BULLETIN

*News from **SubTerra, Inc.**®*

Oconee Nuclear Station
Independent Spent Fuel Storage Installation, Phase V
Greenville, South Carolina

***SubTerra, Inc** was retained by Duke Energy to develop safe blasting criteria and detailed blast planning for blasting adjacent to High Level Nuclear Waste Spent Fuel storage facilities at the Oconee Nuclear Station located east of Greenville, SC.*

As the project's Blasting Consultant, ***SubTerra's*** scope of work included:

1. .Classroom presentations to project personnel regarding safe blasting practices, close-in blasting experience, and predicted blast performance at the Oconee site.
2. Preparing test and production blast plans.
3. Planning and implementing blast vibration monitoring at the nuclear waste storage facilities.

3,000 CY of rock needed to be excavated from the northwest corner of the expanded yard where existing Horizontal Storage Modules (HSMs) were located approximately 125 feet to the east as shown in the photograph below.

Dr. Chris Breeds of ***SubTerra, Inc.*** developed the safe blasting criteria and presented a short course on blast design predicting blast performance and demonstrating how close-in blasting could be safely performed to meet the very conservative project requirements.

Blasting involved drilling blastholes through the overburden into the underlying bedrock obviating the need for using blasting mats. Individual blasts were triple decked to meet the specified maximum allowable peak particle velocity limits.

Instantel Blast Monitors were set up on the Interim Spent Fuel Storage bunkers, and between the blast area and the power plant and cooling towers. Remote monitoring was necessitated by security and proximity to the nuclear waste.

The project was successfully completed without incident and in compliance with the tight QA/QC requirements associated with this Nuclear Facility.

PO Box 520, 218 East North Bend Way, North Bend, WA 98045
Phone (425) 888-5425 info@subterra.us Fax (425) 888-2725