

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 20, 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: Emergency Response and Forensic Investigation for Boyce Hydro Dam Incidents

Dear Mr. Mueller:

Boyce Hydro owns and operates three dams under FERC jurisdiction, Sanford Dam, Project 2785, Secord Dam, Project 10809, and Smallwood Dam, Project 10810. Boyce Hydro also owns and operates the Edenville Dam, which is under the jurisdiction of the State of Michigan. At approximately 5:45 EDT on May 19, 2020, you informed the Chicago Regional Engineer that high inflows were resulting in breaching of the Edenville Dam. You indicated that the Michigan Department of Environment, Great Lakes, and Energy (EGLE) was aware and that the Emergency Action Plans had been activated with evacuations underway downstream of both Edenville and the Sanford Dam. You indicated that the Edenville breach flows could imperil the stability of the Sanford Dam and may lead to a cascading failure scenario. Further discussions later on May 19, 2020, identified that the Smallwood Dam, was experiencing extremely high flows, but had not failed. Additionally, upstream of Smallwood Dam, you indicated that Secord Dam, was safely passing flood flows.

Following the breach of the Edenville Dam, the Sanford Dam was overtopped by the increased inflow from the upstream breach. The overtopping flows led to a declaration of imminent failure by local authorities and triggered additional evacuation efforts. Due to the extensive damage to the projects and the region as a result of the

floodwaters and the Edenville breach, you are directed to fully lower the reservoirs behind Sanford Dam, Smallwood Dam, and Secord Dam in a safe manner as flows recede. You are also directed to perform a dam safety inspection of these dams immediately and within 3 days after the flows recede. You must provide a copy of the inspection reports within 3 days of the inspection but provide a verbal summary of findings immediately upon completion to the Chicago Regional Engineer. You must also maintain fully lowered reservoirs and develop an interim plan to safely pass flows until a safe reservoir elevation can be established and implemented.

You are also directed to immediately begin formation of a fully Independent Forensic Investigation Team to focus on the Sanford Dam, Smallwood Dam, and Secord Dam. Since the Edenville Dam is not under FERC jurisdiction, we will be reaching out to ELGE regarding coordination for investigation of the Edenville breach. Once convened, the team should develop a plan of action for the forensic analysis consisting of, but not limited to:

1. Reviewing project operations, before, during and after the event. This should include activation and effectiveness of the Emergency Action Plan (EAP). It should also include spillway operations.
2. Performing field investigations.
3. Reviewing project documents, including the EAPs, Potential Failure Mode Analyses, Part 12D Independent Consultant Inspection Reports, Owner's Dam Safety Program, and the Supporting Technical Information Documents.
4. Developing any additional information or analyses deemed appropriate by the Team.
5. Preparing and submitting the Forensic Analysis Report. The analysis should discuss the root cause of the overtopping damage to Sanford Dam as well as any other contributing causes and should be submitted directly to FERC from the team.

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.

You must eFile a letter with the Commission which provides a copy of each proposed Forensic Investigation Team member's resume within 7 days from the date of

Project No. 2785

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this letter. The letter should be addressed to the Director, Division of Dam Safety and Inspection (D2SI) for review and approval at the address shown below with a copy to the D2SI-Chicago Regional Engineer.

David E. Capka, P.E.
Director, D2SI
Federal Energy Regulatory Commission
888 First Street, N.E. Routing Code: PJ-13
Washington, D.C. 20426

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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Document Content(s)

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