UNITED STATES OF AMERICA 108 FERC ¶ 62,098
FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Electric Power Company — Project Nos. 2394-066, 2394-067 2357-067 and 2357-068

ORDER MODIFYING MONITORING PLANS UNDER ARTICLES 405 AND 406

(Issued July 28, 2004)

On July 1, 2004, Wisconsin Electric Power Company (WEPCo or licensee) filed a request to amend the water quality monitoring plans under articles 405 and 406 of the license for the Chalk Hill Project (FERC No. 2394) and the license for the White Rapids Project (FERC No. 2357). The projects are located on the Menominee River in Marinette County, Wisconsin and Menominee County, Michigan.

LICENSEE'S REQUESTS

Temperature/Dissolved Oxygen Monitoring Plan

Spot checks of temperature and dissolved oxygen (DO) will occur at two locations: upstream of the Chalk Hill plant adjacent to the USGS gauging station #04066003 (Menominee River below Pemene Creek) and at a point approximately 100 yard downstream of the White Rapids plant in the plant's tailrace. A Hydrolab Surveyor Instrument or comparable water quality measuring device shall be used. The instrument's DO probe will be cleaned and calibrated prior to use per the manufacturer's specifications while temperature will be checked against a laboratory thermometer. Alternately, Winkler Titrations of water samples retained from the river may be conducted to yield measurements of DO.

The spot check measurements will commence on or about June 1 in both locations and will continue through September 30. Spot check measurements will be taken three times per week in the morning (e.g., 7:00 am to 9:00 am). Spot check measurements will be coordinated with the Water Chemistry Monitoring portion of this plan. As such, the seasonal spot check measurements will occur once every five years.

Water Chemistry/Sediment/Fish Contaminant Monitoring Plan

The once every five years quarterly water chemistry samples will be collected from three locations: upstream of the Chalk Hill dam at the County Highway Z bridge; downstream of the Chalk Hill dam in the plant's tailrace; and downstream of the White Rapids dam in the plant's tailrace. Ten percent of quarterly (December, May, July, and

October) samples will be replicated.

The once every 5-year sediment samples will be collected at two locations from the deepest region of each flowage (roughly in the same general area where the winter vertical profile measurements ware taken). Replicate, spatially separate sediment samples will be collected from each flowage for analysis.

Ten legal size walleye (greater than 15 inches) and 10- bottom-feeding fish, such as white sucker or red horse sucker will be collected during early spring from each flowage using trap nets or electro-fishing equipment. Gill nets may only be used if trap nets or electro-fishing fails to capture sufficient numbers of fish. Prior to fish collection activities, the licensee or its contractor for fish collection shall notify the appropriate fish managers and game wardens for both Wisconsin and Michigan as to their anticipated collection activities (e.g., days on site; numbers and kinds of fish being collected; purpose, etc.).

Since capture of the walleye may be labor intensive, an alternate means may be used. The licensee would solicit creeled specimens from fishermen. In return, the company will donate $100 to the donor's preferred charity (501(c)3-recognized) in the donor's name. Fish will be placed on ice until frozen. Edible fish fillets shall be sent to the contracted laboratory to perform the required analyses.

Monitoring Schedule

The first (once every five year) quarterly water quality sampling occurred in 1998 coincident with the first year of continuous water quality monitoring. Therefore the second round of quarterly water chemistry sampling occurred in 2003. Similarly, since the first sediment samples were collected during 1998 and the second round of sampling was conducted in 2003 sampling will be repeated every 5 years hence.

The initial sampling was staggered one year behind the quarterly, water chemistry monitoring program (e.g., in 1999) to reduce demands on staff. Thus, the next round of fish samples will be collected in 2004.

Analyses to be Performed

Each replicate water chemistry sample shall be analyzed using approved US EPA methods for the following parameters: *Alkalinity, chlorophyll-a, color, dissolved sulfates, pH, hardness, specific conductivity, total ammonia, total dissolved solids, total nitrates, total nitrites, total nitrogen, total organic carbon, total phosphorus, total suspended solids.*

Each replicate sediment sample shall be analyzed using US Environmental Protection Agency (EPA) methods for the following parameters: o*il 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.*

Edible fish filets shall be analyzed using US EPA methods for the following contaminants: m*ercury and total PCBs.*

Reporting

Temperature/Dissolved Oxygen Measurements

All temperature and DO measurements and calibration notes will be recorded in a dedicated log book. Upon return to the office, all measurements will be entered onto a dedicated computer file (e.g., EXCEL file or equivalent) and will be reviewed to determine compliance with the 89°F temperature limit and 5.0 mg/L DO standard. The data will be stored on diskette. A final report to appropriate Michigan, Wisconsin, and federal agency contacts as well as to the Commission will be prepared within 30 days of the final September measurements. A diskette with all raw data will also be sent to the resource agencies.

Quarterly Water Chemistry Monitoring Program

The results of the once every five years quarterly monitoring program will be filed with appropriate Michigan, Wisconsin, and federal agency contacts, as well as with the Commission, within 120 days following collection of the final quarterly samples (most likely the winter quarter).

Sediment, Fish Contaminant Monitoring Program

The results of these analyses will be filed with appropriate Michigan, Wisconsin, and federal agency contacts, as well as with the Commission, within 90 days of sample collection in the same year(s) the samples were collected.

Corrective Measures

Temperature/Dissolved Oxygen Measurement Program

Upon discovery and verification (e.g., instrument check and recalibration), Wisconsin Department of Natural Resources (WDNR) and Michigan Department of

Environmental Quality (MDEQ) will be notified within one working day of the time and duration of any water quality-related problem, and whether the condition was caused by upstream disturbances (i.e., DO levels were below standards at County Z bridge). If upstream conditions are the likely cause of the problem, or if the low DO levels were a transient (e.g., non-recurring) event, no further action on the part of the licensee would occur unless agreed to by all parties. If plant operation is the suspected cause and if causative actions are likely to persist, the licensee will initiate corrective actions as soon as possible but no later than within one day of discovery.

Corrective Measures (intentional spilling): The licensee proposes to mitigate low DO levels caused by project operation and detected by the required monitoring below the Chalk Hill and/or White Rapids projects by passing a portion of the flow destined for the generator(s) through the spillway. Since there have been no low DO levels detected below the project to date, there is no data available to judge the efficacy of any particular method of low DO mitigation. As a starting point for mitigation of any low DO levels that may be detected in the future, the licensee will, upon notification (within 24 hours) to operations personnel by field personnel doing the monitoring, pass a minimum of 25 percent of the river flow through the spillway. The upper portions of the water column in both flowages have been shown to be well oxygenated through the entire summer season. Additionally, passing the water over the spillway will increase the DO level of the water via turbulent mixing of entrained air. Mixing the higher DO content water from the spillway with the water from the generators will improve the DO levels in downstream waters.

If spills are required as outlined above, the licensee will perform real time DO measurements below the confluence of the spillway and the power house tailrace to confirm attainment of the DO standard and will perform operational testing to determine what mix of generation and spill will be required to achieve the optimal balance between spilling and generation that will allow for the minimum required DO levels. This testing will begin in consultation with the WDNR, and MDEQ as soon as practical. The WDNR and MDEQ will be consulted at the beginning of testing of operation scenarios intended to meet the water quality standards. If the low DO conditions subside before the operations testing can be completed, the licensee will return the non-compliant project to normal operation. Normal tailrace monitoring for DO levels will resume when operations return to normal.

Reporting

The occurrences of non-compliance and summaries of the licensee’s responses to these occurrences will be filed with the agencies and the Commission within 30 days following detection and resultant mitigation action(s).

Alternative Corrective Measures

If low DO occurrences should become common or protracted, it may become necessary to revise the plan. Any revision to this plan will require agency consultation.

AGENCY COMMENTS

By correspondence dated April 19, 2004, the MDEQ concurred with the licensee's revised plan. By letter dated May 28, 2004, the WDNR also concurred with the licensee's plan.

DISCUSSION

In a December 30, 1997 Order Approving Water/Sediment/Fish Monitoring Plans Under Articles 406 (81 FERC ¶ 62,241) and in a November 8, 2001 Order Modifying and Approving Revised Dissolved Oxygen and Water Temperature Monitoring Plans Under Articles 405, the licensee's monitoring plans were approved. The licensee proposes to amend its monitoring plans under articles 405 and 406 for each project to reflect the current monitoring protocols taking place at each project, particularly with sections of the plan addressing fish contaminant monitoring. Specifically, the revised plans identify the species of fish to be collected and the types of analyses to be performed on these fish.

The licensee's request to amend the monitoring plans under articles 405 and 406 for both the Chalk Hill Project and the White Rapids project makes the plans consistent with provisions in the Wilderness Shores Settlement Agreement for projects on the Menominee River for water quality monitoring and should, therefore, be approved.

The Director orders:

(A) The licensee's request to amend the monitoring plans under articles 405 and 406 of the license for the Chalk Hill Project (FERC No. 2394) and the license for the White Rapids Project (FERC No. 2357), filed on July 1, 2004, 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.

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Chief, Biological Resources Branch
Division of Hydropower Administration
and Compliance