



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-0610

January 29, 2015

Ms. Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Northern Illinois Hydropower, LLC – (Will County)  
New Hydroelectric Development – Brandon Road  
Log # C-0408-08 [FERC docket. # P-12717]

Dear Ms. Bose:

This Agency received a request on August 14, 2009 from Northern Illinois Hydropower, LLC requesting necessary comments concerning the proposed new hydroelectric powerhouse containing four generating units with new intake and forebay structures, reconfigured existing headrace channels, new tailrace, new underground transmission lines and appurtenant facilities on the DesPlaines River near Joliet. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and are not an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do not supplant any permit responsibilities of the applicant toward the Agency.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

1. The applicant shall not cause:
  - a) Violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) Water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - c) Interference with water use practices near public recreation areas or water supply intakes.
2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes, and cleanup procedures necessary to prevent water pollution and control erosion.

3. Any spoil material excavated, dredged, or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations, and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins, and temporary mulching. All construction within the waterway shall be constructed during zero or low flow conditions. The applicant shall be responsible for obtaining an National Pollution Discharge Elimination System (NPDES) Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2014).
6. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials downstream.
7. The applicant shall conduct Dissolved Oxygen (D.O.) monitoring from representative monitoring points or samples taken in the Des Plaines River according to the following:
  - a) Monitoring shall occur April thru October and when flow rate through the Brandon Road Lock and Dam and hydropower plant is less than 12,000 cubic feet per second(cfs) as reported by US Army Corps of Engineers at the Brandon Road Lock and Dam. The flow rate data reported at the following website may be used to determine compliance with the flow rate requirement:  
[stagehttp://rivergages.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=IL03&fid=JOLI2&dt=E](http://rivergages.mvr.usace.army.mil/WaterControl/stationinfo2.cfm?sid=IL03&fid=JOLI2&dt=E)
  - b) Daily monitoring shall be conducted at the following three (3) locations:
    - i. In or downstream of the powerhouse tailrace.
    - ii. Upstream of the Brandon Road Lock and Dam and the intake channel to the turbines in the Brandon Road Pool.
    - iii. Downstream of the powerhouse at the I-55 bridge.
  - c) Monitoring results shall be reported 3 times per year in July, October, and November according to the following:
    - i. Monitoring shall be completed at mid-depth elevations.
    - ii. Monitoring shall be continuous (once per hour) representing the daily minimum and mean D.O. concentrations.
    - iii. The applicant shall report the D.O. results in mg/l.
    - iv. Monitoring shall be reported as a daily minimum for each monitoring location.
    - v. Daily monitoring shall be reported as a daily minimum, a daily minimum averaged over 7 days, and a daily mean averaged over 30 days.



- vi. The monitoring report shall include the date, time, location of the monitoring points, names, and qualifications of individuals(s) who performed the monitoring and methods of monitoring and measurement that were used.
- vii. The monitoring report shall include drawings depicting the location of each monitoring point and the laboratory analysis sheets.
- viii. The monitoring report shall identify the days when no monitoring is conducted due to the river flow rate equal to or greater than 12,000 cfs as identified in condition 7(a) above.
- ix. The monitoring results shall be submitted in a report within one month following the designated monitoring month. The subject monitoring reports shall be submitted to:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

8. The applicant shall implement measures necessary to maintain D.O. levels that meet the dissolved oxygen standard adopted at 35 Ill. Adm. Code 302.206. The applicant shall operate the hydroelectric powerhouse facility to maintain river flows of at least 1000 cubic feet per second (cfs) that flow through the dam of the Brandon Road Lock and Dam and do not flow through the turbines.
9. The applicant shall maintain records at the facility for each D.O. measurement taken under this certification.
10. The applicant shall conduct a mussel survey in the Des Plaines River within the immediate construction area and in vicinity of proposed construction activities (upstream and downstream) prior to commencing construction activities within the Des Plaines River. The subject mussel survey and the results of the Illinois Department of Natural Resources (IDNR) approved relocation and restoration plan shall be submitted to the following address within 30 days of completion or IDNR approval:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

11. The mitigation plan received in emails from the applicant to the Water Quality Standards Section of the Agency dated December 30, 2013 and on Page 4 of the letter of May 29, 2014 from Northern Illinois Hydropower shall be implemented. Modifications to the mitigation plan must be submitted to the Agency for approval. The permittee shall submit annual reports by July 1 of each calendar year on the status of the mitigation. The first annual report shall include a hydric soils determination that represents the soils at the completion of initial construction for the wetland mitigation site(s). The permittee shall monitor the mitigation for 5 years after the completion of initial construction. A final

report shall be submitted within 90 days after completion of the 5-year monitoring periods. If the monitoring period is extended, annual reports and the final report shall be submitted for this extended period. Each annual report and the final report shall include the following: Illinois EPA Log Number, date of completion of initial construction, representative photographs, floristic quality index, updated topographic maps, description of work in the past year, the performance standards for the mitigation as stated in the mitigation plan, and the activities remaining to complete the mitigation plan. For wetland mitigation sites containing non-hydric soils at the time of initial construction, the final report shall include a hydric soils determination that represents the soils at the end of the 5-year monitoring period. For wetland mitigation provided by purchase of wetland mitigation banking credits, in lieu of the above monitoring and reporting, the permittee shall submit written proof from the wetland mitigation bank that the wetland credits have been purchased within thirty (30) days of the purchase. The reports and proof of purchase of mitigation credits shall be submitted to:

Illinois Environmental Protection Agency  
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This certification becomes effective when the Federal Energy Regulatory Commission includes the above conditions, # 1 through # 11, as conditions of the requested Federal License issued pursuant to the Federal Power Act § 6, 16 U.S.C. § 799.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

Sincerely,



Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

SAK:DLH:KAR:C-0408-08\_401 WQ Certification

cc: Illinois EPA, Records Unit  
Illinois EPA, DWPC, FOS, DesPlaines  
Illinois DNR, OWR, Springfield  
CoE, Rock Island District  
USEPA, Region 5  
Northern Illinois Hydropower  
Kleinschmidt Energy & Water Resource Consultants  
KAR