# FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects
Division of Dam Safety and Inspections
888 First Street, NE Routing Code: PJ-13
Washington, DC 20426
(202) 502-6743 Office – (202) 219-2731 Facsimile

#### Dear Mr./Ms. Licensee:

It is important that licensees/owners of dams regulated by the Federal Energy Regulatory Commission (FERC or Commission) have a robust and focused dam safety program in place to safeguard public safety, the environment, and the hydroelectric facilities. Therefore, all owners of high and significant hazard potential dams are required to submit an Owners Dam Safety Program (ODSP). The Commission implements its responsibilities for dam safety through its regulations at 18 CFR Part 12. Specifically, under 12.4(b)(2)(ii) the Commission may require a licensee to submit reports or information on any condition affecting the safety of a project.

The ODSP will assure that dam safety is of the highest priority within your organization. The basic principles of a good dam safety program include;

- Acknowledgment of Dam Safety Responsibilities;
- Communication;
- Clear Designation of Responsibility;
- Allocation of Resources to Dam Safety; and
- Learning Organization.

Enclosure A to this letter provides an outline for development of your dam safety program. The outline is for the management component of your ODSP (Part 12D inspection reports or Dam Safety Surveillance Monitoring Reports are examples of what goes in the appendices as references in the ODSP). Enclosure B and C to this letter provides links to additional information posted on FERC's website on ODSP and links to investigative reports on recent failures where a contributing cause was an inadequate owner's dam safety program.

A dam safety program that is well documented and is kept current through annual reviews sends a message to all affected parties both within and outside your organization that dam safety is important. Recognizing that each organization is unique, your ODSP should be specifically tailored to your particular situation considering your portfolio of dams, dam types, and the associated life safety and financial risks.

Please provide a plan and schedule, within 30 days from the date of this letter, to submit your ODSP for our review and concurrence. The schedule should target the ODSP submittal within 6 months of the date of this letter. Your response should be sent to:

Regional Engineer
Division of Dam Safety and Inspections
\_\_\_\_\_ Regional Office
Address
City, State, Zip Code

cc: Mr. William H. Allerton, P.E.
Director, Division of Dam Safety and Inspections
888 First Street, NE
Washington, DC 20426

The Regional Office will be responsible for reviewing the acceptability of your plan and schedule and the submittal of your ODSP.

If you have any questions please call \_\_\_\_ Regional Engineer at ###-####. Note a copy of this letter will be posted on the Commission's website with hyper-links to the websites referenced in the Enclosures to this letter.

[http://www.ferc.gov/industries/hydropower/safety/initiatives/odsp.asp]

Your transmittal letter submitting your ODSP should reference all project numbers associated with your Licensed or Exempted dams.

Sincerely,

William H. Allerton, P. E. Director
Division of Dam Safety and Inspections

Enclosure A – Table of Contents Owners Dam Safety Program

Enclosure B – Information posted on FERC website on ODSP

Enclosure C – Links to Investigative Reports on recent failures

Enclosure D – List of associated project numbers

cc: Public Files

# Enclosure A Owner's Dam Safety Program

#### **OUTLINE FOR OWNER'S DAM SAFETY PROGRAM**

# TABLE OF CONTENTS

#### 1. INTRODUCTION

This Section should discuss the purpose for the Dam Safety Program and the Scope of the Program. The discussion of purpose should include, in general terms, who is covered by the Program (i.e. the owners employees, consultants, etc.), and what the Program is intended to accomplish. The discussion of scope should specifically state which dam(s) are covered by the Program.

#### 2. TERMS and DEFINITIONS

This Section should provide a glossary of terms and acronyms so that all parties who are covered by the Program have a clear and common understanding of the terms.

# 3. DAM SAFETY POLICY, OBJECTIVES AND EXPECTATIONS

This Section should provide a summary of the policies defined in the Program, the objectives of the Program and the expectations of the owner for its employees, consultants and others involved in assuring dam safety. Each year the CEO or President or the highest person in the organization should issue a signed Company dam safety philosophy to the employees.

#### 4. RESPONSIBILITIES FOR DAM SAFETY

This Section should outline the responsibilities for each level and organizational group.

For instance, the responsibilities of the CEO and Board of Directors may include such items as: establishing the corporate safety philosophy; providing policies, directives and sufficient resources; understanding the Responsibilities and Liabilities that accompany ownership of a dam; understanding the life safety and financial risks associated with dam ownership; assuring safe and adequate design, construction, operation and maintenance of dams(s); assuring adequate emergency action planning is in place, and establishing appropriate decision-making process to assure dam safety.

Other people or organizations that have a role in assuring dam safety, such as: the Chief Dam Safety Engineer; dam safety managers and supervisors; others in the dam safety group; hydro plant managers; other hydro plant personnel; and other employees, agents, consultants and any other personnel, should have their responsibilities defined.

# 5. DAM SAFETY TRAINING PROGRAM

This Section should include a discussion of the dam safety training provided to staff at all levels of the organization including management, operations, maintenance, engineering consultants and contractors as appropriate. Training of the on-site operators should be emphasized because they are the front line of defense. The content and frequency of training should be discussed

# 6. COMMUNICATIONS. COORDINATION, REPORTING & REPORTS

This section should discuss internal and external communication requirements and protocols. Internal communication requirements and protocols should include the type of incidents that are to be reported to the Chief Dam Safety Engineer and the time frame in which those reports must be made. Communication requirements and protocols should also be established for the Chief Dam Safety Engineer to report to senior levels of management, up to and including the Chief Executive Officer and/or Chief Operating Officer.

External communication requirements and protocols should be established for communications to the FERC dam safety staff and other external stakeholders.

# 7. RECORD KEEPING AND DATABASES

Procedures should be established to assure the retention of critical and other relevant documents and data related to design, construction operation and maintenance of the dam. Document types may include items such as design reports, drawings, specifications, construction reports, dam safety inspection reports, photographs, dam safety program audit reports, incident tracking, compliance and non-compliance history, commitment tracking, non-conformance tracking, training programs, etc.

The person or position responsible for assuring the retention of the records should be identified along with the storage location and the retention period.

# 8. SUCCESSION PLANNING

Assuring the continuation of a qualified chief dam safety engineer and a qualified staff to assure dam safety is a critical element of a successful dam safety program. The procedures in place to assure a successful transition as positions become vacant should be described. At a minimum, succession planning procedures should be in place for the chief dam safety engineer, other dam safety group personnel, hydro plant personnel, and engineering and support group personnel.

# 9. CONTINUOUS IMPROVEMENT

Assuring that the dam safety program is periodically reviewed to assure that it reflects the current staffing and organizational structure of the owner and incorporates the lessons learned from the ongoing implementation of the program, information gathered from dam safety inspections and operating history, changes in the state-of-

practice in dam safety, knowledge gained from training and the study of case histories of incidents and failures and findings from audits of the dam safety program.

# **10. AUDITS AND ASSESSMENTS** (Similar to Section 4.8 of Ameren ODSP)

To assure that the dam safety program is being implemented in both the spirit of dam safety and in accordance with the written dam safety program, the chief dam safety engineer should routinely assess the organizations compliance with the written dam safety program and report the findings to the senior management of the organization.

To assure that the program is continuing to improve, as noted in Section 10, independent audits should be conducted periodically by a qualified dam safety expert. The time period between program audits should reflect the risk exposure of the organization. Owners with a large portfolio of dams or whose dams, either individually or collectively, present a significant risk to life safety, the environment or the financial health of the organization should have their dam safety program audited on a schedule not to exceed five years. The chief dam safety engineer should review the audit report and prepare a summary report for presentation to the senior management of the organization. A copy of the summary and audit reports should be submitted to the FERC.

# 11. REFERENCES

References to pertinent documents, policies, procedures, etc that support this dam safety program should be contained in this Section such as a detailed discussion of responsibilities, detailed procedures described in this document, training materials, operation and maintenance policies and procedures, etc.

#### **APPENDICES**

As appropriate – The appendices to include guidance details associated with each component of the program.

# **Enclosure B Information posted on FERC Website on ODSP**

- Owners ODSP Self Assessment Evaluation Parameters
  (http://www.ferc.gov/industries/hydropower/safety/initiatives/odsp/owners-self-assessment.pdf)
- The Importance of ODSP
   (http://www.ferc.gov/industries/hydropower/safety/initiatives/odsp/importance-odsp.pdf)
- <u>Supportive Dam Safety Organizational Principles to Ensure Dam and Project Safety</u>
   (http://www.ferc.gov/industries/hydropower/safety/initiatives/odsp/supportive-DAM-org-principles.pdf)
- ODSP What FERC will be looking for during FERC Dam Safety Inspections (http://www.ferc.gov/industries/hydropower/safety/initiatives/odsp/what-do-we-see.pdf)
- The Stipulation and Consent Agreement Between FERC and Ameren, October 2006 Appendix A: Dam Safety Program (http://www.ferc.gov/media/news-releases/2006/2006-4/10-02-06-agreement.pdf)

# **Enclosure C Links to Investigative Reports on Recent Failures**

# **Taum Sauk**

FERC Staff Report

http://www.ferc.gov/industries/hydropower/safety/projects/taum-sauk/staff-rpt.asp

**Independent Panel of Consultants Report** 

http://www.ferc.gov/industries/hydropower/safety/projects/taum-sauk/ipoc-rpt.asp

# **Kingston Ash Pond**

http://www.tva.gov/kingston/board\_report/mla\_kingston\_report.pdf

# **BP** Deepwater

http://www.oilspillcommission.gov/final-report

# San Bruno Gas Pipeline Failure

**CPUC Report** 

http://www.cpuc.ca.gov/NR/rdonlyres/85E17CDA-7CE2-4D2D-93BA-B95D25CF98B2/0/cpucfinalreportrevised62411.pdf

NTSB Report

http://www.ntsb.gov/doclib/reports/2011/PAR1101.pdf