UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

AmerenUE Project No. 2277

STIPULATION AND CONSENT AGREEMENT

I. INTRODUCTION

1. The Office of Enforcement (OE) and Union Electric Company, doing business as AmerenUE (AmerenUE) enter into this Stipulation and Consent Agreement (Agreement) to resolve all issues that are specifically addressed herein pertaining to potential liability of AmerenUE arising from a non-public investigation pursuant to Part lb of the Federal Energy Regulatory Commission's (Commission) regulations, 18 C.F.R. Part 1b (2006), that OE conducted into alleged violations of license conditions and Commission regulations by AmerenUE as licensee of the Taum Sauk Hydroelectric Project No. 2277, that OE alleges may have contributed to the failure of the upper reservoir of the project on December 14, 2005.

II. STIPULATED FACTS

OE and AmerenUE hereby stipulate and agree to the following:

- A. <u>Background</u>
- 2. AmerenUE, a wholly-owned subsidiary of Ameren Corporation, is the licensee for the Taum Sauk Hydroelectric Project (Taum Sauk), located on the East Fork of the Black River in Reynolds County, Missouri. The Taum Sauk Project is subject to the

Commission's jurisdiction under the Federal Power Act (FPA), 16 U.S.C. § 792 et seq. (2000).

- 3. The Taum Sauk Project is a reversible pumped storage project with a mountain ridge upper reservoir, a shaft and tunnel conduit, and a lower reservoir with a 450-MW two-unit pump-turbine and generator-motor plant. It was constructed in 1962 and went into commercial operation in 1963. The upper reservoir consists of a 6562 foot-long, concrete-faced dumped rockfill dam that impounded 4350 acre-feet of water (approximately 1.4 billion gallons). The project has been operated remotely from a control center at AmerenUE's Osage Hydroelectric Project No. 459.
- 4. On December 14, 2005, there was a breach of the upper reservoir of the Taum Sauk Project. The breach caused personal injury and significant environmental and property damage. A house downstream from the Taum Sauk project was destroyed as a result of the breach, injuring the residents, including three children. Water from the reservoir toppled trees and left a path of mud and debris on the land and in a river downstream, including the Johnson's Shut-Ins State Park.
- B. Applicable Commission Regulations and Taum Sauk License Conditions
- 5. Section 12.5 of the Commission's regulations under the FPA, 18 C.F.R. § 12.5 (2006), requires licensees to "use sound and prudent engineering practices in any action relating to the design, construction, operation, maintenance, use, repair, or modification of a water power project or project works."
- 6. Section 12.10 of the Commission's regulations, 18 C.F.R. § 12.10 (2006), requires licensees to report to the Commission's Regional Engineer any "condition affecting the

safety of the project or project works."

- 7. Section 12.11 of the Commission's regulations, 18 C.F.R. § 12.11 (2006), requires licensees to report "any modification of the project or project works to the Regional Engineer in writing" at least 60 days before work on the modification begins except when required by an emergency.
- 8. Article 27 of the license for the Taum Sauk Project requires the licensee to obtain approval of the Commission prior to making any substantial alteration or addition to the project not in conformity with the approved plans except when required by an emergency.
- 9. Article 20 of Form L-11 of the license for the Taum Sauk Project requires the licensee to install and maintain such gages as the Commission may deem necessary. It allows the licensee to alter the number, character, and location of such gages and other measuring devices only with the approval of the Commission.
- C. Events Prior to the Breach
- i. Water Level and Transducers
- 10. There was an overtopping of the upper reservoir of the Taum Sauk Project on September 25, 2005. AmerenUE did not report the overtopping to the Commission until after the December 14, 2005 breach.
- 11. AmerenUE discovered on September 27, 2005, that one of the three transducers used to measure the water level in the upper reservoir was giving an inaccurate reading.

 AmerenUE did not report the unusual instrumentation reading it observed on September 27, 2005, to the Commission prior to the December 14, 2005 breach. AmerenUE

attempted to address the inaccurate transducer by modifying the programmable logic controller (PLC) to eliminate the transducer's reading from the calculation of the upper reservoir water level.

- 12. On September 27, 2005, AmerenUE employees also observed that the PLC measurement (calculated by the remaining two transducers) did not accurately reflect the observed water level in the upper reservoir. In an attempt to address this inaccuracy, AmerenUE employees added 0.4 foot to the PLC measurement of the project's water level.
- 13. On October 4, 2005, AmerenUE discovered that certain portions of the system for anchoring the transducers used to measure water level in the upper reservoir failed, allowing the transducers to move and creating the possibility of inaccurate reservoir level readings. In an attempt to address this condition until AmerenUE repaired the anchoring system, AmerenUE lowered the maximum water level in the upper reservoir by two feet. AmerenUE further designed repairs to the anchoring system, ordered necessary parts, and arranged for a contractor to perform repairs. AmerenUE did not report the failed system for anchoring the transducers used to measure the water level in the upper reservoir, or its attempt to address this condition, to the Commission until after the breach on December 14, 2005.
- 14. AmerenUE did not repair the system for anchoring the transducers in the upper reservoir prior to December 14, 2005.
- ii. Warrick Probes
- 15. AmerenUE set the normal maximum shutoff for the project's upper reservoir

water level at 1596 feet above sea level starting in October 2004. The lowest point of the top of the parapet wall was 1596.99 feet. The Taum Sauk Project was originally intended to be operated with two feet of freeboard (space between the maximum water level and the crest elevation of the parapet wall).

- 16. There were two Warrick probes at the Taum Sauk Project intended to act as emergency shutoffs in the event the water level exceeded the maximum shutoff level. The Hi probe was intended to shut down the project's two pumps when the water in the upper reservoir contacted the probe at a pre-selected level. The Hi-Hi probe was intended to shut down the pumps when the water contacted the probe at a higher, pre-selected level. It was intended that this higher level not be exceeded. On December 1, 2004, an AmerenUE contractor raised the Warrick probes to 1597.4 feet (Hi) and 1597.7 feet (Hi-Hi). The lowest point of the top of the parapet wall was 1596.99 feet. As a result of the placement of the Warrick probes, the probes did not activate on December 14, 2005.
- 17. To avoid false activation of the probes, the same AmerenUE contractor also added a one-minute delay starting on December 1, 2004. This programmed delay occurred after the probes were activated and before the pumps were shut off, so water would continue to be pumped into the reservoir after activation of the probes. In addition, the same AmerenUE contractor programmed the Hi and Hi-Hi Warrick emergency cutoff probes on February 15, 2005, to operate in series rather than in parallel mode, resulting in the emergency cutoff of the pumps not activating unless both the Hi and Hi-Hi probes were triggered. Programming the Warrick probes in series effectively caused both pumps to

continue pumping water after the Hi probe was activated if the Hi-Hi probe was not activated.

- 18. The alarm system for the Warrick probes was programmed to activate only when the Hi-Hi probe was triggered. No alarm would be activated when the Hi probe was triggered.
- E. Events Since the Breach
- 19. AmerenUE has cooperated fully with the Commission in this investigation.
- 20. AmerenUE has taken steps to repair the damage to property and the environment caused by the breach and made efforts to minimize the impact of the breach on people living and working near the Taum Sauk Project. These efforts include cleaning up the environmental damage caused by the breach and providing financial relief to individuals displaced by the breach. These efforts continue through the date of this Agreement.

III. ALLEGED VIOLATIONS

OE alleges that:

21. The breach of the upper reservoir of the Taum Sauk Project may have been prevented if AmerenUE had reported conditions affecting the safety of the project to the Commission, allowing Commission staff to require AmerenUE to take steps that may have prevented the failure of the upper reservoir, or if Ameren had used sound and prudent engineering practices by operating the upper reservoir at a safe water elevation and properly repairing and maintaining critical instrumentation. OE's specific allegations of violations of the Commission's rules and regulations and Ameren's license conditions are set forth below.

- 22. AmerenUE violated Section 12.10(a) of the Commission's regulations, which requires licensees to report to the Regional Engineer any condition affecting the safety of a project or project works, when it: (a) failed to report the September 25, 2005 overtopping to the Commission; (b) failed to report the unusual instrumentation readings it observed on September 27, 2005, to the Commission; and (c) failed to report the failed system for anchoring the transducers used to measure the water level in the upper reservoir to the Commission.
- AmerenUE violated Section 12.5 of the Commission's regulations, which provides 23. that a licensee must use sound and prudent engineering practices in any action relating to the design, construction, operation, maintenance, use, repair or modification of a water power project or project works, when it: (a) added 0.4 foot to the programmable logic controllers' measurement of the project's water level to compensate for an inaccurate transducer reading; (b) did not repair the loose transducers used to measure the water level in the upper reservoir; (c) operated the Taum Sauk Project with water at 1596 feet above sea level, too close to the top of the upper reservoir's parapet wall; (d) raised the upper reservoir's Warrick probes to 1597.4 feet and 1597.7 feet above sea level, higher than the lowest point of the top of the parapet wall; (e) added a one-minute delay after the Warrick probes were activated before the pumps were shut off; (f) programmed the Hi and Hi-Hi Warrick emergency cutoff probes to operate in series rather than in parallel mode; and (g) did not program the Warrick probe to transmit an alarm when the Hi probe was activated.
- 24. AmerenUE violated Section 12.11 of the Commission's regulations, which

provides that a licensee must report any modification of the project to the Commission, when it failed to report to the Commission that it raised the Warrick probes.

- 25. AmerenUE violated Article 20 of license Form L-11 for the Taum Sauk Project, which requires advance Commission approval of modifications of the project's instrumentation, when it: (a) raised the Warrick probes to 1597.4 feet and 1597.7 feet above sea level without prior Commission approval; (b) added a one-minute delay to the activation of the Warrick probes without prior Commission approval; and (c) programmed the Hi and Hi-Hi Warrick emergency shutoff probes to operate in series without prior Commission approval.
- 26. AmerenUE violated Article 27 of the license for the Taum Sauk Project, which requires Commission approval of a substantial alteration of the project, when it raised the Warrick probes without prior Commission approval.

IV. AMERENUE RESPONSE TO OE ALLEGATIONS

27. AmerenUE neither admits nor denies the allegations in paragraphs 21-26 above, and AmerenUE neither admits nor denies that any action or inaction by AmerenUE in connection with the operation of the Taum Sauk project constitutes a violation of law, Commission regulations, or AmerenUE's license for the Taum Sauk project. In view of the costs and risks of litigation, and in the interest of resolving any dispute between OE and AmerenUE without further proceedings, however, AmerenUE has agreed to undertake the payment and performance obligations set forth herein.

V. REMEDIES AND PENALTIES

On and after the effective date of this Agreement, AmerenUE shall take the following

actions:

- 28. AmerenUE shall pay a civil penalty in the total amount of \$10,000,000 (\$10 million) to the United States Treasury, by wire transfer, and submit proof of payment to the Commission, within ten (10) days of the Commission issuing an order approving this Agreement without material modification.
- 29. AmerenUE shall pay \$5,000,000 into an interest bearing escrow account (the Escrow), and submit proof of payment to Commission, within ten (10) days of the Commission issuing an order approving this Agreement without material modification. The Escrow shall fund project enhancements at or near the Taum Sauk project. These project enhancements will include the development of an advanced Emergency Management System (EMS). These enhancements (which may cost approximately \$1 million) may include administrative and structural systems, advanced communication systems, and medical, police, or fire equipment to serve the medical and evacuation needs of the Johnson's Shut-Ins State Park and will incorporate the EMS into the Taum Sauk project's Emergency Action Plan. In addition, and in consultation with Commission staff, other project enhancements will be directed toward some or all of the following purposes: (1) enhancing economic development and quality of life for persons residing near the Taum Sauk project; (2) protecting and enhancing environmental resources, including animal habitats, at or near the project; and (3) ensuring and promoting educational and recreational (including hydropower education) opportunities at or near the project, including access to such opportunities for disabled persons. The final plan of project enhancements must be submitted to Commission staff for review and approval,

such approval not to be unreasonably withheld, and each project enhancement must be timely completed to the satisfaction of Commission staff, irrespective of whether the final costs exceed \$5,000,000. In the event AmerenUE does not complete the project enhancements by the earlier of (i) December 31, 2007 or (ii) completion of the reconstruction of the Taum Sauk upper reservoir (collectively, the "Milestone Date"), AmerenUE shall, within ten (10) days of the Milestone Date, pay the amounts remaining in the Escrow Fund as a civil penalty to the United States Treasury, by wire transfer, and submit proof of payment to the Commission.

30. AmerenUE shall also implement immediately and comply with the Dam Safety Program (DSP) set forth in Appendix A, which is attached to this Agreement and is expressly made part of, and incorporated in, this Agreement. The DSP provides for safety and environmental checks and balances designed to avoid similar problems in the future. Among other things, the DSP includes creation by AmerenUE of a group headed by the newly-created position of Chief Dam Safety Engineer, who will report to the Vice President of Generation Technical Services. The Chief Dam Safety Engineer shall have primary responsibility for dam safety throughout AmerenUE's system. Also, the Chief Dam Safety Engineer shall be empowered to order all necessary corrective action if dam safety is in question, including issuance of cease generation or stop work orders when necessary. Further, the Chief Dam Safety Engineer shall review and approve all changes to a dam structure, operating system, control system, or critical maintenance or operational procedures before implementation. The DSP also provides for the Chief Dam Safety Engineer to develop and implement quality management elements for

AmerenUE's licensed facilities. These elements shall include audits and assessments of the effectiveness of AmerenUE's dam safety program. Failure to comply with any provision of the DSP may result in further enforcement action by the Commission and possible additional civil penalties and other remedies.

VI. TERMS

- 31. The effective date of this Agreement shall be the date on which the Commission issues an order approving this Agreement without material modification. When effective, this Agreement shall resolve the matters specifically addressed herein as to AmerenUE and any affiliated entity, its agents, officers, directors and employees, both past and present (collectively, AmerenUE). Commission approval of this Agreement without material modification shall release AmerenUE and forever bar the Commission from bringing against AmerenUE any and all administrative or civil claims or matters asserting any claims, liabilities, causes of action, demands, rights, alleged entitlements, obligations, known or unknown, asserted or not asserted, vested or unvested, without limitation, arising out of, related to or connected with any and all activities of AmerenUE at the Taum Sauk Project that may have contributed to the December 14, 2005 breach of the Taum Sauk Project, including but not limited to the activities described herein.
- 32. Failure to make a timely civil penalty payment or to comply with the DSP or any other provision of this Agreement shall be deemed a violation of a final order of the Commission issued pursuant to the FPA and may subject AmerenUE to additional action under the enforcement and penalty provisions of the FPA.
- 33. If AmerenUE does not make the civil penalty payment above at the time agreed by

the parties, interest payable to the United States Treasury will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii), from the date that payment is due, in addition to the penalty specified above.

- 34. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of OE or AmerenUE has been made to induce any other party to enter into the Agreement.
- 35. Unless the Commission issues an order approving the Agreement in its entirety and without material modification, the Agreement shall be null and void and of no effect whatsoever, and neither OE nor AmerenUE shall be bound by any provision or term of the Agreement, unless otherwise agreed in writing by OE and AmerenUE.
- 36. The Agreement binds AmerenUE and its agents, successors and assigns.
- 37. In connection with the payment of the civil penalty provided for herein,
 AmerenUE agrees that the Commission's order approving the Agreement without
 material modification shall be a final and unappealable order assessing a civil penalty
 under section 31(d)(2) of the FPA, 16 U.S.C. § 823b(d)(2) (2000). With regard to such
 order, AmerenUE waives a Notice of Proposed Penalty; hearings pursuant to the
 applicable provisions of the FPA; rehearing of the order approving the Agreement; the
 filling of proposed findings of fact and conclusions of law; an Initial Decision by an
 administrative law judge pursuant to the Commission's Rules of Practice and Procedure;
 and post-hearing procedures pursuant to the FPA and the Commission's Rules of Practice
 and Procedure. AmerenUE further waives judicial review by any court of any

Commission order approving the Agreement without material modification.

38. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Agreement on the entity's behalf.

39. The undersigned representative of AmerenUE affirms that he(she) has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his(her) knowledge, information and belief, and that he(she) understands that the Agreement is entered into by OE in express reliance on those representations.

40. The Agreement may be signed in counterparts.

41. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:

Susan J. Court, Director

Office of Enforcement

Steven R. Sullivan, Senior Vice President,

General Counsel & Secretary

AmerenUE

Date

Date





Generation Program DSP 001

Dam Safety Program for FERC Licensed Facilities Effective Date: _____

Reason for C	hange: New Program		
Responsible	Department: Generation Technical Serv	vices	
This program	contains the following:		
Pages:	20	Annendices:	1 - 6

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1.0 PURPOSE

- 1.1 Establish and define the Dam Safety Program for Federal Energy Regulatory Commission (FERC) Licensed Facilities to ensure dam safety and compliance with FERC requirements for Ameren Corporation (Ameren) and its subsidiary Union Electric Company, doing business as AmerenUE (AmerenUE).
 - 1.1.1 In particular, the Dam Safety Program is intended to ensure that Ameren's employees, agents, and consultants have a complete understanding of, and a constant awareness of, the need to fully comply with all necessary dam safety measures and requirements.
 - 1.1.2 The Dam Safety Program is intended to accomplish the objectives of this section by prescribing the following as to Ameren's employees, agents and consultants:
 - 1) the dam safety related training required of such individuals on a regular or as needed basis;
 - 2) the protocols for communications by and among such individuals, and with FERC, on dam safety related matters;
 - 3) how dam safety related issues should be identified, and how dam safety related concerns should be resolved, within the Ameren organization;
 - 4) audits and assessments as to performance and quality of dam safety related operation; and
 - 5) the record keeping required to implement the above.
- 1.2 Clearly state the policies and expectations of the management of Ameren and its subsidiary AmerenUE regarding dam safety and regulatory compliance for FERC licensed facilities.

2.0 SCOPE

- 2.1 The requirements of this program apply to AmerenUE's hydroelectric projects licensed by the FERC:
 - 2.1.1 The Taum Sauk Project No. P-2277
 - 2.1.2 The Osage Project No. P-0459
- 2.2 This program defines the Dam Safety Program for FERC Licensed Facilities and takes precedence over other Ameren programs and procedures related to dam safety and regulatory compliance for FERC licensed hydroelectric plants.

Appropriate procedures and documents related to dam safety and regulatory compliance shall be routed through the Chief Dam Safety Engineer to ensure compliance with this program.

3.0 DEFINITIONS

- 3.1 **Assessment** A documented routine review conducted to evaluate the performance or effectiveness of an activity.
- 3.2 Audit An objective examination and evaluation of dam safety and regulatory compliance or effectiveness in accordance with a defined set of standards and a formal Audit plan.
- 3.3 Chief Dam Safety Engineer The engineer with responsibility and authority to ensure the Dam Safety Program is fully implemented and to ensure high standards are maintained for dam safety and regulatory compliance. The Chief Dam Safety Engineer is the single point of contact for non-emergency regulatory communications from Ameren to FERC and reports directly to the Vice President, Generation Technical Services. The Chief Dam Safety Engineer shall designate a qualified alternate to act in his or her absence.
- 3.4 **Dam** An engineered barrier constructed to contain a body of water, or control the flow or level, relative to the facilities described in Section 2.1.
- 3.5 **Dam Safety Inspection** A scheduled dam safety inspection performed in accordance with a documented inspection plan or checklist. These inspections will be performed by operations personnel, the Dam Safety Staff, or other qualified consultants.
- 3.6 **FERC -** Federal Energy Regulatory Commission
- 3.7 **FERC Operational Inspection** An annual formal inspection conducted by a FERC inspector. As required, the FERC inspector will be supported by the Operations staff and the Dam Safety Staff.
- 3.8 **FERC Part 12 Inspection** A formal inspection at five year intervals to be conducted by the approved FERC Independent Consultant in conjunction with the Chief Dam Safety Engineer.
- 3.9 **FERC Independent Consultant** a third party consultant contracted to perform the FERC Part 12 Inspection.
- 3.10 **Independent Consultant** A third-party consultant contracted to perform specific duties other than the FERC Part 12 Inspection.
- 3.11 **Modification(s)** Activities that change the physical features or design of the project from the state reflected in the plans or drawings or other documents filed with the FERC.

4.0 PROGRAM DESCRIPTION

4.1 Ameren Management Policies and Expectations

- 4.1.1 It is Ameren policy to maintain safe and compliant operation as our first priority. Ameren employees and consultants shall implement this policy in the conduct of their work assignments.
 - 4.1.1.1 Ameren's employees, agents and consultants shall operate its FERC licensed facilities consistent with the commitment of Ameren and its subsidiaries to good stewardship and responsible behavior.
 - 4.1.1.2 This shall include an awareness by Ameren's employees, that they are entrusted with the responsibility and privilege to operate Ameren's generating plants in a safe, reliable and efficient manner. Further, this shall include an awareness by Ameren's employees that Ameren's daily operating practices must always place public safety, personnel safety and environmental compliance above all other performance goals of Ameren.
- 4.1.2 Production or other business objectives shall not be allowed to compromise dam safety or regulatory compliance. This policy has been detailed in a written senior management document which shall be reviewed in employee training and prominently posted in the operating plants, the Generation Technical Services area, the Energy Supply Operations areas, and the Energy Trading facilities. (Reference Appendix 5) Ameren shall also incorporate this policy into the daily operations of its FERC licensed facilities through regular and as needed discussions and training sessions.
- 4.1.3 The performance evaluations for management and supervisory employees in the dam safety organization and in the hydroelectric operating organization will place primary emphasis on accountability for dam safety and regulatory compliance. Other normally expected job performance areas such as personal contributions, leadership, teamwork, cooperation, communications, and self-identification of problems, will also be evaluated.
- 4.1.4 This program implements commitments to the FERC to maintain compliance with FERC dam safety and regulatory requirements. Proposed changes to the requirements of this program shall be communicated in writing to the FERC Regional Engineer for review and written acceptance prior to implementation.

- 4.1.5 The objective of the Dam Safety Program for FERC Licensed Facilities is to assure continuing safe and compliant operation through the following program initiatives:
 - 4.1.5.1 Clearly communicate policies and expectations regarding dam safety and regulatory compliance.
 - 4.1.5.2 Implement program quality elements.
 - 4.1.5.3 Implement organizational changes to assure compliance with FERC requirements for dam safety.
 - 4.1.5.4 Define protocols for communications and for reporting dam safety issues.
 - 4.1.5.5 Define the authority of the Chief Dam Safety Engineer.
 - 4.1.5.6 Provide a comprehensive Training Plan for dam safety.
 - 4.1.5.7 Require internal and external Audits and Assessments to ensure compliance and to achieve an ongoing focus on dam safety and regulatory compliance.
 - 4.1.5.8 Create and implement a Dam Safety Inspection Program
- 4.1.6 Ameren expects that its employees, agents and consultants performing services for a FERC licensed facility will fully comply with all of FERC's dam safety related requirements.
 - 4.1.6.1 These include the requirement to use sound and prudent engineering practices in any action relating to the design, construction, operation, maintenance, use, repair, or modification of such projects (18 C.F.R. 12.5).
 - 4.1.6.2 These also include the requirement to notify FERC about the following, in the manner specified in the cited regulations:
 - 1) as to any condition affecting the safety of a project or project works (18 C.F.R. 12.10); and
 - 2) as to any modification to the project or project works (18 C.F.R. 12.11).
 - 4.1.6.3. They further include the requirement to comply with all additional items specified in the license applicable to each FERC approved project.

4.1.6.4

Ameren will communicate these requirements to the applicable employees, agents and consultants in training sessions by providing a copy of this Dam Safety Program to them and discussing it with them in training sessions and otherwise as needed. The Chief Dam Safety Engineer or his designee is authorized to determine the proper level of training required of such employees, agents or consultants based on his judgment as to the relevant factors, including but not limited to the following: prior experience, background, expected services to be performed for Ameren, and the impact of such services on dam safety and compliance with FERC regulations.

4.2 **Program Quality Elements**

- 4.2.1 The Chief Dam Safety Engineer and Dam Safety Staff, and plant operations staff, shall develop and implement quality management elements, including but not limited to:
 - 4.2.1.1 Chief Dam Safety Engineer (or designee) independent review and approval of proposed Modifications.
 - 4.2.1.2 Written procedures to perform documented dam inspections.
 - 4.2.1.3 Qualification standards for dam inspection personnel.
 - 4.2.1.4 A formal Surveillance and Monitoring Plan which meets FERC requirements, as described in the letter from the FERC Regional Engineer (Reference 6.1).
 - 4.2.1.5 An instrument calibration program.
 - 4.2.1.6 Risk assessment to prioritize issues identified during inspections.
 - 4.2.1.7 Training in accordance with the Training Plan for Dam Safety (Section 4.7)
 - 4.2.1.8 Retention of records.
- 4.2.2 The Chief Dam Safety Engineer will be responsible for performing internal Assessments.

The Chief Dam Safety Engineer will be responsible for conducting Audits and Assessments of the implementation and effectiveness of the Dam Safety Program. These Audits and Assessments will include, but not be limited to, the effectiveness of the Dam Safety Department and operational activities.

The Chief Dam Safety Engineer shall issue contracts for additional external Audits of Ameren's compliance with the Dam Safety Program. These audits will be for the purpose of augmenting the regular FERC five year inspection cycle.

4.3 Organization, Duties, and Responsibilities

- 4.3.1 The Chief Dam Safety Engineer shall perform the following duties and responsibilities:
 - 4.3.1.1 Report directly to the Vice President, Generation Technical Services. The Vice President, Generation Technical Services reports, independently of operations, to the Senior Vice President, Generation.
 - As necessary, promptly notify the Vice President, Generation Technical Services regarding issues that could affect public safety or safe dam operations. In the event that the Vice President, Generation Technical Services is unavailable, the Chief Dam Safety Engineer shall notify one or more of the following personnel as necessary: the Vice President, Power Operations; the Senior Vice President, Generation; or the Executive Vice President/Chief Operating Officer. The Chief Dam Safety Engineer shall be provided full protection from any reprisal for making these notifications or reports.
 - 4.3.1.3 Act as the single point of contact for correspondence related to dam safety and regulatory compliance between Ameren and FERC, except for immediate notifications required by Emergency Action Plans. The hydroelectric plant management may need to contact FERC on operational issues. The Chief Dam Safety Engineer and hydroelectric plant management shall coordinate as to all contacts with FERC so that each is properly informed on a timely basis as to all relevant issues.
 - 4.3.1.4 Provide oversight of engineering and operational activities related to dam safety, independent of the normal operating organization.
 - 4.3.1.5 Work collaboratively with the hydroelectric plant management and staffs to ensure dam safety and regulatory compliance. _.
 - 4.3.1.6 Provide monthly updates of dam safety and compliance matters to the Vice President, Generation Technical Services and appropriate operational management.
 - 4.3.1.7 Review and comment on annual updates of each facility Emergency Action Plan.

- 4.3.1.8 Ensure Emergency Action Plan drills for each facility are evaluated for effectiveness, and implement improvements to Emergency Action Plans if needed.
- 4.3.1.9 Ensure a Dam Safety Training Plan is developed and implemented, as described in this program.
- 4.3.1.10 Take necessary corrective action when dam safety is in question. Issue an oral or written stop work order for operational activities or a plant shutdown order if necessary to place an affected dam in a safe condition.
- 4.3.1.11 Conduct unannounced facility inspections, as deemed appropriate.
- 4.3.1.12 Ensure the Surveillance and Monitoring Plan is developed and implemented, as required by the FERC and described in this program.
- 4.3.1.13 Designate a qualified alternate to act in his or her absence, with the concurrence of the Vice President, Generation Technical Services.
- 4.3.1.14 Direct the creation, implementation, and maintenance of a Dam Safety Inspection Program for all FERC licensed facilities. Refer to section 4.9 for additional details of this initiative.
- 4.3.2 Operations personnel at Taum Sauk and Osage shall perform the following duties and responsibilities:
 - 4.3.2.1 Work as a team with the Chief Dam Safety Engineer and Dam Safety Staff to ensure dam safety and regulatory compliance.
 - 4.3.2.2 Direct correspondence related to dam safety and regulatory compliance through the single point of contact, the Chief Dam Safety Engineer, except as required by the Emergency Action Plan.
 - 4.3.2.3 Perform dam operations, maintenance, and inspection duties assigned by management.
 - 4.3.2.4 Notify the Chief Dam Safety Engineer before a plant Modification is made. Notify the Chief Dam Safety Engineer if a condition is identified which potentially affects dam safety.

- 4.3.2.5 Maintain each facility Emergency Action Plan and coordinate required drills.
- 4.3.2.6 If shutdown of equipment or the plant is warranted due to safety or asset preservation issues, make that decision in a prompt manner, independent of any business objectives or requirements of Energy Trading, Generation Technical Services, or Energy Supply Operations.
- 4.3.2.7 Immediately implement any stop work order for operational activities or plant shutdown order that is issued orally or in writing by the Chief Dam Safety Engineer.
- 4.3.3 The Chief Dam Safety Engineer will provide assistance in performing internal Assessments. The Chief Dam Safety Engineer shall issue contracts for additional external Audits of the Dam Safety Program performed by third party consultants to augment the regular FERC five year inspection cycle. Audits and Assessments are described in Section 4.8.
- 4.3.4 The Senior Vice President, Generation; Vice President, Power Operations; and the Vice President, Generation Technical Services provide the necessary policies, directives, and resources to assure safe and compliant operation of the FERC licensed facilities.
- 4.3.5 Operations personnel, Generation Technical Services personnel, or others who propose a Modification affecting dam safety shall obtain independent review and approval by the Chief Dam Safety Engineer before implementation.
- 4.3.6 A flow chart illustrating the decision making process for identifying and resolving dam related safety issues, such as whether and how to make a proposed Modification, is attached as Appendix 6.

4.4 Ameren Internal Communications and Reports

- 4.4.1 Personnel in Hydroelectric Operations, Generation Technical Services, and other support personnel shall notify the Chief Dam Safety Engineer before a proposed plant Modification is made. Additionally, operations supervisory personnel shall immediately notify the Chief Dam Safety Engineer or Dam Safety Staff if a condition is identified which potentially affects dam safety.
- 4.4.2 The following communication requirements shall be implemented by the hydroelectric organization:
 - 4.4.2.1 Ameren employees and consultants engaged in hydroelectric operations or supporting activities shall report issues related to dam safety and regulatory compliance to their immediate supervisor.
 - 4.4.2.2 Supervisors and managers shall take immediate action if necessary to address issues related to dam safety and regulatory compliance. Additionally, they shall promptly notify the Chief Dam Safety Engineer or Dam Safety Staff.
 - 4.4.2.3 A Hydro Project Non-Conformance Report form is provided by Appendix 2 to record and resolve concerns or issues. Reported dam safety or regulatory compliance issues shall be recorded by a Hydro Project Non-Conformance Report and will be evaluated and resolved by the Chief Dam Safety Engineer or Dam Safety Staff, with corrective action taken if necessary. Permanent records shall be retained.
 - 4.4.2.4 Any employee or consultant may document or orally convey concerns to the Chief Dam Safety Engineer and shall be provided full protection from any reprisal for communicating such concerns.
- 4.4.3 The Chief Dam Safety Engineer shall report directly to the Vice President, Generation Technical Services, and not to the organization routinely responsible for production.
- 4.4.4 The Chief Dam Safety Engineer shall regularly report dam safety and regulatory compliance issues to the Vice President, Generation Technical Services, who in turn reports independently of operations to the Sr. Vice President, Generation.

- 4.4.5 The Chief Dam Safety Engineer is required to promptly notify the Vice President, Generation Technical Services regarding issues that could affect public safety or safe dam operations. In the event that the Vice President, Generation Technical Services is unavailable, the Chief Dam Safety Engineer shall notify one or more of the following personnel as necessary: the Vice President, Power Operations; the Senior Vice President, Generation; or the Executive Vice President/Chief Operating Officer.
- 4.4.6 The Chief Dam Safety Engineer shall report dam safety and regulatory compliance issues and conduct meetings with senior management at least annually or more often if deemed necessary by the Chief Dam Safety Engineer. The minimum attendees shall include: the Vice President, Generation Technical Services; the Vice President, Power Operations; the Senior Vice President, Generation; and the Executive Vice President/Chief Operating Officer.
- 4.4.7 The Chief Dam Safety Engineer and the Vice President of Generation Technical Services will make an annual report to the audit committee of the Board of Directors of Ameren (Ameren Board audit committee). The Ameren Board audit committee shall consist of members of the Ameren Board. The report shall cover at a minimum the following subjects: dam safety issues, Audit findings on dam safety, and ongoing improvement plans. The presentation to the Ameren Board audit committee will be maintained as a permanent record by the Chief Dam Safety Engineer. The Chairman of the Ameren Board audit committee or his designee shall report to the Ameren Board at its next regularly scheduled meeting concerning the annual report. The Chief Dam Safety Engineer will remain responsible for requiring and directing Audits under this Dam Safety Program, and nothing in this section is intended to affect that responsibility.
- 4.5 External Communications and Reports
- 4.5.1 The Chief Dam Safety Engineer shall be the single point of contact for non-emergency regulatory reporting of dam safety issues. Except for those immediate communications required by emergency plans, communications related to dam safety and regulatory compliance between Ameren and the FERC shall be routed through the Chief Dam Safety Engineer.
- 4.5.2 The Chief Dam Safety Engineer shall provide an annual written report to the FERC Regional Engineer, or present the report in person at the discretion of the FERC, regarding the status and compliance of the subject facilities.
- 4.5.3 The Chief Dam Safety Engineer shall issue a report to the FERC Regional Engineer within 45 days of completion of each additional external Audit

performed by independent third-party consultants required by the DSP to augment the regular FERC five year inspection cycle. The report shall include findings, corrective actions taken in response to the Audit, and an assessment of Ameren compliance with the DSP, including the effectiveness of the Ameren Dam Safety Department. These Audits are described in Section 4.8.2. The report shall further include a plan and schedule on how and when to carry out the recommendations of such an Audit.

4.6 Authority of the Chief Dam Safety Engineer

The Chief Dam Safety Engineer shall be empowered with the following authority:

- 4.6.1 Order necessary corrective action if dam safety is in question. This authority includes the issuance of an oral or written stop work order for operational activities or an order for a plant shutdown, if necessary to place an affected dam in a safe condition.
 - 4.6.1.1 To remove any doubt, the Chief Dam Safety Engineer shall have the authority to direct any Ameren employee, agent or consultant to take any action which in his judgment is necessary to ensure dam safety, including action to shut down the operation of either Osage or Taum Sauk.
- 4.6.2 Conduct unannounced facility inspections.
- 4.6.3 Review and approve proposed Modifications or changes to a dam structure, operating system, control system, or critical maintenance or operations procedures before implementation. This review and approval may be delegated to a qualified person or persons; however, the Chief Dam Safety Engineer maintains overall accountability for the review process.
- 4.6.4 Approve dam safety instrumentation design for each applicable installation.
- 4.6.5 Request the use of external resources from consultants to assist with internal Assessments performed by the Chief Dam Safety Engineer or Dam Safety Staff, if needed. Issue contracts for additional external Audits performed by third party consultants as required by the DSP to augment the regular FERC five year inspection cycle. Refer to section 4.8.3 for additional details on the external audits.
- 4.6.6 Create and enforce a schedule for Audits and Assessments to evaluate compliance with the DSP and to assure that required Audits and Assessments are completed in a timely and effective manner.

4.7 **Training Plan for Dam Safety**

- 4.7.1 A training plan shall be implemented for personnel involved in the operation or Modification of hydroelectric facilities on a level appropriate to the assigned responsibilities. The Training Plan shall include training for management, operations, maintenance, engineering, consultants, and contractors, as appropriate.
- 4.7.2 The training plan shall include the following features:
 - 4.7.2.1 General and site-specific training focused on dam safety awareness and regulatory compliance.
 - 4.7.2.2 Presentation of the Ameren corporate policies regarding dam safety and regulatory compliance.
 - 4.7.2.3 Recognition of potential dam safety deficiencies, including, but not limited to, design basis events for each facility.
 - 4.7.2.4 Inspection and monitoring techniques.
 - 4.7.2.5 Qualification standards for personnel conducting inspections, consistent with the nature and complexity of assigned duties.
 - 4.7.2.6 Design control process requirements.
 - 4.7.2.7 Personnel training records.
 - 4.7.2.8 Modules for needed initial training and modules for continuing training as training needs are identified.
 - 4.7.2.9 Review of Emergency Action Plans.
- 4.7.3 Effectiveness of the Training Plan shall be one of the subjects of internal Assessments and external Audits. Findings and corrective actions from these Assessments and Audits shall be included in the annual written report to the FERC described in Section 4.5.2.
- 4.7.4 An outline of training modules is provided by Appendix 4.
- 4.7.5 In establishing and maintaining training programs, the Chief Dam Safety Engineer shall consider, and make use of, all appropriate materials, such as FERC's Part 12 regulations and its Engineering Guidelines for the Evaluation of Hydropower Projects, as well as opportunities to attend seminars, conferences and FERC training programs.

4.8 Audits and Assessments

- 4.8.1 Internal Assessments or Audits will be routinely conducted by the Chief Dam Safety Engineer and Dam Safety Staff. These Assessments or Audits will focus on operational compliance and improvement of the Dam Safety Program for FERC Licensed Facilities.
- 4.8.2 The Chief Dam Safety Engineer will be responsible for performing internal Assessments.

The Chief Dam Safety Engineer will also conduct Audits and Assessments of the implementation and effectiveness of the Dam Safety Program. These Audits and Assessments will include, but not be limited to, the effectiveness of the Dam Safety Department and operational activities.

The Chief Dam Safety Engineer shall issue contracts for additional external Audits of Ameren's compliance with the Dam Safety Program. These audits will be for the purpose of augmenting the regular FERC five year inspection cycle.

- 4.8.3 External Audits will be conducted by independent third-party consultants with expertise in hydro project safety and contracted by the Chief Dam Safety Engineer.
 - 4.8.3.1 These Audits will be scheduled annually for 2007 and 2008, and subsequently during the third year of each 5-year FERC Part 12 inspection cycle to augment the regular FERC five year inspection cycle.
 - 4.8.3.2 The Chief Dam Safety Engineer shall issue a report to the FERC Regional Engineer within 45 days of completion of each additional Audit of this type. Prior to this time, the Chief Dam Safety Engineer shall instruct the third-party consultant to provide the issued written report for each external Audit to the Regional Engineer at the same time that they are provided to the Chief Dam Safety Engineer.

- 4.8.3.3 These external Audits will include the following:
 - A. Review operating and maintenance records for each facility to determine if proper notification procedures were followed.
 - B. Review Surveillance and Monitoring Plan reports for each facility to verify compliance with the FERC approved Surveillance and Monitoring Plan.
 - C. Review training records to verify that dam safety training is being provided in accordance with the plan.
 - D. Conduct interviews, examinations, or other methods to evaluate the effectiveness of training.
 - E. Interview the Chief Dam Safety Engineer and Dam Safety Staff; facility managers; staff engineers, and hydro plant technicians to determine their understanding of the Dam Safety Program and the implementation of their respective responsibilities.

4.9 **Dam Safety Inspection Program**

- 4.9.1 The Chief Dam Safety Engineer shall direct the creation and implementation of a Dam Safety Inspection Program for all FERC licensed facilities.
 - 4.9.1.1 The inspection program shall include detailed descriptions of inspections to be performed by the following personnel:
 - 4.9.1.1.1 Facility Operations and Maintenance personnel
 - 4.9.1.1.2 Facility Management personnel
 - 4.9.1.1.3 Hydro Engineering and Dam Safety personnel
 - 4.9.1.1.4 Outside Consultants performing FERC Part 12 inspections and other inspections as necessary.
 - 4.9.1.2 The inspection program documentation shall outline the frequency and type of inspections to be performed by the personnel included above.

4.9.1.3 The inspection program documentation shall also outline the instrumentation monitoring and assessments that will be part of the inspections.

5.0 RECORDS

	Record Type	Responsible Group	Retention Period	Location
5.1	Hydro Project Non-Conformance Report Form GEN-D-2590-01-OPP	Chief Dam Safety Engineer	Life of the facility plus 10 years.	Hardcopy files in custody of Chief Dam Safety Engineer or digital record retention
5.2	Records are generated by inspection procedures, training plans, and other support activities.	The Chief Dam Safety Engineer shall ensure records are retained.	Specified by originating procedures and programs.	Retention may be at plants, digital, or in custody of the Chief Dam Safety Engineer
5.3	All correspondence between Ameren and FERC related to hydro projects.	Chief Dam Safety Engineer	Life of the facility plus 10 years.	Hardcopy files in custody of Chief Dam Safety Engineer or digital record retention

6.0 REFERENCES

6.1 Correspondence: Federal Energy Regulatory Commission, Office of Energy Projects, Division of Dam Safety and Inspection – Chicago Regional Office, to Mr. Warren Witt, dated April 27, 2006, Subject: Submittal of Instrumentation Reports/Surveillance and Monitoring Plans (SMP)

7.0 APPENDICES

- 7.1 Appendix 1, Responsibilities
- 7.2 Appendix 2, FERC Licensed Hydro Project Non-Conformance Report
- 7.3 Appendix 3, Dam Safety Commitment Tracking List
- 7.4 Appendix 4, Ameren Dam Safety Training Outline
- 7.5 Appendix 5, Ameren Generation Operational Responsibility
- 7.6 Ameren Dam Safety Communications/Work Flowchart

Responsibility	Chief Dam Safety Engineer	Hydro Operations Personnel	Employees & Consultants	Supervisors & Managers	Technical Services Personnel	Senior Mgrs
Ensure the Ameren Dam						
Safety Program is effectively implemented, and report to						
the Vice President,	X					
Generation Technical			,			E C
Services, and to other senior					ă	
management as required.						
Perform routine operations,						
maintenance, and inspection activities to maintain dam						
safety and regulatory				~		I
compliance, and		X				
immediately notify the Chief						
Dam Safety Engineer when						
required by this program.				, A		
Report issues related to dam						
safety and regulatory compliance to immediate		X	X			
supervision.						
Notify the Chief Dam Safety						
Engineer with issues	*	X	X	X		
affecting dam safety and		Selection of the second				
regulatory compliance. Issue contracts for third		S. W. C. S. L. C. W. C. S. C.				
party external Audits of the	X			as A		
Dam Safety Program.				*		

Responsibility	Chief Dam Safety Engineer	Hydro Operations Personnel	Employees & Consultants	Supervisors & Managers	Technical Services Personnel	Senior Mgrs
Obtain independent review						
and approval from the Chief						12
Dam Safety Engineer or	4	X	X	_	_	
designee of proposed design		^	^	X	X	
changes affecting dam	_					
safety, before	10					
implementation.						
Maintain policy to encourage						
employees and consultants						
to communicate concerns	X			X		X
regarding dam safety and						
regulatory compliance.						

HYDRO PROJECT NON-CONFORMANCE REPORT				
Identify the affected project/plant: Taum Sauk Osage				
Date of Report:				
Name and phone number of initiator:				
Problem Description / Affected Area:				
Review and Disposition by Chief Dam Safety Engineer/Dam Safety Staff:				
Problem Report Log #				
Review and Evaluation:				
Immediate Corrective Action (mark N/A if none):				
Disposition: Rework Repair Use as is Reject Reportable to FERC				
Statement of Completed Action:				
Action Completed by: Date:				

review and

Note: The following table provides a list of commitments created by the Dam Safety Program for FERC Licensed Facilities. Other commitments are required by FERC regulations and

are maintained by the Chief Dam Safety Engineer and Dam Safety Staff. Responsible** Schedule, Frequency or Commitment Closed Comments Location* Procedure Org/Person Condition Step Date Prior to implementation of Proposed changes to requirements of DSP shall CDSE TS/O 4.1.4 be communicated in writing to FERC Regional proposed change Engineer for review and written acceptance. TS/O 4.3.2.2 Except for immediate emergency Ameren Routing communications communications, communications related to dam related to dam safety and 4.5.1 personnel safety and regulatory compliance between regulatory compliance. Ameren and FERC shall be routed through CDSE. Provide written report to FERC Regional CDSE TS/O 4.5.2 Annually Engineer, or present in person, regarding the status and compliance of the subject facilities. Within 45 days of Issue report to FERC Regional Engineer of each CDSE TS/O 4.5.3 additional external Audit performed by third-party completion of additional external Audit consultants. Include findings and corrective actions from CDSE Annually TS/O 4.5.2 training plan Assessments and external Audits in 4.7.3 annual written report to FERC, described in Step 4.5.2. 2007, 2008, and 3rd year Contract external Audits by third party CDSE/ Mar. TS/O 4.3.3 of each 5-year FERC 4.8.3 Independent Consultants. Quality Management Part 12 inspection cycle Review and comment on annual updates of each To be TS/O 4.3.1.7 CDSE Annually, during annual facility Emergency Action Plan. update. submitted to FERC for review and comment Operations, GTS, Before proposed TS/O 4.2.1.1 Obtain CDSE or designee independent review To be or others Modification is submitted to 4.3.5 and approval of proposed Modifications. 4.6.3 proposing implemented FERC for Modifications review and comment Obtain CDSE or designee review and approval of TS/O Operations, or Before proposed change 4.6.3 To be proposed changes to a dam structure, operating is implemented others proposing submitted to system, control system, or critical maintenance or changes FERC for operations procedures.

					comment
TS/O	4.3.1.2, 4.3.1.3, 4.3.1.10, 4.6.1, and 4.6.3	Send incident reports to FERC Regional Engineer	CDSE	When required by the notifications triggered by the designated sections	

^{*} TS = Taum Sauk. O = Osage. ** CDSE = Chief Dam Safety Engineer

Dam Safety Training Outline

- I. The Training Plan shall be implemented for personnel involved in the operation or Modification of hydroelectric facilities on a level appropriate to the assigned responsibilities. The Training Plan shall include training for management, operations, maintenance, engineering, consultants, and contractors, as appropriate.
- II. Training shall consist of needed initial training modules and continuing training modules if additional training needs are identified.
 - A. Continuing training may include training modules with modified content to focus on training needs identified during Audits and Assessments.
 - B. A training schedule will be established which identifies required attendees.
- III. Material that is site-specific will only be presented to personnel associated with that site.
- IV. Qualification standards and training requirements shall be established for personnel, consistent with the nature and complexity of their assignments.
- V. Training and qualification records shall be established for each applicable person in the hydroelectric organization and supporting organizations.
- VI. Additional or revised training modules will be developed and presented based upon training needs identified by tests, training evaluation and feedback, and the findings of Assessments and Audits.
- VII. The list of training modules in the following table describes content for initial and continuing training.

Dam Safety Training Module Content Description					
Training Module	Brief Description of Content				
Dam Safety Awareness	Emphasize the importance of dam safety; provide information on the major features of dams and how they function; describe the causes and consequences of dam failure. Provide an overview of the Ameren Dam Safety Program. Discuss the reporting structure and the Chief Dam Safety Engineer function.				
2. Ameren Corporate Policy	This training module will include the corporate policies regarding dam safety.				
3. Identification of Visual Dam Safety Deficiencies	Provide guidelines for visual detection of some of the more common dam deficiencies. Review the facility inspection plan and discuss individual responsibilities.				
4. Inspection of Embankment Dams	Provide guidance on how to inspect the slopes, crest and adjacent areas of an embankment dam and on identifying deficiencies. Note: This module is site specific.				
5. Inspection of Concrete and Masonry Dams	Provide guidance on how to inspect the faces, crest, interior, and adjacent areas of concrete and masonry dams, and identification of deficiencies. Note: This module is site specific.				
6. Instruments for Embankment and Concrete Dams	Explain the purpose of instrumentation and describe how the instruments work. Provide instruction on proper instrument reading and data recording. Review the installed facility instrumentation and what they monitor. Note: This module will contain site-specific material.				
7. Emergency Action Plan and Dam Safety Refresher	Mandatory review of the EAP for the facility, with discussion of individual responsibilities. Reinforce dam safety awareness and present site specific issues. Note: This module is site specific.				
8. Dam Safety Compliance Requirements	Review FERC safety compliance and reporting requirements with particular attention to Part 12 reporting requirements.				



Ameren Generation Operational Responsibility

All generation employees are entrusted with the responsibility and privilege to operate Ameren's plants in a safe, reliable, and efficient manner. Our daily operating practices must always place public safety, personnel safety, and environmental compliance above other performance goals of our Company.

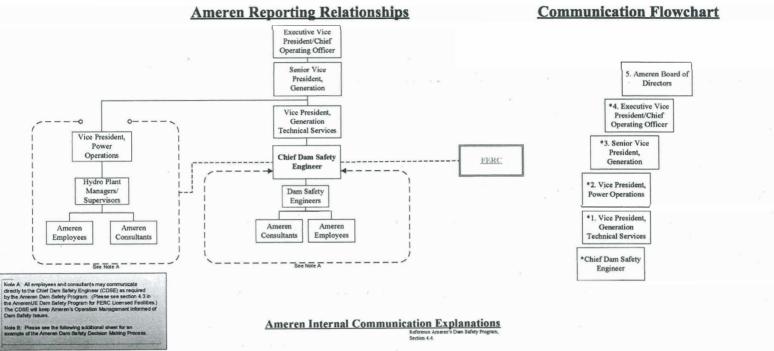
Operations management has the responsibility and authority to implement this standard throughout the operating organization.

Thomas R. Voss
Executive Vice President and COO

Olhomas R Voos

June 8, 2006

Ameren Dam Safety Communications Flowchart



- *1. The CDSE reports to and has regular communications with the Vice President, Generation Technical Services about his department's activities and any dam safety related issues.

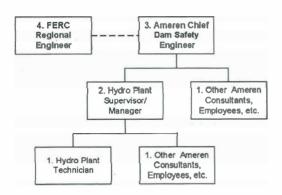
 *2. The Ameren Chief Dam Safety Engineer (CDSE) communicates on a routine basis with the Vice President, Power Operations, regarding any issues affecting Dam Safety and regulatory compliance.
- The CDSE will inform the Senior Vice President, Generation of pertinent Dam Safety issues as necessary.
 The CDSE will inform the Executive Vice President, Generation of pertinent Dam Safety issues as necessary.
 The CDSE will inform the Executive Vice President, Generation of pertinent Dam Safety issues as necessary.
 The CDSE and the Vice President, Generation Technical Services will make an annual report to the audit committee of the Board of Directors of Ameren (Ameren Board). The report shall cover as a minimum the following subjects: dam safety issues, Audit findings on dam safety and ongoing improvement plans. The presentation to the audit committee will be kept as a permanent record. The Chairman of the audit committee or his designee shall report to the Ameren board at its next regularly scheduled meeting concerning each presentation.

^{*}As stipulated in section 4.4.6 of Ameren Dam Safety Program, these personnel will be present during the CDSE's annual report outlining the status of the Dam Safety Program and any Regulatory Compliance issues.

Ameren Dam Safety Decision-Making Example

Thursday, August 03, 2006

Personnel Involved in Decision Making



Decision Making Explanations

in this example, a potential dam safety issue, proposed plant modification, PLC change, etc. is recognized by a Hydro Plant Employee, consultant, or other employee (1). Although this employee may go directly to the Chief Dam Safety Engineer (CDSE) (3), the normal procedure would be for the employee to communicate the issue to his/her supervisor or manager (2) for their submission to the CDSE (3).

(3) The CDSE shall evaluate the proposed Dam Safety or Regulatory Compliance issue, and shall communicate the issue to the FERC Regional Engineer (4) as outlined by the Regulations. The CDSE shall then determine how and when the proposed dam safety issue, proposed plant modification, etc. should be implemented, if at all.