UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION
102 FERC ¶ 62,045

Wisconsin River Power Company — Project No. 1984-078

ORDER APPROVING PURPLE LOOSESTRIFE AND EURASIAN WATERMILFOIL MONITORING PLAN PURSUANT TO LICENSE ARTICLE 408

(Issued January 22, 2003)

On June 3, 2002, Wisconsin Public Service Corporation (WPSC) on behalf of Wisconsin River Power Company (WRPC or licensee), licensee for the Petenwell-Castle Rock Hydro Project, [1] filed the Purple loosestrife and Eurasian watermilfoil Monitoring Plan pursuant to license article 408. The Petenwell-Castle Rock Project consists of two developments and is located on the Wisconsin River, near Prairie Du Sac, in Wood, Juneau and Adams Counties, Wisconsin.

LICENSE REQUIREMENTS

Article 408 requires that in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS), the licensee develop a plan to monitor purple loosestrife (*Lythrum salicaria*) and Eurasian watermilfoil (*Myriophyllum spicatum*) in project waters. The plan is required to include, but is not limited to: (a) the method and frequency of monitoring, (b) a provision to cooperate in the control/elimination of these vegetative species if deemed necessary by the agencies, and (c) documentation of transmission of monitoring data to the agencies.

The licensee is required to include documentation of consultation with the resource agencies before preparing the plan, copies of agencies' comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments were accommodated by the plan. The licensee is required to allow a minimum of 60 days for the agencies to comment and make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing is required to include the

[1] See Order Issuing New License, 97 FERC ¶ 62, 205 (issued December 7, 2001).

licensee's reasons, based on project-specific information. The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee is required to implement the plan including any changes required by the Commission.

LICENSEE'S PROPOSED PLAN

A) Purple Loosestrife (*Lythrum salicaria*):

WRPC proposes to conduct shoreline surveys by boat and/or on foot to determine the baseline of existing purple loosestrife colonies in July or August 2003 (depending upon the plants bloom time and weather conditions), and then continue monitoring annually to determine the increase of density and abundance of purple loosestrife. The locations of small, isolated colonies will be documented using a Global Positioning System (GPS).

The results of all surveys will be displayed on a map of the total project area. A copy of the completed map will be provided to the WDNR and the FWS by October 31 every year. The map will indicate relative populations of purple loosestrife based on the following criteria:
(a) small colonies of 1-5 plants;
(b) medium colonies of 6-50 plants; and
(c) dense colonies of > 50 plants.

To help control purple loosestrife, small colonies of 1 to 5 plants will be cut by hand and the remaining stems will be hand pulled or sprayed with an appropriate herbicide. The growth and size of the larger purple loosestrife populations will be monitored each year. WRPC proposes to determine at a later date if control measures are necessary for larger populations. If control measures are deemed necessary, then WRPC will consult with the WDNR.

WRPC proposes to increase public awareness about purple loosestrife by displaying fact sheets supplied by the WDNR at all WRPC owned public access areas within the project boundary. Documentation of submittal of the monitoring reports to the WDNR and FWS will be provided to the Commission by December 31 for the first two years of monitoring (i.e. 2003 and 2004), and will include agency comments (if any).

B) Eurasian Watermilfoil (*Myriophyllum spicatum*):

Monitoring methods will include a routine macrophyte reconnaissance survey utilizing a boat to take samples at five different transects of approximately 36 feet in

length. Transects will be selected based upon the location of macrophyte colonies and the areas of likely Eurasian watermilfoil infestation. The location of these transects will be documented using GPS. The transect samples will be analyzed for presence and approximate abundance of Eurasian watermilfoil. WRPC proposes to sample each transect with a rake in three 12-foot diameter sections. Each section will be sampled in quarters. The first quarter will be sampled at a depth of 0 - 0.5 meters (m) below the surface, the second will be 0.5 - 1.5 m below the surface, the third 1.5 - 3.0 m below the surface, and the fourth section will be beyond 3.0 m below the surface. Typically all of the samples occur in water less than 3 m deep.

Eurasian watermilfoil surveys will be taken every third year (in July, August, or September), starting in 2003. The results of each survey at each transect will be displayed in table form indicating relative abundance (none, low, medium, and high) of Eurasian watermilfoil in the aquatic macrophyte samples taken. All appreciable Eurasian watermilfoil beds will be documented on a map of the project reservoir. The completed documentation will be provided to the WDNR and FWS no later than October 31 every year in which the monitoring was completed.

Regarding the control of existing colonies, a natural eradication process will be used if Eurasian watermilfoil becomes established. Studies have shown that a native weevil (*Euhrychiopsis lecontel*) can control populations of Eurasian watermilfoil by feeding on it. WRPC says this weevil is native to the area so it does not need to be introduced. If the monitoring reports support the need to control Eurasian watermilfoil, then WRPC will cooperate with the WDNR in developing site-specific control measures.

WRPC proposes to increase public awareness about Eurasian watermilfoil by providing informational notices supplied by the WDNR at all WRPC owned public access areas in the project boundary. Finally, documentation of submittal of monitoring reports to the WDNR and FWS will be provided to the Commission by December 31 for the first two monitoring periods (i.e. 2003 and 2006), including agency comments (if any).

AGENCY COMMENTS

The licensee provided the resource agencies with a copy of the draft plan on March 19, 2002. By letter dated April 18, 2002, the FWS provided comments on the draft plan (letter from Janet M. Smith, FWS, Field Supervisor to Mr. Rick J. Moser, Environmental Consultant for WPSC). Only one comment from the FWS remains outstanding because the licensee chose not to incorporate it into the final plan. The FWS recommended that purple loosestrife monitoring reports be provided to the Commission annually (as it will

be for the agencies) instead of just for the first two monitoring years, and that Eurasian watermilfoil results also continue to be submitted to the Commission beyond the first two monitoring periods, as recommended by WRPC.

By letter dated May 17, 2002, the WDNR provided comments on the draft plan (letter to Rick Moser of WPSC from Laura Herman through Mr. Robert Martini). Only two comments from WDNR remain outstanding issues because the licensee chose not to incorporate them into the final plan. First, WDNR recommended that the flower heads cut-off of any individual purple loosestrife plants found be burned or landfilled and that WDNR help the licensee select the proper control methods for medium to large colonies of purple loosestrife.

Second, WDNR does not think the native weevil (*Euhrychiopsis lecontel*) will work to control Eurasian watermilfoil on the type of flowage provided at this project because the weevils have to fly to the shoreline to overwinter in leaf litter. If the water is drawn down too much (this is a peaking project with annual drawdowns), then the weevils will never be able to fly to the leaf litter shorelines because the weevils are weak flyers. The weevils would then have to get back to the Eurasian watermilfoil beds in the spring. If the weevils have to overwinter in the areas that will be flooded then the weevils will die. If they did however, make it back to the leaf litter, then they either have to fly black or be blown back out to the Eurasian watermilfoil beds which would be very unlikely. Therefore, WDNR recommends that chemical or manual Eurasian watermilfoil removal would have much better results than weevil placement.

LICENSEE'S RESPONSE TO AGENCY COMMENTS

WRPC revised its original (draft) plan to incorporate all of the agencies' comments, except for the three remaining issues previously stated (see above Section, AGENCY COMMENTS). In response to the FWS's comment to submit annual purple loosestrife monitoring results and tri-annual Eurasian watermilfoil results to the Commission beyond the first two monitoring studies, WRPC says that in the past, some FERC Orders approving exotic species monitoring plans (i.e., FERC No. 2433 dated February 2, 1997) have mandated that the agencies receive monitoring reports every year that a survey is conducted, with FERC receiving documentation for the first two years only.

In response to the WDNR's comments, first WRPC says cutting off and burning the purple loosestrife flower heads is not necessary. WRPC says that annual field surveys will be completed while the purple loosestrife is flowering, so its seeds are not yet formed and should not spread. WRPC says there has been success in the past on different FERC projects where small populations of purple loosestrife were eradicated without burning or

landfilling the purple loosestrife heads. For example, in year 2000, small populations of purple loosestrife were found along FERC Project Nos. 10856 and 2506. The stems were cut and sprayed with the flower heads left on site. Subsequently, during the 2001 purple loosestrife surveys, no purple loosestrife was found along those same flowages.

Second, WRPC responds to WDNR's recommendation to use chemical or manual removal and not use the native weevil, by arguing that the subject areas having the highest potential of being infested with Eurasian watermilfoil are shallow backwater areas, and areas of the flowage that are close to the shoreline. These are the same areas that provide suitable habitat for the native weevil. WRPC says the possibility of Eurasian watermilfoil occurring in the middle of the flowages is unlikely for this project. WRPC argues that *Euhrychiopsis* is indeed a suitable control measure for Eurasian watermilfoil at this site.

DISCUSSION AND RECOMMENDATIONS

The proposed monitoring plan fulfills the intent and filing requirements of license article 408. We address the frequency for filing monitoring reports, on a project-specific basis. To date, purple loosestrife and Eurasian watermilfoil have not been identified as a significant problem at this particular project. Therefore, we concur with the licensee's proposal to file purple loosestrife and Eurasian watermilfoil monitoring reports to the Commission by December 31 for the first two sampling years (2003 and 2004 for purple loosestrife and 2003 and 2006 for Eurasian watermilfoil), including any agency comments.
As stated in license article 408, we reserve the right to require changes to this plan, including the frequency of filing future monitoring reports.

In regards to the outstanding issue of burning or landfilling purple loosestrife flower heads, we agree with the licensee that those measures may not be necessary at this time. We recommend that if small colonies of purple loosestrife are found then the licensee be allowed to cut the flower heads and pull or spray the stems with an appropriate herbicide, initially. If the next survey confirms that the purple loosestrife beds have returned and spread then the licensee will be required to implement alternative control measures developed through consultation with the WDNR and FWS, at that time.

In regards to the outstanding issue of using the native weevil versus chemical control, if needed, for found populations of Eurasian watermilfoil, we recommend that the specific type of control measure can be decided (through consultation) after control measures have been deemed necessary by the resource agencies and/or Commission. To require one type of control method at this time would be premature without knowing if and when Eurasian watermilfoil will be a problem and to what extent. In the meantime,

new information on this issue could surface at other hydro projects in Wisconsin that could provide insight to the most effective form of treatment. Therefore, we recommend that following each survey (to be conducted every third summer), the agencies review the monitoring results and decide the best course of recommended action for control measures (if needed) at that time.

In summary, WRPC's proposed plan to monitor purple loosestrife and Eurasian watermilfoil in project waters, with the above discussed modifications, fulfills the requirements of license article 408 and should allow the licensee to prevent the rapid infestation of these two noxious plants from invading project lands and waters. Therefore, the proposed monitoring plan, should be approved.

The Director orders:

(A) The licensee's Purple Loosestrife and Eurasian Watermilfoil Monitoring Plan filed on June 3, 2002, is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days from the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

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and Compliance