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FEDERAL ENERGY REGULATORY COMMISSION

May 28, 2004

Ms. Magalie R. Salas, Secretary - Federal Energy Regulatory Commission
888 First St. NE
Washington, DC 20426

Re: *Addendum (May 2004) to the Water Quality Monitoring Plan
Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project -
FERC Project #2523, N.E.W. Hydro, Inc.*

Dear Ms. Salas,

Enclosed is the Addendum (May 2004) to the Water Quality Monitoring Plan Per License Article 405 for the Oconto Falls (Upper) Hydroelectric Project - FERC Project #2523, N.E.W. Hydro, Inc.

This Addendum identifies the monitoring equipment that will be used, digital information formats furnished with written submissions to agencies and the designated contact person(s) for each agency involved.

Sampling will begin on July 1, 2004 and continue through September 30, 2004 during this sampling year.

If you have any questions or suggestions, please feel free to contact me at (920) 293-4628 ext #15.

Thank you,

Steven Loeffler
Environmental Studies Manager
North American Hydro Holdings, Incorporated

Enclosure - as noted

Cc: Ms. Peggy Harding, FERC-CRO
Mr. Larry Thompson, USDOJ - U.S. Fish & Wildlife Service
Mr. Tom Meronek, WDNR Regional FERC Coordinator

ADDENDUM
(May 2004)

to the

Water Quality Monitoring Plan
Per License Article 405

for the

Oconto Falls (Upper) Hydroelectric Project
FERC Project # 2523
N.E.W. Hydro, Inc.

Oconto River, Oconto County, Wisconsin

Submitted By:
North American Hydro, Incorporated
116 North State Street
Neshkoro, Wisconsin 54960

May, 2004

Introduction

This Water Quality Monitoring Plan for the Oconto Falls (Upper) Hydroelectric Project, FERC Project # 2523, City of Oconto Falls, Oconto County, Wisconsin has been written in generic terms in order to encompass technological advancements and potential agency personnel changes during the 30-year term of license. Therefore, current equipment manufacturers, equipment model specifications and reference to specific Wisconsin Department of Natural Resources (WDNR), United States Department of the Interior – Fish and Wildlife Service (USFWS) and Federal Energy Regulatory Commission (FERC) agency personnel have purposely been excluded from this plan.

Prior to the execution of a Water Quality Study, the licensee will refine the Water Quality Monitoring Plan in consultation with the WDNR and the USFWS. The plan refinement will specify the sampling equipment to be used during the study period and the specific agency personnel to whom data and report submissions will be sent. It will be submitted in the form of an addendum to the Water Quality Monitoring Plan and will be sent to all designated agency personnel on or before May 31 of the sampling year in order to provide timely notice of the sampling event and reporting requirements.

**Water Quality Monitoring Plan
Per License Article 405**

for the

**Oconto Falls (Upper) Hydroelectric Project
FERC Project # 2523
N.E.W. Hydro, Inc.**

Oconto River, Oconto County, Wisconsin

Requirements for Studies and History

The Federal Energy Regulatory Commission (FERC), has stipulated as a requirement of the Oconto Falls (Upper) Hydroelectric Project License (Article 405), issued November 20, 1997, that a Water Quality Study shall be performed beginning five (5) years after license issuance and once every five (5) years thereafter for the term of the license. Article 405 also required that a monitoring plan should be filed with the Commission within one (1) year of license issuance.

On March 19, 1998 the Wisconsin Department of Natural Resources, in a letter to North American Hydro, Inc. commenting on the proposed Water Quality Monitoring Plan for the Oconto Falls (Lower) Hydroelectric Project (FERC Project No. 2689), recommended coordination for concurrent water quality studies with the Oconto Falls (Upper) Hydroelectric Project, located approximately 2000 feet upstream.

On May 18, 1998 the FERC granted a request by N.E.W. Hydro, Inc., submitted on March 25, 1998, for a one-year extension of all license article stipulated deadlines, extending the deadline for plan submission to November 19, 1999.

On November 19, 1998 the FERC approved the Water Quality Monitoring Plan for the Oconto Falls (Lower) Hydroelectric Project to commence in 1999 and once every five (5) years thereafter for the 30-year term of the license. The FERC additionally commented that the licensee may propose to begin water quality monitoring at the Oconto Falls (Upper) Hydroelectric Project in the year 2004 in order to run concurrently with the Oconto Falls (Lower) Hydroelectric Project water quality studies.

It is the intent of this plan to initiate water quality monitoring in the year 2004 and once every five (5) years thereafter for the term of the current license in order to execute water quality studies concurrently with the Oconto Falls (Lower) Hydroelectric Project Water Quality Monitoring Plan timeline.

Purpose of Studies

Article 405 of the license states that "The purpose of this monitoring plan is to ensure that releases from the Oconto Falls Project maintain the following state standards, *except when natural conditions prohibit attainment of the standards*: (1.) the DO shall not be lowered to less than 5 milligrams per liter at any time; (2.) the temperature shall not exceed 89° Fahrenheit at any time; and (3.) the pH shall be within the range of 6.0 and 9.0".

Study Sampling Periods

Study sampling will be conducted July 1, 2004 through September 30, 2004 and every 5th year interval thereafter for the term of the license. Study sampling will coincide with sampling at the Oconto Falls (Lower) Hydroelectric Project (FERC Project #2689). The July through September sampling period represents the typical annual period of minimum dissolved oxygen levels in the Oconto River resulting from a combination of high ambient temperature, low river flow, and aerobic oxygen consumptive processes.

Equipment Assignment

The following equipment has been acquired and is scheduled to be used for the July 1 through September 30, 2004 water quality study at Oconto Falls (Upper) Hydroelectric Project – FERC Project No. 2523:

Reservoir: YSI 51B Oxygen/Temperature meter with:
YSI 5739 Dissolved Oxygen probe for field use
YSI 5740-50 detachable cable w/1-meter markers
YSI 5775 Standard 1.0 mil (0.001") membrane
(YSI 51B meter and sensor will obtain weekly surface to bottom 1-meter profile sample data in the reservoir)

Hach Dissolved Oxygen Test Kit Model OX-2P
(Hach kit will be used to verify on-site calibration of the YSI 51B)

Tailrace: Hydrolab Recorder/DS-3 Multiprobe Datalogger with:
DS3-OX Dissolved Oxygen sensor w/1.0 mil membrane
DS-SPH Standard pH sensor
Hydrolab Conductivity sensor
Hydrolab Temperature sensor
Hydrolab Internal Battery Pack
(Hydrolab Recorder will obtain and store continuous 30-minute interval tailrace sample data during the Study)

YSI 51B Oxygen/Temperature meter with:
YSI 5739 Dissolved Oxygen probe for field use
YSI 5740-50 detachable cable w/1-meter markers
YSI 5775 Standard 1.0 mil (0.001") membrane
(YSI 51B meter will document any calibration variations between impoundment and tailrace monitoring equipment during impoundment sampling events)

Digital Report Formats

In addition to printed reports, data will be digitally furnished on CD-ROM in Microsoft Excel and Microsoft Word formats.

Agency Contact Personnel

All Water Quality Study correspondence, reports, and any notifications will be directed to the following agency personnel:

Wisconsin Department of Natural Resources:

Mr. Tom Meronek - Regional FERC Coordinator
Wisconsin Department of Natural Resources
101 N. Ogden Road
Peshtigo, Wisconsin 54157
(715) 582-5052 (voice)
(715) 582-5005 (fax)

U.S. Fish & Wildlife Service:

Mr. Larry Thompson - Biologist
U.S. Fish & Wildlife Service
2661 Scott Tower Drive
New Franken, WI 54229
(920) 866-1717 (voice)
(920) 866-1710 (fax)

Federal Energy Regulatory Commission:

Ms. Magalie R. Salas, Secretary - Federal Energy Regulatory Commission
888 First St. NE
Washington, DC 20426
(202) 219-2700 (office)

Ms. Peggy Harding, Regional Director - FERC
Chicago Regional Office
230 South Dearborn St. - Room 3130
Chicago, IL 60604
(312) 596-4444 (office)