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ORIGINAL

March 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
Submittal of Plan Regarding License Article 404

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 Article 404.

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

Regards,
Natural Resources Consulting, Inc.

William R. Poole
Principal Scientist

Enclosure

Cc. Bruce Greer - Alliant Energy
Doug Hau - Alliant Energy

Hydroelectric License Compliance

License Article 404

PRAIRIE DU SAC HYDROELECTRIC PROJECT
PRAIRIE DU SAC, WISCONSIN

FERC Project No. 11162

Prepared for

WISCONSIN POWER & LIGHT COMPANY

March 25, 2003

Natural Resources Consulting, Inc.
Specializing in wetland, biological and environmental permitting services

HYDROELECTRIC LICENSE COMPLIANCE
LICENSE ARTICLES 404

PRAIRIE DU SAC HYDROELECTRIC PROJECT
PRAIRIE DU SAC, WISCONSIN

FERC Project No. 11162

March 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

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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 a monitoring plan pertaining to License Article 404-*Disolved Oxygen Monitoring*. The license specifies that this plan shall be developed in consultation with the appropriate resource agencies and is 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 above-mentioned License Article was first held on October 29, 2002 (Appendix A). A separate meeting was held on November 21, 2003, with the Wisconsin Department of Natural Resources (WDNR) representative responsible for coordinating Article 404. He was on extended leave during October 29 meeting. Based on discussions and suggestions generated during these meeting, a draft plan was developed jointly with the WDNR and submitted to the agencies on January 17, 2003 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 plan and WP&L staff adequate time to react and respond to agency comments, WP&L requested an extension of 90 days (March 27, 2003) to submit this plan. 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 plan (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 404 – Dissolved Oxygen Monitoring Plan

WDNR Comments:

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 WP&L 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 WP&L 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.

WP&L Response:

WP&L and the WDNR jointly developed the initial draft of the DO Monitoring Plan that was submitted for agency review on January 17, 2003. Upon review of that draft plan the WDNR provided the additional comments listed above.

In accordance with the WDNR request for longitudinal monitoring downstream of the dam and a subsequent conversation with Dave Marshall, WPL revised the plan to include, in addition to the continuous monitoring, manual profiles of DO to be measured each business day (Monday – Friday) using a portable DO meter. These spot measurements will consist of recording three vertical measurements in the tailrace (one at each end of the tailrace and one associated with the location of the data logger) with measurements taken at the surface, mid-depth and bottom. The protocol should provide the longitudinal and vertical monitoring aspect of the tailrace as requested.

In regard to WDNR questions pertaining to the frequency of observation, the diurnal aspect of daily measurements and request for maintenance of a calibration log, the plan has been revised to include this level of detail.

WP&L provided clarification in the plan as to the process that would be followed should the vacuum breaker method of increasing tailwater DO prove to be inadequate, including evaluating other methods of increasing DO.

WP&L agrees to provide electronic copies of the vacuum breaker test results to the agencies.

WP&L is confused by the WDNR comment "A study design for DO needs to be put forth" since the initial draft plan submitted for agency review was developed jointly with the WDNR. WP&L believes the revised DO monitoring plan as presented below will be adequate for monitoring DO in the tailrace and addressing occurrences of substandard DO levels as required by License Article 404. WP&L proposes to evaluate the need for monitoring DO levels further downstream upon assessing results of the initial DO monitoring effort. Also, WP&L doesn't understand how monitoring DO levels further downstream can only help WP&L with other compliance requirements. WP&L is not aware of any other DO-related compliance issues.

D. LICENSE ARTICLE PLAN

Article 404

Within 180 days from the date of issuance of this license, in order to monitor and enhance dissolved oxygen (DO) concentrations immediately downstream of the project, the licensee shall develop a DO monitoring and enhancement plan, in consultation with the Wisconsin Department of Natural Resources and the U.S.

Fish and Wildlife Service, for Commission approval. This plan must include, but is not limited to, an implementation schedule, provisions to monitor DO concentrations immediately downstream of the project, provisions for an evaluation of the vacuum breakers using air and/or oxygen injection to increase DO concentrations in the project discharge during low-flow high-temperature periods, such as occur during June, July and August, and a schedule to provide the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service DO monitoring results.

Dissolved Oxygen (DO) Monitoring and Enhancement Plan

Water quality studies conducted in 1992, during the licensing process, indicated that DO concentrations at the project intake and in the tailrace occasionally fell below the state standard of 5mg/l during the summer months (generally July and August). The DO profiles conducted in the impoundment during this summer period revealed that DO concentrations were depressed at or near the bottom of the impoundment. Additional studies were conducted during August and September 1994. Results of this monitoring effort demonstrated that DO concentrations were generally greater than the 5-mg/l DO standard. During the 1994 study DO fell below the standard only 2 days and at depths greater than 20 feet or more. Therefore, due to the occurrence of low DO events, monitoring efforts are required to better document compliance with the state DO standard.

A preliminary study was conducted on July 31, and August 1, 1995 to evaluate the effect of operating the vacuum breakers as a means of increasing DO concentrations in water being discharged to the tailrace. Preliminary results were somewhat inconclusive and the overall effectiveness of such measures needs to be revisited.

Tailrace DO Monitoring

Continuous DO and temperature monitoring will be conducted during the critical summer months (mid-June -- mid-September) by deploying two automated data loggers, one immediately upstream of the intake area midway between the bottom of the intake wall and the lake bottom (~ 20 feet from the surface) and one at a mid-depth in the immediate tailrace. The data loggers will be programmed to record data at 15-minute intervals. Data will be retrieved (downloaded) and the data loggers will be serviced (probe cleaning, membrane replacement, routine diagnostic testing and recalibration) at least weekly during normal business hours (Monday – Friday). A calibration log will be maintained. In addition to the continuous monitoring, manual profiles of DO will be measured each business day (Monday – Friday) using a portable DO meter. These spot measurements will consist of recording a vertical upstream profiles at the same location of the data logger at 1-meter intervals from the surface to the bottom and three vertical measurements in the tailrace (one at each end of the tailrace and one associated

with the location of the data logger) with measurements taken at the surface, mid-depth and bottom. These profiles will be recorded in the morning (between 0700 and 0800) to account for the diurnal occurrence of low DO levels. This additional effort will be used to validate DO measurements recorded by the data loggers.

Evaluate Vacuum Breakers for Oxygen Injection

WP&L proposes to evaluate using the vacuum breakers as a means of introducing oxygen into water being discharged to the tailrace. The evaluation will be accomplished by using the DO monitoring data loggers deployed just upstream of the intake and in the tailrace to obtain a baseline correlation between upstream and downstream DO levels. When continuous tailrace DO monitoring results indicate concentrations at a level of 5.5 mg/l or less the vacuum breakers will be adjusted (opened) for a period of three hours in an effort to introduce oxygen into the passing water. Provided that the necessary conditions occur, this procedure will be conducted on three occasions for the purpose of replication. The tailrace data logger will be positioned to detect any substantial changes in DO levels resulting from use of the vacuum breakers.

If the vacuum breaker study proves this method to be ineffective at increasing tailwater DO, WP&L will conduct a literature review for other methods of increasing tailwater DO at hydroelectric facilities. Based on the information collected WP&L will assess the feasibility of testing and implementing such measures at the Prairie du Sac hydroelectric plant. This effort will be coordinated with Wisconsin Department of Natural Resources and the U.S. fish and Wildlife Service.

Implementation Schedule and Schedule to provide DO monitoring/evaluation results

After FERC approval of the monitoring and evaluation plan, DO monitoring will commence the following summer (mid-June—mid-September). The vacuum breaker test will occur on three separate occasions during the mid-June – mid-September monitoring period when continuous DO monitoring results indicate concentrations at a level of 5.5 mg/l or less. DO monitoring results will be provided to the appropriate resource agencies within 60 days following completion of each of the first three summer monitoring periods. Results from the vacuum breaker test will be provided to the appropriate resource agencies electronically and in hardcopy form within 60 days following completion of the third test replication.

Wisconsin Power and Light Company (WP&L) proposes to conduct the DO monitoring for a period of three years at which time WP&L will review the monitoring results with the appropriate resource agencies and determine if continuation of the monitoring effort is necessary or if the effort needs to be expanded further downstream.

Tailrace Ammonia Sampling

Although not requested under License Article 404 the WDNR indicated that there "needs to be monitoring for the downstream effects of ammonia, etc." Initial water quality sampling efforts conducted in 1992 to support the license application did not include an analysis of ammonia levels in the tailrace. Therefore, during each year of DO monitoring, WP&L will collect one grab sample from the tailrace during a low DO (below 5 mg/l) event and have it analyzed at an analytical laboratory for ammonia concentration. The results of this analysis will be included with the annual DO monitoring report.

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.

3. 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

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

Name	Address	Phone #	Affiliation
Janet Smith (e-mail — janet_smith@fws.gov)	105 Challenger Court, Green Bay	920 465-7401	U.S. Fish & Wildlife Service
Kurt Welke	3911 Fish Hatchery, Fitchburg	608 273-5946	WI DNR Fisheries
Tim La[illegible]	N3344 [illegible] Poynette	608 635-8122	Wi DNR Fisheries
Pam Biersach	3911 Fish Hatchery Road Fitchburg	608-275-3282	WDNR Waterway/Wetland Permits
Gordon Stevenson	1500 N. Johns St. Dodgeville	608-935-1957	W.DNR - Lower Wis Supv.
J. Eric Allen	505 [illegible], Baraboo	608-355-4420	NRCS
Heidi Rahn		458 3214	Alliant Energy
Doug Hahn	PDS WI	356-0646	Alliant Energy
PATRICK KAISER	N3344 Stebbins Rd., Poynette WI	(608) 635-8123	WDNR
Bruce Greer	4902 North Biltmore Lane, Madison	608-458-3948	Alliant Energy - Wisconsin Power & Light
Monica Gross (grosayles@netzero.net)	4421 Abbott Av. S., Mpls., MN 55410	612-922-5356	River Alliance of Wisconsin
Bill Poole	P.O. Box 128, Cottage Grove, WI	(608)-839-1998	Natural Resources Consulting

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

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 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 Hay		608-356-0646	Alliant Energy
Bill Skalitzky	Madison G.O.	458-3108	Alliant Energy
J Eric Allen	Baraboo	608-355-4420	NRCS / USDA
Tim Larson	Poynette	(608) 6358122	WDNR
Heidi Rahn	Alliant Energy	458-3214	
Monica Gross	River Alliance of WI 4421 Abbott	(612) 922-5356	R.A.W.
Bruce Greer	Alliant - WP&L 4902 Biltmore	608-458-3948	Alliant - WPL
Ron Biersach	3911 Fish Hatchery Road Fitchburg	608-275-3282	DNR
John Lyons	1350 Femrite Dr. Monona WI 53711	608-221-6328	DNR
Bill Poole	P.O. Box 128, Cottage Grove 53527	608-839-1998	NRC

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

Ms. Pamela Biersach
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

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

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

Mr. Pat Kaiser
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.

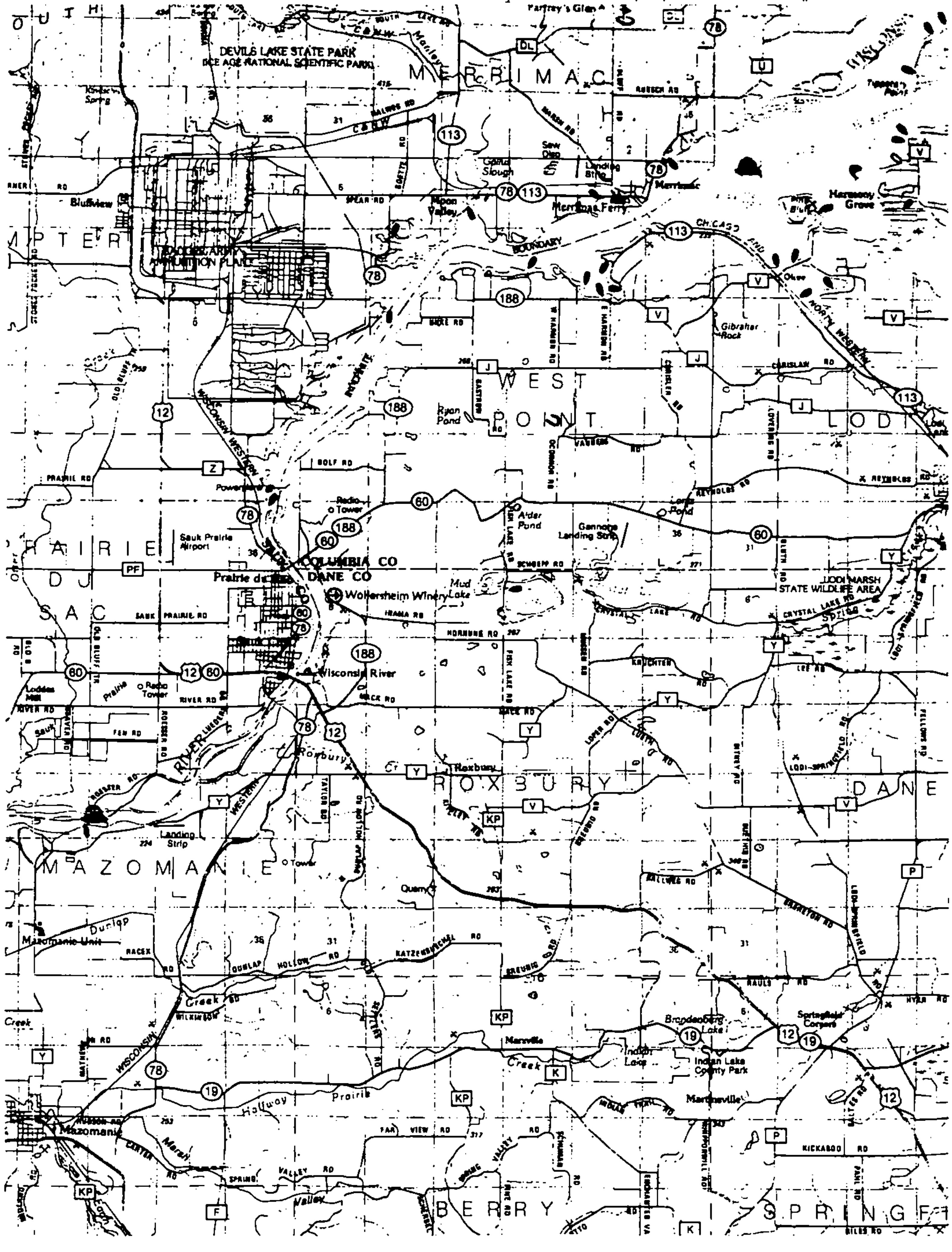
Regards,
Natural Resources Consulting, Inc.

William R. Poole

William R. Poole
Senior Environmental Scientist

Enclosure

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



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P.O. Box 128
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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. 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

Ms. Pamela Biersach
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

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

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

Mr. Pat Kaiser
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.

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

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

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 31st 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.

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
Fax: 608-839-1995

February 4, 2003

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

Ms. Pamela Biersach
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

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

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

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

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

J. Eric Allen
NRCS
505 Broadway, Room 232
Baraboo, WI 53913

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. Poole

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
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

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

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.

Proposal to Assess Dissolved Oxygen Levels Below the Prairie du Sac Dam

In a DNR memo (Water Resources Biologist David Marshall to Bob Hansis) dated January 9, 1992, dissolved oxygen monitoring was required as part of FERC re-licensing due to the past history of water quality standards violations and hypereutrophic nature of Lake Wisconsin. At that time, we recommended summertime early morning grab samples on a weekly basis using the Winkler titration method and/or YSI Model 57 dissolved oxygen-temperature meter. Ultimately, as part of the FERC monitoring effort, additional water quality standards violations were detected.

Since that time, technology has advanced to the stage where reliable automated dissolved oxygen-temperature and multi-parameter data logging instruments can be deployed insitu at reasonable costs. Yellow Springs Instruments (YSI) manufactures submersible units that measure dissolved oxygen, % saturation, pH, conductivity, TDS, depth (uncompensated) and temperature for approximately $4,500 per unit. BioDevices Corporation markets a dissolved oxygen-temperature data logger for approximately $2,000. Both companies, as well as other manufacturers of data logging instruments, provide user friendly software for calibration, data download and data storage.

Given the history of water quality problems, the unique nature of the resource and presence of threatended and endangered fishes within the tailrace area, further dissolved oxygen sampling should be conducted to better assess threats to these important biological resources. Ultimately, operational changes can be evaluated to reduce or eliminate further threats to the tailrace fisheries.

Coinciding with vacuum breaker and other mechanical and operational evaluations during the summer of 2003, and perhaps beyond, deployment of automated data loggers should be conducted at three locations below the Prairie du Sac dam. The data loggers should be deployed approximately equidistantly below the dam downstream to the Hwy 60 bridge (approximately 1.3 miles below the dam). Exact deployment locations would be determined based on specific site conditions affecting sample representation and instrument security. The goal is to determine how far water quality violations extend downstream of the dam. Reach assessment could be expanded if sampling determines that the sag point extends downstream of Hwy 60.

Specific quality assurance procedures are applicable to the type of instruments purchased. However, weekly data downloading, membrane replacements, probe cleaning, routine diagnostic testing and recalibrations should be conducted weekly or more frequently regardless of the instruments used. Backup systems including portable dissolved oxygen-temperature meters should be used for additional calibration checks and frequent discrete measurements for comparison with the insitu data loggers. Discrete should be taken daily at a minimum. Cross sectional channel measurements (at least 5 per site) should be collected to define the area of potentially low dissolved oxygen.

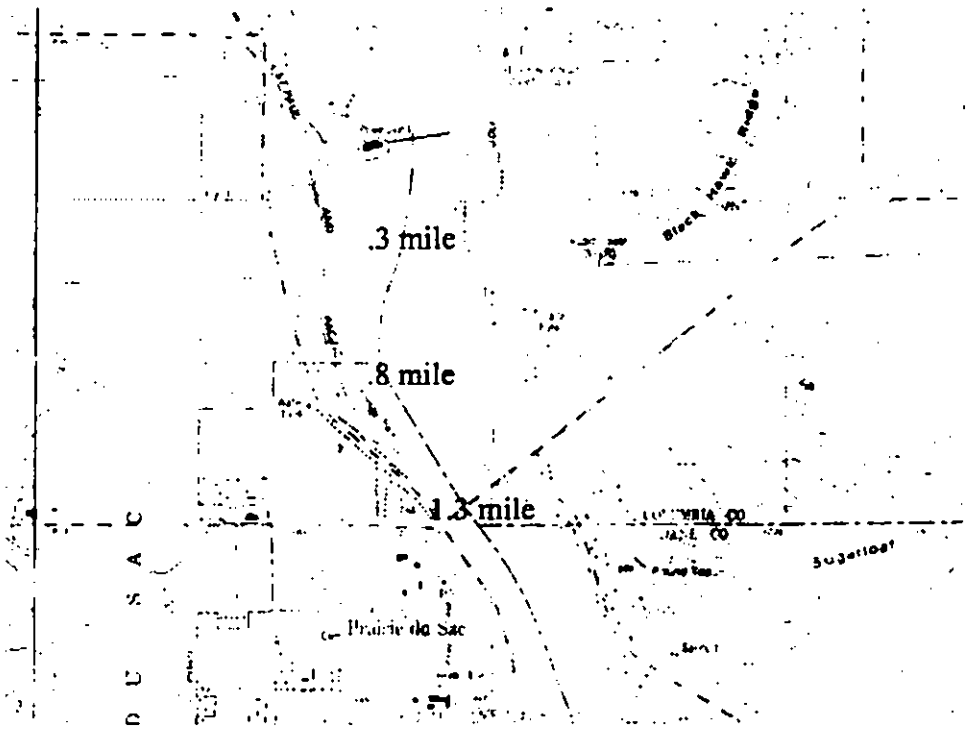
Records should compile information such as date and time of calibration, calibration results, and discrete measurement results. The overall effort should be well coordinated with tests conducted at the facility involving vacuum breakers or other proposed modifications.

Data loggers provide an opportunity for near-continous water quality monitoring throughout the summer months. Short periods of downtime would coincide with instrument maintenance, data downloading and recalibration.

Data loggers should be deployed along the power side of the channel. Structures enabling deployment include island (.3 mi. below) snags (.8 mi. below) and Hwy 60 bridge (1.3 mi. below).

Equipment required:

Boat and motor
Anchors, chains, locks and other hardware for data logger deployment
4 to 5 d.o.-temperature or multi-parameter data loggers.
At least one discrete dissolved oxygen meter and perhaps Winkler titration kit.



Natural Resources Consulting, Inc.

TELEPHONE CONVERSATION RECORD

Project Name:	**Prairie du Sac License Compliance**	**Date:**	**2/24/03**
Project #:	**02-131**	**Time:**	**13:30**
Spoke With:	**Pam Biersach**	**Of:**	**Wisconsin DNR**
Telephone #:	**(608) 275-3282**		
Regarding:	**Changing reference from Alliant to WP&L**		

X I Placed Call **☐ Party Called** **☐ Returned My Call** **☐ Left Message**

In the February 14, 2003 comment letter to WP&L the Wisconsin Department of Natural Resources (WDNR) deferred to the project owner (WP&L) as Alliant.

I (Bill Poole) called Pam to request permission for us to change the reference she made from Alliant to WP&L and she agreed.

Copy:

Signed: William R. Poole

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March 25, 2003

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Green Bay, WI 54311-831

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Mr. Pat Kaiser
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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 Article 404. 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. Poole
Principal Scientist

Enclosure

Cc: Bruce Greer – Alliant Energy
Doug Hau - Alliant Energy