPROVING WATER/SEDIMENT/FISH MONITORING PLAN  
(December 30, 1997)

Wisconsin Electric Power Company (licensee) filed, on November 3, 1997, a water/sediment/fish monitoring plan under article 406 of the license for the White Rapids Project (FERC No. 2357) and the Chalk Hill Project (FERC No. 2394). The projects are located on the Menominee River, in Marinette County, Wisconsin and Menominee County, Michigan.

BACKGROUND

Article 406 requires the licensee to file with the Commission, for approval, a water/sediment/fish monitoring plan capable of satisfying the following requirements:

- (1) Quarterly water quality monitoring in the Menominee River downstream of the White Rapids Project and in the impoundment quarterly every fifth year. Quarterly monitoring at the Z Bridge gaging station and in the Chalk Hill Project impoundment every fifth year. The following parameters are to be analyzed: alkalinity, chlorophyll-a, color, dissolved sulfates, pH, hardness, secchi depth, specific conductivity, total ammonia, total dissolved solids, total nitrates, total nitrites, total nitrogen, total organic carbon, total phosphorus, total suspended solids, and temperature and dissolved oxygen profiles at the deepest location in the impoundment every 0.5 meter.
- (2) Sediment monitoring in the White Rapids and Chalk Hill Project impoundments once every 10 years for the following parameters: oil and grease, percent volatile solids, total arsenic, total barium, total cadmium, total chromium, total copper, total lead, total manganese, total mercury, total nickel, total nitrogen, total organic carbon, total phosphorus, total selenium, total silver, total zinc, acid volatile sulfides, and total PCB.
- (3) Fish monitoring on resident walleye (20-22 inch size range) once every five years from the following location: the Menominee River downstream of the White Rapids Project and in the vicinity of the Z Bridge gaging station. Chemical analyses on the whole fish samples are to include: dieldrin; DDE; DDD; DDT; mercury; total chlordane; PCB (Arochlors 1242, 1248, 1254, 1260); toxaphene; 2,3,7,8-TCDD; and 2,3,7,8-TCDF.

(4) The licensee must prepare a summary report of results every five years and submit this report to the Commission, Michigan Department of Natural Resources (MDNR), Wisconsin Department of Natural Resources (WDNR), and U.S. Fish and Wildlife Service (USFWS).

#### LICENSEE'S PLAN

The once every five years quarterly water quality samples will be collected from three locations: (1) upstream of the Chalk Hill dam at the County Highway Z Bridge; (2) downstream of the Chalk Hill dam in the plant's tailrace; and (3) downstream of the White Rapids dam in the plant's tailrace. Ten percent of quarterly (December, May, June, October) samples will be replicated.

The once every five year sediment samples will be collected from the deepest region of each reservoir. Replicate, spatially separate sediment samples will be collected from each reservoir for analyses.

At least ten legal size walleye (greater than 15 inches) and red horse sucker will be collected during early spring from each reservoir using trap nets or electrofishing equipment. Also, if present, at least 10 carp will be retained for analyses.

The first quarterly water quality sampling will occur concurrently with the first year of continuous water quality monitoring. The first sediment samples will be collected during the initial year of monitoring and will be repeated every five years.

The fish sampling will be staggered one year behind the quarterly monitoring program to reduce demands on staff. The initial fish samples would not be collected until spring of 1999. A follow-up fish collection and analysis effort would be conducted in 2004.

The results of the once every five years quarterly monitoring program will be filed with the agencies, and the Commission, within 120 days following collection of the final quarterly samples (most likely the winter quarter). The results of the sediment and fish analyses will be filed with the agencies and the Commission within 90 days of sample collection in the same year the samples were collected.

#### AGENCY COMMENTS

The WDNR, by letter dated October 17, 1997, concurred with the licensee's water quality monitoring plan. The MDNR, in a letter dated October 28, 1997, and the Michigan Department of Environmental Quality, by letter dated October 21, 1997, provided comments on the licensee's plan, which the licensee incorporated into its plan filed with the Commission. The USFWS did not provide any comments.

#### DISCUSSION AND CONCLUSIONS

The licensee will monitor a variety of water quality parameters including alkalinity, ammonia, nitrates, nitrites, phosphorus, and suspended solids in the water column. The licensee will also monitor a variety of contaminants from the sediment and fish in the Menominee River. These contaminants include a variety of heavy metals and DDT, mercury, PCB, and dioxins. Since the licensee's water/sediment/fish monitoring plan adequately addresses each of the requirements in article 406 for each project, the licensee's plan should, therefore, be approved.

The Director orders:

(A) The licensee's water/sediment/fish monitoring plan under article 406 of the license for the White Rapids Project (FERC No. 2357) and the Chalk Hill Project (FERC No. 2394), filed on November 3, 1997, is approved.

(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 18 CFR § 385.713.

Kevin P. Madden  
Acting Director  
Office of Hydropower Licensing