## 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-2785, P-10808, P-10809, and P-10810

June 24, 2016

Mr. Lee Mueller Boyce Hydro Power, LLC 10120 W. Flamingo Road, Suite #4-192 Las Vegas, Nevada 89147

Re: Sanford Hydroelectric Project – FERC No. 2785 Edenville Hydroelectric Project – FERC No. 10808 Secord Hydroelectric Project – FERC No. 10809 Smallwood Hydroelectric Project – FERC No. 10810 2015 Gated Spillway Rating Curve Update Schedule

Dear Mr. Mueller:

We have completed our review of the April 5, 2016 submittal of the proposed schedule to address the spillway capacity calculations for your above-mentioned Hydroelectric Projects. We have the following comments:

- 1. The rating curve weir coefficients (3.95) appear to be more efficient than what could occur. A detailed analysis of the proper weir coefficients and effective weir lengths for each project should be prepared.
- 2. For each structure, calculations should be developed to ensure the gate does not experience orifice flow when the reservoir is at the zero freeboard elevation. The concern is that the rating curve for the gate may transition from weir flow to orifice flow when the reservoir gets near the zero freeboard elevation.
- 3. The revised rating curves along with the report detailing the weir coefficients and effective weir lengths should be submitted by **November 30, 2016**.
- 4. Your April letter proposed to submit a report identifying what actions will be taken to address the spillway capacity deficiencies. This report should be submitted by **November 30, 2016**. This submittal should also contain a detailed schedule to implement improvements.

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Please feel free to contact Mr. Peter Chapman, P.E. at 312.596.4446 (<a href="mailto:peter.chapman@ferc.gov">peter.chapman@ferc.gov</a>) or me at 312.596.4430 if you have any questions or concerns pertaining to this letter.

Sincerely,

John A. Zygaj, P.E. Regional Engineer

CC: Mr. Frank Christie, P.E., General Manager Boyce Hydro Power, LLC P.O. Box 15 Edenville, MI 48620

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