

UNITED STATES OF AMERICA 110 FERC ¶62,173  
FEDERAL ENERGY REGULATORY COMMISSION

Upper Peninsula Power Company

Project No. 1864-024

ORDER MODIFYING AND APPROVING NUISANCE PLANT CONTROL PLAN  
PURSUANT TO ARTICLE 411

(Issued February 24, 2005)

On February 20, 2004, Upper Peninsula Power Company (UPPCO), licensee, filed a nuisance plant control plan (plan) pursuant to article 411 for the Bond Falls Hydro Project (2003 Order).<sup>1</sup> Article 411 requires the licensee to file, for Commission approval, a plan to control nuisance plants at the four project impoundments. Additionally, article 411 requires that implementation of the plan be funded by the mitigation enhancement fund described in section 7 of the Settlement Agreement (SA). The Bond Falls Project consists of four developments and is located on the Ontonagon River in Ontonagon and Gogebic Counties, Michigan, and Vilas County, Wisconsin, and partially on lands within the Ottawa National Forest (ONF).

## LICENSEE'S PROPOSED PLAN

1. Purple loosestrife (*Lythrum salicaria*)

The licensee proposes to annually monitor for purple loosestrife and to cooperate with the agencies to implement measures to control or eliminate the plant if survey results warrant it. The monitoring method will include a survey of the Bond Falls, Victoria, and Bergland impoundment shorelines and adjoining wetlands by boat and/or on foot to determine the baseline of existing colonies. The licensee indicated that continued monitoring would determine if there is an increase in density and abundance of purple loosestrife.

The licensee proposes to conduct surveys each July or August, starting with baseline surveys the first year following plan approval. Further, the licensee proposes to display the results on a map and provide the data to the Bond Falls Implementation Team (BFIT) by October 31 each year, and to the Commission by December 31 for the first two years. The map will indicate populations based on the following criteria: small colonies

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<sup>1</sup> See Order Approving Settlement and Issuing New License, 104 FERC ¶ 62,135 (August 20, 2003).

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of 1-5 plants; medium colonies of 6-50 plants; and large colonies of more than 50 plants. Small colonies will be cut and pulled by hand or sprayed with an aquatic herbicide. Cutting or pulling will occur prior to seed set, or the flower spikes will be bagged and discarded. The growth and size of larger colonies will be monitored, and if control measures are deemed necessary, UPPCO will consult with BFIT. Fact sheets about purple loosestrife will be displayed at UPPCO-owned public access areas within the project boundary to enhance public awareness.

## 2. Eurasian water milfoil (*Myriophyllum spicatum*)

The licensee proposes to monitor Bond Falls, Victoria, and Bergland waters for Eurasian water milfoil by doing a routine aquatic macrophyte reconnaissance survey every third year in July, August, or September. The licensee states that transects would be selected for sampling based on locations of likely infestation, and these locations would be documented using Global Positioning System (GPS). The licensee also states that the transect samples would be analyzed for presence and approximate abundance of Eurasian water milfoil. Additionally, the licensee proposes to survey the shore at boat landings annually for plant fragments.

The licensee proposes that the results of the surveys be displayed in table format indicating relative abundance of Eurasian water milfoil in each sample taken, as well as a map showing locations of the transects. The reports would be provided to BFIT by October 31 each year monitoring is completed, and to the Commission (including agency comments) by December 31 for the first two monitoring periods. The licensee states that fact sheets about Eurasian water milfoil would be displayed at UPPCO-owned public access areas within the project boundary to enhance public awareness. If Eurasian water milfoil becomes established at the project, UPPCO proposes to use native weevils (*Euhrychiopsis lecontei*) to control it. If the monitoring reports support the need for further control, UPPCO proposes to cooperate with BFIT to develop site-specific control measures.

## 3. Exotic Species Monitoring for the Cisco Chain of Lakes

The Cisco Chain Riparian Owners Association (CCROA) currently monitors and controls exotic plant species on the Cisco Chain of Lakes. UPPCO proposes to have CCROA continue to monitor and control exotic species on the lakes, with UPPCO providing plant identification training and materials to CCROA as needed. A lake leader will be established for each lake to ensure that monitoring occurs all summer on the lakes, including a survey of the shoreline and adjacent wetlands each year in July or August.

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The licensee proposes to work with CCROA to produce a summary report of exotic species monitoring and control by September 30 each year. UPPCO states that purple loosestrife colonies would be mapped according to the following abundance: small colonies of 1-5 plants; medium colonies of 6-50 plants; and dense colonies of more than 50 plants. Colonies of Eurasian water milfoil would be documented as follows: 0-absent; 1-presence less than half; 2-equal presence compared to other species; 3-dominant species; and 4-total infestation. Documentation of monitoring would be provided to BFIT by October 31 each year monitoring is completed, and to the Commission by December 31 for the first two monitoring periods.

The CCROA has a fund set aside for exotic species control measures. The licensee proposes to have CCROA continue to control Eurasian water milfoil using appropriate aquatic herbicide when necessary. Small colonies of purple loosestrife will be cut by hand, hand pulled, or sprayed with an appropriate aquatic herbicide. Cutting or pulling will occur prior to seed set or the flower spikes will be bagged and discarded. UPPCO proposes to consult with BFIT if more control measures are required.

The licensee also proposes to monitor CCROA to ensure compliance with this plan and the license, including posting nuisance species information at public boat landings. The licensee proposes to resume responsibility for monitoring and control, according to the protocols described above for the Victoria, Bond Falls, and Bergland developments, if CCROA no longer agrees to monitor. If the Cisco development is removed from the project, UPPCO suggests it should be relieved of this monitoring and control requirement related to the Cisco development.

#### AGENCY CONSULTATION

On December 19, 2003, UPPCO provided the agencies with a draft copy of the plan for their review. The licensee received similar comments on the plan from the following agencies:

<b>Entity Commenting</b>	<b>Date of Comment Letter</b>
U.S. Forest Service	January 9, 2004
Michigan Department of Natural Resources	January 9, 2004
Michigan Hydro Relicensing Coalition	January 12, 2004
Keweenaw Bay Indian Community	January 13, 2004

Several of the agencies' comments were incorporated into the final plan. However, other agency recommendations are discussed below.

## DISCUSSION AND CONCLUSIONS

(I) The following outstanding issues remain in regard to purple loosestrife:

The U.S. Forest Service (FS) recommends that for the Bergland development survey results also be submitted to two lake associations: Lake Gogebic Improvement Association and North Shore Association. In response, UPPCO says it will not send a copy of its information to the two lake associations because they are not members of BFIT, nor are they listed specifically in article 411 and UPPCO says it will follow the consulting and reporting protocols outlined in article 411. Although, the licensee is not required to file survey results with the two lake associations, the licensee may find communicating with these local groups beneficial in gaining information, additional resources and support in its enhancement efforts. We encourage the licensee to share the information; however, we will not make it a requirement at this time. The information will be readily available to the two lake associations (and any other group) through the Commission's web page.

FS also recommends the following specific language be included in the plan: *“if it is determined that the colony cannot be treated when discovered due to size or any other reason, or for older colonies that persist despite past treatment efforts, then information as to extent, density and other relevant information about the colony shall be gathered and provided to BFIT as soon as possible upon completion of the survey. BFIT will review the information and make a determination as to the most appropriate control measures to implement, if warranted”*. In response, UPPCO states it would be inappropriate to have BFIT<sup>2</sup> determine whether and what control measures are needed. Additionally, UPPCO states it is ultimately responsible for implementation of the license requirements. UPPCO proposes to consult with BFIT, but in regard to controlling colonies, UPPCO proposes to retain its language and not adopt the FS's.

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<sup>2</sup> Section 9.1 of the SA (filed with the Commission on July 11, 2000) established the Bond Falls Implementation Team (BFIT) that will meet annually and will coordinate and implement the SA. The ten SA signatories are UPPCO, Forest Service, Fish and Wildlife Service, Wisconsin Department of Natural Resources, Michigan Hydro Relicensing Coalition, American Rivers, American Whitewater Affiliation, Keweenaw Bay Indians, Michigan Department of Natural Resources, and Michigan Department of the Attorney General.

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The intent of article 411 is to work with the agencies and develop a plan to control nuisance plants. Staff agrees with FS that information on the larger and older populations should be gathered and provided to BFIT, but the final decision on removal methods is not solely BFIT's. While BFIT, which consists of a single representative or designate from eight of the signatories to the SA, coordinates measures and oversees funding, the licensee is required to ensure license requirements are implemented. Therefore, the FS's proposed language does not appear necessary. UPPCO and BFIT should continue to work together to decide the most effective means of removing/controlling large and older populations of purple loosestrife. However, should a disagreement arise over the most appropriate control measures to implement, UPPCO will need to provide the Commission with site-specific reasons for disagreeing with agency recommended control measures.

The Michigan Department of Natural Resources (MI DNR) recommends that annual surveys of all impoundments include all project waters and wetlands. In response, UPPCO states it will survey all wetlands that adjoin project waters, but proposes not to include isolated wetlands because it is unlikely that purple loosestrife would be transferred from an isolated wetland to the project reservoir. Staff agrees with UPPCO and we are not requiring surveys on isolated wetlands at this time. The presence or absence of nuisance plants on isolated wetlands has not been linked to effects caused by the project.

MI DNR also recommends that survey results be displayed on a map using GPS coordinates and that the map clearly identifies new colonies and previously documented colonies. In response, UPPCO says BFIT will receive a map, but the precision of GPS is not required in order to represent the survey results in a clear and accurate manner. UPPCO says GPS has not been required at other projects. UPPCO proposes that it not be required to distinguish between new colonies and previously documented colonies because surveys are meant to give a relative abundance, not a detailed summary.

Staff agrees with UPPCO that specific GPS coordinates are not needed on the map provided the location of the survey sites are clearly identified in the written report. However, simply overlaying new data year after year on the same historical map may be more efficient than preparing a new map each year. The concern is whether or not the enhancement measures proposed are sufficient at preventing the spread of nuisance plants. Therefore, distinguishing between newly formed colonies and previously formed colonies would be beneficial information and should be available through review of previous year's reports. We will not require the specific information recommended by MI DNR at this time as long as other suitable information (i.e., the amount of purple loosestrife found each year at each site and the amount removed) is provided that allows the Commission to make a determination on the success of implementing this plan.

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Nevertheless, if future monitoring reports lack sufficient data, the Commission should reserve the authority to require additional information.

(II) The following outstanding issues remain regarding Eurasian water milfoil:

FS states that the number of transects proposed by UPPCO is not adequate and that with only 2-5 transects per lake, it is highly likely that any small, initial infestations of Eurasian water milfoil would be missed. FS recommends that transects target all the likely infestation areas including shallow, quieter water such as shorelines, small bays, and near islands. FS also recommends boating around the entire shoreline with rake sampling conducted whenever aquatic macrophyte populations are seen, followed by additional sampling in other shallow areas. In response, UPPCO disagrees with FS that more transects are needed. Even though Lake Gogebic is 13,380 acres in size, a vast majority of this area has conditions unlikely to produce Eurasian water milfoil. UPPCO says samples need to be concentrated only in areas of likely infestation. Staff agrees that transects should target areas of likely infestations. After reviewing UPPCO's proposal, the number of transects appear to be sufficient for Eurasian water milfoil if properly placed. Therefore, we accept UPPCO's proposed sampling methodology at this time. However, if survey results indicate inadequacies with this methodology then the Commission should reserve the right to make further modifications to this plan.

FS also states that surveying every three years for Eurasian water milfoil is not frequent enough considering the rate at which this plant can spread and the potential for serious and perhaps irreversible damage if infestations are not caught early. FS states that the National Invasive Species Challenge (NISC) calls for early detection and rapid response to infestations. FS recommends annual surveys for this species. In response, UPPCO says NISC does not define early detection, nor does it state that identification within three years can not be considered early detection. UPPCO argues that WPS Resources (the parent company of UPPCO) currently have 16 hydro projects in Michigan and Wisconsin that require Eurasian water milfoil surveys and all 16 flowages are surveyed once every three years. Therefore, UPPCO does not agree with FS to survey annually for Eurasian water milfoil.

While UPPCO is correct that several other UPPCO-owned projects in Wisconsin do survey for Eurasian water milfoil every three years (i.e., Prickett (Project 2402); Escanaba (Project 2506); Cataract (Project 10854); and AuTrain (Project 10856), these projects were originally required by the Commission to survey annually for both purple loosestrife and Eurasian water milfoil. These projects were later granted amendments to reduce surveying frequency for Eurasian water milfoil to every three years only after filing adequate documentation supporting the reduced frequency with the Commission for approval. Numerous other projects in Wisconsin currently survey annually for Eurasian

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water milfoil (i.e., Grand Rapids (Project 2433) and Brule (Project 2431) to name a few). In the present case, the Final Environmental Impact Statement (FEIS) issued for Bond Falls in June 2002,<sup>3</sup> says the FS identified Eurasian water milfoil in two lakes in the Cisco Chain. Therefore, due to the highly aggressive nature of this invasive species that already has a history of being in the project area, staff agrees with FS that sampling annually for Eurasian water milfoil is recommended, at least initially.

Consequently, staff recommends that the licensee conduct monitoring surveys for Eurasian water milfoil for the next five years. The results of the first five surveys should be filed with BFIT by October 31 each year and with the Commission by December 31 each year starting in 2005 and ending in 2009. By December 31, 2009, the licensee should file a comprehensive five-year Eurasian water milfoil monitoring report with the Commission, containing a comparison of all data and a recommendation from the licensee and BFIT on the frequency of future Eurasian water milfoil monitoring. If the report concludes that no significant change is evident in the extent and location of Eurasian water milfoil, the licensee may request that the survey frequency be modified to once every three to five years as recommended by the licensee and BFIT. However, if the first five annual surveys show any increase in the extent and/or location of Eurasian water milfoil, then annual surveys should be continued until the Commission concurs with evidence that such increase has ceased. The licensee should allow a minimum of 30 days for BFIT to make comments and recommendations before filing monitoring reports with the Commission. If the licensee does not adopt an agency recommendation, the filing should include the licensee's reasons, based on project-specific information. The Commission should reserve the authority to require modifications to the plan based on the licensee's monitoring reports or new information as it becomes available.

FS further recommends that for Bergland, survey results also be submitted to two lake associations. In response, UPPCO proposes not to send survey results to the two lake associations because the associations are not members of BFIT and because article 411 does not require sending results to those two entities. Staff agrees with UPPCO for reasons stated above, under purple loosestrife.

Lastly, FS recommends that BFIT evaluate the survey information on existing Eurasian water milfoil colonies, and that BFIT determines what control measures are warranted, if any. FS recommends the following language regarding control: "*All Eurasian water milfoil colonies detected through annual surveys will be evaluated by BFIT to determine the most appropriate course of action*". In addition, FS states that relying on possible natural occurrences of the native weevil (*Euhrychiopsis lecontei*) for

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3 See Section 3.4 of FEIS issued for FERC Project No. 1864-005.

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Eurasian water milfoil control is unlikely to be effective. FS states that while the weevil is native to the area that does not mean it occurs naturally in every water body, or in sufficient abundance to provide adequate control of Eurasian water milfoil. FS indicates that various factors including fish populations in the lake, amount of weevils present, and amount of milfoil present can affect this control method. FS argues that the impoundments are frequently used by trailered motorboats and so the potential for spreading these plants to other lakes is high, therefore, eradication rather than suppression should be the goal by using a variety of tools depending on the infestation's characteristics. FS recommends that if BFIT determines that weevil control be attempted, then surveys for weevil would first have to be done to determine weevil presence/absence, fish populations would have to be assessed to determine predation pressure on weevils, and other factors would first need to be considered to determine whether weevil use or some other control method would be most appropriate.

In response, UPPCO disagrees with FS. UPPCO says it has the responsibility of implementing the license requirements not BFIT. UPPCO says it is the Commission's responsibility to review the licensee's final conclusions regarding the survey results and to determine what control measures are warranted. Staff agrees with UPPCO's proposed methodology for Eurasian water milfoil at this time. The Commission encourages the licensee to work with BFIT to come up with a solution for control measures, if warranted.

Information on control measures should be included in future monitoring reports. The Commission should reserve the right to require changes to this plan pending future monitoring results or new information.

(III) The following outstanding issues remain regarding to the Cisco Chain of Lakes monitoring plan.

FS states that BFIT is the most appropriate group to determine what control measures are warranted for nuisance plant infestations (other than small colonies of purple loosestrife which can be removed using the procedures described in the plan). FS recommends changing language in the plan to indicate that BFIT and CCROA jointly determine what control measures are needed for discovered infestations. In response, UPPCO disagrees with the proposed role of BFIT. UPPCO states that it has the responsibility to implement all license requirements, not BFIT. UPPCO states that if at a later date a change is required, then UPPCO will consult with the BFIT prior to implementation. Staff recommends that UPPCO, BFIT and CCROA cooperate in finding the most effective control measures for nuisance plants. The proposed plan appears adequate at this time; however, the Commission should reserve the authority to make changes to the plan pending future monitoring results or new information.



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FS also states that curly pondweed (*Potamogeton crispus*) is another invasive aquatic plant that may move into the area (as it is known in Wisconsin but not yet in the western Upper Peninsula). FS recommends that provisions be made for monitoring and the control of curly pondweed and other new invasive species that may become concerns during the life of the license. In response, UPPCO says additional species may be proposed at a later date after discussions with the BFIT. However, UPPCO proposes that the plan not be changed now and requests any necessary amendments to the approved plan be added later, if needed. Staff recommends that UPPCO and the agencies first cooperate to find effective means to control purple loosestrife and Eurasian water milfoil. Adding additional invasive species (that have not been determined to be present in the project area) to monitoring efforts now, is not recommended. Staff recommends that the primary focus remain monitoring and controlling purple loosestrife and Eurasian water milfoil from spreading in and adversely affecting project lands and waters which is the intent of article 411. Staff agrees with UPPCO that amendments can be made to the plan later if needed based on new information regarding other invasive species.

In summary, staff recommends that for purple loosestrife and the Cisco Chain of Lakes, the licensee should survey annually and file annual nuisance plant monitoring reports with the BFIT by October 31 each year over the term of license, starting in 2005, and with the Commission by December 31 for the first two monitoring periods (2005 and 2006). For Eurasian water milfoil, the licensee should survey for five consecutive years and file monitoring reports with the BFIT each year by October 31, and with the Commission by December 31, each year starting in 2005 and possibly ending in 2009. By December 31, 2009, the licensee should file a comprehensive five-year Eurasian water milfoil monitoring report with the Commission, for approval. If the monitoring reports filed with the Commission indicate that either purple loosestrife or Eurasian water milfoil is spreading, then the licensee should file monitoring reports with the Commission for each subsequent year that monitoring is conducted. The licensee should include copies of agency comments and recommendations with reports filed with the Commission. If the licensee does not adopt a recommendation, the filing should include the licensee's reasons, based on project-specific information. The Commission should reserve the authority to modify this plan based on the licensee's monitoring reports or new information as it becomes available.

The licensee's plan satisfies license article 411 of the 2003 Order and should help improve the environment by preventing the spread of nuisance plant species in the Bond Falls Project area and therefore, should be approved, as modified.

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The Director orders:

(A) The Upper Peninsula Power Company's (licensee) Nuisance Plant Control Plan, filed February 20, 2004 pursuant to article 411 of the Bond Falls Project license, as modified by ordering paragraphs (B) and (C), is approved.

(B) For purple loosestrife and the Cisco Chain of Lakes, the licensee shall survey annually and file annual nuisance plant monitoring reports with the Bond Falls Implementation Team (BFIT) by October 31 each year over the term of license, starting in 2005, and with the Commission by December 31 for the first two monitoring periods (2005 and 2006). If the first two monitoring reports filed with the Commission indicate that purple loosestrife is spreading, then the licensee shall continue to file monitoring reports with the Commission annually. The licensee shall include copies of agency comments and recommendations with reports filed with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the authority to modify this plan based on the licensee's monitoring reports or new information as it becomes available.

(C) For Eurasian water milfoil, the licensee shall conduct annual monitoring surveys for the next five years. The results of the first five surveys shall be filed with BFIT by October 31 each year and with the Commission by December 31 each year starting in 2005 and ending in 2009. By December 31, 2009, the licensee shall file a comprehensive five-year Eurasian water milfoil monitoring report with the Commission, for approval, containing a comparison of all data and a recommendation from the licensee and BFIT on the frequency of future Eurasian water milfoil monitoring. The licensee shall allow a minimum of 30 days for BFIT to make comments and recommendations before filing monitoring reports with the Commission. If the licensee does not adopt an agency recommendation, the filing shall include the licensee's reasons, based on project-specific information. Following the filing of the five-year report with the Commission, the frequency and extent of future surveys shall be established based on the data obtained in the reports and the recommendations of the licensee and BFIT. The Commission reserves the authority to require modifications to the plan based on the licensee's monitoring reports or new information as it becomes available.

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

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and Compliance