



Acting Chairman Cheryl LaFleur Live at Oroville Dam

Welcome to Open Access, the podcast series of the Federal Energy Regulatory Commission, or FERC. I'm Craig Cano, your host. Our goal here is to have a conversation about FERC, what it does, and how that can affect you. FERC can get very legal and very technical, so we will strive to keep it simple.

FERC is an independent regulatory agency that oversees the interstate transmission of electricity, natural gas and oil. FERC's authority also includes review of proposals to build interstate natural gas pipelines and liquefied natural gas terminals and licensing of nonfederal hydropower projects. FERC protects the reliability of the high-voltage interstate transmission system through mandatory reliability standards, and it monitors interstate energy markets to ensure that everyone in those markets is playing by the rules.

Mary O'Driscoll: I'm Mary O'Driscoll, welcome to Open Access. Today we're talking by phone with Acting FERC Chairman Cheryl LaFleur, who is in Oroville, California, where damage occurred to the Oroville Dam Service Spillway during spillway operations on February 7, 2017. Additionally, due to high inflows and reduced service spillway capacity, the ungated emergency spillway saw overtopping flow beginning on February 11, 2017, for the first time. Excessive erosion of the bedrock downstream of the emergency spillway threatened the stability of the structure on February 12. The reservoir was immediately lowered using the service spillway to prevent potential erosion of the emergency spillway's foundation.

Chairman, welcome to the podcast.

Acting Chairman LaFleur: Thank you, Mary.

O'Driscoll: Now many of our listeners won't understand why FERC is out at Oroville, or why FERC is involved with hydropower. Can you explain?

LaFleur: As you know, FERC regulates more than 1,700 hydropower dams around the country. The licensing of hydroelectricity was actually FERC's first authority when the Federal Power Commission was created in 1920. We issue licenses for the construction of new projects; we do relicensing applications for the continuance of existing projects, and we oversee all ongoing project operations, including dam safety. In addition to our Office of Energy Projects in Washington, D.C., we have regional offices around the country of dam safety inspectors who regularly inspect all of the dams we regulate.

O'Driscoll: OK, so, who's out there in Oroville right now?

LaFleur: Oh my goodness. I've said several times today there's so much activity here it's like Richard Scarry's big book of trucks and boats. So some of the main players, first of all, the licensee, the California Department of Water Resources, is overseeing all the work, and they are here in force, fortunately they have a major headquarters in Oroville, but also like a trailer village has sprung up in two weeks of offices from people from around the state and around the country.

Secondly, our own wonderful employees of FERC have been here since the beginning. We have folks here from Washington, D.C., and from several of FERC's regional offices. They were here 24-7 at the time of the operation of the emergency spillway, and they have remained on-site and will stay here throughout the duration of the repairs this summer.

Third, the California dam safety people are here, from the state department, the Army Corps of Engineers is here lending their expertise, the Butte County Sheriff's Department has been wonderful, and all of the first responders who've been very involved. And we have contractors from around the country driving trucks and operating barges.

So the No. 1 reason I wanted to do this podcast was to say thank you, first and foremost to our own FERC employees, but really to all the people who are working here on this situation.

O'Driscoll: So, what's going on out there right now?

LaFleur: Well, there's two major things that are happening right now. The first is that because they were able to reduce Lake Oroville enough, they were able to turn off the service spillway, the one that is most highly damaged, and really get a good look at it when there was no water coming down. And so that is being inspected and closely looked at by the experts. And, photographs don't do justice to how enormous the crater is that the water carved. It's a 200-foot deep canyon in the side of the hill next to the service spillway. The geologists say it's about 1.7 million cubic yards of rock, down to bedrock, and debris that was eaten out by the water. And so we're getting a look at that to figure out how to repair it or replace it.

The second big piece of work that's involving most of the people here is to remove as much of the rock and debris as we can from the river that flows down from the powerhouse. We have trucks and barges all over the place. It's estimated that they're filling one big truck every 90 seconds, if they removed it all, it's going to take 55 million truckloads of rock and debris that came down the mountain, to be somehow stored somewhere else and removed.

They need to do that so they can get the powerhouse operating, because right now the water isn't flowing enough to run the powerhouse. And they need to operate the powerhouse to start making sure the lake levels are maintained at a safe level. It will

also be very good for the fish and for the condition of the river to get that river flowing again.

O'Driscoll: The dam itself is not the issue right now, correct?

LaFleur: No. The dam is in very good shape. I flew right over it this afternoon. Actually, it's fascinating. It's the highest dam in the United States, more than 700 feet high, it's a very, thick and deep earthen dam, made of packed dirt and earth, and it is intact and in very good shape. The damage was to the spillway, which is quite a ways to the side of the dam, and which is where the water that doesn't go through the powerhouse comes down.

O'Driscoll: FERC recently asked the California Department of Water Resources to convene a Board of Consultants. What is that, and what's the status?

LaFleur: A board of consultants is basically a group of outside experts, not directly involved, who are brought in because of their expertise to look at the situation and help determine what happened and how best to respond. And the Department of Water Resources has brought in five highly qualified engineers to be on the board and they're having their first meeting tomorrow [March 2, 2017].

O'Driscoll: What else will the Commission be doing as the work continues out in Oroville?

LaFleur: Well, we will be working here on site to oversee the work that's going on, as well as in Washington, D.C., to review proposals that may come before us related to that.

Basically, going forward there will be four major workstreams. The first, which is going on right now, is to oversee the immediate actions that are happening to protect public safety. We've had a little bit of a respite from the rain this week, but the record snow melt in the ranges around here, is due to start next month and we have to make sure that the water levels are maintained safely and public safety is restored during that period.

Secondly, and this has already started, we need to make sure we understand exactly what happened, what went wrong, how it could have been prevented so we can learn from it.

Thirdly, they have to repair, or replace, or restore, the spillways so they can get the dam ready to be operated during the rainy season, which I understand could start in October. So that means an intense period of work to do that.

And finally, we need to make sure that lessons learned, whether they are lessons about spillway construction, evacuation, or anything else, are carefully understood and applied, both here in Oroville and anywhere else at any of the dams we regulate or other dams around the country where they may be relevant.

O'Driscoll: OK, well thank you, Chairman, thank you so much for joining us today.

LaFleur: Well thank you for having me. As you can see, being out here, it's just been an amazing opportunity. Although it's something you never want to happen, it certainly gets the adrenaline flowing to see how important the work that folks at FERC and the folks who work in this industry and all parts of it, how important their work is. So thank you again to everyone who is doing that.

O'Driscoll: If you want more information on the Oroville situation, go to the FERC website, www.ferc.gov. You'll see the link for the Oroville project under the "Of Current Interest" listing on the left side of our main webpage.

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