## FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects
Division of Dam Safety and Inspections
888 First Street, NE
Washington, DC 20426
(202) 502-6314 Office – (202) 219-2731 Facsimile

May 26, 2020

In reply refer to: P-2785 P-10809 P-10810

Mr. Lee Mueller Boyce Hydro Power, LLC 4132 S. Rainbow Blvd. #247 Las Vegas, Nevada 89103

Subject: Forensic Investigation and Drawdowns for Boyce Hydro Dam Incidents

Dear Mr. Mueller:

Your May 22, 2020 letter references the required reservoir drawdowns at your FERC-licensed projects as well as the required Independent Forensic Investigation which we directed you to perform in our May 20, 2020 order. Your letter did not address directives regarding inspections by your consulting engineer, but you mentioned inspections by Spicer Engineering in your May 24, 2020 email to Mr. John Zygaj of the D2SI-Chicago Regional Office.

## Reservoir Drawdowns

We do understand that the right embankment at Sanford Dam (P-2785) was fully breached during the high flows resulting from the Edenville Dam breach. Therefore, the directive to safely draw down the Sanford reservoir is moot due to the inability of the project to retain the reservoir. The drawdown requirements at both Secord (P-10809) and Smallwood (P-10810) have not changed and you must draw each down to the spillway crest at a minimum. These actions are necessary in order for possible dam safety issues at your projects to be assessed. Depending on the results of the evaluations, you may be required to draw one or both reservoirs down further. It is your responsibility to ensure a safe drawdown rate based on all project factors, including embankment stability, spillway

gate operations, and debris issues. You must not return either reservoir to "normal" levels until you have received authorization from FERC.

The directive for reservoir drawdowns does not absolve Boyce Hydro of any responsibilities with regard to the State of Michigan's permitting process or the environmental measures required by state resource agencies. You must expeditiously reach out to Michigan Department of the Environment, Great Lakes, and Energy regarding a drawdown permit and the Michigan Department of Natural Resources regarding mussel surveys and provide the Commission a copy of any correspondence issued to or received from these parties. We remind Boyce Hydro that federally listed species protected under the statute of the Endangered Species Act must also be considered.

## **Engineering Inspections**

Your May 24, 2020 email to Mr. John Zygaj stated one or more engineers from Spicer Engineering were on site, but their primary focus was at the Tobacco River side of the Edenville Dam in the area of the embankment west of the spillway structure. Aside from this statement, we have not received any written or verbal reports from any engineering inspections and it is not clear if inspection by Spicer Engineering included the FERC-licensed projects. We have not received any written or verbal reports from any engineering inspections as required by the May 20, 2020 order. Although Commission staff have performed preliminary assessments at the projects, it is your responsibility as the dam owner and operator to provide the justifications for safe operations based on your engineer's assessment.

Your letter states that Secord and Sanford have not sustained any consequential damage. You clearly meant to say Secord and Smallwood, as Sanford is breached. Based on our site assessment, we do not agree that Smallwood sustained no consequential damage. To the contrary, Smallwood sustained erosion damage in multiple locations. Each project must be thoroughly inspected and the conclusions provided to FERC before any return to normal operations will be allowed. Additionally, we understand that you placed some material to provide some erosion protection at Smallwood. While you are not required to receive approval from FERC to place material during emergency conditions in order to stabilize the projects, you must document all work that occurred and provide that documentation for our assessment of your stabilization measures. All work from this point forward at your FERC jurisdictional projects must be submitted to FERC for review and approval prior to implementation.

## Forensic Investigation

Your letter references a 3-day timeframe for putting together a Forensic Team. The May 20, 2020 order required a proposal within 7 days, not the 3 day timeframe you

have indicated. Regardless, your request for a 2-day extension of time, until May 29, 2020, to submit a proposal for the Forensic Team is granted. However, no additional extensions will be granted. You also state that a Structural engineer, a geotechnical engineer, and a hydraulics expert would be the three disciplines required. I refer you back to the May 20, 2020, letter which clearly states:

"The team must consist of dam safety experts well versed in the following disciplines: Hydraulics and Hydrology, Geotechnical Engineering, Structural Engineering, Reservoir Operations, Emergency Action Planning, and Organizational/Human Factors. The team members must not have worked on any of the Boyce Hydro Projects in the past. You must also take care to preserve or record any information that may be useful to the Forensic Investigation Team."

This requirement has not changed. Your team must have expertise in the above disciplines to ensure a full Forensic Investigation can successfully be performed for the May 19 incidents and failures.

If you have any questions regarding this letter, please call me at 202-502-6314.

Sincerely,

David E. Capka, P.E. Director Division of Dam Safety and Inspections

cc:

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