FEDERAL ENERGY REGULATORY COMMISSION
Office of Energy Projects
Division of Dam Safety and Inspections - Chicago Regional Office
230 South Dearborn Street, Suite 3130
Chicago, Illinois 60604
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In reply refer to: P-2506
NATDAM No.: MI00167

June 14, 2013

Mr. Terry Jensky
Vice President – Energy Supply Operations
Wisconsin Public Service Corporation
P.O. Box 19001
Green Bay, Wisconsin 54307

Re: Boney Falls Development (P-2506-04) - Phase II Seepage Remediation
Authorization to Begin Construction

Dear Mr. Jensky:

Representatives of Upper Peninsula Power Company (UPPCo), FERC, AECOM, GEI Consultants, and Moyle Construction met on June 13, 2013 at UPPCo's Escanaba Delta Service Center to discuss plans, specifications, and regulatory requirements for the pending construction at the Boney Falls Development (P-2506-04). Final design documents were submitted and commented upon by a June 7, 2013 Commission letter.

GEI clearly explained UPPCo's concerns for employee safety, FERC's concerns for dam safety (especially related to quality control and, placement of soil between the rakers0 and environmental regulatory requirements. The Commission has no further comments; construction may proceed.

The Contractor has suggested some modifications to the raker connections to expedite construction. This modification is not expected to alter the load carrying capacity of the raker however; a formal change to the plans and specifications should be submitted.

Monthly construction reports should be filed by the 15th day of the month following the period covered by the report. A final construction report should be submitted within 90 days after the completion of the work (see Enclosure 1 - Final Construction Reports from Licensees).

Certifications need to be submitted prior to refilling the reservoir.

- A certification by the Design Engineer that the repairs were constructed in accordance with the design intent.
- A certification by the QCIP Manager that the results of the inspection and testing program results in a conclusion that the project was constructed in accordance with the plans and specifications.
- A certification from the Licensee that the construction fulfills the design intent and was constructed in accordance with the plans and specifications reviewed by FERC.
- The certifications should also indicate that it is safe to refill the reservoir.

Any changes to the plans and specifications should be coordinated between the Design Engineer, the QCIP Manager, and FERC. Any change in the operation of the project should be properly coordinated with FERC and understood by all of your operators. No changes to the operation of the project can made to the project until it is authorized by FERC.

Please contact me (312.596.4430) or Mr. John Fornek (312.596.4445) if you have any questions.

Sincerely,

John A. Zygaj, P.E.
Regional Engineer

Enclosures:
CONSTRUCTION REPORTS FROM LICENSEES
FINAL CONSTRUCTION REPORTS FROM LICENSEES

Cc:
Mr. Gilbert Snyder
Wisconsin Public Service Corporation
700 N. Adams Street
P.O. Box 19001
Green Bay, Wisconsin 54307

CONSTRUCTION REPORTS FROM LICENSEES

When mobilization for construction commences, we will require monthly reports to provide timely information on construction progress. Each report should contain, as a minimum, the information described below. If certain sections are not yet applicable on the date of a particular report, so indicate. It is important to supplement each report with pertinent photographs. We would like to receive the reports, in duplicate, including all attachments, not later than the middle of the month following the month for which the report is written.

We will inspect the project construction approximately monthly. Whenever possible, we prefer to time our inspections to conform with important phases of construction. It would be appreciated if you would notify us in advance of such phases of construction.

The following items shall be included in monthly (or other periodic) construction reports to be submitted by the Licensee. In those cases where there is nothing to report under a specific heading, a statement of non-applicability will suffice. Some items require a one-time report. In these cases make reference to the report where the data was provided.

1. Progress of Work. Provide a brief narrative description of construction activities and related events during the reporting period. Report major items of work which reflect overall progress, rather than detailed statistical information.

2. Status of Construction. Describe the status of progress, as related to the original schedule and quantity estimates of items such as: (1) excavation for tunnels, structures, and roadways; (2) embankment, concrete, and other materials placed; (3) installation of machinery and equipment; (4) reservoir clearing; (5) necessary relocations; and (6) installation or construction of recreation, fish, and wildlife facilities. Furnish construction schedules and progress charts. Report the status of construction in terms of percent physically complete and percent of contract time elapsed. Provide an appraisal as to whether work is proceeding at such a rate as to indicate completion within the specified contract time. If not, give the reasons why and estimate a revised completion date.

3. Construction Difficulties. Describe unanticipated construction difficulties which could significantly increase project costs and/or affect job progress such as latent conditions, serious job accidents, floods, labor difficulties, quantity overruns, material shortages, and similar events.

4. Contract Status. Identify principal contractors and subcontractors engaged on the work. Describe any special expertise or equipment possessed by contractors.

5. Critical Events and Dates. Report important items and events such as dates of river diversion, start and completion of construction, tunnel closure, initial unit testing, and date of initial commercial generation for each unit.

6. Reservoir Filling. Prior to filling, provide the anticipated schedule and procedures for filling. During filling, note the date of initiation of reservoir filling, filling progress, and the performance of instrumentation installed to reflect structural conditions as affected by reservoir level, such as weir measurements of seepage and flows from wet spots. Report the date maximum normal reservoir level is attained.

7. Foundations. Report specifically on foundation conditions, foundation preparations, the type of material and conditions of placement. Include photographs and descriptions of the foundation areas that have been uncovered. Uncovering of foundation areas may reveal faults, cracks, and other conditions which require special treatment. In such cases, comment on the corrective measures utilized. Include with the construction report copies of any special reports on the foundations or treatment thereof. During excavation for major structures such as dams, powerhouses and tunnels, foundations shall be mapped for record purposes by the Licensee. Submit a copy of this map to the Regional Engineer.

8. Sources of Major Construction Materials. Provide information on the sources from which major construction materials and equipment are being obtained. Include all materials and equipment that may have an important bearing on the safety and efficiency of the project works, such as: aggregate cement, hydraulic control equipment, turbines and generators, etc. A plan of the project area showing the location of borrow areas and/or quarries shall be included.

9. Materials Testing and Results. Include periodic summaries of tests on concrete specimens and results of all tests. Field control tests that fail to meet specifications and as a result of which an area was reworked, shall be reported. Tests will be referenced to ASTM or other applicable standards.

10. Instrumentation. When instrumentation of the structures is required by the license or the Regional Engineer, the report shall include the schedule for installation and the program for reading the instrumentation during construction. Before filling the reservoir, the Licensee shall develop and furnish a schedule for monitoring the instrumentation.

11. Photographs. At the outset of construction, establish several photographic vantage points from which periodic progress photographs can be taken to document progress. These photographs shall be supplemented by an appropriate number of detailed photographs to record significant elements of the work. All photographs shall be dated, captioned, and identified as to the report they accompany.

12. Erosion Control and Other Environmental Measures. The report shall include a discussion of erosion control and other measures and their effectiveness. The report should also include a discussion of any instances where sediments or other construction discharges entered the stream(s), the extent of the discharges, an assessment of any damage to the stream(s) and corrective actions taken, including measures to prevent further problems.

13. Other Items of Interest. Note here events not reported elsewhere in the inspection report. Typical items are meeting of boards of consultants, matters requiring continuing or follow-up

action, public relations, job safety, important visitors, changes in job management, environmental problems, abnormal weather events, etc. Report significant events involving relationships with interested government agencies such as the U. S. Forest Service, Fish and Wildlife Service, Corps of Engineers, State and county highway and health authorities, State and Federal industrial safety enforcement organizations, and recreational and conservationist groups.

FINAL CONSTRUCTION REPORTS FROM LICENSEES

The Licensee should submit a final construction report within 45 days from the completion of work. This report should include all information pertinent to the dam safety in a concise form, should be included by the Licensee in the project file and it should be given to the independent consultant for his safety inspection and analyses, if applicable.

As such, the report should contain a summary of information in each of the applicable sections indicated below (the information was previously presented in the monthly reports). Tabular form for test result presentation with indication of applicable standard is recommended for conciseness. If certain sections are not applicable, skip them. Include construction difficulties under sections where it applies.

1. General. Briefly present the reason for construction and description of work with dates of beginning and end of construction. Include reservoir drawdown and filing dates, any findings regarding the original structure.

2. Foundations. Present specifically condition of foundation (faults, etc.) When uncovered, and foundation treatment. Attach foundation mapping.

3. Embankments. Describe the equipment, type of materials used in filters and fills, attach gradation and compaction requirements and all test results.

4. Concrete work. Describe equipment and materials, include all concrete and grout test results, describe surface treatments.

5. Anchors. Present summary of drilling operation including boring logs; results of water pressure tests; anchor design calculations, design loads, specification; results of grout test; results of proof and performance tests; and summary of acceptance criteria.

6. Instrumentation. Present plots of existing instrumentation readings during the construction, if the readings are affected. Include details, compete schedule, plan of calibration/reading of all new instrumentation.

7. Drawings. Attach as-built drawings reduced in size to 8.5"x11" or 11"x17". The drawings should include plan, section and details of the structure affected by the new work. Any new instrumentation should be shown on plan and sections.

Document Content(s)