



FERC Part 12D Dam Safety Inspections



GENTERRA Consultants, Inc. provides specialized consulting services for the inspection and evaluation of existing dams, the design of new and modified dams and reservoirs, and for the design of rehabilitation and repairs of dams and appurtenances. **Since 1995, GENTERRA has provided services on more than 155 dams.** Most of the dams GENTERRA has worked on fall under the jurisdiction of State dam safety review agencies. Projects have also included lead or support for Federal Energy Regulatory Commission (FERC) Part 12D Dam Safety inspections of hydropower projects.



FERC dam experience of GENTERRA personnel includes serving as the Independent Consultant, Potential Failure Mode Analysis Facilitator, and Emergency Action Plan exercise coordinator for the inspection, safety evaluation, and analyses of more than 30 licensed projects. GENTERRA's engineers have investigated and developed solutions for FERC dam safety issues involving earth and concrete dam stability, spillway inadequacy, spillway gate rehabilitation, and outlet works renovation.

Specific Services Related to FERC Part 12D Inspection include:

- Review of Previous FERC Part 12D Inspections and Reports
- Field Inspection by a Qualified FERC Part 12D Consultant
- Inspection and Evaluation of Rockfill, Earthfill, Timber Crib, Concrete Buttress, RCC, and Concrete Gravity Dams
- Inspection and Assessment of Powerhouses, Spillways, Outlet Works, Gates, Valves, and Other Appurtenant Structures
- Evaluation of Instrumentation Trends, Changes in Physical Features, and/or Changes in Operation that could impact the Structural, Geotechnical, and Hydraulic Factors of Safety
- Review of Data Relative to the Long Term Reliable and Safe Operation of Dam and Hydropower Facilities including Flood Hydrology, Stability Analyses, Seismicity Records, Instrumentation Data, Dam Break Studies, Emergency Action Plans, and Operational Data
- Slope and Structure Stability Analysis and Liquefaction Studies
- Review and Evaluation of Operation and Maintenance Program Relative to Potential Failure Modes
- Facilitation of Potential Failure Mode Analysis
- Emergency Action Plan Preparation and Reviews
- Emergency Action Plan Tabletop and Full-Scale Comprehensive Exercises



GENTERRA has the full capabilities to address any deficiencies or additional studies as a result of the evaluations, including field investigations and laboratory testing; hydrologic and hydraulic analyses; seismic stability and seepage issues; and development of design plans, specifications and construction cost estimates. A Statement of Qualifications can be submitted upon request.

For information, please contact Joseph J. Kulikowski, P.E., G.E., President & Senior Principal Engineer, at (949) 753-8766 or by e-mail at joekul@genterra.com.

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