DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-20-011

SECTION A. Project Title: Electric Grid Testing Capabilities - Soil Boring

SECTION B. Project Description and Purpose:

The Power Grid Test Bed (PGTB) needs to obtain soil types and depth-to rock-information to complete project design for the new 138kV powerline from the Central Facilities Area (CFA) to the Materials and Fuels Complex (MFC) that was evaluated in *The Final Environmental Assessment for Expanding Capabilities at the Power Grid Test Bed at Idaho National Laboratory* (DOE/EA-2097, July 2019). The proposed action uses a 2 - 6" drill on a track-mounted earth drilling machine to obtain soil types and depth-to-rock at about 30 locations along the route of the powerline to determine how deep to bury power poles. The locations are within the area of potential effects (APE) analyzed in DOE/EA-2097. The project 1) identifies and marks the soil boring locations using land survey methods, 2) drills at each location to gather samples, and 3) pushes excavated materials pushed back into the holes. All holes will be drilled or bored. No explosives will be used. Figures 1-5 show boring locations (identified by 'SB' on the figures).

The proposed action also includes performing soil electrical resistivity testing (ERT) at locations identified as ERT on Figures 1-5. Wilson road will be plowed, as necessary, to gain access to the western end of T-25 where the tracked soil borer will be deployed.

Figure 1. Soil boring and ERT locations along the powerline route.

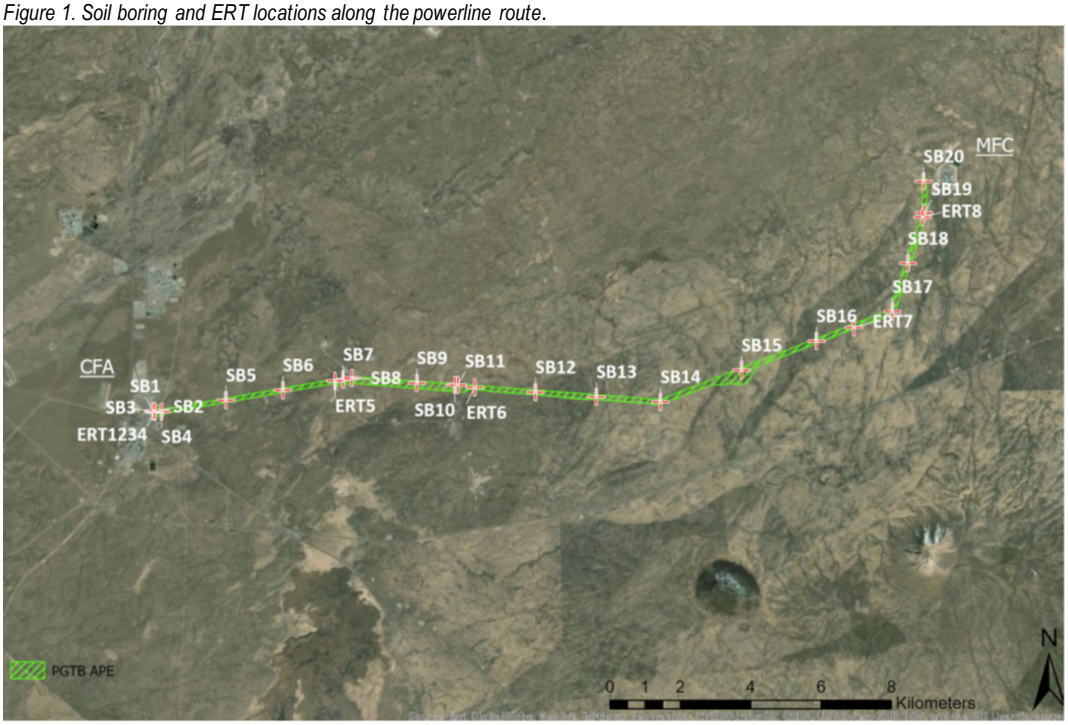


Figure 2. Soil boring and ERT locations from the Central Facilities Area (CFA) to the Critical Infrastructure Test Range Complex (CITRC).

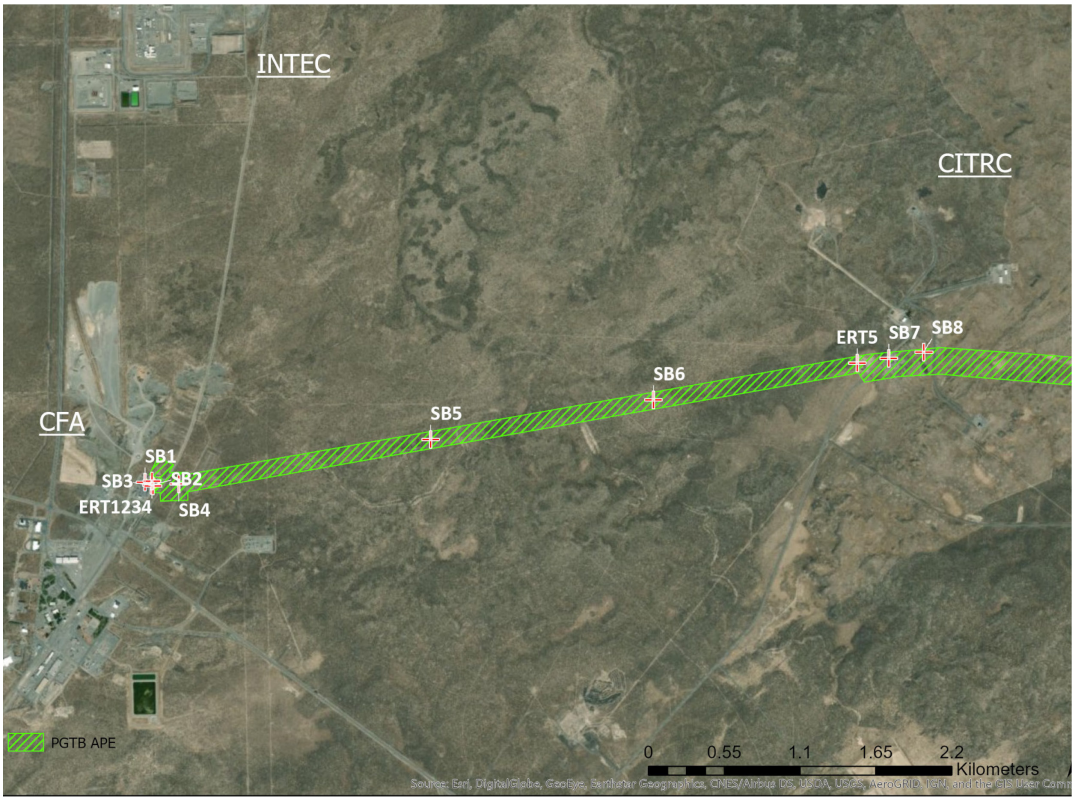


Figure 3. Soil boring and ERT locations near CITRC and the Obsidian Test Pad.

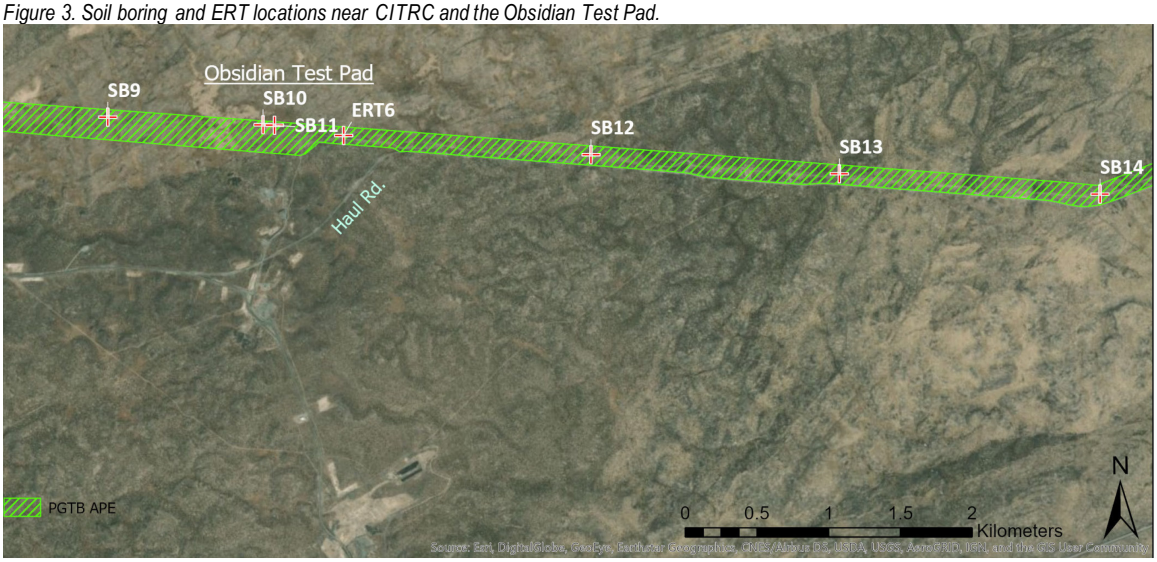


Figure 4. Soil boring and ERT locations in the vicinity of MFC.

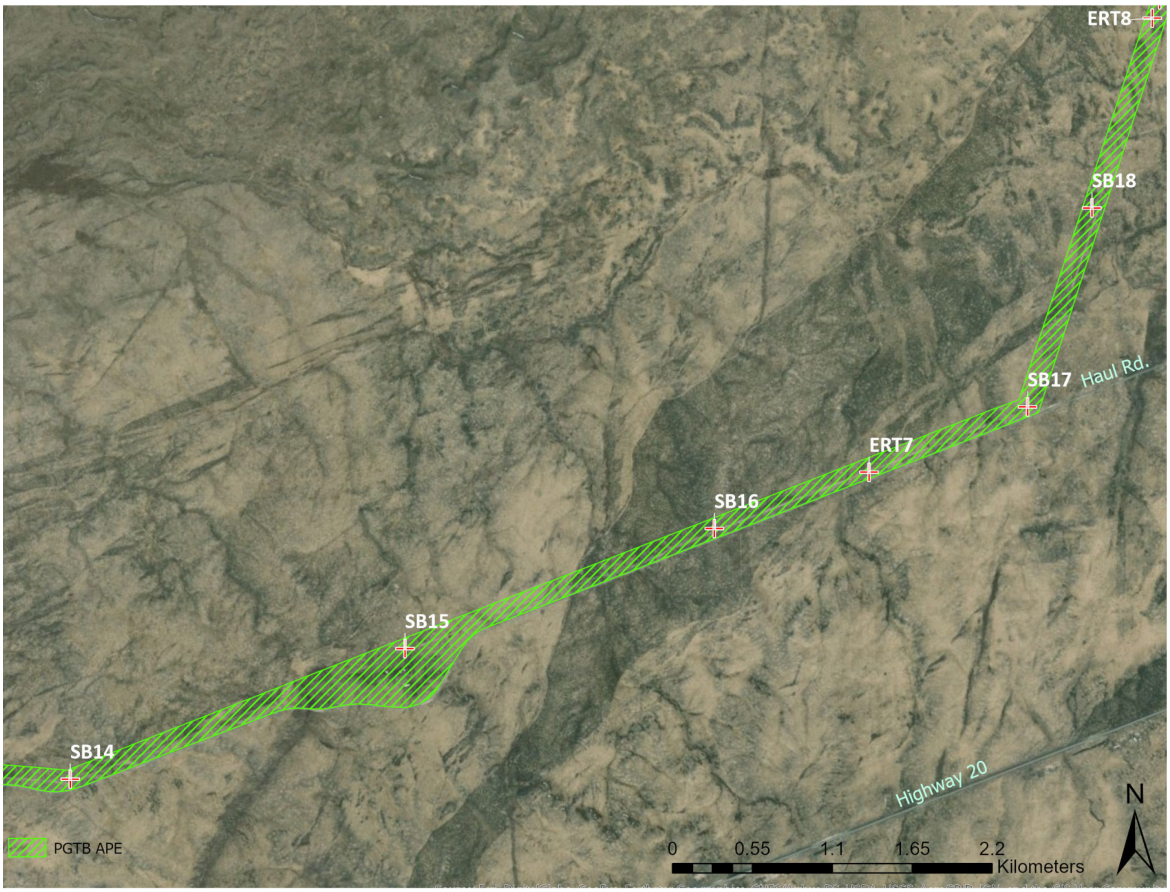
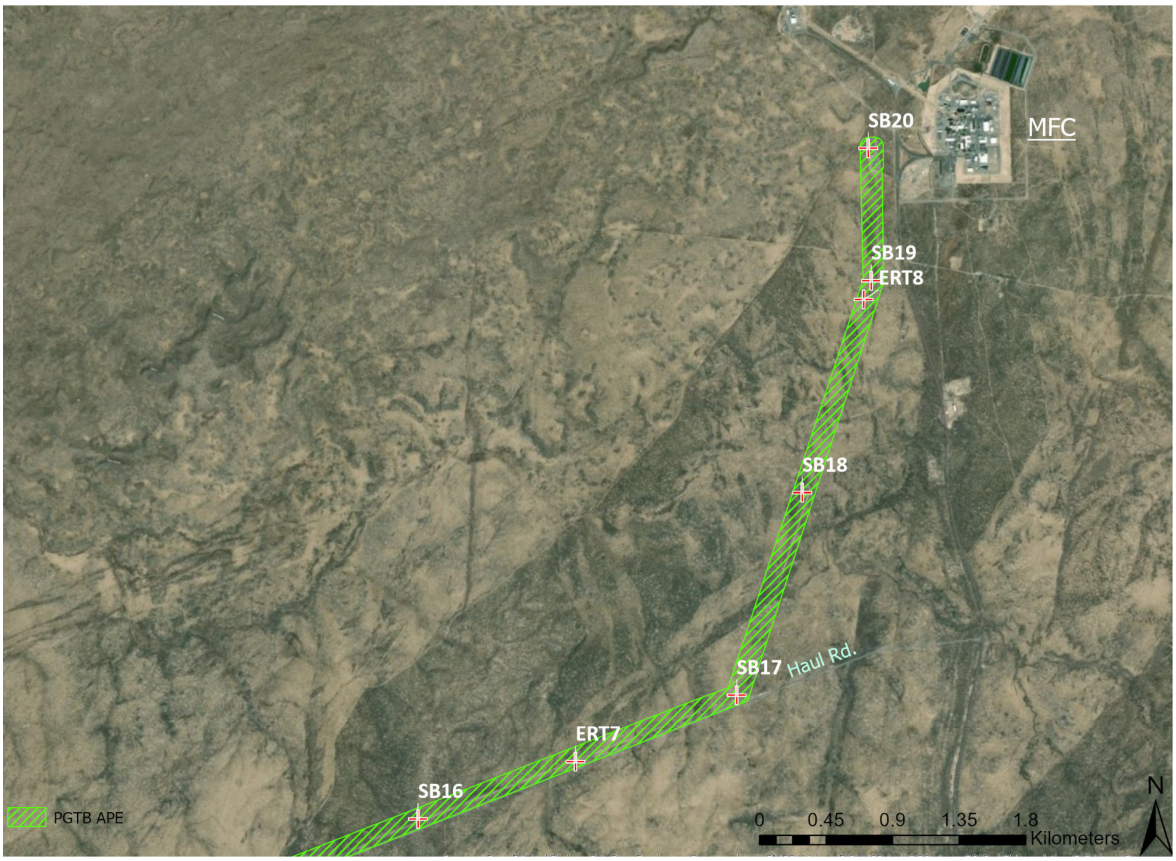


Figure 5. Soil boring and ERT locations near MFC.



DOE/EA-2097 does not detail the proposed action. However, DOE/EA-2087 evaluated staking and flagging the power line corridor (measuring about 100 ft out from each side of center), marking each structure location, and off-road vehicle access along the 16.5 miles of power line along a corridor measuring 200 ft wide or 100 ft each side of center line. The proposed activities are within the 200 ft disturbance corridor analyzed in DOE/EA-2087, and the impacts of the proposed activities fall within the impacts disclosed in the EA and summarized in the Finding of No Significant Impact (FONSI).

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Air emissions will be generated from a mobile source, the tracked soil borer. These are not regulated as a stationary source.

Disturbing Cultural or Biological Resources

The planned work has the potential to disturb biological and cultural resources. Work will avoid fenced areas. While the new power line corridor has been surveyed for resources, the Cultural Resource Management Office (CRMO) will determine the need for an archaeologist to be present during travel and boring activities.

Generating and Managing Waste

Small amounts of industrial waste may be generated. All solid waste will be managed by WGS.

Releasing Contaminants

Project activities use typical construction chemicals such as fuels, lubricants, adhesives, concrete, concrete cure, asphalt, etc., and those used must be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. Although not anticipated, there is a potential for spills when using chemicals or fueling equipment.

Using, Reusing, and Conserving Natural Resources

All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting

have recycled content and are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or SNAP requirements as appropriate (see http://www.sftool.gov/GreenProcurement/ProductCategory/14).

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: *Final Environmental Assessment for Expanding Capabilities at the Power Grid Test Bed at Idaho National Laboratory and Finding of No Significant Impact* (DOE/EA-2097) approved July 30, 2019.

Justification: The Department of Energy (DOE) approved the *Final Environmental Assessment for Expanding Capabilities at the Power Grid Test Bed at Idaho National Laboratory and Finding of No Significant Impact* (DOE/EA-2097) on July 30, 2019. The impacts of the proposed activities fall within the impacts disclosed in the EA and summarized in the FONSI.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 03/03/2020