

## STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



June 10, 2022

## VIA ELECTRONIC FILING

The Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Dear Secretary Bose:

SUBJECT: Financial Assurance Measures for Hydroelectric Projects

Federal Energy Regulatory Commission Docket No. RM21-9-000

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) is submitting comments in response to the Federal Energy Regulatory Commission's (FERC) Technical Conference regarding potential changes to current practices for requiring financial assurance measures in licenses and other authorizations for hydroelectric projects, FERC Docket No. RM21-9-000.

This matter is of grave importance to the State of Michigan in light of the May 19, 2020, failure of two dams in Gladwin and Midland Counties, one of which had its license surrendered by implied surrender following the failure and the other had its FERC license revoked in 2018 due to long standing noncompliance by the licensee to meet dam safety requirements (FERC Project Nos. 2785 and 10808, respectively). There are currently ninety-two dams in Michigan that are regulated by FERC, sixty of which have been assigned high and significant hazard potential ratings.

While we appreciate that several representatives from Michigan were included as panelists for the Technical Conference, we wish to also provide the following formal responses to each of the questions provided with the conference agenda.

Panel 1: Protecting Hydroelectric Facilities and Communities with Financial Assurance Requirements

Question 1: What project specific characteristics, such as facility age, condition, reservoir size, dam safety hazard potential, geography, natural resources, and development in the surrounding floodplain should the Commission consider as it evaluates the need for a financial assurance requirement?

While each of these characteristics, and perhaps others, should be considered in determining the value of financial assurance, EGLE believes that financial assurance should be required universally for all FERC projects. As was indicated by several of the panelists, the ability to forecast future conditions which may compel a licensee into non-compliance

Secretary Kimberly D. Bose FERC Docket No. RM21-9-000 Page 2 June 10, 2022

(either due to a physical change to the dam or external forces on the licensee's business model) is challenging to quantify. The intent of financial assurance is to provide FERC with the financial and legal means to employ remediation measures at a project to reduce or eliminate risks to the general public and public trust. FERC cannot predict with certainty which licensees or projects will eventually become non-compliant. Therefore, the need for financial assurances is universal, however the amount of financial assurance required for each hydroelectric project needs to be determined.

2. How can financial assurance requirements protect against broader risks, including increased risk from aging infrastructure and regional heat/severe storm stressors from climate change?

Broader risks such as aging infrastructure and climate change are the types of external pressures that can impair the feasibility of a project and compel a licensee to surrender a FERC license or, worse yet, abandon a dam. As the cost of maintenance increases with the age of a dam and regulatory requirements increase (due to environmental changes or lessons learned from failures), projects become incrementally less profitable and eventually may cross a threshold where the licensee is no longer inclined to continue investing in the dam. While a responsible licensee will take the appropriate steps for sale of the project to a new responsible owner, or for surrender and decommissioning, it has been found that some licensees are less inclined to meet these obligations. Such is the case with several hydroelectric projects in Michigan. There are numerous examples throughout Michigan where former hydropower dams have been "gifted" to communities that lack the means to maintain the facilities. Then, long after all revenues have been extracted from the resources, the taxpayers are left with the burden of removing the dams.

These broader risks are also the reason EGLE feels that financial assurance should also consider decommissioning costs at the end of a dam's service life. By factoring these costs into determining the value of financial assurance, FERC is safeguarding against the potential for an owner who is no longer solvent to walk away from a project and leave the burden of removal with local stakeholders. Again, we have several examples in Michigan of dam owners that have either hidden behind corporate veils to avoid financial obligations, or have simply filed bankruptcy and dissolved the corporations, leaving the dams abandoned.

Question 3: How should the Commission weigh the impacts of the various risks when establishing a financial assurance requirement?

Again, it should be reiterated that the need for financial assurance is universal and should be required of all dams. The various risks affecting the viability and safety of a project should be applied to the financial assurance requirements as multipliers which will increase or decrease the required value, based on the severity of the impacts. This factored approach to assigning a financial assurance requirement will necessitate reevaluation of the financial assurance value on a routine basis, likely in conjunction with dam safety inspections.

Secretary Kimberly D. Bose FERC Docket No. RM21-9-000 Page 3 June 10, 2022

Question 4: What are the impacts on communities and how should they be factored into the requirement?

Risk to surrounding communities can be mitigated in part by requiring licensees to provide FERC financial means and authority to remediate unacceptable risks through appropriate financial assurance. However, impacts to infrastructure, dwellings, and population-at-risk within the breach flood inundation zone (which correlates to the hazard classification), along with loss of recreational, and natural resources should be considered in determination of a financial assurance value. While impacts to recreational and natural resources can be incorporated into the base calculation of cost for alleviating risks (such as dewatering or breaching), the impacts associated with the potential failure of the dam could be factored in as multipliers on this base cost.

Panel 2: Establishing a Financial Assurance Requirement

Question 1: How should certain project characteristics, such as the hazard classification of the dam, the size of the project reservoir, the size of the project (capacity), compliance history, location, or other factors, inform a financial assurance requirement?

It is EGLE's opinion that financial assurance should be required for all dams that pose a risk to human health and safety, infrastructure, private property, or the environment in the event of a failure. The extent of financial assurance likely should vary based on factors, as is inferred in the question. However, all dams require proper maintenance and upkeep and are therefore susceptible to falling out of compliance with dam safety standards.

Question 2: Should the Commission treat projects at governmental dams where financial assurance may already be required for use of that facility (e.g., U.S. Army Corps of Engineers and Bureau of Reclamation) differently?

Where projects are located at dams either owned by other governmental agencies, or coregulated by other agencies which have financial assurance requirements, FERC should only seek additional financial assurance if the FERC required value has not been met. The total combined values should be equal to the FERC requirement. FERC may need to seek agreements or authorization to access the financial assurance mechanisms.

Question 3: Depending on the risk (i.e., project specific, regional, or global), how could the appropriate amount of financial assurance be determined?

EGLE believes that a financial assurance requirement should be derived based on the cost to dewater or breach a dam and alleviate its risks, similar to the financial assurance program in Pennsylvania. From this base, additional factors could be applied as multipliers to increase or decrease the required value. Factors could incorporate either quantified risk analyses values, or assigned values based on specific characteristics such as age, number of PFMs, and compliance history.

Secretary Kimberly D. Bose FERC Docket No. RM21-9-000 Page 4 June 10, 2022

In addition to considering the costs for averting risks, EGLE believes that long-term disposition of the dam and its eventual decommissioning and removal should be factored in. This removal cost, amortized over the remaining life of the dam, could then be compared to the risk aversion cost and the greater value applied as the financial assurance requirement. For both cost formulas, environmental impacts of those actions, such as sediment management, stream restoration, wetland mitigation and impacts to wildlife and fisheries, should be included.

Question 4: What methodology should be used to set the required funding levels (e.g., is it a formula based on the hazard level of the dam and the acre-feet of storage or is it based on the amount of generation)?

EGLE believes that the level of funding should be based on the cost to FERC to alleviate the risk of the dam and address the problem, should the licensee be unwilling or unable to do so. This may be the cost to breach or dewater the dam, or it may be for full decommissioning and removal at end of service life. Either way, these costs can be amortized and adjusted based on factors previously discussed.

Question 5: What level of funding or assurance should each licensee be required to demonstrate? Should this level be applied broadly or be determined on a case-by-case basis?

The level of funding should be commensurate with the costs and factors previously discussed. This approach inherently will be applied on a project specific basis. Furthermore, this approach incentivizes proper maintenance and compliance at a dam as it will allow for reduction of the required financial assurance value.

Panel 3: Evaluating Mechanisms for Financial Assurance

Question 1: Should the Commission require licensees to use a performance or surety bond (or bond bank); irrevocable letter of credit; individual trust, escrow, or remediation fund; or insurance policies or self-insurance?

EGLE believes there is value in providing multiple options for the licensee to achieve the necessary financial assurance. Regardless of the mechanism, FERC will need unfettered access to these funds in the event of non-compliance and inaction by a licensee.

Additionally, the State of Pennsylvania provides a great example of establishing a bond program which private owners may buy into and meet financial assurance requirements. When this fund has grown to exceed a certain threshold, excess funds become available as grants to private owners for risk reduction projects.

Question 2: What is the availability of the various financing instruments?

Currently in Michigan, financial assurance is required for several of our environmental programs. One such example is our wetland mitigation program that requires either a bond

Secretary Kimberly D. Bose FERC Docket No. RM21-9-000 Page 5 June 10, 2022

or letter of credit to ensure that mitigation is completed in accordance with permit requirements. This financial assurance provides the funding for the State to step in and complete necessary mitigation or remediation if the responsible party fails to do so. This type of financial assurance could certainly be tailored to dam safety applications.

Question 3: Should licensees be required to file financial records or financing plans? If so, how should the Commission establish financing thresholds or a way to measure or determine if a licensee's financials are sufficient?

Yes, a licensee should be required to demonstrate financial viability in order to retain their FERC license. From a simplistic view, it would seem to make sense that a licensee should be required to estimate the costs of replacement and removal and amortize the greater cost over the remaining design life of the project. If the licensee lacks the financial capacity to cover these costs, they likely won't be able to meet their obligations over the life of the dam. It is also important that these financial capacities and obligations be tied to both parent and shell corporations invested in the dams. Additionally, it is worth noting that in order to obtain a bond or letter of credit, financial institutions will routinely investigate the financial capacity of the licensee.

Question 4: Should the Commission require licensees to reaffirm or recertify that they have adequate financial assurance instruments during their license term? Or should the Commission reexamine the financial assurance requirements after a set number of years.

Given the recommended approach to calculating the financial assurance requirement, it would seem appropriate to reevaluate this value at each Part 12D inspection and engineering reevaluation, and have the licensee recertify their compliance with this requirement. Additionally, it would seem appropriate to reevaluate the required value when any conditions of the dam or known risks change. It's also prudent to reevaluate costs of rehabilitation and removal of the project periodically. As construction costs increase over time, so will the financial assurance values required to mitigate risks associated with the dam.

Question 5: How should the experience of other federal, state, and industry regulators inform the Commission's financial assurance requirements?

There are certainly other proven examples of financial assurance requirements being implemented for the protection of the public. EGLE strongly encourages FERC to investigate these programs across industries to gain insights in the development of their own requirements. The State of Pennsylvania financial assurance program is a good example for the dam sector.

In general, all the proposed financial assurance mechanisms proposed previously in the NOI are supported by EGLE. However, EGLE recommends that each of the options be explored further for feasibility and proper considerations be given to several of these mechanisms as it is anticipated that a diverse approach will be necessary to provide adequate coverage for all FERC regulated dams. Just as every dam is unique, so too are

Secretary Kimberly D. Bose FERC Docket No. RM21-9-000 Page 6 June 10, 2022

its operation and maintenance costs and funding situation. EGLE also urges FERC to consider the creation of an emergency fund that is accessible by FERC to mitigate hazards associated with a hydroelectric project when the licensee is unable to do so. As EGLE has learned from past experiences, compliance by dam owners is not a sure thing, but dams, while in operation, do continue to deteriorate and pose downstream hazards. It is imperative that regulatory agencies have the ability to step in to avert disaster when the need arises.

EGLE welcomes the opportunity to further discuss these recommendations as FERC and EGLE are concurrently exploring many of the same issues related to financial assurances and safe maintenance of dams by their owners.

Thank you for the opportunity to provide comments on this issue. If you have any questions about these comments, please contact me at TrumbleL@Michigan.gov; 517-420-8923; or EGLE, P.O. Box 30458, Lansing, Michigan 48909-7958.

Sincerely,

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