FERC GUIDANCE FOR ODSP EXTERNAL AUDITS

To assure that an Owners Dam Safety Program is continuing to improve, independent audits should be conducted periodically by a qualified dam safety expert. Audits are intended for dam owners to continue to improve their dam safety program, help them understand how well their program is working, and to identify areas where their dam safety program may need improvement. The time period between program audits should reflect the risk exposure of the organization. For owners of one or more high hazard classification dams, their dam safety program should be externally audited or peer reviewed on a schedule not to exceed five years. More frequent audits could be necessary if there has been a significant dam safety incident, or major changes in personnel and organizational structure have occurred. A statement of qualifications of the proposed auditor should be submitted to the Regional Engineer for review and acceptance prior to performing the audit. Upon completion of the audit, the Chief Dam Safety Engineer or Coordinator should review the audit report and prepare a summary report for presentation to the senior management of the organization. A copy of the summary document along with the full audit reports should be submitted to the FERC for review and comment, along with the licensee's plan and schedule to implement any recommendations.

The following items are examples of what should be considered when developing a Scope of Work for the audit, but should be customized to the specific projects and licensee/exemptee mission:

- Review representative reports and information specifically related to the development and implementation of the Dam Safety Program (DSP), prior to performing the actual audit.
- Review recent operating and maintenance records for each facility (or a representative sample of facilities) to determine if proper procedures are adequate and being followed.
- Assess the Dam Safety Surveillance and Monitoring Plan (DSSMP) and reporting requirements at each facility (or a representative sample of facilities) toward the end goal of understanding and verifying the expected performance of the dam.
- Review representative personnel training records to evaluate if an appropriate dam safety training program exists and is being conducted in accordance with the latest training plan as defined in the ODSP, and that appropriate training has been taken by all personnel involved with the operation and inspection of the project(s).
- Conduct interviews of a representative sample that includes all levels of Licensee/Exemptee staff (including senior management), perform visual

examinations, or utilize other methods to evaluate the effectiveness, completeness, and familiarity of those responsible for the project(s) with the dam safety training.

- Attend and participate in representative project site visits or inspections with field personnel at one or more projects. This should include, at a minimum, those projects with the highest downstream consequences.
- Interview the Chief Dam Safety Engineer/Chief Dam Safety Coordinator and all dam safety staff; including but not necessarily limited to: senior management, facility managers, staff engineers, and hydro plant technicians to determine their understanding of the DSP and the implementation of their respective responsibilities.
    - These interviews should ideally obtain independent views from those interviewed, of the effectiveness and completeness of the ODSP.
- Evaluate the Licensee's/Exemptees corporate commitment and its priorities with respect to dam safety, including senior executives. This includes meeting directly with senior management to discuss the DSP.
- Provide the auditor's opinion as to whether the licensee's dams are being adequately operated, inspected and maintained, i.e. determine if the ODSP is appropriate for the specific projects and accomplishing what is intended from a well-developed dam safety program.
- Assess how proactive the licensee is in implementing their dam safety program. Evaluate whether they take initiative to address dam safety issues on their own without waiting for FERC to require action, or if they are strictly reactive.
- Provide conclusions, and if appropriate, recommendations for the Licensee to further improve their dam safety program.

You might also consider sharing the draft Scope of Work with the FERC Regional Office for input prior to beginning the audit.

Frequently Asked Questions

1. *Who should be hired to perform the ODSP audit? What experience and qualifications are needed by the auditor?*

   For smaller licensees with only a couple of dams, a single individual may be appropriate to perform the audit. For larger licensees with numerous dams and complex organizations, a two or more person audit or peer review team would likely be more appropriate.

The auditor(s) should be from an external organization that was not involved in drafting the ODSP document or responsible for routine ODSP activities such as internal dam safety inspections or drafting DSSMPs or DSSMRs.

Qualifications for auditor(s) would include:

- Engineer(s) experienced in dam safety design, operation, and maintenance of the types of dams being evaluated.
- A current/former CDSE who has worked in a different dam owning organization with a strong dam safety program.
- Someone with a regulatory dam safety background (e.g. current or former state or federal employee).
- Engineering Consultant with expertise in dam and hydro safety management, design, and/or dam safety engineering.

2. *Do I need to submit the proposed auditor's resume to the FERC for acceptance?*

   Yes. As indicated in our annual letter, prior to conducting an audit of your ODSP, you should submit a statement of qualifications, including a resume, of the proposed auditor to the Regional Engineer for review and acceptance prior to performing the audit. A copy of the final audit report should also be submitted to the FERC for review and comment.

3. *Can we just use our Part 12 Independent Consultant to conduct our audit?*

   For smaller licensees with only a few dams and a simple organizational structure, it may be possible to use your Part 12 Independent Consultant, provided their experience includes understanding of organizational management and leadership principles. In our experience, this option is being over-utilized, possibly as a simplification of contracting or familiarity with the consultant. The selection of an auditor who can fully understand and evaluate a dam safety program, as well as provide an independent review of the entire dam safety program, is a reflection upon the seriousness of the Licensee/Exemptee to their program.

4. *Can we use the same auditor for every audit?*

   In general, it is preferred that you use a different auditor for each external audit. However, there may be situations where there is a logical reason to do so, such as following a major organizational change. You should check with your Regional Office prior to using the same auditor twice.

5. *Can the FERC provide us with some names of potential auditors?*

   The FERC does not maintain a list of individuals who are qualified to perform an audit. We do maintain a list of Part 12 Independent Consultants who may or may not be qualified to perform an audit. Professional Organizations such as the Association of State Dam Safety Officials (ASDSO), U.S. Society on Dams (USSD), and the American Society of Civil Engineers (ASCE) may be able to help with finding qualified auditors or peer reviewers.

Example Table of Contents for Audit Report