

EFCOG – ESS

Subsurface Investigation Workshop

National Renewable Energy Laboratory

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Outbrief

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Savannah River Site

The Workshop was hosted by Sal Sferrazza and NREL. It was sponsored by the EFCOG-ESS Subsurface Investigation Committee. Open to all DOE and EFCOG participating facilities, the workshop was widely publicized within the EFCOG organization. NREL, INL, SRS, Y12, ORNL, SNL, LLNL, LANL, Pantex and AECOM sent representatives to the workshop. There were several subsurface investigation leading indicators which fueled the formation of this workshop. The workshop, itself, was organized to provide three distinct services or functions. The first was to provide participants with a history of the EFCOG-ESS Subsurface Investigation Committee and accomplishments to date. The second was to have each participating DOE facility provide a summary of their present Subsurface Investigation Program. And the third was to demonstrate locating tools presently used by the facilities in attendance, their underlying technologies and inherent strengths or weaknesses.

The Workshop was organized into a three day agenda, and strong participation was noted.

Day 1 of the Workshop started with presentations on the background and past accomplishments in the areas of interest. The three EFCOG Best Practices, presently posted on EFCOG.org, were summarized. The remainder of the day was devoted to presentations by each of the participating facilities. They outlined their basic programs for surface investigations and configuration management of subsurface utilities, as well as specific tools and equipment, their strengths, and weaknesses, if any. There was active participation by all facilities in attendance. Effective interactions between presenters and the audience were commonplace during the entire day's activities.

Day 2 was devoted to demonstrations of configuration management software, locating technologies and specific equipment presently in use at the participating facilities. ARC-GIS, Campus Info Modeling, Trimble Total Station, 3M Marker Balls, GSSI Mini Scan, GSSI - SIR3000, Trimble GEO XT6000 GPS Receiver, Mala-Mira, Mala CX11 and CX12, Hilti Ferrosan and Vacuum Excavation were included in the demonstrations. The programs and tools were

demonstrated by “users”, so the insights and knowledge they provided was especially beneficial to the attendees.

Day 3 was devoted to field demonstrations of locating equipment. Participants were provided the opportunity to see the equipment in action, as well as interact with the individual pieces of equipment and the operators. Many questions were asked, and significant insight was gained. The day ended with a final gathering of participants to provide feedback on the NREL workshop and topics of discussion to take forward to the EFCOG Fall Workshop at ORNL. Some of those topics identified were :

1. Reviewing locating “hits” in the field to establish ORPS reviews for reportability based on a “hazards” graded approach. Consensus for treating known abandoned commodities differently, for reportability purposes, than unknown energized power cables was expressed.
2. Creating a summary/listing of locating tools/equipment and their uses at different facilities, and posting it on the EFCOG Home Page.
3. Hazardous Energy and Hazardous Materials Guidelines for excavations.
 - a. When to lock out and when not to
4. Establish uniform recommendations for “identified commodities” exposure requirements. Some facilities require one foot, some require five foot from “known” or “identified” interferences.