

PD394
Seismic Design and Retrofit of Equipment and Piping

Days One and Two – Seismicity and Structural Supports

- Introduction to seismic engineering
- Static and dynamic seismic analysis
- Seismic input motions
- Development of generic seismic response spectra
- Seismic input in accordance with IBC / ASCE 7
- Development of seismic input coefficients
- Site-specific seismic input
- Seismic design of steel support frames
- Seismic design and qualification of concrete anchor bolts

Days Three and Four – Mechanical and Electrical Systems

- Seismic equipment list
- Seismic qualification methods: Analysis, test, experience data
- Seismic design and retrofit of mechanical distribution systems (pipe, duct)
- Seismic design and retrofit of static equipment (tanks, vessels)
- Seismic design and retrofit of electrical distribution systems (conduit, cable trays)
- Seismic design and retrofit of electrical equipment (MCC, switchgear, etc.)
- Seismic interactions review (II/I)
- Planning and seismic project management
- Where possible, walk-down of hotel mechanical room for seismic retrofit