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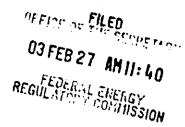
# ORIGINAL



Natural Resources Consulting, Inc.

Specializing in wetland, biological and environmental permitting services

119 South Main Street, Suite D P.O. Box 128 Cottage Grove, Wisconsin 53527-0128 Phone: 608-839-1998 Fax: 608-839-1995



February 25, 2003

Magalie Roman Salas Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Subject:

FERC Hydroelectric Project No. 11162-002

007,008,009 Submittal of Plans Regarding License Articles 403, 407 and 410

Dear Magalie Roman Salas:

In accordance with the June 27, 2002 Federal Energy Regulatory Commission Order Issuing Original License and our subsequent November 25, 2002 request for an extension of time to submit, we are pleased to provide you with an original and eight copies of the License Compliance submittal regarding License Articles 403, 404, and 407.

Please contact me if you have questions or require additional information regarding this submittal.

Regards,

Natural Resources Consulting, Inc.

William R. Pool

William R. Poole Principal Scientist

Enclosure

Cc. Heidi Rahn

Alliant Energy

Doug Hau

Alliant Energy



# ORIGINAL

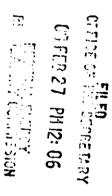
# Hydroelectric License Compliance License Articles 403, 407 and 410

PRAIRIE DU SAC HYDROELECTRIC PROJECT
PRAIRIE DU SAC, WISCONSIN

FERC Project No. 11162

**Prepared for**WISCONSIN POWER & LIGHT COMPANY

February 25, 2003





## HYDROELECTRIC LICENSE COMPLIANCE LICENSE ARTICLES 403, 407 AND 410

# PRAIRIE DU SAC HYDROELECTRIC PROJECT PRAIRIE DU SAC, WISCONSIN

FERC Project No. 11162

February 25, 2003

Prepared For:

Wisconsin Power & Light Company

Prepared By:

Natural Resources Consulting, Incorporated P.O. Box 128 Cottage Grove, Wisconsin 53527-0128

NRC Project No. 02-131

William R. Poole

**Principal Scientist** 

Scott A. Storlid Principal Scientist Unofficial FERC-Generated PDF of 20030228-0442 Received by FERC OSEC 02/27/2003 in Docket#: P-11162-007

Prairie du Sac License Compliance

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February, 2003

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February, 2003

#### A. SUMMARY

In accordance with the Federal Energy Regulatory Commission (FERC) Order Issuing Original License (June 27, 2002) for the Prairie du Sac Hydroelectric Project, FERC Project No. 11162-002, Wisconsin Power & Light Company (WP&L) is required to submit monitoring/management plans pertaining to License Articles 403-Operations Compliance Monitoring, 407-Woody Debris Passage and 410-Purple Loosestrife/Eurasian Water-milfoil Monitoring. The license specifies that these plans shall be developed in consultation with the appropriate resource agencies and are due within 6 months of issuance of the license (December 27, 2002). Due to scheduling conflicts among the various resource agency participants, the initial consultation meeting to discuss the abovementioned License Articles was first held on October 19, 2002 (Appendix A). Based on discussions and suggestions generated during this meeting, draft plans were developed and submitted to the agencies on November 25, 2002 for review and comment. The License requires a minimum of 60 days for the appropriate resource agencies to review the proposed plans. Therefore, in order to allow agency staff adequate time to review the plans and WP&L staff adequate time to react and respond to agency comments, WP&L requested an extension of 60 days (February 27, 2003) to submit these plans. A copy of the request letter is included in Appendix B. A second consultation meeting was held on February 10, 2003 to discuss the draft plans (Appendix A) and written comments were received from the Wisconsin Department of Natural Resources (WDNR) on February 14, 2003 (Appendix B).

#### B. DOCUMENTATION OF CONSULTATION

Appendix A provides copies of the minutes for the agency/licensee consultation meetings held on October 29, 2002 and February 10, 2003. Appendix B provides copies of the written correspondence exchanged between the resource agencies and WP&L. The original written comments received from the WDNR on February 14, 2003 refer to Alliant as the project owner/legal entity. The actual legal entity for this facility, as referenced in the FERC License, is Wisconsin Power & Light Company. In accordance with permission granted during a February 24, 2003 telephone conversation with Pam Biersach (author of the WDNR comment letter) all references to Alliant were changed to WP&L in this document in order to reflect the correct legal entity. However, the remaining text in the WDNR comment letter is presented as originally submitted.

#### C. RESPONSE TO AGENCY COMMENTS

A copy of the February 14, 2003, comment letter from the WDNR is included in Appendix B. No written comments were received from the U.S. Fish and Wildlife Service (FWS). The following presents the WDNR comments and subsequent WP&L responses.

#### Article 403 - Operation Compliance Monitoring Plan

#### WDNR Comments:

Availability of Operating Records - The Department believes that a website should be established which will have "real-time" river flow (cfs), headwater and tailwater levels. This would enable the public and the agencies, including the FERC, 'up-to-date' information on water levels and flows. This would prevent/minimize complaint calls to the agencies and subsequent interpolation and clerical work by WP&L in order to respond to requests for log information as a result of those complaints. This will only serve to save staff time and resources as time goes on.

Other Hydro dams along the Wisconsin River already post this information through a link located at the Wisconsin Valley Improvement Company website. At our last meeting on February 10, 2003, it was WP&L's position that although technically feasible, there was a concern about compliance if the website should crash. It would be acceptable if WP&L were to write into the plan that should the website crash, appropriate measures would be taken to restore the site as soon as practicable. There was also a concern regarding the accuracy of the data that would be placed on the website. It was mentioned during the meeting that the data would need to be run through a program in order to "truth" the data before it was posted. The data update intervals could coincide with the time it would take for the program to truth the data. After reviewing other websites containing dam and stream flow information, it appears this could be done anywhere from 10 minutes to a several hours.

In addition, we need to see more logistical information relative to 'Operation During Plant Outages'. For example, what type of system notifies the plant operators when the plant is unmanned? What are the shifts of the plant operators? How many are on duty? Which plant staff are available for trouble calls? How can they be contacted and by whom?

#### WP&L Response:

WP&L contends that "real-time" access to flow data is not necessary to demonstrate compliance with run-of-river operation requirements. In accordance with License Article 402, a provision will be included in the Operational Compliance Monitoring Plan that requires WP&L to notify the WDNR, FWS and FERC when there are deviations above or below the required headwater limits. "Real time" access is not required by state or federal agencies for other types of compliance monitoring such as air emissions and wastewater discharge. Also, WP&L believes that compliance monitoring should be its own responsibility and that of the appropriate resource agencies, not the public. The 1-800 phone number currently maintained by WP&L provides the necessary flow information to the general public.

February, 2003

Flow information provided on the website for 7 of the 25 hydro plants on the Wisconsin River is purely voluntary and not a License compliance requirement. In fact, the website includes a disclaimer indicating the flow data is for informational purposes only and may not be accurate or up to date. WP&L is concerned about releasing "real-time" information without verifying its accuracy prior to releasing it for public and agency use, especially for use as a compliance monitoring tool. There are also potential issues regarding website failures etc. that would make this a complicated component of the compliance monitoring requirements should FERC impose such a requirement. The primary concern with this WDNR request is the potential for erroneous information being displayed and then having non-compliance actions being imposed as a result. WP&L believes the Compliance Monitoring Plan as presented will adequately provide the appropriate compliance documentation in a timely manner.

In accordance with the WDNR request for more logistical information relative to "Operation During Plant Outages" WP&L has modified the plan to explain that the Prairie du Sac hydro plant is typically operated remotely from the Columbia Generating Station located near Portage, Wisconsin. The Columbia Station is manned 24 hours per day, 7 days per week. The Prairie du Sac hydro plant is normally manned Monday through Friday by at least one employee during normal business hours (0700 - 1530). Hydro plant personnel call the Columbia Generating Station prior to leaving the plant. In the event of an unplanned plant outage, an alarm system notifies the plant operators on site and/or remote operators at the Columbia Station when the hydro plant is un-manned. At this point the plant operator(s) on site or the remote operator will restart the turbines. If restarting the turbines is unsuccessful, on site personnel will manually open the appropriate number of spillway gates to pass flows downstream until normal operations can be restored. If the hydro plant is not manned at the time of a plant outage the remote operator will contact a hydro plant staff member by telephone. At least one hydro plant staff member is available for trouble calls at all times. If, for some reason, a hydro plant staff member is unable to be contacted then personnel from the Columbia Station will be dispatched to the hydro plant. If the telephone system becomes inoperative the Columbia Station and the hydro plant are equipped with cellular phones.

#### Article 407 - Plan to Pass Woody Debris

#### **WDNR Comments:**

How often is the woody debris dragged to the log chute? We realize it's on an "as needed" basis, however, it is appropriate to provide enough information for the agencies to understand when and how often that usually is throughout a calendar year.

#### WP&L Response:

In accordance with the WDNR comments presented above WP&L has modified the plan to indicate that woody debris typically collects against the intake area of the powerhouse and on other portions of the dam following periods of high flows. These flow events normally occur during the spring and fall and occasionally after large storm events within the river basin. It is part of the existing operation and maintenance routine at the Prairie du Sac Hydroelectric Project for Plant staff to manually pass such debris downstream as necessary. This task is accomplished by physically dragging woody debris through the water to a log chute located at the east side of the powerhouse where it is passed downstream. Other organic debris, such as leaves and aquatic vegetation, is collected from the trash racks on a weekly basis when the lake is void of ice and is also passed downstream. The frequency of cleaning the trash racks also tends to increase with periods of high river flows. WP&L proposes to continue this practice in order to comply with this License Article.

### Article 410 - Purple Loosestrife/Eurasian Water-milfoil Monitoring Plan

#### **WDNR Comments:**

Since Purple loosestrife is present on numerous islands in the river basin and islands of the Lake Columbia, what work activities will be implemented to reduce the spread, control the spread, or eliminate the plants? For example, implementing biological control by insect hosts.

#### WP&L Response:

WP&L realizes that purple loosestrife is present within the upstream drainage basin and on portions of WP&L owned land within the project boundary. The purpose of the proposed monitoring is to assess changes in the occurrence of purple loosestrife within the project boundary. As proposed in the monitoring plan appropriate measures will be taken to physically remove small colonies (1-5 plants) during each survey event on undeveloped shorelines owned by WP&L. In addition WP&L proposed to post information regarding purple loosestrife identification and control measures on bulletin boards located at WP&L recreational sites. In accordance with the WDNR comments presented above, additional language has been incorporated into the plan to indicate that based on the survey results and consultation with the WDNR and FWS, other control methods may be warranted. Examples of control methods could include approved herbicide treatment or biological control by introducing specified insects. However, until purple loosestrife is completely eliminated from the upstream drainage basin there will be a continuous seed source, thereby making the goal of eradicating this nuisance plant from the project boundary unattainable.

#### D. LICENSE ARTICLE PLANS

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#### Article 403

Within 180 days from the date of issuance of this license, in order to monitor the operating mode and impoundment elevations required in articles 401 and 402, respectively, the licensee shall develop, in consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service, an operations compliance monitoring plan, for Commission approval. This plan must include, but not be limited to, an implementation schedule provisions to: (1) install and maintain staff gages visible to the public on or near the Prairie du Sac dam; (2) maintain water level sensors to continuously record headpond and tailwater elevations; (3) record and maintain daily operating records, including headpond and tailwater elevations, hourly powerhouse and spillway discharge, and turbine operations; and (4) provide the Wisconsin Department of natural resources and the U.S. Fish and Wildlife Service operating records upon request.

### **Operations Compliance Monitoring Plan**

The Prairie du Sac hydroelectric facility is required to operate in a run-of-river mode for the protection of aquatic resources in the Wisconsin River. The licensee shall at all times act to minimize the fluctuation of the impoundment surface elevation by maintaining a discharge from the dam that approximates the sum of inflows to the project impoundment. As such, the licensee shall maintain a headwater surface elevation of 774.4 ± 0.3 ft. National Geodetic Vertical Datum. (There is a recognized 0.4 ft. discrepancy between the actual and recorded headwater elevation. A recorded headwater elevation of 774.0 ft. NGVD corresponds to an actual headwater level of 774.4 ft. NGVD)

#### **Staff Gages**

Wisconsin Power and Light Company (WP&L) proposes to install two staff gages on the upstream portion of the dam. One will be located on the upstream face of the intake area located along the west end of the dam. This gage will be visible to boaters on the project impoundment. The second gage will be installed on the east end of the dam adjacent to the canoe take-out/portage. This gage also will be visible from the water, as well as the golf course located on the east bank of the impoundment. These gages will be designed to indicate the upper and lower limits of the required operating bandwidth.

In addition to the upstream staff gages, WP&L proposes to install one staff gage on a tailrace pier visible from the west shore/parking area.

WP&L proposes to install the staff gages within three months of FERC approval of the plan provided that ice-free conditions exist. Otherwise, the gages will be installed as soon as safe climatological conditions exist.

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#### Water Level Sensors

Operation of the Prairie du Sac hydroelectric facility was automated in 1995. As part of the automation system Druck brand, PTX Depth Pressure Transmitters were installed. These electronic headwater and tailwater transmitters were installed to continuously provide indication of water levels to the plant operator and the control system. The headwater level sensor is located indoors in the control room and the tailwater sensor is affixed to the west wing-wall immediately downstream of the turbine discharge. These sensors respond to changes in headwater and tailwater to provide the necessary information for the operation of the 8 generating units and 3 of the 41 spillway gates in order to maintain the prescribed headwater elevation. If river flows exceed the capacity of the generating units and the automated spillway gates, then additional gates are manually opened to maintain appropriate headwater levels.

#### **Daily Operating Records**

Average hourly headwater and tailwater levels, river flow (cfs), and turbine operation (generation) are recorded and printed out on a daily basis. These paper records are maintained in a logbook and are available on site.

#### **Availability of Operating Records**

Upon request by the Wisconsin Department of Natural Resources (WDNR) and/or U.S. Fish & Wildlife Service (FWS), photocopies of pertinent pages of the operating logbook will be provided within 48 business hours of the request. In addition, WDNR and FWS staff are welcome to review operating records in person at the plant by appointment.

#### Notification of Non-Compliance

As specified under Article 402 of the License, if the target reservoir surface elevation  $(774.4 \pm 0.3 \text{ ft.})$  is temporarily modified due to operating emergencies beyond the control of the licensee or for short periods upon mutual agreement between the licensee, the WDNR and the FWS, WP&L will notify the Commission, the aforementioned agencies as soon as possible, but no later than 10 days after each incident.

#### **Operation During Plant Outages**

The Prairie du Sac hydro plant is typically operated remotely from the Columbia Generating Station located near Portage, Wisconsin. The Columbia Station is manned 24 hours per day, 7 days per week. The Prairie du Sac plant is normally manned Monday through Friday by at least one employee during normal business hours (0700 – 1530). Hydro plant personnel call the Columbia Generating Station prior to leaving the plant. In the event of an unplanned plant outage, an alarm system notifies the plant operators on site and/or remote operators at the Columbia Station when the hydro plant is un-manned. At this point the plant operator(s) on site or the remote operator will restart the turbines. If restarting the turbines is unsuccessful on site personnel will manually open the

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appropriate number of spillway gates to pass flows downstream until normal operations can be restored. If the hydro plant is not manned at the time of a plant outage the remote operator will contact a hydro plant staff member by telephone. At least one hydro plant staff member is available for trouble calls at all times. If a hydro plant staff member is unable to be contacted then personnel from the Columbia Station will be dispatched to the hydro plant. If the telephone system becomes inoperative the Columbia Station and the hydro plant are equipped with cellular phones.

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### Article 407

Within 180 days of license issuance, the licensee shall file for Commission approval a plan, developed in consultation with the Wisconsin Department of Natural Resources and U.S. fish and wildlife Service, for the passage of large woody debris that collects near the project intake into the reach of river blow the project dam to improve fish habitat downstream of the project dam.

### Plan to Pass Woody Debris

Large woody debris can provide important habitat for a variety of aquatic organisms including fish and macroinvertebrates. This is especially true in aquatic systems that lack natural bathymetric structure. Therefore, it is important that large woody debris be allowed to pass through the river system as a natural process.

## Passage Plan

Woody debris typically collects against the intake area of the powerhouse and on other portions of the dam following periods of high flows. These flow events normally occur during the spring and fall and occasionally after large storm events within the river basin. It is part of the existing operation and maintenance routine at the Prairie du Sac Hydroelectric Project for Plant staff to manually pass such debris downstream as necessary. This task is accomplished by physically dragging woody debris through the water to a log chute located at the east side of the powerhouse where it is passed downstream. Other organic debris, such as leaves and aquatic vegetation, is collected from the trash racks on a weekly basis when the lake is void of ice and is also passed downstream. The frequency cleaning the trash racks also tends to increase with periods of high river flows. Wisconsin Power & Light Company proposes to continue this practice in order to comply with this License Article.

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#### Article 410

Within 180 days of license issuance, the licensee shall, in consultation with Wisconsin Department of Natural Resources (WDNR) and U.S. Fish and Wildlife Service (FWS), develop a plan to monitor purple loosestrife (Lythrum salicarla) and Eurasian water milfoil (Myriophullum spicatum) in project waters. The purpose of the plan is to assist the WDNR and FWAS in controlling the spread of these two nuisance species. The plan shall include, but not be limited to: (a) the method of monitoring, (b) the frequency of monitoring, (c) a provision to cooperate in the control/elimination of these vegetative species if deemed necessary by the agencies, and (d) documentation of transmission of monitoring data to WDNR and FWS.

#### **Nuisance Plant Control Plan**

Purple loosestrife and Eurasian water milfoil have generated attention from natural resource agencies because of the threat they pose to native plant and animal communities. An effective monitoring program is essential to minimizing the spread of these species and detecting early invasions greatly enhances the ability for implementation of a successful control program. The following describes Wisconsin Power and Light Company's (WP&L) plan to monitor purple loosestrife and Eurasian water milfoil within the project boundary.

### **Monitoring Plan**

Two observers will conduct surveys by boat and will entail slowly motoring along the impoundment shoreline and the shoreline of islands. All waters and wetlands within the project boundary also will be surveyed. Areas of the impoundment that support submerged aquatic macrophytes will be surveyed for Eurasian water milfoil.

Monitoring will be conducted on an annual basis for the first three years after FERC approval of this plan with surveys typically occurring between July 25 and August 10 unless seasonal weather conditions affect peak blooming times. Survey dates would be adjusted accordingly in such cases. Based on the first three years of survey results, the necessity for and/or the frequency of subsequent surveys will be determined in consultation with the appropriate resource agencies.

Occurrences of purple loosestrife and/or Eurasian water milfoil will be detailed on a map and the size of the population will be noted. For each purple loosestrife stand, the stem density and plant density will be determined. Sampling and measuring methodologies may be modified according to stand characteristics but will be sufficient to document the character of each stand.

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Eurasian water milfoil surveys will entail visually searching the water for submerged vegetation. The presence/absence of Eurasian water milfoil will be determined by dragging a rake through the vegetation bed. If milfoil is encountered the species will be verified and a determination of relative abundance and spatial coverage will be documented.

Results of each monitoring event will be transmitted to the FWS and WDNR within 60 days of the survey date.

#### **Control of Existing Colonies**

Since it is advisable to remove purple loosestrife plants at the earliest stage of infestation, appropriate measures will be taken to physically remove small colonies (1-5 plants) during each survey event on undeveloped shorelines owned by WP&L. Based on the survey results and consultation with the WDNR and FWS, other control methods may be warranted. Examples of control methods could include approved herbicide treatment or biological control by introducing specified insects. WP&L will cooperate with the agencies to control or eliminate purple loosestrife and Eurasian water milfoil on Licensee-owned property within the project boundary upon reasonable requests from the FWS and the WDNR.

Most of the project boundary is surrounded by private property. Therefore, the most effective control scenario would involve individual riparian owners removing purple loosestrife plants occurring on their property. As such, WP&L will post information regarding purple loosestrife and Eurasian water milfoil identification and control measures on bulletin boards located at WP&L recreational sites. This information will be comprised of educational material already developed by the natural resource agencies.

#### **Documentation of Submittal**

WP&L will provide documentation to the Federal Energy Regulatory Commission by December 31<sup>st</sup> of each survey year, indicating that monitoring data has been transmitted to the resource agencies.

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# Appendix A

**Meeting Minutes** 

#### **Meeting Minutes**

## Prairie du Sac Hydroelectric Project – FERC No. 11162 Licensee/Resource Agency License Compliance Meeting October 29, 2002

### Alliant Energy

Attending: Alliant Energy (Owner)

Heidi Rahn - Environmental Consultant

Doug Hau - Hydro Manager

Bruce Greer - Manager Environmental Services

Natural Resources Consulting, Inc. (License Consultant)
Bill Poole – Senior Environmental Scientist

Wisconsin Department of Natural Resources

Pam Biersack - waterway/Wetland Permitting

Tim Larson – Fisheries

Kurt Welke - Fisheries

Gordon Stevenson - Lower Wisconsin River Supervisor

Patrick Kaiser - Wildlife

U.S. Fish & Wildlife Service

Janet Smith – Supervisor

Natural Resource Conservation Service

J. Eric Allen – Soil Conservation Technician

River Alliance of Wisconsin Monica Gross

- 1. The purpose of the meeting was to discuss License Article requirements that involve the need for consultation with the specified resource agencies prior to developing specific Article-related plans. More specifically, the meeting involved discussions related to developing monitoring/management plans for License Articles 403,404, 407, and 410.
- 2. Bill Poole presented an overview of the License Article compliance process and the role the agencies will play in developing the monitoring/management plans. Bill also indicated that due to a number of reasons, including scheduling conflicts with the meeting participants, that plans for the above-mentioned Articles would not likely be completed by the Federal Energy Regulatory Commission (FERC) imposed deadline of December 27, 2002. Therefore, a request for extension of time will need to be made to FERC. The resource agencies indicated that they

would support such a request since consultation is progressing and the draft plans will be forthcoming for agency review.

- Bill Poole distributed copies of the project boundary map and indicated that the proposed monitoring/management plans would be confined to areas within the project boundary.
- 4. The meeting consisted of Doug Hau leading a tour of the hydroelectric facility. At various points of interest such as the control room, electronic headwater gage, intake area, log chute and tailrace area, representatives of Alliant Energy (Alliant) and Natural Resources Consulting, Inc., described how they intended to develop the Operation Compliance Monitoring Plan and Woody Debris Management Plan. Discussions included the proposed location of installing staff gages and the method of passing woody debris downstream. Bill Poole described the conceptual plan for monitoring dissolved oxygen during the critical summer months, the proposed locations for installing monitoring equipment, and testing the use of the vacuum breakers as a means re-oxygenating low D.O. water. Also, Bill indicated that he would be having a separate meeting with Dave Marshall of the WDNR to discuss details of the D.O. plan.
- 5. Operation Compliance Monitoring. Discussions resumed in the meeting room where Bill Poole explained that the Operation Compliance Monitoring Plan would consist of installing two staff gages on the upstream side of the dam (one near the intake and one near the canoe portage) and one in the tailrace that would be visible from the parking area. In addition, the electronic gages will be used to record average hourly headwater and tailwater elevations. Electrical generation and water discharge would also be recorded. This information would be available to the agencies within 48 hours upon request.

The agencies indicated that the proposed approach would provide the necessary compliance data. However, the WDNR indicated that they would like to see some means of providing the compliance data in a "real time" form that could be accessed via the internet. The WDNR suggested that making this information readily accessible could be useful to the agencies when responding to public complaints. The FWS indicated that this could be a form of public outreach and may be more appropriate in the context the recreation plan but would be nice to have nonetheless.

Alliant staff expressed potential security concerns related to providing public access to the hydro plant operating system. Also, there may be limitations with the operating software that won't allow a means of providing this information in a "dial-up" format. Alliant will have their computer support staff research the feasibility of this request.

The FWS asked how flows will be passed downstream during a plant outage and that a description of such measures be included in the plan. Alliant explained that

the spillway gates would be manually opened to pass flows in the event of a plant outage and agreed to include such language in the plan.

- 6. Woody Debris Plan. Bill Poole indicated that the plan would consist of Alliant staff physically floating/dragging woody debris across the face of the dam to a log chute located on the east side of the powerhouse. Other organic debris that collects on the trash racks is passed through the log chute as well. The resource agencies concur with the proposed Woody Debris Management Plan as described during the facility tour.
- 7. Purple Loosestrife/Eurasian Water-milfoil Monitoring Plan. Bill Poole described the proposed method of annually surveying for purple loosestrife and Eurasian water-milfoil. He indicated that an annual report would be provided to the WDNR and FWS summarizing the survey results. The plan would also include potential control methods for each species should the resource agencies determine that control measures are necessary. In addition, Bill explained some of the limitations regarding implementing control measures such as the extent of private riparian ownership around the project boundary.

The resource agencies encouraged the removal of any purple loosestrife plants sooner than later. The FWS suggested implementing a means of involving the local public to participate in the eradication of this species.

Kurt Welke (WDNR) suggested that we include a monitoring plan for zebra mussels as well. Alliant indicated that they have already implemented zebra mussel monitoring. Doug Hau will look into what the plan currently entails. However, such a plan was not recommended by FERC or required by the new license and that the focus at this time was to comply with the requirements of Article 410.

- 8. Heidi Rahn distributed copies of the Riverland Conservancy map and briefly explained that there are limited upland areas within the project boundary for land management and wildlife management purposes. However, Alliant helps support land management and wildlife management efforts on the Riverland Conservancy property that is located adjacent to a portion of the project boundary.
- 9. The meeting concluded with discussions regarding the next steps that would be taken for license compliance. Steps included: (1) draft a letter to FERC requesting a deadline extension for License Articles 403,404, 407, and 410; (2) investigate the implications of the October 11, 2002, FERC Order on Rehearing and Amending License regarding fish passage and protection measures: (3) prepare draft conceptual plans for the remaining License Articles for agency review prior to the next meeting, and (4) schedule another meeting in January to address the remaining License Articles. The meeting participants agreed to provide availability information to Bill Poole and he will coordinate scheduling the meeting.

## **Attendance List**

Unofficial

# Prairie du Sac Hydroelectric Project – FERC No. 11162 License/Resource Agency License Compliance Meeting October 29, 2002

0	Name	Address	Phone #	Affiliation
e-mail — Janet_smith Ofus.gov	Janet Smitz	105 Challenger Court, Green Bay	920 465-7401	U.S. KiEL & Wildlife Service
<b>9</b> (0)	Kurt Weike	3911 Fish Hatchery Fikhora	608 273-5946	WI DIR FISHERIES
	Tim Larger.	N3344 STABLES Kd Poynthe	608 635-8122	W. DASK Fisheres
	Pam Biersach	3711 Fish Hatchen Read Fitchburg	1.08-275-3282	WDAIR Western / Wortend Pen
	GORDON STEVENSON	1500 N. Johns St. Delgarite	608-935-1957	W.DM? - Lowe - Wis Supy
	J. Frie Allen	505 Epphysist, Barabon	608-355-4420	NKCS
	Heidi Raha		4583214	Alliant Grerga
	Dove Han	ADS w:	356-0646	Alliast Every
	PATRICK KAISER	N3344 Stellin Rel , Payeth WI	(608) 635-8123	WONR
	Bruce Greec	4902 North Biltmore 'Larken	608-2458-3948	Alliant Energy - Wisconin Powerel
grosiyles@	Monica Gross	4421 Abbolt Av. S. Mds., MN 55410	612-922-5356	River Alliance of Wisconsin
netzerc. no	Bill Poole	P.O. Box 128, Cottage Grove, WI		Natural Resources Consulting
		<u> </u>		

## **Meeting Minutes**

## Prairie du Sac Hydroelectric Project – FERC No. 11162 Licensee/Resource Agency License Compliance Meeting February 10, 2003

## Wisconsin Power & Light

Attending: Wisconsin Power & Light (Owner)

Heidi Rahn - Environmental Consultant

Doug Hau - Hydro Manager

Bruce Greer - Manager Environmental Services

Bill Skalitzky - Environmental Specialist

Natural Resources Consulting, Inc. (License Consultant)
Bill Poole – Principal Scientist

Wisconsin Department of Natural Resources

Pam Biersack - Aquatic Habitat/FERC Coordinator

Tim Larson - Fisheries

John Lyons – Fisheries

U.S. Fish & Wildlife Service

Janet Smith - Supervisor (via conference call)

Natural Resource Conservation Service

J. Eric Allen – Soil Conservation Technician

River Alliance of Wisconsin Monica Gross

- The purpose of the meeting was to discuss License Article requirements that
  involve the need for consultation with the specified resource agencies prior to
  developing specific Article-related plans. More specifically, the meeting involved
  a brief review and discussion of documents submitted for agency review related to
  developing monitoring/management plans for License Articles 403,404, 407, and
  410. In Addition, the meeting focused on the conceptual framework for
  developing monitoring/management plans for License Articles 405, 408, 409,
  411, 412, and 413.
- 2. Bill Poole presented an overview of License Article compliance, including the status of the Wisconsin Power & Light (WP&L) request for an extension of time to meet the Federal Energy Regulatory Commission (FERC) December 27, 2002 deadline for several of the Articles. Bill indicated that the

monitoring/management plans for Articles 403, 407 and 410 had been submitted to the agencies for review over 60 days prior to this meeting and that no responses have been received from the agencies to date. In addition, no response has been received regarding the plan for Article 404 that was submitted to the agencies on January 17, 2003.

Pam Biersach indicated that written comments from the Wisconsin Department of Natural Resources (WDNR) would be provided by the end of the week. However, Pam presented a synopsis of what the written comments would include. For example the WDNR comments regarding:

Article 403 includes a request for WP&L to establish a website that will provide "real-time" river flow (cfs), headwater and tailwater levels for the Hydroelectric Project. The stated purpose for this website is so the public and the agencies can obtain water level and flow information as needed and so that the WDNR can address flow-related complaints from the public. The WDNR indicated that a similar web site is available for several other Hydro Plants on the Wisconsin River. In addition, the WDNR would like more detailed information presented in the Compliance Monitoring Plan regarding the protocol to be followed in the event of a plant outage.

Various representatives of WP&L contended that "real-time" access to flow data was not necessary to demonstrate compliance with plant operation requirements and that a provision will be included in the Operational Compliance Monitoring Plan that requires WP&L to notify the WDNR, U.S. Fish and Wildlife Service (FWS) and FERC when there are deviations outside of the required operational limits. Doug Hau explained that flow information provided on the website of other hydro plants on the Wisconsin River was purely voluntary and not a License Article compliance requirement. In fact, the website includes a disclaimer indication the flow data is for informational purposes only and may not be accurate. In addition, WP&L expressed concern over releasing "real-time" information without verifying its accuracy prior to releasing it for public and agency use. There are also potential issues regarding website failures etc. that would make this a complicated component of the compliance monitoring requirements should FERC impose such a requirement.

Janet Smith suggested that this request might be more appropriate within the context of Article 413 (Recreation Plan).

WP&L agreed to include more detail regarding the protocol to be followed during a plant outage.

Article 404 includes a request for longitudinal and vertical dissolved oxygen (DO) and temperature monitoring in addition to the proposed use of upstream and down stream continuous monitoring data loggers and daily manual profile measurements at each data logger location. The WDNR would like to see more

detail in the monitoring plan regarding location of the monitoring equipment, frequency of data collection, timing of manual measurements, and a calibration log.

The WDNR would like a commitment in the DO monitoring plan for WP&L to evaluate other DO enhancement measures should the vacuum breaker test prove to be ineffective. They would also like to receive the vacuum breaker test results electronically.

WP&L agreed to provide more detail in the DO monitoring plan regarding the items listed above and to provide for evaluating other DO enhancement measures should the vacuum breaker approach not accomplish the desired results. Results of the vacuum breaker will be provided electronically as requested.

Article 407 includes a request to provide more detail regarding the frequency and seasonality of woody debris management at the hydro project.

WP&L agreed to provide the requested information.

Article 410 includes a request to include zebra mussel monitoring as part of the Article 410 plan.

Bill Poole explained that the guidance in License Article 410 was specific to monitoring nuisance plants and that zebra mussel monitoring was not an issue during the licensing consultation process nor was it addressed as an issue in the FERC-prepared Environmental Assessment. He suggested the agencies should make a formal request for such monitoring requirements to FERC if they believe it is necessary at this time.

Janet Smith suggested that this issue may be better addressed under License Article 408 (Aquatic Resources Enhancement Plan) and the WDNR agreed.

3. The meeting proceeded by discussing the License Articles with monitoring/management plan deadlines of July 27, 2003. Bill Poole distributed draft plans associated with License Articles 406, 408, 409, 411, 412, and 413 and proceeded to describe the conceptual framework of each plan. He explained that WP&L concurs with the requirements of Article 405 (Planned Impoundment Drawdown Plan), as presented in the License, requiring notification to and consultation with the resource agencies prior to a planned impoundment drawdown.

The agencies indicated that they would like to see procedures regarding how and when they would be notified incorporated into the plan.

WP&L agreed to provide such procedures in the plan.

#### 4. Article 406 - Fishways Provision

Doug Hau explained that WP&L is contesting the subsequent FERC order to provide fish passage through appropriate legal procedures and that we would refrain from discussing this matter further at this meeting.

The agencies agreed and requested that WP&L keep them informed of the legal proceeding.

#### 5. Article 408 - Aquatic Resources Enhancement Plan

Bill Poole explained that the enhancement plan would entail providing an annual contribution of \$28,500, as recommended in the FERC-prepared Environmental Assessment, to the resource agencies to be applied toward a fish/aquatic resources enhancement fund in lieu of developing specific fish protection and passage measures. WP&L assumed that such funds would be used to fund studies and/or plans that the resource agencies deemed appropriate to protect and enhance the aquatic resources within project waters.

Monica Gross and the agency representatives indicated that they would like to be able to manage the fund and use it to explore potential fish passage and/or protection measures if deemed appropriate. In addition, they would like the plan to outline a framework for making decisions regarding distribution of the financial contribution and a process for coordinating and implementing various aquatic enhancement/management measures.

Bill Poole indicated that the plan could be designed to accommodate the agencies request to use the annual fund for aquatic resource enhancement including fish passage if so desired. Doug Hau asked if the agencies had examples of similar fund coordination and process implementation agreements.

Monica Gross and Janet Smith agreed to provide examples of similar settlement agreements.

Bill Poole informed the attendees that the WDNR had relocated mussels from the tailrace and downstream reach of the river to areas above the dam as part of a nearby bridge construction project. In the process of this relocation effort the WDNR was not able to locate an adequate number of fawnsfoot mussels. Bill suggested that the mussel reintroduction issue should be revisited and the plan modified to reflect current mussel populations in the project area.

The agencies agreed that preparing a plan to relocate fawnsfoot mussels was no longer appropriate and that the mussel reintroduction topic should be addressed separately during consultation for the overall aquatic resources enhancement plan.

#### 6. Article 409 - Bald Eagle Management Plan

Bill Poole explained that the presence of bald eagles within the vicinity of the Prairie du Sac dam is primarily limited to winter and that they are attracted to the open water and feeding opportunity created by the dam. Documentation of eagles nesting in the general geographic area has occurred in recent years. However, there are no eagles nesting within the project boundary. In fact, due to the limited amount of land and eagle nesting habitat within the project boundary, the opportunity for implementing bald eagle protection measures is also limited.

Therefore, in an effort to promote local bald eagle awareness and education WP&L has provided support, including informational signage, brochures and financial assistance to the Ferry Bluff Eagle Council (FBEC), a local non-profit eagle conservation organization. As part of the bald eagle protection plan WP&L proposes to continue providing support to the FBEC and will work with downstream riparian owners, to the extent possible, to protect eagle perching/loafing trees along the downstream river bank.

The agencies agreed that WP&L has limited ability to implement bald eagle protection measures on its own due to the limited eagle habitat within the project boundary and supported the concept of continued support of the FBEC. Tim Larson mentioned that there have been cases of eagles dying within the Wisconsin River basin and that efforts were under way to determine the cause. The agencies felt it would be prudent to mention this situation in the eagle protection plan.

WP&L agreed to include mention of the eagle deaths.

#### 7. Article 411 - Wildlife Management Plan

Bill Poole explained that the majority of the upstream shoreline is in private ownership and developed with homes, resorts, restaurants, etc. Land and subsequently wildlife habitat within the project boundary is limited to several small islands located near the upstream reaches of the project impoundment and riparian wetlands adjacent to Whalen Bay and Galus Slough. Therefore, within the limited habitat, WP&L proposes to install several artificial waterfowl nesting structures and bat houses. WP&L will consult with the WDNR as to the appropriate number, design and placement of such structures.

WP&L will coordinate an annual consultation meeting with the WDNR and FWS to discuss the status of the management plan and wildlife issues within the project boundary.

Pam Biersach indicated that Pat Kaiser, the WDNR wildlife manager, will be providing written comments and suggestions to be incorporated into the wildlife management plan.

#### 8. Article 412 - Land Management Plan

Bill Poole again explained the limitations of implementing a land management plan due to the limited amount of land within the project boundary. However, WP&L intends to retain ownership of the existing property within the project boundary and will maintain this property in its natural state. WP&L will follow the guidance outlined in Article 415 regarding the procedures for removing and/or transferring land from the project boundary if such action is proposed in the future.

The agencies acknowledged the limitations of such a plan and agreed that WP&L should follow Article 415 in the event of future changes in property ownership.

#### 9. Article 413 - Recreation Plan

Bill Poole described proposed measure to comply with the requirements of this article. The measures included:

- A table listing all recreational facilities related to the project will be included in the plan.
- WP&L proposes to construct a wheelchair accessible fishing platform on the west wing-wall immediately downstream of the powerhouse discharge. This design would eliminate the need to upgrade the ramp from the parking area to the shoreline and would provide a safer approach and universal access for fishing.

John Lyons agreed with this design approach and indicated that the proposed location was a very good area for fishing. John asked if WP&L had any plans to enforce unauthorized access to the east embankment of the dam.

Doug Hau indicated that measures would be taken from a security standpoint to control the unauthorized entry to this area near the dam.

- WP&L will provide for consultation with the Natural Resource Conservation Service and WDNR when designing and implementing erosion control measures associated with future recreation enhancements.
- WP&L will review the national standards established by the Architectural and Transportation Barriers Compliance Board pursuant to the Americans with Disabilities Act of 1990 and incorporate the guidelines for universal accessibility into the design of the new tailwater fishing platform. No other recreational enhancements or new facilities are being proposed at this time. Any future recreational facilities developed by WP&L will follow the procedure described above.
- Upon approval of the recreation plan by the FERC, WP&L proposes to design the new tailwater fishing platform and construct during the summer of 2004.

- WP&L has and will continue to inspect the tailwater access facilities as part of its routine maintenance of the hydroelectric facility. At a minimum, handrails for the staircase leading to the river's edge and the proposed tailwater fishing platform will be inspected annually and appropriate maintenance will occur as needed. In addition, the parking area for tailrace access is incorporated into the access for the hydroelectric plant and is maintained as necessary to provide safe passage.
- WP&L currently posts information at the tailwater access regarding special fishing regulations, eagle watching procedures, recreational safety warnings and notices for local public events such as the "eagle watching days." In addition to recreational facilities information other information such as the toll-free telephone number for daily flow conditions, will also be posted on the existing outdoor bulletin board. The toll-free telephone number will continue to be maintained for use by the general public. WP&L will develop a recreation information pamphlet for local public distribution that indicates the location and type of recreational resources associated with project waters around Lake Wisconsin and near the tailwater access.
- The FERC requires all licensees to collect and file information with respect to existing and potential recreation use at existing recreational facilities within the project area (18 CFR at §8.11). WP&L proposes to conduct such recreation use monitoring per FERC requirements. This information will be submitted to FERC every six years in the Licensed Hydropower Development Recreation Report, also referred to as Form No. 80 and will help to identify facilities that are under or overused. WP&L will consult with the appropriate entities (National Parks Service, WDNR, appropriate County and local government groups and recreational interest groups) periodically in the course of preparing the FORM 80 report per the FERC regulations, and will discuss any proposed actions to adequately maintain or enhance recreational use. The Form No. 80 report will include documentation of this process and consultation.
- As described in other License Article plans, land owned by WP&L within the project boundary is limited to several small islands located near the upstream reaches of the project impoundment and riparian wetlands adjacent to Galus Slough and Whalen's Bay. These lands are already available for passive recreational use. Therefore, there is no other land available to set aside for future recreation needs.

In the event that WP&L proposes a major recreational enhancement not required by the original license they will inform FERC of such measures prior to implementation Tim Larson indicated that the WDNR was in the process of acquiring additional shoreline property on Lake Wisconsin to develop another fishing access. However, this would not likely occur prior to completion of this recreation plan.

10. The meeting concluded with all parties agreeing to meet again on April 9, 2003 to finalize the management/monitoring plans having a FERC deadline of July 27, 2003.

## **Attendance List**

## Prairie du Sac Hydroelectric Project – FERC No. 11162 Licensee/Resource Agency License Compliance Meeting February 10, 2003

Name	Address	Phone #	Affiliation
Doug Han		608-356-0646	Alliant Energy
Bill SKALAZYY	Madison 60.	458.3108	Allight Evergic
Jinic Alles	Barches	608-355-4420	NRCS / USBA
Tim Lavsun	Payantie	1568 6358172	wdnrz
Heidi Rahn	Alliant merzy	458-3214	
Monica Gross	River Miance of WI Abbite	(612) 922-5356	R.A.W.
Broce Green	Alliant-WPol 4900	608-458-3948	Albent-WA
Pan Biersach	3911 Fish Hotchery Road Fitchber	608-275-3282	DUR
John Lyens	120. Box 128, Cottogo Grove 53577	608-221-6328	DNR
John Lyens	P.O. Box 128, Cottope Grove 53527	608-839-1998	NRC

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February, 2003

Prairie du Sac License Compliance

## Appendix B

Correspondence



### Natural Resources Consulting, Inc.

Specializing in wetland, biological and environmental permitting services

119 South Main Street, Suite D P.O. Box 128 Cottage Grove, Wisconsin 53527-0128

Phone: 608-839-1998 Fax: 608-839-1995

October 18, 2002

Ms. Janet Smith U.S. Fish and Wildlife Service 1015 Challenger Court Green Bay, WI 54311-831

Mr. Dave Marshall Wisconsin Department of Natural Resources 1350 Femrite Drive Monona, WI 53716

Mr. Pat Kaiser Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955 Ms. Pamela Biersach Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Mr. Tim Larson Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955

SUBJECT: Prairie du Sac Hydroelectric License Compliance Meeting

Dear Sir/Madam:

On behalf of Alliant Energy, this letter is to confirm our meeting scheduled for 10:00 a.m. on October 29, 2002. The meeting will be held at the hydroelectric plant, located at S9270A Dam Road (see attached map). The purpose of this meeting is to discuss specific Article requirements within the Original License (issued on June 27, 2002) that specify the need for consultation with the appropriate resource agencies prior to developing the various monitoring/management plans.

Please contact me if you have questions or require additional information regarding this meeting.

Regards,

Natural Resources Consulting, Inc.

William R. Pool

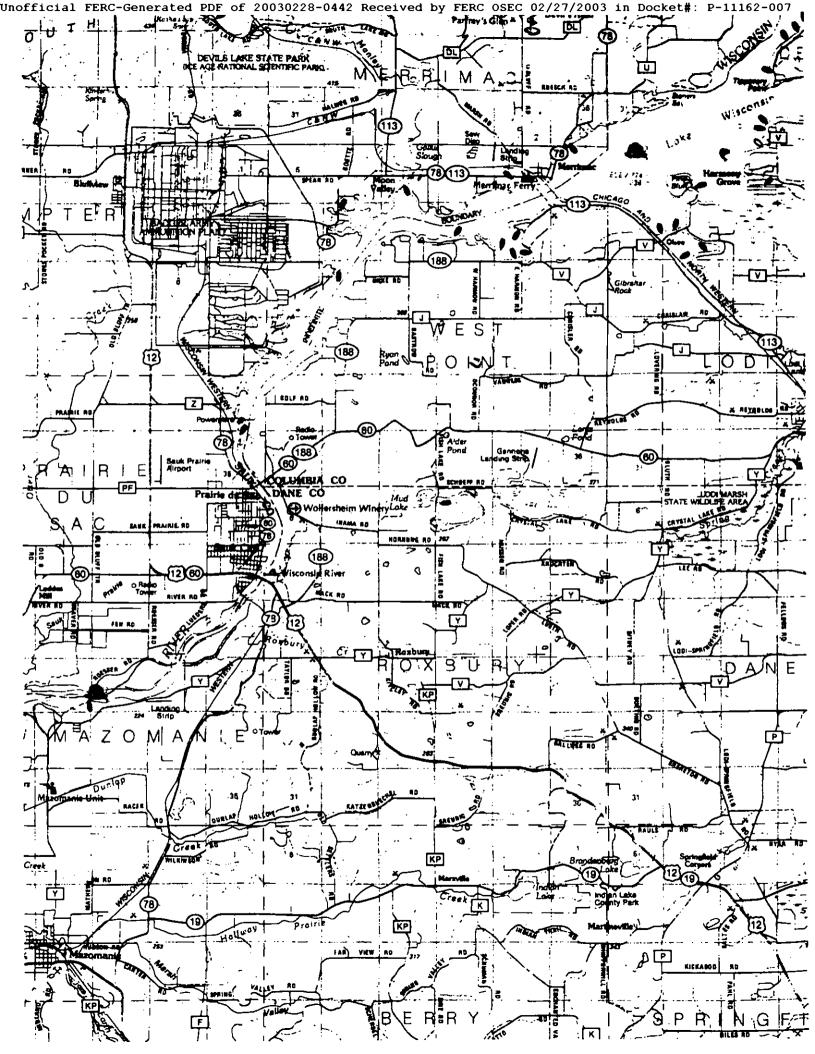
William R. Poole

Senior Environmental Scientist

Enclosure

Cc: Heidi Rahn - Alliant Energy

Doug Hau - Alliant Energy





### Natural Resources Consulting, Inc.

Specializing in wetland, biological and environmental permitting services

119 South Main Street, Suite D P.O. Box 128 Cottage Grove, Wisconsin 53527-0128 Phone: 608-839-1998

Fax: 608-839-1995

October 25, 2002

Mr. Mike Engleson River Alliance of Wisconsin 306 East Wilson Madison, WI 53703

SUBJECT: Prairie du Sac Hydroelectric License Compliance Meeting

Dear Mr. Engleson:

On behalf of Alliant Energy, this letter is to confirm our meeting scheduled for 10:00 a.m. on October 29, 2002. The meeting will be held at the hydroelectric plant, located at S9270A Dam Road (see attached map). The purpose of this meeting is to discuss specific Article requirements within the Original License (issued on June 27, 2002) that specify the need for consultation with the appropriate resource agencies prior to developing the various monitoring/management plans. License Article 408 (Aquatic Resources Enhancement Plan) specifies consultation with the River Alliance of Wisconsin for this particular subject.

Please contact me if you have questions or require additional information regarding this meeting.

Regards,

Natural Resources Consulting, Inc.

William R. Porole

William R. Poole

Senior Environmental Scientist

Enclosure

Cc:

Heidi Rahn - Alliant Energy

Doug Hau - Alliant Energy

## Agenda

## Prairie du Sac Hydroelectric Project - FERC No. 11162 Licensee/Resource Agency License Compliance Meeting October 29, 2002

- 1. Introductions
- 2. Overview of License Article Compliance
- 3. Description of Project Boundary
- 4. Facility Tour
- 5. Article 403 Operation Compliance Monitoring Plan
- 6. Article 404 Dissolved Oxygen Monitoring and Enhancement Plan
- 7. Article 407 Plan to Pass Woody Debris
- 8. Article 410 Purple Loosestrife/Eurasian Water-milfoil Monitoring Plan
- 9. Article 405 Planned Impoundment Drawdown Plan
- 10. Article 406 Fishways Provision
- 11. Article 408 Aquatic Resources Enhancement Plan
- 12. Article 409 Bald Eagle Protection Plan
- 13. Article 411 Wildlife Management Plan
- 14. Article 412 Land Management Plan
- 15. Article 413 Recreation Plan
- 16. The Next Step



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November 25, 2002

Ms. Janet Smith U.S. Fish and Wildlife Service 1015 Challenger Court Green Bay, WI 54311-831

Mr. Dave Marshall Wisconsin Department of Natural Resources 1350 Femrite Drive Monona, WI 53716

Mr. Pat Kaiser Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955 Ms. Pamela Biersach Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Mr. Tim Larson Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955

Subject: FERC Hydroelectric Project No. 11162-002

Proposed Monitoring/Management Plans

#### Dear Sir/Madam:

Enclosed are copies of the proposed monitoring/management plans regarding the requirements of License Articles 403-Operations Compliance Monitoring, 407-Woody Debris Passage, and 410-Purple Loosestrife/Eurasian Water-milfoil monitoring. Consultation with Dave Marshall of the Wisconsin Department of Natural Resources regarding Article 404-Dissolved Oxygen Monitoring and Enhancement Plan occurred on November 21, 2002. As a result of this meeting the plan associated with Article 404 will soon be submitted under separate cover.

In accordance with the License Articles, the resource agencies have a minimum of 60 days to review and comment on the above-mentioned plans. As discussed during our October 29, 2002 consultation meeting, the FERC deadline for submittal of these plans is December 27, 2002. Therefore, we will be submitting a request for extension to FERC in order to allow the agencies adequate time to review the proposed plans. Please review the attached extension request letter and, if you concur, please send separate letters to FERC from your agency endorsing this request.

FERC Project No. 11162-002 Proposed Monitoring/Management Plans

November 25, 2002

We plan to meet again in mind-January to finalize these articles and begin discussing the remaining articles. I will contact you with the meeting time as soon as I know everyone's availability.

Please contact me if you have questions or require additional information regarding the topics presented in this letter.

Regards,

Natural Resources Consulting, Inc.

William R. Poole

William R. Poole

Senior Environmental Scientist

Heidi Rahn - Alliant Energy Doug Hau - Alliant Energy Cc.

Attachments

#### Article 403

Within 180 days from the date of issuance of this license, in order to monitor the operating mode and impoundment elevations required in articles 401 and 402, respectively, the licensee shall develop, in consultation with the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service, an operations compliance monitoring plan, for Commission approval. This plan must include, but not be limited to, an implementation schedule provisions to: (1) install and maintain staff gages visible to the public on or near the Prairie du Sac dam; (2) maintain water level sensors to continuously record headpond and tailwater elevations; (3) record and maintain daily operating records, including headpond and tailwater elevations, hourly powerhouse and spillway discharge, and turbine operations; and (4) provide the Wisconsin Department of natural resources and the U.S. Fish and Wildlife Service operating records upon request.

## **Operations Compliance Monitoring Plan**

The Prairie du Sac hydroelectric facility is required to operate in a run-of-river mode for the protection of aquatic resources in the Wisconsin River. The licensee shall at all times act to minimize the fluctuation of the impoundment surface elevation by maintaining a discharge from the dam that approximates the sum of inflows to the project impoundment. As such, the licensee shall maintain a headwater surface elevation  $774.4 \pm 0.3$  ft. National Geodetic Vertical Datum.

#### **Staff Gages**

Wisconsin Power and Light Company (WP&L) proposes to install two staff gages on the upstream portion of the dam. One will be located on the upstream face of the intake area located along the west end of the dam. This gage will be visible to boaters on the project impoundment. The second gage will be installed on the east end of the dam adjacent to the canoe take-out/portage. This gage also will be visible from the water, as well as the golf course located on the east bank of the impoundment. These gages will be designed to indicate the upper and lower limits of the required operating bandwidth.

In addition to the upstream staff gages, WP&L proposes to install one staff gage on a tailrace pier visible from the west shore/parking area.

WP&L proposes to install the staff gages within three months of FERC approval of the plan provided that ice-free conditions exist. Otherwise, the gages will be installed as soon as safe climatological conditions exist.

#### Water Level Sensors

Operation of the Prairie du Sac hydroelectric facility was automated in 1995. As part of the automation system Druck brand, PTX Depth Pressure Transmitters were installed. These electronic headwater and tailwater transmitters were installed to continuously

provide indication of water levels to the plant operator and the control system. The headwater level sensor is located indoors in the control room and the tailwater sensor is affixed to the west wing-wall immediately downstream of the turbine discharge. These sensors respond to changes in headwater and tailwater to provide the necessary information for the operation of the 8 generating units and 3 of the 41 spillway gates in order to maintain the prescribed headwater elevation. If river flows exceed the capacity of the generating units and the automated spillway gates, then additional gates are manually opened to maintain appropriate headwater levels.

# **Daily Operating Records**

Average hourly headwater and tailwater levels, river flow (cfs), and turbine operation (generation) are recorded and printed out on a daily basis. These paper records are maintained in a logbooks and are available on site

# **Availability of Operating Records**

Upon request by the Wisconsin Department of Natural Resources (WDNR) and/or U.S. Fish & Wildlife Service (FWS), photocopies of pertinent pages of the operating logbook will be provided within 48 business hours of the request. In addition, WDNR and FWS staff are welcome to review operating records in person at the plant by appointment.

#### **Operation During Plant Outages**

In the event of an unplanned plant outage, the alarm system notifies the plant operators on site or remote operators when the plant is un-manned. At this point the plant operator will restart the turbines. If restarting the turbines is unsuccessful the appropriate number of spillway gates will be manually opened to pass flows downstream until normal operations can be restored. Plant staff is available for trouble calls at all times.

# Article 407

Within 180 days of license issuance, the licensee shall file for Commission approval a plan, developed in consultation with the Wisconsin Department of Natural Resources and U.S. fish and wildlife Service, for the passage of large woody debris that collects near the project intake into the reach of river blow the project dam to improve fish habitat downstream of the project dam.

# Plan to Pass Woody Debris

Large woody debris can provide important habitat for a variety of aquatic organisms including fish and macroinvertebrates. This is especially true in aquatic systems that lack natural bathymetric structure. Therefore, it is important that large woody debris be allowed to pass through the river system as a natural process.

#### Passage Plan

As woody debris collects against the intake area of the powerhouse and on other portions of the dam, it is part of the existing operation and maintenance routine at the Prairie du Sac Hydroelectric Project for Plant staff to manually pass such debris downstream. This task is accomplished by physically dragging it through the water to a log chute located at the east side of the powerhouse and passed downstream. Other organic debris that is collected from the trash racks is also passed downstream. Wisconsin Power & Light Company proposes to continue this practice in order to comply with this License Article.

## Article 410

Within 180 days of license issuance, the licensee shall, in consultation with Wisconsin Department of Natural Resources (WDNR) and U.S. Fish and Wildlife Service (FWS), develop a plan to monitor purple loosestrife (Lythrum salicarla) and Eurasian water milfoil (Myriophullum spicatum) in project waters. The purpose of the plan is to assist the WDNR and FWAS in controlling the spread of these two nuisance species. The plan shall include, but not be limited to: (a) the method of monitoring, (b) the frequency of monitoring, (c) a provision to cooperate in the control/elimination of these vegetative species if deemed necessary by the agencies, and (d) documentation of transmission of monitoring data to WDNR and FWS.

# **Nuisance Plant Control Plan**

Purple loosestrife and Eurasian water milfoil have generated attention from natural resource agencies because of the threat they pose to native plant and animal communities. An effective monitoring program is essential to minimizing the spread of these species and detecting early invasions greatly enhances the ability for implementation of a successful control program. The following describes Wisconsin Power and Light Company's (WP&L) plan to monitor purple loosestrife and Eurasian water milfoil within the project boundary.

## **Monitoring Plan**

Two observers will conduct surveys by boat and will entail slowly motoring along the impoundment shoreline and the shoreline of islands. All waters and wetlands within the project boundary also will be surveyed. Areas of the impoundment that support submerged aquatic macrophytes will be surveyed for Eurasian water milfoil.

Monitoring will be conducted on an annual basis for the first three years after FERC approval of this plan with surveys typically occurring between July 25 and August 10 unless seasonal weather conditions affect peak blooming times. Survey dates would be adjusted accordingly in such cases. Based on the first three years of survey results, the necessity for and/or the frequency of subsequent surveys will be determined in consultation with the appropriate resource agencies.

Occurrences of purple loosestrife and/or Eurasian water milfoil will be detailed on a map and the size of the population will be noted. For each purple loosestrife stand, the stem density and plant density will be determined. Sampling and measuring methodologies may be modified according to stand characteristics but will be sufficient to document the character of each stand.

Eurasian water milfoil surveys will entail visually searching the water for submerged vegetation. The presence/absence of Eurasian water milfoil will be determined by dragging a rake through the vegetation bed. If milfoil is encountered the species will be verified and a determination of relative abundance and spatial coverage will be documented.

Results of each monitoring event will be transmitted to the FWS and WDNR within 60 days of the survey date.

#### Control of Existing Colonies

Since it is advisable to remove purple loosestrife plants at the earliest stage of infestation, appropriate measures will be taken to physically remove small colonies (1-5 plants) on undeveloped shorelines owned by WP&L. WP&L will cooperate with the agencies to control or eliminate purple loosestrife and Eurasian water milfoil on Licensee-owned property within the project boundary upon reasonable requests from the FWS and the WDNR.

Most of the project boundary is surrounded by private property. Therefore, the most effective control scenario would involve individual riparian owners removing purple loosestrife plants occurring on their property. As such, WP&L will post information regarding purple loosestrife and Eurasian water milfoil identification and control measures on bulletin boards located at WP&L recreational sites. This information will be comprised of educational material already developed by the natural resource agencies.

#### Documentation of Submittal

WP&L will provide documentation to the Federal Energy Regulatory Commission by December 31<sup>st</sup> of each survey year, indicating that monitoring data has been transmitted to the resource agencies.



## Natural Resources Consulting, Inc.

Specializing in wetland, biological and environmental permitting services

119 South Main Street, Suite D P.O. Box 128 Cottage Grove, Wisconsin 53527-0128 Phone: 608-839-1998

November 25, 2002

Magalie Roman Salas Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Subject:

FERC Hydroelectric Project No. 11162-002

Request for Extension of Time

# Dear Magalie Roman Salas:

In accordance with the June 27, 2002, Federal Energy Regulatory Commission (FERC) Order Issuing Original License, Wisconsin Power and Light Company is required to submit four separate monitoring/management plans to FERC by December 27, 2002. The four plans in question pertain to the requirements of Articles 403-Operations Compliance Monitoring, 404-Dissolved Oxygen Monitoring and Enhancement, 407-Woody Debris Passage, and 410-Purple Loosestrife/Eurasian Water-milfoil monitoring and require consultation and review by the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (FWS) prior to submittal to FERC.

Due to scheduling conflicts among the various resource agency participants, the initial consultation meeting to discuss the above-mentioned License Articles was first held on October 29, 2002. A separate meeting was held on November 21, 2002, with the WDNR representative responsible for coordination of Article 404. He was on extended leave during the initial consultation meeting. Based on discussions and suggestions generated during these meetings, plans were developed for Articles 403, 407 and 410 and submitted to the agencies for review on November 25, 2002. A plan regarding Article 404 is being developed and will soon be submitted to the agencies.

In addition, the License Articles require a minimum of 60 days for the appropriate resource agencies to review the proposed monitoring/management plans. Therefore, in order to allow agency staff adequate time to review the plans and WP&L staff adequate time to react and respond to agency comments, we hereby respectfully request an extension of 60 days (February 27) to submit appropriate plans for Articles 403, 407, and 410 and 90 days (March 27) to submit a final plan for Article 404.

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Magalie Roman Salas November 22, 2002 FERC Project No. 11162-002 Request for Extension of Time

I look forward to hearing from you regarding this request for extension of time. Please contact me at (608) 839-1998 if you have questions or require additional information.

Regards,

Natural Resources Consulting, Inc.

William R. Poole

William R. Poole

Senior Environmental Scientist

Cc. Heidi Rahn - Alliant Energy

Doug Hau - Alliant Energy Mari Nahn - Alliant Energy

Pam Biersach - WDNR

Janet Smith - FWS



# State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor Darrell Bazzell, Secretary Ruthe E. Badger, Regional Director South Central Region Headquarters 3911 Fish Hatchery Rd Fitchburg, Wisconsin 53711 Telephone 608-275-3266 FAX 608-275-3338 TTY 608-275-3231

December 20, 2002

Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Subject: FERC Hydroelectric Project No. 11162-002. Request for Extension of Time

Dear Ms. Salas:

We are in receipt of the draft plans for Articles 403 – Operations Compliance Monitoring, 404 – Dissolved Oxygen Monitoring and Enhancement, 407 – Woody Debris Passage, and 410 – Purple Loosestrife/Eurasian Water-milfoil monitoring, as required by the Federal Energy Regulatory Commission Order Issuing Original License.

Due to scheduling difficulties among the parties, we agree that a 60-day extension (February 27) is necessary in order to allow the agencies to respond and Alliant to put together appropriate plans as required by License Articles 403, 407 and 410. We also agree that a 90-day extension (March 27) will be necessary for Alliant to submit a plan for Article 404.

If you have any questions of WDNR with respect to this project, please feel free to call me at 608-275-3282.

Sincerely,

Pam Biersach

Aquatic Habitat/FERC Coordinator, Southcentral Region

CC: Janet Smith, USFWS

Bill Poole, Natural Resources Consulting





# Natural Resources Consulting, Inc.

Specializing in wetland, biological and environmental permitting services

119 South Main Street, Suite D P.O. Box 128 Cottage Grove, Wisconsin 53527-0128 Phone: 608-839-1998

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February 4, 2003

Ms. Janet Smith U.S. Fish and Wildlife Service 1015 Challenger Court Green Bay, WI 54311-831

Mr. Dave Marshall Wisconsin Department of Natural Resources 1350 Fermite Drive Monona, WI 53716

Mr. Pat Kaiser Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955

J. Eric Allen NRCS 505 Broadway, Room 232 Baraboo, WI 53913 Ms. Pamela Biersach Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Mr. Tim Larson Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955

Monica Gross River Alliance of Wisconsin 4421 Abbott Ave. South Minneapolis, MN 55410

SUBJECT: Prairie du Sac Hydroelectric License Compliance Meeting

Dear Sir/Madam:

On behalf of Alliant Energy, this letter is to confirm our meeting scheduled for 9:30 a.m. on February 10, 2003. The meeting will be held at the Alliant Energy office, located at 4902 North Biltmore Lane in Madison (see attached map). The purpose of this meeting is to finalize our discussion regarding License Articles 403, 404, 407, and 410, and initiate discussion regarding the remaining Article requirements within the Original License (issued on June 27, 2002) that specify the need for consultation with the appropriate resource agencies prior to developing the various monitoring/management plans.

Please contact me if you have questions or require additional information regarding this meeting.

Regards,

Natural Resources Consulting, Inc.

William R. Pool

William R. Poole

Senior Environmental Scientist

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# Enclosure

Cc: Heidi Rahn – Alliant Energy Doug Hau - Alliant Energy

# Agenda

# Prairie du Sac Hydroelectric Project - FERC No. 11162 Licensee/Resource Agency License Compliance Meeting February 10, 2003

#### Introductions

#### Overview of October 29, 2003 Meeting

# License Article Plans Submitted for Agency Review (Due to FERC by 02/27/03)

- Article 403 Operation Compliance Monitoring Plan
- Article 404 Dissolved Oxygen Monitoring and Enhancement Plan
- Article 407 Plan to Pass Woody Debris
- Article 410 Purple Loosestrife/Eurasian Water-milfoil Monitoring Plan

# Remaining License Article Plans (Due to FERC by 07/27/03)

- Article 405 Planned Impoundment Drawdown Plan
- Article 406 Fishways Provision
- Article 408 Aquatic Resources Enhancement Plan
- Article 409 Bald Eagle Protection Plan
- Article 411 Wildlife Management Plan
- Article 412 Land Management Plan
- Article 413 Recreation Plan

## The Next Step

# State of Wisconsin

# CORRESPONDENCE/MEMORANDUM -

DATE:

February 14, 2003

**FILE REF: FERC No. 11162-002** 

TO:

Bill Poole, Natural Resources Consulting

FROM:

Pam Biersach, Aquatic Habitat Coordinator

SUBJECT: WDNR response to proposed Monitoring/Management Plans for Articles 403, 404, 407, 410

#### Article 403 – Operation Compliance Monitoring Plan

Availability of Operating Records - The Department believes that a website should be established which will have "real-time" river flow (cfs), headwater and tailwater levels. This would enable the public and the agencies, including the FERC, 'up-to-date' information on water levels and flows. This would prevent/minimize complaint calls to the agencies and subsequent interpolation and clerical work by Alliant in order to respond to requests for log information as a result of those complaints. This will only serve to save staff time and resources as time goes on.

Other Hydro dams along the Wisconsin River already post this information through a link located at the Wisconsin Valley Improvement Company website. At our last meeting on February 10, 2003, it was Alliant's position that although technically feasible, there was a concern about compliance if the website should crash. It would be acceptable if Alliant were to write into the plan that should the website crash, appropriate measures would be taken to restore the site as soon as practicable. There was also a concern regarding the accuracy of the data that would be placed on the website. It was mentioned during the meeting that the data would need to be run through a program in order to "truth" the data before it was posted. The data update intervals could coincide with the time it would take for the program to truth the data. After reviewing other websites containing dam and stream flow information, it appears this could be done anywhere from 10 minutes to a several hours.

In addition, we need to see more logistical information relative to 'Operation During Plant Outages'. For example, what type of system notifies the plant operators when the plant is unmanned? What are the shifts of the plant operators? How many are on duty? Which plant staff are available for trouble calls? How can they be contacted and by whom?

# Article 404 - Dissolved Oxygen and Enhancement Plan

There needs to be longitudinal (bank to bank) monitoring downstream of the dam. In addition, there also needs to be monitoring for the downstream effects of ammonia, etc. We discussed at our meeting on February 10, 2003, the fact that WDNR had previously believed we could fund a project to assist with this type of monitoring. Due to our current and future fiscal situation, there is little possibility that WDNR will be able to allocate funds to conduct the necessary monitoring. Our understanding was that Alliant wanted to know the parameters of the proposed monitoring so that it could make a decision whether to engage in the monitoring or provide funding for it to be completed. Attached is the "Proposal to Assess Dissolved Oxygen Levels Below the Prairie du Sac Dam," written by Dave Marshall, Water Resources Specialist. Since understanding the downstream DO levels can only help Alliant with other compliance requirements, we hope this proposal will meet the needs of all parties.

Tailrace DO Monitoring – What will be the frequency of observation? When the measurements are taken each day, they need to have a diurnal component. For example, don't limit them to a mid-afternoon



measurement – they should be taken at critical times, such as early morning. A calibration log should be maintained, as well. The measurement locations should be done along a transect in order to be representative of the entire condition. The current proposal does not provide for the entire water column, laterally or vertically. If a double check is done by hand, it should be all along the structure and at critical times.

Evaluate Vacuum Breakers for Oxygen Injection – It's already been stated that the efficacy of using the vacuum breakers isn't ensured. What other methods were considered? What were the pros and cons of each? We would also like Alliant to include a statement in the plan that recognizes their commitment to evaluate and implement other options if the vacuum breaker method proves incapable of providing the desired results.

Implementation Schedule – The results from the vacuum breaker test should be provided to the resource agencies online.

A study design for DO needs to be put forth. We recommend contact with John Sullivan out of the LaCrosse DNR office (phone 608-785-9995). John has monitored dams on the Mississippi River for years and could suggest some options for appropriate and effective monitoring designs.

### Article 407 - Plan to Pass Woody Debris

How often is the woody debris dragged to the log chute? We realize it's on an "as needed" basis, however, it is appropriate to provide enough information for the agencies to understand when and how often that usually is throughout a calendar year.

Since Pat Kaiser was unavailable for our meeting on Monday, February 10, I have included his preliminary comments for inclusion in Articles 409, 410 and 411.

#### Article 409 - Bald Eagle Protection Plan

Monitoring for "eagle usage" should be included as well as a plan for nesting opportunities since the population appears to be on a gradual increase over the years.

Alliant should also acknowledge the concern over the "potential" effect of eagle deaths related to eagle feeding on shad. Attached is an email between DNR Biologists Tim Larson and Susan Marcquenski regarding more specific information.

# Article 410 - Purple Loosestrife/Eurasian Water-milfoil Monitoring Plan

Since Purple loosestrife is present on numerous islands in the river basin and islands of the Lake Columbia, what work activities will be implemented to reduce the spread, control the spread, or eliminate the plants? For example, implementing biological control by insect hosts.

#### Article 411 - Wildlife Management Plan

A monitoring plan should be included to document the "fall" and "spring" waterfowl usage of Lake Wisconsin to record abundance and locations of use. Maybe somehow incorporate guidelines to reduce boat traffic in such locations during peak weeks of usage.

Submergent wetland plants (like wild celery) that are highly preferred waterfowl foods in shallow water locations of the lake; can these areas somehow be protected from increased water turbidity.

Evaluate the potential for "osprey" use (maybe nesting) of the lake area in areas that may have reduced or limited public activity. If there are any sites; this could mean establishing some artificial nesting platforms.

Create upland nesting habitat for waterfowl species (mallards, bluewinged teal, woodducks) that use some of the shallow wetland habitat of the Lake Wisconsin basin. Maybe purchase some highly erodible uplands that are marginal for farming adjacent to the shallow wetland areas (sloughs and back bays) and have the fields planted to native prairie habitat.

If you have any questions regarding the comments provided in this memo, please give me a call at 608-275-3282.

CC: Janet Smith (USFWS), Monica Gross (River Alliance), Tim Larson, Andy Morton, Gordon Stevenson, Dave Marshall, Pat Kaiser, John Lyons, Kurt Welke.

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# Natural Resources Consulting, Inc.

Protest Name:	Projete du See Lineaux Complianes	Deter	3/94/03
Project Name:	Prairie du Sac License Compliance	<del>_</del>	2/24/03
Project #:	02-131 D. Di	Time:	13:30
Spoke With:	Pam Biersach	Of:	Wisconsin DNR
Telephone #: Regarding:	(608) 275-3282		
	Changing reference from Alliant to WP&L		
X I Placed Call	□ Party Called □ R	teturned My Call	☐ Left Message
	4, 2003 comment letter to WP&L the		ment of Natural Resources
(WDNK) deterred	d to the project owner (WP&L) as Al	mant.	
I (Bill Poole) call	led Pam to request permission for us	to change the refer	ence she made from Alliant t
WP&L and she as	greed.		
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February 26, 2003

Ms. Janet Smith U.S. Fish and Wildlife Service 1015 Challenger Court Green Bay, WI 54311-831

Mr. Dave Marshall Wisconsin Department of Natural Resources 1350 Femrite Drive Monona, WI 53716

Mr. Pat Kaiser Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955 Ms. Pamela Biersach Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Mr. Tim Larson Wisconsin Department of Natural Resources N3344 Stebbins Road Poynette, WI 53955

Monica Gross River Alliance of Wisconsin 4421 Abbott Ave. South Minneapolis, MN 55410

SUBJECT: Prairie du Sac Hydroelectric License Compliance Submittal

Dear Sir/Madam:

In accordance with the Federal Energy Regulatory Commission FERC Order Issuing License and our subsequent request for an extension of time to submit, we are pleased to provide you with a copy of the License Compliance submittal regarding License Articles 403, 404, and 407. We look forward to refining the remaining license article requirements with you.

Please contact me if you have questions or require additional information regarding this submittal.

Regards,

Natural Resources Consulting, Inc.

William R Porle

William R. Poole Principal Scientist

Enclosure

Cc: Heidi Rahn - Alliant Energy

Doug Hau - Alliant Energy