

127 FERC ¶ 62,210
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Valley Improvement Company

Project No. 2113-207

ORDER AMENDING PURPLE LOOSESTRIFE CONTROL PLAN

(Issued June 16, 2009)

1. On December 1, 2008, Wisconsin Valley Improvement Company (licensee) filed a request to amend its Purple Loosestrife Control Plan included in Section 4.4.5 of its Commission approved Fish and Wildlife Management Plan¹ for the Wisconsin River Headwaters Project (FERC No. 2113). The headwaters system consists of 21 storage reservoirs located in Gogebic County, Michigan; and Vilas, Forest, Oneida, Lincoln, and Marathon Counties, Wisconsin. The project does not include any hydroelectric generating facilities.

Requirements

2. License article 413² requires the licensee to file a fish and wildlife management plan and subsequent updates of the plan every five years for Commission approval.³ The filings are required to address 13 specific issues. As part of the fish and wildlife management plan, the licensee also included a purple loosestrife control plan.

3. License article 414 requires the licensee to develop a plan to cooperate with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) on controlling purple loosestrife, when deemed appropriate by the agencies.

4. According to the updated Fish and Wildlife Management Plan, the licensee, with approval from the WDNR, conducted pilot studies concerning purple loosestrife in 1996 and began implementing control measures for purple loosestrife in Rice Reservoir using various spraying methods and Rodeo herbicide concentrations during the flowering stage

¹ See Order Modifying and Approving Fish and Wildlife Management and Bald Eagle Management Plan Updates. Issued July 18, 2007. 120 FERC ¶62,049.

² See Order Issuing New License. Issued July 18, 1996. 76 FERC ¶61,050.

³ The licensee filed with the Commission updates to the Fish and Wildlife Management Plan on July 17, 2001 and July 13, 2006 in accordance with Article 413 of the license.

of the plant. The licensee further refined the spraying and application rates and expanded the program in 1997 to include chemical control at Willow and Spirit Reservoirs where greater than 100 purple loosestrife plants also occurred. Additionally, small new colonies of less than 10 purple loosestrife plants were treated at Rainbow and Eau Pleine Reservoirs in 1997 and 1999, respectively, leading to eradication of the colonies in those years.

Licensee's Proposal

5. The licensee is requesting to amend its Purple Loosestrife Control Plan, which is included in Section 4.4.5 of its updated and approved Fish and Wildlife Management Plan. The licensee proposes to ultimately terminate chemical control of purple loosestrife at Rice, Willow, and Spirit Reservoirs, by implementing biological control methods and allowing the establishment of *Galerucella sp.* beetles from other areas surrounding the three reservoirs. The licensee stated that in spite of the success of reducing purple loosestrife abundance at the three reservoirs over the past 13 years by using chemical treatment, it has not resulted in the eradication of this invasive plant. Further, the licensee stated that it appears annual application of herbicide would need to continue indefinitely in order to maintain control of purple loosestrife under this approach.

6. According to the licensee's proposal, *Galerucella sp.* beetles were found at Spirit Reservoir during herbicide spraying by the licensee in July 2008 and spraying was terminated at this reservoir to allow beetles to occupy and potentially expand within the site. The licensee further stated that these beetles may have migrated from either Jersey City flowage located four miles to the north, or Alexander flowage located 12 miles to the south, or at Tripoli, Wisconsin located 10 miles to the north where well-established beetle populations occur. The licensee noted that Wisconsin Public Service Corporation released 10,000 *Galerucella sp.* beetles in Jersey City flowage in 2007 and over 50,000 beetles in 2008. The licensee also stated that beetles were introduced in Alexander flowage in 2007. Moreover, the licensee stated that several thousand beetles are present near Tripoli and were introduced by WDNR over two years ago. The licensee stated in their proposal that it seems reasonable the *Galerucella sp.* beetles will migrate to Willow and Rice Reservoirs within the next few years, since they have been observed in Spirit Reservoir and are a few miles in proximity to Rice and Willow Reservoirs.

7. Beginning in 2009, the licensee proposes to survey the shorelines of the three reservoirs by boat in mid-July where purple loosestrife has historically occurred. During the shoreline survey, the licensee proposes to map and record with a GPS the locations and abundance of flowering purple loosestrife and define its abundance as low (1-5 plants), moderate (6-50 plants) or high (51-100+ plants). The licensee proposes to compare these maps with 2008 survey data and baseline maps collected for Rice and

Willow Reservoirs, and 2007 survey data and baseline maps collected for Spirit Reservoir. In addition, during the annual surveys, the licensee proposes to also record with a GPS the locations of plants exhibiting signs of leaf and stem damage characteristics of *Galerucella sp.* beetles and inspect them to verify beetle presence. The licensee stated that this information will be compared between years to assess the distribution and effectiveness of the beetles in controlling purple loosestrife abundance.

8. Additionally, the licensee proposes to file a report on the annual monitoring results with the Commission, WDNR, and FWS by October 31 of each year for the first five years of this control plan (2009-2013). Further, the licensee proposes to discuss the results and possible management options for the following year with the resource agencies in November of each year. At the end of the five year period, the licensee proposes to submit a five-year report to the Commission, WDNR, and FWS summarizing the results of biological control and identifying future monitoring requirements and management options, if any, that may be necessary.

Resource Agency Comments and Licensee's Responses

9. On October 3, 2008 the licensee sent a copy of their proposed modifications to the Purple Loosestrife Control Plan to the WDNR and FWS for review and comment. The licensee received comments from WDNR on October 16 and November 4, 2008. No comments were received by the licensee from the FWS.

10. In commenting on the licensee's proposal, WDNR agreed with the licensee's proposal concerning the need for continuous annual monitoring as part of the modified control plan in order to track and map where and how quickly purple loosestrife is spreading after chemical treatments are discontinued by the licensee. WDNR also stated that the annual review process is necessary and that management recommendations need to be made on an annual basis after the review. The WDNR also stated that the levels of purple loosestrife abundance that trigger hand pulling versus chemical control versus beetle control need to be identified and included in the licensee's proposed modifications to the control plan.

11. On November 14, 2008, the WDNR's Purple Loosestrife Control Coordinator communicated directly with the licensee and suggested that another option could be to use an integration of various control methods at the reservoirs, such as still using traditional controls until beetles become common enough at the three reservoirs to exert meaningful control themselves. Another suggested strategy included introducing beetles in the center of a large purple loosestrife infestation and using other controls, such as chemical application, at the periphery to minimize spread. Finally, WDNR inquired who would be responsible for raising and releasing beetles if it is deemed necessary to do so at

the reservoirs.

12. The licensee responded that the levels of purple loosestrife abundance that would trigger each type of control action is a relatively gray area due to the complexity and variability of this invasive plant's distribution and abundance at the three reservoirs. However, the licensee stated that purple loosestrife has been identified at the three reservoirs for more than 13 years and the complexity and variability of this invasive plant's distribution and abundance may initially merit integration of chemical and biological control methods. The licensee stated that the selection of management strategies for each reservoir would be based on the annual survey results and during the annual agency review process. For example, the licensee noted that if beetles have not migrated into the reservoir and/or are not effectively controlling the spread of this invasive plant, then integrating beetle introductions at levels of 2,000-3,000 beetles per site and multiple releases at various locations in the reservoir with chemical control at the periphery could be one consideration. The licensee also responded that they would assume responsibility for the introduction of beetles, if necessary.

Discussion

13. Since the pilot studies in 1996, purple loosestrife has been found at various reservoirs of the Wisconsin River Headwaters Project. The licensee has used chemical herbicides in an attempt to control this invasive species. The licensee, after consultation with the resource agencies, proposes to limit its chemical applications and try controlling this invasive plant using biological methods. The licensee's proposed control plan and monitoring procedures have merit.

14. However, the licensee proposes to file a report on the annual monitoring results with the Commission, WDNR, and FWS by October 31 of each year for the first five years of the control plan (2009-2013). The licensee also proposes to discuss the results and possible management options for the following year, with the resource agencies in November of each year. In order to keep the Commission apprised of both the monitoring results and the management options to be used for the following year, the licensee should file the annual monitoring report with the Commission after it has been received by the resource agencies and after the annual review process. Therefore, the annual monitoring report should be filed with the Commission by December 31 of each year, beginning in 2009, and should at a minimum include: 1) annual monitoring results identifying locations and abundance of purple loosestrife at the reservoirs; 2) information and/or results identifying the distribution and effectiveness of the beetles in controlling purple loosestrife abundance; 3) documentation of agency comments or recommendations regarding the annual monitoring results, if any; and 4) all management options that were used the previous year and that will be used the following year based on

the annual review process with the resource agencies.

15. At the end of the five-year period, the licensee also proposes to submit a five-year report to the Commission, WDNR, and FWS that summarizes the results of biological control for purple loosestrife and determines what future monitoring requirements and management options, if any, may be necessary. In order to ensure adequate control and the prevention of spreading purple loosestrife at the Project's reservoirs, the licensee's five-year report, which will include determinations on future monitoring requirements and management options, should be filed for Commission approval.

16. The licensee's request to amend its Purple Loosestrife Control Plan should help reduce the spread of purple loosestrife at the Project's reservoirs and, as modified, should be approved.

The Commission Orders:

(A) Wisconsin Valley Improvement Company's (licensee) request to amend its Purple Loosestrife Control Plan included in Section 4.4.5 of its updated Fish and Wildlife Management Plan for the Wisconsin River Headwaters Project (FERC No. 2113), filed December 1, 2008, as modified in paragraphs (B) and (C), is approved.

(B) The licensee shall file five annual monitoring reports for purple loosestrife with the Commission by December 31 of each year, beginning in 2009, and the report shall include at a minimum the following: 1) annual monitoring results identifying locations and abundance of purple loosestrife at the Project's reservoirs; 2) information and/or results identifying the distribution and effectiveness of *Galerucella sp.* beetles in controlling purple loosestrife abundance at the reservoirs; 3) documentation of comments or recommendations from the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) regarding the annual monitoring results, if any; and 4) all management options that were used the previous year and that will be used for the upcoming year based on the annual review process with the resource agencies.

(C) The licensee shall file its five-year monitoring report for purple loosestrife with the Commission for approval by December 31, 2013. The final annual report shall include the licensee's proposal for future monitoring and management options, developed in consultation with the WDNR and the FWS. The licensee's final report shall include documentation of consultation with the resource agencies. The Commission reserves the right to require changes to the licensee's Purple Loosestrife Control Plan based on the monitoring results, agency comments or recommendations, or other available information.

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(D) This order constitutes final agency action. Request for rehearing by the Commission must be filed within 30 days from the date of the issuance of this order, pursuant to 18 CFR § 385.713.

George H. Taylor
Chief, Biological Resources Branch
Division of Hydropower Administration
and Compliance

Document Content(s)

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