The IF-685 Battery Laboratory (Lab) researchers require the following actions:

1. Relocate existing 75 KVA transformer on top of new 150 KVA transformer Unistrut frame.
2. Provide and install a new 150 kilovolt-amp (kVA) transformer (XFMR-42) and Unistrut frame.
3. Ground new transformer using 3/4" schedule 40 polyvinyl chloride (PVC) with 1 #2 grounding electrode conductor to building steel.
4. Provide and install a new 225 Amp panel (685-2P-76) with external main and outlet distribution box.
5. Provide and install a new 225 Amp panel (685-2P-77) with external main.
6. Route ¾" flex conduits beneath raised floor from new panel (685-2P-77) to MACCOR and blower bays.
7. Install 2-1/2" electrical metallic tubing (EMT conduit) with 4 #4/0 thermoplastic heat and water-resistant nylon-coated (THWN) wire & 1 #4 ground to new equipment.
8. Install 1-1/2 galvanized steel tubing (GRS) between 225 Amp panel (685-2P-76) and TEQ and ESPEC Chambers.
10. Install new raised floor.

The proposed action would install this equipment to support research in the west highbay (Battery Lab) of the Energy Systems Laboratory (IF-685, ESL) in Idaho Falls, Idaho. The project is estimated to occur in the November 2014 time frame at a cost of approximately $15 K.

### Generating and Managing Waste
Typical construction debris such as packaging material, scrap metal, empty chemical containers, etc., would be generated during the project. All waste would be characterized, stored, and disposed at the direction of Waste Generator Services (WGS).

### Releasing Contaminants
Typical construction chemicals such as paints, adhesives, etc., would be used by the subcontractor. A chemical inventory list with associated Material Safety Data Sheets (MSDS's) would be submitted in the vendor data system by the subcontractor. All chemicals would be entered into the Idaho National Laboratory (INL) Comply Plus Chemical Management System by the Construction Chemical Coordinator.

### Using, Reusing, and Conserving Natural Resources
All materials would be reused and/or recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. New equipment would meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see https://sftool.gov/green-products/0?agency=0). In addition, the project would 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, or are non-toxic or less-toxic alternatives.

### References
10 CFR 1021, Appendix B to Subpart D, B.1.31 "Installation or relocation of machinery and equipment."

Justification: The proposed action is consistent with categorical exclusion B1.31 "Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that the uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts."

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

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 11/5/2014