

HEADLINES

Staff Presentation | Final Rule Regarding Safety of Water Power Projects and Project Works

December 16, 2021

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[Item H-1](#) | [News Release](#)

Good morning, Mr. Chairman and Commissioners.

Today, the Commission will decide on important changes to its dam safety regulations, which are located in 18 CFR Part 12. While the Commission's Division of Dam Safety and Inspections has periodically updated its Engineering Guidelines to reflect evolving dam safety practices, these regulations provide one of the cornerstones of the Commission's dam safety program: the Independent Consultant Inspection Program, commonly referred to as the Part 12D Program.

First, I will provide some background to explain the dam safety incident, and the resulting review, that precipitated the changes to the Commission's dam safety program that are included in today's Final Rule.

Why are we here

In February 2017, a major incident at the Oroville Dam spillways resulted in extensive damage to its primary spillway and the first activation of its auxiliary spillway; the evacuation of approximately 180,000 people; and an extensive repair project, in both scope and speed, to ensure the safety of the highest dam in the United States.

Within days of this incident, the Commission ordered the owner of Oroville Dam, the California Department of Water Resources, to convene an Independent Forensic Team to evaluate what factors contributed to the Oroville spillway incident. At the same time, the Commission convened an After-Action Review Panel to scrutinize the incident and the Commission's own Dam Safety Program, and to suggest potential changes to our program that might have improved our ability to detect the underlying problems at Oroville in advance. The reports on both of these initiatives offered recommendations to improve the Commission's dam safety program policies and practices.

Shortly after the Oroville reports were published, I convened an internal team to review the findings and conclusions of these reports, other previous incidents, and the practices of other agencies with dam safety responsibilities, including the US Army Corps of Engineers and the Bureau of Reclamation. The team was tasked with proposing any specific changes they thought were necessary and appropriate to address the recommendations and improve our dam safety program.

NOPR effort

To propose improvements to our dam safety program, the Commission, on July 16, 2020, issued a Notice of Proposed Rulemaking (or NOPR). On the same day, the Commission also issued for public comment four new draft chapters of the Engineering Guidelines.

The Commission received 16 comment letters in response to the NOPR. We received comments from licensees, individuals, other Federal agencies, and professional trade associations. The Commission considered all comments in formulating the final rule. The Final Rule does not include any major changes that represent a significant departure from the proposed changes presented in the NOPR. However, several clarifying edits were made in response to commenters' questions and concerns.

Final Rule

In addition to making various minor revisions and updates to our part 12 regulations, this Final Rule accomplishes four overarching objectives that are integral to strengthening the Commission's dam safety program and addressing shortcomings identified by the forensic investigations that followed the Oroville Dam spillway incident.

First, the Final Rule implements a two-tier independent consultant inspection cycle. Projects will still be subject to a Part 12D Inspection every five years, but the required scope of the inspection will alternate between a Periodic Inspection and a Comprehensive Assessment. A Periodic Inspection focuses on the performance of the project over the previous five years, and includes a field inspection, a review of project operations, an in-depth review of monitoring data trends and behavior, and an evaluation of whether any potential failure modes are occurring. A Comprehensive Assessment builds on a Periodic Inspection with a deep dive into every aspect of a project, including a detailed review of the design basis, analyses of record, and construction history; an evaluation of spillway adequacy; a Potential Failure Modes Analysis; and a Risk Analysis. While these changes will alter the scope of independent consultant efforts, they will not affect Commission staff's safety inspections of all regulated projects.

Second, the Final Rule revises how we review and evaluate who performs Part 12D Inspections. Instead of focusing on the individual Independent Consultant, we will focus on

the qualifications of the Independent Consultant Team with the goal to ensure that each project is inspected by an independent consultant team with sufficient experience and expertise for each project's site-specific conditions.

Third, the Final Rule codifies an existing requirement that owners of high and significant hazard dams prepare and maintain an Owner's Dam Safety Program, which formalizes a licensee's policies and procedures related to organizational oversight and responsibility, internal communication, resource allocation, and continuous improvement. This requirement, established in 2012, has succeeded in raising dam safety awareness by licensees and exemptees across the country. A proactive, conscientious licensee is the first line of defense against potential dam safety issues.

Fourth, the Final Rule modifies licensee reporting and preparedness requirements related to public safety at or near hydroelectric projects. The Final Rule clarifies that licensees are required to report public safety incidents that are related to project operation; to report rescues in addition to deaths and serious injuries; and to prepare, maintain, and submit a public safety plan to the Commission.

The Final Rule will take effect 90 days after publication in the Federal Register.

Closing statement

Concurrent with issuance of the Final Rule, we will publish on the Commission's website four new chapters of the Engineering Guidelines that provide additional guidance on the changes adopted in the Final Rule.

We believe that the changes to our dam safety regulations are necessary and, once implemented along with the new chapters of the Engineering Guidelines, will significantly improve our dam safety program.

We appreciate the Chairman's and the Commissioners' consideration of this important revision to the Commission's dam safety policies and procedures. This concludes our presentation. We are happy to answer any questions you may have.

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