

Summary of FERC-517, Safety of Water Power Projects and Project Works Notice of Proposed Rulemaking

August 3, 2020

Title: FERC-517, Safety of Water Power Projects and Project Works

Docket No. RM20-9-000

The proposed rule includes key revisions as follows:

Applicability

- Applicability of the rule is no longer exclusive to a dam and includes canals and other water conveyances. Criteria include; a dam that is 32.8 feet or higher or an impoundment with a gross storage capacity of more than 2,000 acre-feet; a project feature with a high hazard feature, or it is determined by the Regional Engineer as requiring inspection under subpart D. The proposed rule updates the definition of hazard potential to be consistent with FEMA's Hazard Potential Classification System for Dams and points to the Engineering Guidelines for hazard potential criteria.

Independent Consultants & Independent Consultant Teams

- Proposes the professional relationship between an independent consultant and licensee be broken down into three requirements.
 - (1.) The independent consultant is not an employee of the licensee or its affiliates
 - (2.) The independent consultant has not been an employee of the licensee or its affiliates within two years prior to performing the inspection under this subpart.
 - (3.) The independent consultant has not been an agent acting on behalf of the licensee or its affiliates before performing services under this part, for a manner and time period defined in the Engineering Guidelines.
- Proposes adopting the definition of an independent consultant team as, "one or more independent consultants and additional engineering and scientific personnel, as needed." Codifies current practice and requires a licensee submit a detailed independent consultant team proposal to the Director of D2SI at least 180 days prior to a periodic inspection or comprehensive assessment. The Director of D2SI has the authority to disapprove an independent consultant team member. These requirements will ensure an independent consultant team has the expertise necessary (relative to the project's scale, complexity and relevant technical disciplines) to sufficiently review the project. A comprehensive assessment will require a higher degree of expertise than the periodic inspection (discussed below).

Exemption

- The Director of D2SI will retain the authority to exemption projects from subpart D with good cause. The proposed rule also rescinds all exemptions granted prior to the proposed rulemaking, current grantees will be required to reapply.

Two Tier Part 12 Inspection Approach

- A complete replacement of current inspection scope. A comprehensive assessment and periodic inspection will take place at a project development within a ten-year period with no more than a five-year interval between the two reviews. The periodic inspection will comprise a reduced scope in comparison to the existing independent consultant's inspection and the proposed comprehensive assessment. The comprehensive assessment will involve an increased scope in comparison to the existing independent consultant's inspection and proposed periodic inspection.

Periodic Inspection

- Scope includes: review of prior reports; a physical field inspection; review of surveillance and monitoring plan and data; and review of dam and public safety programs.
- Proposes subsequent reports can no longer incorporate project information or analysis contained in an initial report by reference only. The subsequent report will be required to include the referenced language.

Comprehensive Assessment

- Scope includes: review of prior reports and analyses of record; physical field inspection; review of surveillance and monitoring plan and data; review of dam and public safety programs; supporting technical information document; potential failure mode analysis; and risk analysis.
- Expands on current requirements for evaluating spillway adequacy. Additional requirements include, potential for misoperation, failure to operate, blockage, debilitating damage to the spillway and impacts maximum reservoir level and potential for overtopping.
- Grants the D2SI Regional Engineer the authority to waive the risk analysis requirement.
- Removes provisions allowing independent consultants the ability to reference prior reports and only documenting new observations since the last report.
- Proposes an analysis of record must be evaluated for accuracy with current dam engineering practices. If the independent consultant team is unable to review or disagrees with an analysis of record, the team is required to recommended a new analysis.

Timeline for Inspections and Reports

- Grants the D2SI Regional Engineer the authority to require reports filed after January 1, 2021 be either a comprehensive assessment or periodic inspection. The proposed rule does authorize the D2SI Regional Engineer authority to extend the time to file an independent consultant's report for good cause.
- For any project that was inspected under subpart d prior to January 1, 2021, under the Commission's rules in effect on January 1, 2020:
 - A periodic inspection or comprehensive assessment must be completed, and the report on it filed, within five years of the due date of the Previous Part 12D Report.
 - The Regional Engineer may require that the first report due to be filed under this subpart after January 1, 2021 be a report on a comprehensive assessment.
 - The first comprehensive assessment under this subpart must be completed, and the report on it filed, by December 31, 2034.
- For any project that was not inspected under subpart D prior to January 1, 2021, under the Commission's rules in effect on January 1, 2020:

- For any development that meets the specified criteria and was constructed before the date of issuance of the order licensing that development the first comprehensive assessment must be completed, and the report on it filed, not later than two years after the date of issuance of the order licensing the development.
- For any development that was constructed after the date of issuance of the order licensing that development, or amending a license to include that development, the first comprehensive assessment must be completed, and the report on it filed, not later than five years after the date of issuance of the order licensing that development or amending the license to include that development.
- Timing of subsequent reports:
 - A comprehensive assessment must be completed and report filed within ten years of the date the previous comprehensive assessment report was due to be filed.
 - A periodic inspection must be completed and report filed within five years of the date the previous comprehensive assessment report was due to be filed.

Corrective Measures

- In cases where the independent consultant finds that corrective action is needed, the licensee must submit a plan and schedule addressing the recommendations of the independent consultant within 60 days of filing the periodic inspection or comprehensive report.
- Emergency corrective measures are to be immediately reported to the licensee and licensee notify the Regional Engineer. Emergency corrective measures must be included the within the corrective plan and schedule.

Owner's Dam Safety Program

- Content to include at a minimum: Dam safety policy, objectives, and expectations; responsibilities for dam safety; dam safety training program; communication, coordination, reporting, and reports; record keeping and databases; continuous improvement; and other information as further described by the Guidelines.
- Requires any licensee of a dam or project feature with a high or significant hazard potential must submit an Owner's Dam Safety Program.
- Requires a Chief Dam Safety Engineer or a Chief Dam Safety Coordinator be designated within an Owner's Dam Safety Program. Specifically, a Chief Dam Safety Engineer must be a licensed professional engineer. The owner may choose to bring on an outside party to serve as the Chief Dam Safety Engineer or Chief Dam Safety Coordinator. However, the Owner still remains ultimately responsible for their project(s).
- Requires dam safety personnel and senior management review the program annually. Any findings, corrective actions or revisions are to be reported to the D2SI Regional Engineer.
- The Owner's Dam Safety Program is to be audited and reviewed at a minimum of every five years for all high hazard potential dams or other projects. Qualifications of the review team must be submitted and approved by the D2SI Regional Engineer in advance of the audit or review start of work. Findings of the audit or review must be documented, reviewed by licensee staff and senior management, and submitted to the Regional Engineer.

Public Safety and Miscellaneous Updates

Subpart A – General Provisions

- Includes addition of “overtopping of any dam, abutment, canal, or water conveyance” within conditions potentially affecting project safety.
- Clarifies that failure to comply with a directive issued under part 12 by the Commission, Regional Engineer or authorized representative may result in a cease generation order, penalties and revoking of a project’s license.

Subpart B – Reports and Records

- Expresses preference that an oral report be made within 72 hours of identification of conditions that impact a project’s safety, this report should not hinder emergency response to subject incident.
- Replaces “project-related accident” with “project-related incident,” and further clarifies these incidents as those that take place at project works, relate to water level fluctuations due to operations, or directly related to a project or its operations.

Subpart E – Other Responsibilities of Applicant and Licensee

- In addition to existing requirements, licenses “must install, operate, and maintain warning and safety devices to protect the public”. Current guidance will be codified allowing the Commission to potentially “require a licensee to submit a public safety plan that documents the installation, operation and maintenance of public safety devices.”

Regulatory Flexibility Act

In accordance with the Regulatory Flexibility Act of 1980 (RFA), the Commission certifies that this proposed rule will not have a significant impact on a substantial number of small entities.

If enacted, the part 12 subpart D proposed revisions would impact all those licensees that already file the Independent Consultant’s Safety Inspection Report. In reviewing data over a ten-year period of time, the Commission found that roughly 132 entities qualify as small category, with 225 response to the Commission in a ten-year cycle. The remaining 525 responses are projected to be filed by 106 entities that do not qualify as small. The Commission projects that the annual cost to small entities will likely weigh to the “Simple Hydroelectric Facility” category. In addition, the proposed rule also authorizes the Commission staff, with good cause, to waive or reduce scope of an Independent Consultant’s Safety Inspection or to change the type of report.

The proposed part 12, subpart F codifies the Owner’s Dam Safety Program applies only to entities with one or more projects considered as having a high hazard potential. The Commission anticipates this proposed rule will increase the probability of an entity identifying and addressing dam safety issues prior to endangerment of life, safety or property. The Commission does not anticipate an increased burden or cost to licensees under this proposed rule.

In regards to filing public safety incidents in cases of rescue, the Commission finds that small entities may file a higher number of reports, but estimates this burden at an estimated two hours or \$166.

In regards to the proposed revisions to subpart D the Commission estimates economic impact on a small entity to range from \$166 to over \$7,000 per year, highlighting a typical small entity with one or more simple projects would likely pay closer to \$2,500 per project per year.