

FEDERAL ENERGY REGULATORY COMMISSION
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March 19, 2019

In reply refer to:
Project No. 2100-CA

Ms. Gwen Knittweis, Chief
Hydropower License Planning and Compliance Office
California Department of Water Resources
P.O. Box 942836
Sacramento, California 94236-0001

Subject: Oroville Emergency Recovery – Spillways, Submittal of Lake Oroville
2018/2019 Flood Operations Plan and 2018/2019 Spillway Recommissioning
Manual, FERC Project 2100

Dear Ms. Knittweis:

This letter is in response to your February 8, 2019 letter transmitting the Flood Operations Plan and Spillway Recommissioning Manual that provide guidance and protocols for operating and monitoring for reservoir management of Lake Oroville, part of the Feather River Project, FERC No. 2100.

We have reviewed the documents and they are acceptable, however, we have the following general comments on information presented in the Spillway Recommissioning Manual that we ask you to be cognizant of during the reservoir operation. No response is required.

1. Section 2.2 and 3.2 reference the ‘unlikely’ nature of the ‘extreme’ flood events, (i.e., events that may have a likelihood of occurrence in the range of a one in a couple of hundred to one in a few hundred years), and are nonetheless very important to develop operational plans in the event they do occur. It appears that much of the information used to develop the understanding of reservoir operations is based on a relatively limited subset of historic reservoir operation information (1980-2017). This limiting approach appears to narrow the expectations of the possible range of flows that could occur, which statistically speaking, could be much larger than

the limited historical information. Also, changes to the drainage basin as a result of the Camp Fire could dramatically change the runoff characteristics making the historic information less helpful in predicting future performance. There also appears to be a continued neglect of the uncertainty in the discussions of anticipated flows, something that was identified from the 2017 event.

2. Section 3.2. A statement is made, “should DWR determine that the emergency spillway may be needed, an evaluation outlining the risks, trade-offs, and alternatives to using the emergency spillway will be performed.” We strongly recommend DWR perform this evaluation upon receipt of this letter; before a possible need arises in utilizing the emergency spillway. It will be too late to do this evaluation once it is recognized that the emergency spillway is needed.
3. Section 4.4. The text states, “ the emergency spillway will be capable of passing at least 100,000 cfs without significant damage to the structure.” The initial design criteria of 30,000 cfs has been changed to 100,000 cfs. We do not recall, and are not aware of any supporting documentation for the 100,000 cfs number. Is this based upon engineering judgment? Are there analyses and documentation that support this? Further documentation of the safe discharge capacity should be referenced and provided as part of DWR’s ongoing submittal of the final design and construction documentation.

Please keep us informed of any potential changes to the reservoir management through the implementation of the plan. We appreciate your cooperation in this aspect of the Commission’s dam safety and hydropower compliance programs. If you have questions, please contact Doug Boyer at (503) 502-3048 or me at (415) 369-3318.

Sincerely,

Frank L. Blackett, P.E.
Regional Engineer

cc:
Ms. Sharon Tapia, Chief
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