

USSD COMMITTEE ON EARTHQUAKES CHARTER

Approved by the Board of Directors on 7/22/15

COMMITTEE DESCRIPTION

The Earthquakes Committee (EQ) identifies seismic design needs for dams to study, research or assemble updated information and disseminate it to those responsible for dam design and operation.

TERMS OF REFERENCE

The Earthquakes Committee was established by the Board of Directors (BOD) of USSD in 1968. It is charged with the collection of information on earthquake instrumentation, recorded data and performance of dams during earthquakes; evaluation and development of guides for modern methods of design of dams and reservoirs to withstand earthquakes and to identify needs for new knowledge and research on designing and analyzing dams. The Committee supports the International Committee on Large Dams (ICOLD) Committee on Seismic Design of Dams. It keeps the general membership informed of work through timely publication of reports and white papers, articles in the Newsletter, input to the committees section of the USSD website, and in the organization and execution of periodic workshops. The Committee also collaborates and/or assists other committees in developing and promoting education and training activities under the four imperatives of the 2014-2017 Strategic Plan, Advocate, Educate, Collaborate, and Cultivate.

BACKGROUND AND HISTORY

The USSD EQ Committee has worked collaboratively with the ICOLD Seismic Committee for the past twenty years. In 2000 the Committee had incorporated an earlier USSD Committee, called the Committee on Numerical Methods, into the present EQ Committee. The EQ Committee has produced reports, several of which became the basis for ICOLD bulletins and guidelines for dam seismic design and analysis throughout the world. The reports include:

Bibliography on Performance of Dams During Earthquakes (1984).

Bibliography on Reservoir-Induced Seismicity (1986).

Compilation of U.S. Dams with Strong Motion Instruments and Reservoir Seismicity Networks (1985).

Dam Modifications to Improve Performance During Strong Earthquakes (2003).

Guidelines for Earthquake Design and Evaluation of Structures Appurtenant to Dams (1995).

Guidelines for Inspection of Dams Following Earthquakes (2003).

Guidelines on Design Features of Dams to Effectively Resist Seismic Ground Motion (2002).

Numerical Models for Seismic Analysis of Concrete Dams (2008).

Observed Performance of Dams During Earthquakes (1992).

Observed Performance of Dams During Earthquakes, Volume II (2000).

Observed Performance of Dams During Earthquakes, Volume III (2013).

Reservoir Triggered Seismicity (1997).

Strong Motion Instruments at Dams - Guidelines for Their Selection, Installation, Operation and Maintenance (1989).

Strong Earthquake Motions at Dams (2008).

Updated Guidelines for Selecting Seismic Parameters for Dam Projects (1999).

The Committee has also organized several workshops at USSD and ICOLD Meetings.

RESPONSIBILITIES

At this time, no specific responsibilities of committee have been established by the BOD.

CHAIR, AND VICE CHAIRS AND RELATED RESPONSIBILITIES

Chair: Lelio H. Mejia
Vice Chair: Donald H. Babbitt
Vice Chair: Jack Montgomery (Young Professional)

GOALS AND OBJECTIVES

Goals and objectives for the period 2014 – 2017:

Advocate:

1. Continue to work with universities and other organizations to promote research on seismic aspects of dams and related topics. Develop a closer relationship with the Association of State Dam Safety Officials (ASDSO) and sponsor technical discussions at future ASDSO Meetings.

Educate:

1. Complete in-progress Committee reports.
2. Develop and implement another workshop at a USSD meeting.

3. Have scans of selected out-of-print committee reports posted on the USSD website.
4. Recruit a group of volunteers to speak or lecture at universities, schools, and public forums.

Collaborate:

1. Collaborate within USSD and with targeted US organizations.
2. Strategically collaborate with targeted international organizations.

Cultivate:

1. Improve committee operations. Encourage and add new and younger members to the Committee.

MEMBERSHIP

The current membership of the USSD Technical Committee on Earthquakes is provided below.

Lelio H. Mejia, Chair
Donald H. Babbitt, Vice Chair
Jack Montgomery
John A. Barneich
Michael H. Beaty
Mohsen Beikae
Ross Boulanger
Bruce Brand
Thomas A. Brown
William Brown
Clinton Carlson
Kerry D. Cato
Joseph L. Ehasz
Yusof Ghanaat
George F. Horowitz
Peter J. Hradilek
Jennifer Huggins
C. Michael Knarr
Richard W. Kramer
C. Eric Lindvall
Faiz I. Makdisi
Larry K. Nuss
Warren J. Paul
Phoebe Percell
Marc J. Ryan
Mark Schultz
John Stoessel
Nicolas von Gersdorff