



September 18, 2020

Federal Energy Regulatory Commission
Secretary of the Commission
888 First Street NE
Washington, DC 20426

RE: Safety of Water Power Projects and Project Works
Docket No. RM20-9-000

Alaska Electric Light and Power Company (AELP) is the certificated electric utility serving the City and Borough of Juneau, Alaska. Juneau is the State Capital and the fifth largest Borough in the state with 31,974 residents. AELP has been in operation since 1893 and operates five hydroelectric plants, three of which are subject to regulation by the Federal Energy Regulatory Commission. Two of the projects are low hazard and one is high hazard. AELP has worked closely with FERC Dam Safety to ensure safe operation of all three facilities. However, as more regulations and guidelines are developed based on incidents which occurred at large, complex projects we are concerned about the impacts to small, less complex projects like those we operate. The Juneau electrical system is physically and electrically islanded which means that all costs of generation must be borne by local customers. AELP would like FERC to consider the potential rate impacts of applying these new regulations and associated guidance chapters to small, less complex projects. AELP is a small company with 62 employees, senior management is involved daily in all aspects of operating and maintaining our hydroelectric plants. At no time does AELP want to sacrifice project safety, but we request that FERC provide a more streamlined process for small, less complex projects.

With this proposed rulemaking, FERC is applying a one-size fits all solution for all hydroelectric projects, whereas these projects vary in age, construction, maintenance programs, ownership, and risk to the public. This puts an unfair burden on smaller, less complex projects and will have a large impact on the cost of power in smaller communities. In the Section III (C) Regulatory Flexibility Act of the NOPR, FERC states “While the proposed revisions to subpart D may have some increased economic impact on a limited number of small entities, these improvements to the independent safety inspection process are necessary, and the associated costs justified...” However, the main example cited for these revisions is the Oroville Dam which was a very large project with the potential to impact a very large area. FERC should give

consideration to the size and type of project, history of compliance with dam safety regulations and ownership history when instituting new regulations.

FERC asserts that a representative cost for a typical small entity would be approximately \$2,500 per year. In our experience, AELP has found that a Part 12 inspection costs between \$50,000 and \$100,000 depending upon the additional studies requested by FERC. Furthermore, the Part 12 inspection recommendations often result in supplementary studies and analysis which can double the cost of the initial inspection report. In addition to the Part 12 costs, licensees have additional annual operating costs for personnel training specific to dam safety and costs for maintenance and inspection of project features and public safety equipment. Small projects like Salmon Creek (P-2307) which may only generate 25,000MWh per year cannot be expected to shoulder the same burdens as a project like Oroville which generates over 1,500,000MWh per year, especially when there is no history of accidents or damage associated with the project.

These proposed rules require inspections to be performed by a team of consultants, all of whom must travel to site for the inspection. The NOPR states that “A representative cost for a typical small entity with one or more simple projects would be approximately \$2,500 per year per project...” AELP disagrees with this cost estimate. The expansion of the inspection process to include teams, additional inspection requirements, a PFMA, and a RA could significantly increase the costs above what is paid currently for a Part 12 inspection. The costs to travel to Alaska including travel time and expenses coupled with the project transport which is often by helicopter increases linearly with the number of people participating in the inspection, adding one hour of helicopter charter alone costs \$2500. There are also new annual reports due to FERC, much of which is duplicating efforts already performed by licensees. The true cost of these proposed rules, depending upon how they are applied by the Regional Engineer, could easily double the Part 12 costs for a small entity with a simple project. If all studies pertaining to a project have to be updated for consistency with the current state of the practice of dam engineering (which appears to be the direction given the inclusion of the Engineering Guidelines in the new rules), then those costs could be even higher.

Throughout the proposed rule change reference is made to the “Guidelines” which are described in Chapter 8 as, “The guidelines are not a substitute for good engineering judgment and experience when available data clearly call for a departure from recommended procedures.” In the summary of the NOPR, one of the goals listed is to “codify existing guidance” which seems to conflict with the requirement that the guidelines not substitute for good engineering judgement. With the guidance being “codified” that seems to take away the latitude previously allowed for good engineering judgement and experience. AELP would request that the Guidelines be left as guidelines.

If FERC proceeds with incorporating the guidelines into these regulations, the opportunity for public comment only applies to Chapters 15-18 of the Guidelines but does not include Chapter 14 much of which will be superseded by these new chapters. If the intention is to “codify

existing guidance” then Chapter 14 should be updated and each of the existing Chapters should be issued for public comment as part of this process instead of just the four new chapters.

These changes add the cost burden of an IC Team, a requirement to do a full PFMA and a Level 2 risk analysis every 10 years. The justification given is that the dam owner and operator are in the legal position of being responsible for the safety of their dam, its operation, and the consequences of a failure should one ever occur. The statement is made that “All dam owners must fully understand and appreciate their legal, regulatory, moral, and social obligations of owning a dam.” The section goes on to describe how this process is necessary for the owner to fulfill these obligations. As a project owner, AELP is keenly aware of its responsibilities and FERC has emphasized this through the requirements to have an Owner’s Dam Safety Program, a Public Safety Plan, an Emergency Action Plan and a Dam Surveillance Monitoring Plan and annual reports on the EAP and DSSMP. In addition to that as owners, we are dealing with risk questions daily from our insurers, our employees, and our community. Adding yet more redundant requirements does not enhance our knowledge of risk, instead it just leads to increased operational costs and higher cost of electricity for our community.

The NOPR states that projects owned by entities that qualify as small entities, are typically smaller and/or less complex and thus would likely skew towards the “Simple Hydroelectric Facility” category presented in the burden estimates. It goes on to say that the proposed rule incorporates provisions that grant Commission staff the authority....”to waive or reduce the scope of specific components.....or to change the type of inspection report...” The ability to grant a waiver is given to the Regional Engineer in consultation with the Director, D2SI. There are no guidelines provided for when a waiver may be granted, and no appeal process outlined which means that it is subjective and may not be consistently applied. This approach leaves project owners with no recourse, except to hope that we will be treated fairly.

As stated in the NOPR, “D2SI staff has also augmented the part 12 inspection process over the years by adding additional inspection components...” Before adding yet more requirements for licensees, D2SI should instead consider the documentation they are currently requesting that licensees provide and look to see how that can be optimized. Currently, licensees must file the same information annually in the Owner’s Inspection Preparation Form, the EAP Status Report and the DSSMR. Reduction of existing redundant requirements needs to be considered before adding yet more annual reporting requirements, especially when the content of the annual reports overlap so much.

Perhaps the most concerning part of the proposed changes is that any exemption from subpart D that was issued prior to the effective date of this proposed rule would be rescinded. This would place a burden on the project owner then to reapply for an exemption. There is no detail required on the application content, but it does state that the review “is based on the current state of the practice, considering potential failure modes, consequences, and total project risk.” This language makes it appear that a PFMA and RA and possibly other studies will be required for the application. In Table 1 of the NOPR, the Average Annual Burden in Hours and Cost is

estimated to be \$166 for Exemption Requests. Without an idea of what specifically will be required, this cost seems greatly underestimated. Instead of putting this uncertainty on project operators, all exemptions should remain in place unless D2SI can show cause as to why they should be rescinded.

An example of how this has been underestimated is in footnote 44 of Table 1 where FERC states that the Commission staff believes that industry is similarly situated in terms of cost for wages and benefits. That logic is used to derive a full-time equivalent cost of \$83/hour. This estimate does not accurately reflect the costs which would be incurred by Alaskan utilities. Even the federal government employees in Alaska are paid Locality Pay and COLA which are currently 29.67% and 2.86% respectively, which substantially increases local labor costs per hour. This example reflects the inaccuracies of the one size fits all solution presented by FERC in this NOPR.

The NOPR focuses heavily on what has failed at projects, but there is no consideration for the fact that most projects are following FERC guidance and doing what is correct to ensure project safety. Continuing to add regulations and redundant requirements will increase operating costs; this is in addition to the increased FERC lands fees that Alaska projects have been burdened with in recent years. It is evident from the cost analysis that FERC has underestimated the potential cost of these regulations for a “simple hydroelectric facility” located in Alaska. It is imperative that FERC consider the total cost of FERC regulation (administration fees, lands fees, license compliance and dam safety) before making this type of decision.

While the above comments have been more general in nature, AELP would like to submit the following specific comments on the proposed changes to the regulations.

18 CFR 12.3(4) adds the words “including recreation” so would read “Condition affecting the safety of a project or project works means any condition, event, or action at the project which might compromise the safety, stability, or integrity of any project work or the ability or any project work to function safely for its intended purposes, including navigation, water power development, or other beneficial uses including recreation; of which might otherwise adversely affect life, health, or property.” Does this mean that the dam safety group is now going to inspect the recreational trail on a project? Is a tree falling across the trail now an event that has to be reported to FERC? AELP would suggest removing the words “including recreation” or if there is a specific purpose for this proposed change, then that be better described so that project owners can understand the proposed relationship between Dam Safety and recreational facilities.

18 CFR 12.3(b)(14) This definition of high hazard does not match the definition in 12.31(d). High hazard is a serious classification and FERC should verify that all definitions of high hazard are consistent.

18 CFR 12.4(iii)(B) allows FERC to require a licensee to modify the Owner's Dam Safety Program. This is a new requirement adding additional burden on project owners. AELP has already prepared an ODSP and objects to the new requirement, especially to the requirement for periodic audits.

18 CFR 12.4(iii)(D) allows FERC to require a licensee to modify any Public Safety Plan. This is a new requirement. AELP has already prepared a Public Safety Plan and objects to the new requirement, especially given the overlap with the Emergency Action Plan and other requirements.

18 CFR 12.12(d) The words "physical and" should be struck from this section. *"Provision of records.* If the project is subject to subpart D of this part, or if requested by the Regional Engineer, the applicant or licensee must provide to the Regional Engineer ~~physical and~~ electronic copies of the documents listed in paragraph (a)(1) of this section, except as provided in paragraph (a)(2) of this section."

18 CFR 12.20 and 18 CFR 12.24. AELP fully supports removing the requirements to file three physical copies of the EAP with D2SI. D2SI has demonstrated during the pandemic that electronic copies of documents are adequate, this is an opportunity to build on that foundation and move solely to electronic submittals.

18 CFR 12.30 has added "(b) That has a project feature (dam, canal, or water conveyance) or any portion thereof that has a high hazard potential, as defined in §12.3(b)(14); or..." Adding this language expands the number of projects which are subject to Subpart D. By allowing public access to project lands with above ground penstocks for recreation this could inadvertently increase the hazard potential. Either the high hazard potential definition in 12.3(b)(14) needs to be modified to exclude recreational access to project lands or this section needs to add language to clarify when this would apply.

18 CFR 12.32 The revision removes the exclusion for generating equipment. This expands the oversight of dam safety into the powerhouse and increases the likelihood that more team members would be required for an inspection. The previous version also limited the inspection to identify deficiencies that might endanger public safety, but the new wording is expanded to include "endanger life, health or property." Again, this has greatly broadened the scope of the inspection. AELP would propose the following changes:

"The project works of each development to which this subpart applies, excluding transmission and transformation facilities **and generating equipment**, must be inspected on a periodic basis by an independent consultant team to identify any actual or potential deficiencies that might endanger ~~life, health, or property~~, the public including deficiencies that may be in the condition of those project works or in the quality or adequacy of project maintenance, safety, **or** methods of operation, ~~analyses, and other conditions described in the Guidelines~~. A report must be prepared by the independent consultant team, by or under the direction of at least one independent consultant, who may be a member of a consulting firm, to document the findings and evaluations made during their inspection. The inspection must be performed by the independent consultant team, and the report must be filed by the licensee, in accordance with the procedures in this subpart and as further described in the Guidelines."

18 CFR 12.33 (b) extends the exemption requirement from dams only to include canals and water conveyances. This is a big addition and one could argue that any pressured pipe constitutes a hazard. FERC should supply a better definition of what criteria will be used to

judge the hazard potential for all water conveyances, currently Chapter 12 only discusses hazard potential of canals, and allow public comment on that before enacting this vague rule change which could have very large consequences for project owners. Until that step is complete, AELP recommends that the language for 12.33(b) be left as it currently is written.

18 CFR 12.33(c) states that an exemption from this subpart, granted prior to the effective date of this rule no longer constitutes an exemption from the requirements of this subpart. There is no detail required on the application content, but it does state that the review “is based on the current state of the practice, considering potential failure modes, consequences, and total project risk.” This language makes it appear that a PFMA and RA and possibly other studies will be required for the application.

18 CFR 12.35(d) requires the periodic inspection and comprehensive assessments (12.37) to include a review of dam and public safety programs. This is an independent review of the ODSP and the Public Safety Plan, this requirement should fulfill the requirement for a peer review of the ODSP for simple projects, thereby reducing the additional burden on licensees and helping to offset the cost of these new requirements.

18 CFR 12.37(f) requires a Potential Failure Modes Analysis to be performed in accordance with the Guidelines during the comprehensive assessment. AELP operates a high hazard but very simple project. In the past during the Part 12 inspection, AELP personnel, the Independent Consultant and FERC Staff sat together in a conference room to review the potential failure modes. Additional failure modes were added during this process, but it did not follow the Guidelines published in Chapter 18 since a Facilitator was not present and those present took their own notes. Conducting a full PFMA on a simple project which has been in operation for 100 years with very limited change between inspection cycles just does not make sense and is unnecessary. This process adds costs to the project operations with no benefit. Instead, for simple projects a PFMA should be required if there is a change in project works (either due to modification or damage) or major operating change. At a minimum this paragraph should be expanded to allow for a waiver as in (g).

18 CFR 12.40(e) allows the Regional Engineer to select if a CA or PI report is due, this appears to be an option for the Regional Engineer to require licensees to perform a CA instead of a PI. If so, the Regional Engineer must provide a justification to the licensee with the notice to perform the inspection.

18 CFR 12.41(a)(2) requires an annual status report on the corrective measures until all have been completed. This is a redundant requirement to the Owner’s Inspection Preparation Form. Again, FERC is adding reporting requirements without first evaluating the need. The last portion of the paragraph should be removed as shown below.

(2) Carrying out the plan. The licensee must complete all corrective measures in accordance with the plan and schedule submitted to, and approved or modified by, the

~~Regional Engineer, and on an annual basis must submit a status report on the corrective measures until all have been completed.~~

18 CFR 12.52 is an update to 18 CFR 12.42. This proposed change adds a paragraph which gives the Regional Engineer the option to require a Public Safety Plan. The paragraph goes on to say that "safety plans must be developed in accordance with the Guidelines for Public Safety at Hydropower Projects established..." This FERC document is outside of the Engineering Guidelines chapters and is again a "guideline" not a regulation. FERC should be consistent in how the guidelines are treated and if this guideline is also going to be a regulation, it should become a chapter in the Engineering Guidelines which should be reviewed by FERC and then submitted for public comment.

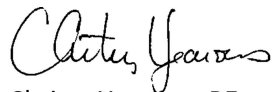
18 CFR 12.64 now requires a report on the annual review of the OSDP to be submitted to the Regional Engineer. This is a new requirement and an additional document to be generated and duplicates the effort a licensee already performs when completing the Owner's Inspection Preparation Form. Suggested changes to the paragraph are below.

~~"The Owner's Dam Safety Program, and the implementation thereof, shall be reviewed at least once annually by the licensee's dam safety staff and discussed with senior management of the Owner's organization. The licensee shall submit the results of the annual review, including findings, analysis, corrective measures, and/or revisions to the Owner's Dam Safety Program, to the Regional Engineer."~~

18 CFR 12.65 requires an Independent external audit or peer review. As discussed above, for simple projects without changes to project operations and which remain under the same ownership, this requirement should be satisfied by the PI or CA.

Thank you for consideration of our comments. AELP remains committed to working with local, state, and federal agencies to provide safe, renewable, low cost energy to our customers within the City and Borough of Juneau.

Sincerely,



Christy Yearous, PE

Vice President Power Generation

Alaska Electric Light and Power Company