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# FEDERAL ENERGY REGULATORY COMMISSION

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## NEWS RELEASE

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### FOR IMMEDIATE RELEASE

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Docket No. P-2277

### COMMISSION SEEKS COMMENT ON INDEPENDENT PANEL REPORT EXAMINING TAUM SAUK RESERVOIR BREACH IN MISSOURI

The Federal Energy Regulatory Commission today released for public comment a report by an Independent Panel of Consultants on the technical reasons for the December 14, 2005, breach of the Taum Sauk Pumped Storage Project upper reservoir dam.

“This marks the completion of the first stage of our investigation. Now that we have the facts before us, we will consider what further action is required,” Commission Chairman Joseph T. Kelliher said.

The report cites the primary cause of the Taum Sauk breach as overtopping of the upper reservoir dam due to improperly maintained and installed water level monitors. The report states that the monitors became loose and indicated reservoir levels lower than actual levels.

In addition, the panel found, emergency backup sensors proved ineffective because they “were set at an elevation above the lowest points along the parapet wall; thus, they failed their protection role because this enabled overtopping to occur before the probes could trigger shutdown.”

Another factor contributing to the overtopping was that AmerenUE typically operated with high water levels of one foot below the top of the parapet wall, which was not enough to take into account possible mistakes in project operation, the report said.

A secondary cause, the panel said, was the marginally stable dumped “dirty” (silt, sands and gravels) rockfill embankment and associated parapet wall on top of the upper reservoir dam.

The independent panel was convened by the Commission’s Director of Dam Safety to establish an independent assessment of the technical causes of the release of the upper reservoir at the project. The investigation by the panel included a review of the operation of the project and a forensic evaluation of the breach.

The Commission will review the report's findings to determine their applicability to other pumped-storage projects under the Commission's jurisdiction.

The Commission's dam safety staff conducted an exhaustive forensic investigation of the breach, which is detailed in a report released April 28. On April 7, the licensee for the project, AmerenUE, submitted a report prepared by an independent consultant it retained under a directive from the Commission. Both reports were forwarded to the Independent Panel of Consultants for consideration in its preparation of the report released today.

On December 14, 2005, the northwest corner of the Taum Sauk project's upper reservoir breached at approximately 5:20 a.m. CST. Approximately 4,300 acre-feet of stored water, or more than 1 billion gallons, flowed through a state park and into the East Fork of the Black River, upstream from the project's lower reservoir. An acre-foot is the amount of water it would take to flood an acre of land one-foot deep. The project is located near Lesterville, Missouri.

Immediately following the Taum Sauk breach of the upper reservoir, the Commission initiated a review of all Commission-regulated pump storage projects to assure project safety and determine the need for, and development of guidelines for the safe operation of pump storage projects. This ongoing effort includes a review of the effectiveness of the instrumentation and monitoring systems, operating procedures, operator training programs, and Emergency Action Plans. In addition, the Commission requested each operator to conduct a fault-tree analysis of possible failure mechanisms addressing the project structures, all instrumentation and monitoring systems, backup alarms and computer controls.

"The Commission's hydropower safety program is a model for the world. To the extent this unfortunate event provides lessons we can apply to the program, we will make it even better," Chairman Kelliher said.

The public has 30 days to comment on the report. The entire report is available on the Commission's website, [www.ferc.gov](http://www.ferc.gov). Comments may be filed with the Commission at 888 First Street, N.E., Washington, D.C. 20426. Comments should include the docket number for the project, P-2277.

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