Background & Project Challenges

This project involved a feasibility study and potential combined construction and operation license application (COLA) for two nuclear reactors and related infrastructure at an existing nuclear power plant site. As part of the study, a geotechnical subsurface investigation was conducted, and a laboratory testing program in support of that investigation was carried out. Due to the significance of the project, and the fact that testing was being performed in support of a nuclear safety-related project, a major portion of the effort involved attention to quality assurance and quality control.

GeoTesting Role & Accomplishments

GeoTesting Express, Inc. (GTX) worked directly for the geotechnical consultant for the project. GTX supplemented the consultant's in-house laboratory by providing sophisticated geotechnical testing, including:

- Triaxial
- Consolidation
- Direct shear

In addition, GTX performed index testing associated with strength and compressibility testing. GTX provided these services while adhering to the strict quality requirements of the project (10CFR50 Appendix B and NQA-1).

Procedures for all facets of the testing program were developed and approved prior to commencing work. The GTX laboratory underwent a series of audits which examined and approved both our testing processes and our quality system.

Since GTX already had a quality system in-place that met the requirements of the project, we were able to move through the auditing process very quickly and begin testing without delay. Because we have a large number of totally automated test stations, we were able to provide the client with test data very quickly. This allowed our client the ability to complete their work on schedule. Not only did we provide test results to the client quickly, we saved them money. Because of GTX's prior experience with providing geotechnical testing services for nuclear safety-related projects and our heavy reliance upon automation, GTX was able to save the client over 30% of what a standard testing laboratory would charge for the same test program.