Hydropower Meeting Dam Safety Program

[redacted]

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U.S.ARMY

US Army Corps of Engineers
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Transition to a Risk Informed Dam Safety Program

- Dam Safety Action Classification is assigned by probability of failure and the incremental risk. Degree of urgency.
- USACE has moved from a solely standards-based approach for its dam safety program to a dam safety portfolio risk management approach.
- Standards- based or essential guidelines approach is included in the risk-informed approach.
- Dam Safety program decisions will be risk-informed.
- Implementation of risk reduction measures will be evaluated for achievement of tolerable risk guidelines

Issue Evaluation Studies and Karst Limestone formations in SWPA Region

District	Plant	Active IES	Karst
Tulsa	Keystone	Yes	No
Vicksburg	Blakely Mountain	Yes	No
Little Rock	Beaver	No	Yes
Little Rock	Table Rock	No	Yes
Little Rock	Bull Shoals	No	Yes
Little Rock	Norfork	No	Yes

•Largest Karstic area in our region is in the Ozark Plateau. Dams in this area are considered stable. Area in OK Arbuckle region, and SW Texas.
•Stockton is not built on Karstic formation.
•Whitney in limestone area, but not Karstic

Dam Safety- MKARNS Tainter Gates

MKARNS has been in service for about 50 years.

•Dardanelle, Ozark, RS Kerr and Webbers are higher structures on the system- 65 gates are Joint Costs- shared.

•Initial assessment of tainter gates in FY14- limited ability of USACE to repair tainter gates within existing budget, manpower, and plant levels- is not sufficient to prevent tainter gate failures, beginning about 15-years from now.

•FY16 Appropriations has funds for starting an major rehab/ repair study of these gates, with follow on funds anticipated in FY17.

•Major Rehab (recapitalization) vs. repairs (expensed).

Questions?