

ICOLD Committee B Workshop:

Seismic aspects of safety- critical electro-mechanical and hydro-mechanical equipment

The seismic design of safety-critical electro-mechanical and hydro-mechanical equipment (spillway gates, low-level outlets) has not yet been covered by any ICOLD guidelines and is a requirement based on ICOLD Bulletin 148 “Selecting seismic parameters for large dams”. As it must be possible to control the water level in a reservoir after a strong earthquake, spillways and low-level outlets must function after the safety evaluation earthquake and thus must be designed for this extreme load case. A sub-working group has been formed to prepare this bulletin. The workshop is a kick-off event. It will provide an overview of observed effects, information on the proposed Bulletin and some case histories. Details follow.

Date/Time: Sunday 11 June 13.30-15.30

Workshop Program

1. Introduction to subject: Overview on observed effects of Safety-critical Hydro-mechanical and Electro-mechanical Elements of Large Storage Dams (Martin Wieland) 40 min
2. Proposed ICOLD Bulletin: Seismic design aspects of safety-critical hydro-mechanical and electro-mechanical equipment (Trevor Matuschka) 25 min
3. Case study 1: Seismic Qualification of Spillway Gate Power & Control Equipment (Kofi Addo) 20 min
4. Case study 2: Seismic Design of Radial Spillway Gates (Russ Digby) 20 min
5. Conclusions/Discussions: (Trevor Matuschka) 15 min