## 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 (312) 596-4430 Office - (312) 596-4460 Facsimile

In reply, refer to: P-10809

August 18, 2020

Via Electronic Mail

Mr. Lee Mueller Boyce Hydro Power, LLC lwmueller@boycehydrollc.com

Re: Secord Hydroelectric Project No. 10809

Right Retaining Wall Erosion Repair Design – August 17, 2020

Dear Mr. Mueller:

On August 17, 2020, you eFiled an August 14, 2020 letter, which provided the Secord Dam Right Retaining Wall Erosion Repair Design drawings. The submittal provides only two drawing sheets outlining proposed repairs to a hole in the right concrete retaining wall near the downstream toe. The repairs were recommended in the Secord Dam Emergency Inspection Report dated June 25, 2020, as a critical action item (Item C-1) by TRC Engineers Michigan Inc. TRC recommended the following:

"Lower the tailrace water level for a period of time sufficient to clear debris from the base of the existing retaining wall and prepare a uniform surface for installation of concrete forms located approximately 2-3 feet away from and parallel to the existing retaining wall. Install formwork for the entire length of the existing retaining wall to a uniform height of approximately 3 feet to ensure coverage above the existing hole and provide a closure form at the end of the existing retaining wall. Install dowels in the spillway slab and the side of the exiting retaining wall and install a rebar cage tied to the dowels. Pour the form with concrete. Allow appropriate cure time and then remove the forms and re-water the tailrace."

The drawing sheets provided for the repairs cannot be pre-approved as requested in your letter. Additional information is needed in order to complete our review of the design. A complete design package will be required prior to FERC approval.

A design report must accompany the provided engineering drawings. The drawings and design report must be certified by the Chief Dam Safety Engineer and stamped and signed by a licensed professional engineer of record who will oversee the work. The design

report should provide references to applicable engineering standards. The design report must include the following:

- a. Reinforced concrete design
- b. Dowel embedment design
- c. Engineering specifications
- d. Method of demolition
- e. Approach for incorporating the existing wall reinforcement
- f. Method to bond/connect/attach the new wall to the old wall

Plans and Specifications, a Quality Control Inspection Program (QCIP), Temporary Construction Emergency Action Plan (TCEAP), and Schedule timeline must also be submitted for approval with the design package. Construction methods for ensuring a dry and safe work area must be identified. If a contractor-designed cofferdam is to be used, you must: (1) have a Professional Engineer, who is independent from the construction contractor, review and approve the design of the cofferdam prior to the start of construction; and (2) ensure that construction of the cofferdam is consistent with the approved design. You must file cofferdam construction drawings and specifications, and the letters of approval for our review.

The Secord Dam Emergency Inspection Report by TRC (Referenced above) also provided recommended action items (Items R-1 through R-5). These items were defined as having a medium risk to dam stability and public safety. TRC stated in the report that the recommended action items should be addressed as soon as feasible. These items must also be addressed.

You may contact me at 312.596.4430 if you have any questions or concerns pertaining to this letter.

Sincerely,

John A. Zygaj, P.E. Regional Engineer

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Document Content(s)
10809 Secord Retaining Wall C52785, C52784. PDF1-2