We exist to solve complex multi-disciplinary problems, leveraging advanced technologies, that increase the resiliency, performance, and longevity of high value assets.

OVERVIEW
- Engineering Consulting Firm
  - Founded in 1983
  - Employee-owned corporation
  - Experts in prevention and control of structural and mechanical failures
  - Strong participation in industry codes and standards activities
  - Strong involvement with and support of EPRI (BWRVIP, MRP, WRTC, etc.)
- Senior Technical Staff with Extensive Industry Experience
  - Highly involved in regulatory issues and interaction with U.S. NRC
- Full time staff of approximately ~300; large percentage have advanced degrees and Professional Engineering licenses
- Quality Assurance
  - Compliant with: 10 CFR 50, Appendix B; 10 CFR 21; and ANSI/ASME/1-1989/1994
  - ISO 17025 certified (NDE)

ADVANCED STRUCTURAL ANALYSIS
- Mass Concrete
  - Heat of Hydration
  - Shrinkage
  - Cracking
- Non-Linear Concrete Performance
  - Concrete Aging and Degradation Modeling
  - ASR, AAR
  - Shrinkage
  - Prestress Losses
- Fragility - Structures, Systems, Components
- Pressure Vessels
- Rotating and Reciprocating Equipment Supports and Foundations
- Fluid-Structure Interaction (FSI)
- Liquid Storage Tanks - Extreme Events
SEISMIC ANALYSIS
■ Seismic Probabilistic Risk Assessment (SPRA)
■ Time History Analysis
■ Non-Linear Concrete Performance
■ Seismic Vulnerability Assessment
■ Retrofit Efficacy Evaluation
■ Soils-Structure Interaction (SSI)
■ Soil fragility
■ In-Structure-Response Spectra (ISRS)
■ Equipment Analytical Qualifications

SHOCK, BLAST AND IMPACT ENGINEERING
■ Blast
  • Blast Wave Propagation
  • Anti-Terrorism Force Protection
  • Progressive Collapse Evaluations
  • Deflagration Events
  • Confined Detonations
■ Shock
  • Equipment Fragility
  • Equipment Isolation Systems
■ Impact
  • Aircraft Impacts
  • Vehicular Impacts
  • Tornado Borne Missiles
  • Load Drops

QUALIFICATION AND CERTIFICATION
Structural Integrity’s Qualification & Certification Division, TRU Compliance, is Capable of Handling Wind and Seismic Qualification of Structures, Systems and Components.
■ Seismic Qualification of Structures, Systems and Components
  • Analytical
  • Testing – Shake Table
  • ICC-ES AC 156, IEEE 344 & 693
  • OSHPD OSP & OPA, CAN 2-1708A.5, IBC 1708.4
■ Wind Qualification of Structures, Systems and Components

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