

## DWR could have lost control of Oroville spillway gates during crisis

By Risa Johnson, Chico Enterprise-Record  
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The state Department of Water Resources could have lost control of the spillway radial gates for days during the Oroville Dam crisis if crucial power lines had gone down, according to department officials.

DWR leaders Cindy Messer and Joel Ledesma stated this Jan. 10 during [a legislative oversight hearing](#) on the dam at the State Capitol. This has since led some local groups to wonder why there was no backup power supply.



The spillway gates are seen from the other side of the lake, from the spillway itself, as construction continues on July 7, 2017. Emily Bertolino — Enterprise-Record file

Representatives of Friends of the River, the Sierra Club, South Yuba River Citizens League, California Sportfishing Protection Alliance and American Whitewater filed a letter with the Federal Energy Regulatory Commission, or FERC, dated Jan. 16 addressing their concerns.

There should be a backup generator that could allow for operation of the gates in case its power lines are compromised, according to DWR's Bulletin 200, published in 1974. A standby power source is described as "a 55-kW generator operated by a liquid-propane-gas-fueled engine" in the document.

The groups cited this, requesting that the commission ask the department to explain why the backup energy source was unavailable during the crisis last February and whether there was still a problem. The commission should also require that DWR have an accessible electrical supply for the radial gates, they said.

### How it happened

Chris Shutes, FERC projects director for the California Sportfishing Protection Alliance, said in an interview Tuesday that this issue is pressing because it could lead to use of the emergency spillway again, which no one wants to happen, including DWR.

The emergency spillway is a concrete weir with an unlined hillside below that eroded in February when water ran down it for the first time in history. When erosion from the overflow created a deepening chasm that worked its way toward the concrete lip, fear

the structure could be compromised led to evacuation orders on Feb. 12 for more than 180,000 people downstream.

“It needs to be resolved as soon as possible,” Shutes said.

[The independent forensic team report released Jan. 5](#) found that department officials were weighing several risks before they decided to use the emergency spillway.

Some scary possibilities included continuing erosion of the main spillway leading to the loss of a transmission tower nearby and also water heading toward the headgate structure because of erosion. However, the forensic team report did not discuss the lack of a fallback power source for the radial gates, the group’s letter states.

Shutes described the radial gates as similar to guillotines, hoisted up to allow water releases down the nation’s tallest spillway.

“The farther you raise it up, the more water escapes,” he said. “If you can’t raise them, (the gates) can’t allow water to go out at the same rate it’s going in (the reservoir).”

If the department had lost control of the gates and was therefore unable to crank up releases, more water would have backed up in the reservoir and streamed down the emergency spillway, he said.



**The Oroville Dam spillway gates, near the waterline in this photo taken from the lake on April 1, 2017, were in danger of being inoperable during the spillway crisis. Dan Reidel — Enterprise-Record File**

[‘Kind of a big deal’](#)

Dave Steindorf, special projects director for American Whitewater, said that in his mind, this highlighted a need for more transparency about issues relating to the spillway failures. It is puzzling that transmission lines were placed in the area to begin with, he said.

“It’s rather astounding that (below the emergency spillway) there was a set of power lines in the path of water coming down,” Steindorf said.

If backup electricity was accessible, upping releases when the reservoir was getting dangerously full should not have been such a dilemma, he said.

“The question becomes, ‘were those generators not working?’ which is kind of a big deal,” Steindorf said.

Transmission lines around the emergency spillway were turned off Feb. 10 and eventually rerouted away from the area.

Ron Stork, senior policy advocate for Friends of the River, was taken aback when he heard at the oversight hearing that the department could have lost control of the gates.

“I was floored,” Stork said on Tuesday. “We know power lines are now out of harm’s way. But regardless, it’s a simple matter to make sure you’ve got backup power, because you don’t want to lose control of those gates.”

He said the group was very careful in the letter not to assume anything it didn’t know. He hopes discussion about radial gate power routing can come before the public.

### Hyatt Powerplant

The department also could have lost access to the Hyatt Powerplant for months because of downed transmission lines, department officials said in their testimony at the Jan. 10 oversight hearing. This was addressed in the forensic report.

“This would result in significant long-term water management issues, mainly in view of environmental effects and water deliveries,” the forensic report stated. “It would also affect the logistics in water management during repairs to the damaged service (main) spillway. However, the unknown risks of using the emergency spillway were also a major concern, in view of the major unexpected erosion of the service spillway foundation.”

A DWR spokesperson did not respond to a request for comment before the deadline for this story.

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