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ofield Operations:

May 13, 1999

Mr. David Boergers, Secretary Federal Energy Regulation Commission Mail Code: DLC, HL-11 888 First Street, N.E. Washington, D.C. 20426

> Oconto Falls (Upper) Project - FERC #2523 -RE:

Article 407

Purple Loosestrife & Eurasian Watermilfoil Inventory & Control Plan

Dear Secretary Boergers:

Enclosed are an original and eight copies of a plan to monitor and control the spread of Purple Loosestrife and Eurasian Watermilfoil for the Oconto Falls (Upper) Project, FERC No. 2523, licensed by N.E.W. Hydro, Inc. (NEW).

This plan was developed in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U. S. Fish and Wildlife Service (USFWS). A preliminary plan was sent to the agencies for comment on March 19, 1998. On March 24, 1998, comments were received from the WDNR. No correspondence has been received from the USFWS. A copy of the WDNR comments is included with this plan.

The WDNR made the following comments:

- > Surveys should be started during the summer of 1998. The license is under appeal and ownership has not been transferred to NEW at the time of this letter. We are hopeful this matter will be resolved this year, and, therefore, propose the first survey be conducted in the summer of 2000.
- Wetlands within the Project Boundary should also be surveyed and county wetlands maps should be used to detect areas where Purple Loosestrife could be found on project lands. The plan has been modified to use county wetland maps to determine areas where Purple Loosestrife could be found on lands owned by NEW within the Project Boundary.

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Mr. David Boergers May 13, 1999

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- > Purple Loosestrife surveys should be conducted annually. The plan has been modified accordingly.
- Purple Loosestrife stands should be located using GPS coordinates and delineated on detailed maps using GPS coordinates. The plan has been modified accordingly.
- Purple Loosestrife stand area, percent cover, stem density, and plant density should be determined. Sampling and measuring methodologies should be sufficiently rigorous to document the character of each stand. We believe our current methodology is sufficient.
- NEW should take appropriate steps to physically remove any Purple Loosestrife at the time of detection. For colonies larger than 20 plants, NEW should work to control or eliminate these colonies upon the request of the USFWS or the WDNR and following the procedures outlined by these agencies. The plan has been modified to include methods of control.
- NEW should post information obtainable from the WDNR on bulletin board at project recreational facilities on Purple Loosestrife identification and prevention of spread. The plan has been modified accordingly.
- Mow many transects will be run and how will locations be determined to inventory Eurasian watermilfoil? Quantity and locations of transects will be determined at the time of the inventory. The plan has been modified accordingly.
- All areas of the impoundment and tailwater supporting the growth of submerged vegetation should be surveyed for Eurasian watermilfoil. We believe current methodology is sufficient.
- > Surveys for Eurasian watermilfoil should be conducted annually. The plan has been modified accordingly.
- Location of Eurasian watermilfoil should be marked using GPS coordinates and delineated on detailed maps using GPS coordinates. The plan has been modified accordingly.
- For each Eurasian watermilfoil bed, the following should be determined: perimeter of the bed, mat density, and overall mat thickness. We believe our current methodology is sufficient.
- NEW should post information obtainable from the WDNR on bulletin boards located at Project recreational facilities on Eurasian watermilfoil identification and prevention of spread. The plan has been modified accordingly.



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NEW should work to control or eliminate any colonies of Eurasian watermilfoil upon the request of the USFWS or the WDNR and following the procedures outlined by these agencies. NEW will cooperate with any Federal, State, and community Eurasian watermilfoil control program located within the Project Boundary. The plan has been modified accordingly.

If you should have any questions about the enclosed material, we will be pleased to discuss them with you at your earliest convenience.

Sincerely,

North American Hydro, Inc.

Loyal/Gake

Director of Development and Regulatory Compliance

ral:RAL

Enclosures: As stated

Cc: Mr. Ronald A. Lesniak, FERC-CRO

Mr. Thomas Thuemler, WDNR Mr. James Fossum, USFWS

File: 99-02-01 Rick Oconto Falls Upper 2523 Article 407 Purple Loosetrife - Eurasian Milfoil Inventory Plan.doc



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary William R. Selbig, District Director Department of Natural Resources Box 127, 101 N. Ogden Rd. Peshtigo, Wisconsin 54157 TELEPHONE 715-582-5000 FAX 582-5005

March 19, 1998

IN REPLY REFER TO: 3600

Mr. Loyal Gake North American Hydro, Inc. P.O. Box 167 Neshkoro, WI 54960

MAR 2 4 1998

SUBJECT:

Comments on Proposed Plan for Monitoring and Controlling Purple Loosestrife and Eurasian Watermilfoil - Oconto Falls (Upper) Project FERC No. 2523

Dear Loyal:

We have reviewed your proposed Purple Loosestrife and Eurasian Watermilfoil Plan for the Upper Oconto Falls Project (FERC No. 2523) and have the following comments.

We are concerned that you are waiting until July - August of 1999 to start your monitoring surveys for each of these exotic plant invaders. The license for this project was issued in November of 1997, you should be capable of starting these surveys during the summer of 1998.

Purple Loosestrife

In addition to conducting a boat survey to determine the presence or absence of purple loosestrife in the impoundment, all wetlands within the project boundary should also be surveyed. County wetland maps and/or true color aerial photos of the project area should be used to detect areas where purple loosestrife could be found on project lands.

Surveys for purple loosestrife should be conducted annually at this project. It is much easier to control purple loosestrife if colonies are found before they become well established. Annual surveys would allow for control of small numbers of plants before they take over an area. The annual surveys should take place between mid July and early August unless weather conditions that would affect peak blooming time dictate otherwise.

Locations of purple loosestrife stands should be permanently marked using a shoreline benchmark with a known Global Position System (GPS) coordinate, and the actual stands should be delineated on a detailed map using GPS coordinates.

For each purple loosestrife stand, the following should be determined: stand area, percent cover, stem density, and plant density. Sampling and measuring methodologies should be sufficiently rigorous to document the character of each stand.

It is advisable to remove all purple loosestrife plants at the earliest stage of an infestation. Therefore NEW Hydro should take appropriate steps to physically remove any plants at the time of detection. If larger colonies (greater than 20 plants at an individual site) are found, they should work to control or eliminate these colonies



Upper Oconto Falls Project FERC No. 2523 Purple Loosestrife/Eurasian Milfoil Plan Page.2

upon the request of the U.S. Fish and Wildlife Service or the Wisconsin Department of Natural Resources and following the procedures outlined by these agencies.

NEW Hydro should post information on purple loosestrife identification and prevention of spread on bulletin boards located at project recreation facilities. This information can be obtained from the Wisconsin Department of Natural Resources.

Eurasian watermilfoil

The proposed plan states that boating transects will be conducted both above and below the dam. How many of these transects will be run and how will the location of these transects be determined? We recommend that all areas of the impoundment and the tailwater supporting the growth of submerged vegetation be surveyed. NEW Hydro should first delineate the presence of submerged aquatic vegetation beds on maps of the impoundment and tailwater. All of the areas supporting growth of submerged aquatic vegetation should then be surveyed for the presence of Eurasian watermilfoil.

Surveys for Eurasian watermilfoil should be conducted annually in July or August of each year. Surveys should not be curtailed after 2000, but should continue over the entire license period.

Locations of Eurasian watermilfoil beds should be permanently marked using a shoreline benchmark with a known Global Position System (GPS) coordinate, and the actual beds should be delineated on a detailed map using GPS coordinates.

For each Eurasian watermilfoil bed, the following should be determined: the perimeter of the bed, mat density, and overall mat thickness. Sampling and measuring methodologies should be sufficiently rigorous to document the character of each bed.

NEW Hydro should post information on Eurasian watermilfoil identification and prevention of spread on bulletin boards located at project recreation facilities. This information can be obtained from the Wisconsin Department of Natural Resources.

If Eurasian watermilfoil is found on project waters, NEW Hydro should work to control or eliminate any colonies upon the request of the U.S. Fish and Wildlife Service or the Wisconsin Department of Natural Resources and following the procedures outlined by these agencies.

If you have any questions on these comments please feel free to give me a call.

Sincerely.

Thomas F. Thuemler Regional FERC Coordinator

cc: Jim Fossum - FWS

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Oconto Falls (Upper) Project - FERC Project #2523 Article 407

Purple Loosestrife & Eurasian Watermilfoil Inventory & Control Plan
NEW Hydro, Inc. April 17, 1998 Page 1 of 3

Purple Loosestrife

Beginning in 2000, annual inventories of Purple Loosestrife will be performed by N.E.W. Hydro, Inc. (NEW) using the following method:

After Purple Loosestrife has bloomed in mid July to early August, the inventory should be conducted using a boat to survey the impoundment above the dam and on foot or by boat below the dam. County wetland maps will be used to determine other areas where Purple Loosestrife could be found on lands owned by NEW within the Project Boundary. These areas will be surveyed on foot. A pair of binoculars should be used to search for the purple flowered spikes of the plant. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the immediate area around the plants as this could cause them to spread. A GPS receiver will be used to establish a GPS coordinate for the location of the plants. If it is not possible to get close enough to establish an accurate location, an approximate location will be established with reference to an established GPS coordinate. The plant should be inventoried by marking and numbering the location on a lake map along with notes approximating size of plants, area that they cover, and location with reference to established GPS coordinates. Photos and/or videotape will be taken of the largest occurrences.

Example:

#1 6' tall plants; 4' X 20'; on shoreline N44° 52' 54.55" E88° 10' 00.00"; no photo

#2 5' - 7' tall plants; 10' X 10'; in marsh 50 feet bearing 25° from N44° 52' 54.55" E88° 10' 00.00"; photo #1

The area to be inventoried shall be the shoreline and lands owned by NEW within the Project Boundary as indicated on the Project Boundary map included as Exhibit G of NEW Hydro, Inc. Application For New License for the Oconto Falls Hydroelectric Project FERC Project #2523. The Project Boundary is shown as the water and shoreline of the impoundment from approximately 6000' upstream of the State Highway 32 bridge to approximately 500' downstream of the Project dam.

Within 60 days of completion of the inventory, the results will be mailed to the Wisconsin Department of Natural Resources (WDNR), the U.S. Fish

Oconto Falls (Upper) Project - FERC Project #2523 Article 407

Purple Loosestrife & Eurasian Watermilfoil Inventory & Control Plan
NEW Hydro, Inc. April 17, 1998
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and Wildlife Service (USFWS), and the Federal Energy Regulatory Commission (FERC).

NEW will acquire informational signs from the WDNR on Purple Loosestrife identification and prevention of spread and post on bulletin boards located at project recreational facilities.

NEW will cooperate with any Federal, State, and community Purple Loosestrife control program located within the Project Boundary.

If colonies less than 20 plants are located on lands owned by NEW within the Project Boundary, NEW will take appropriate steps to eliminate plants at time of detection. For stands larger than 20 plants located on lands owned by NEW within the Project Boundary, NEW will consult with the WDNR and USFWS to determine proper control methods. For Purple Loosestrife within the Project Boundary, but not located on NEW owned land, NEW will attempt to contact the landowner and encourage removal of the plants. The owner will also be asked to contact the WDNR and USFWS.

Eurasian watermilfoil

Beginning in 2000, annual inventories of Eurasian watermilfoil will be performed by NEW using the following method:

After Eurasian watermilfoil has developed in mid July to early August, the inventory should be conducted by boating transects in the impoundment above and below the dam. Number and locations of transects will be determined at the time of the first inventory and appropriately marked on the inventory lake map. A GPS receiver will be used to establish GPS coordinates for the beginning and endpoints of the transects. The person(s) inventorying should visually search areas with depths of 12 feet or less for the dense mats of the plants on and below the water surface. When plants are located, the person(s) inventorying should get close enough to make a positive identification without disturbing the plants or the immediate area around the plants as this could cause them to spread. If necessary, a sample may be taken for identification later. The plant should be inventoried by marking and numbering the location on a lake map along with notes approximating area that they cover and location with reference to the GPS coordinates. Photos and/or videotape will be taken of the largest occurrences.

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Oconto Falls (Upper) Project - FERC Project #2523 Article 407

Purple Loosestrife & Eurasian Watermilfoil Inventory & Control Plan NEW Hydro, Inc. April 17, 1998 Page 3 of 3

#1 40' X 20'; dense mat in 3' depth N44° 52' 53.55" E88° 10' 00.00"; no photo

#2 8' X 10'; dense mat on surface N44° 52' 54.05" E88° 10' 00.00"; photo #1

The area to be inventoried shall be that within the Project Boundary as indicated on the Project Boundary map included as Exhibit G of NEW Hydro, Inc. Application For New License for the Oconto Falls Hydroelectric Project FERC Project #2523. The project boundary is shown as the water and shoreline of the impoundment from approximately 6000' upstream of the State Highway 32 bridge to approximately 500' downstream of the Project dam.

Within 60 days of completion of the inventory, the results will be mailed to the WDNR, the USFWS, and the FERC.

NEW will acquire informational signs from the WDNR on Eurasian watermilfoil identification and prevention of spread and post on bulletin boards located at project recreational facilities.

NEW will cooperate with any Federal, State, and community Eurasian watermilfoil control program located within the Project Boundary.

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