The Nuclear Science and Technology (NS&T) customer for Human Simulation Systems Lab (HSSL) has requested additional - computer lab space to support forth coming projects in year-end FY12 and projected into FY13. Project specific is the LWRS-related project for control room upgrades for a commercial client. The project will utilize the client's plant simulator installed in the HSSL on a number of touch screen panels to mimic their control room. The system displays will be used to perform a range of human factor analyses to support the client's modernization program. To support the hardware requirements for this project, large touch screen panels (L-panels) are currently on order via the customer. These are large consoles that cannot fit into the HSSL space at Center for Advanced Energy Studies (CAES) without undertaking expensive alterations for ceiling height, air conditioning and power supply which will not be conducive to the space now shared with the Computer Assisted Virtual Environment (CAVE) program and is cost prohibitive.

EROB (IF-654) room 182 was the old mail room, approximately 2500 square feet of open office space with linoleum flooring, currently being used to process excess furniture and supporting receiving activities for the building. The proposed modifications required in EROB room 182 are minimal, as the vacated space already has significant power available and heating, ventilating, and air conditioning (HVAC)- based on old mail room processing equipment. The linoleum flooring is preferred by the customer to provide easy relocation for the mobile touch screen panels for system displays. The existing flooring requires only cleaning, stripping, minor patching and sealing. A 37 Lineal Foot standard wall will be constructed which will provide separation of the proposed 1,757 square feet of computer lab area from the approximately 800 square feet of storage and receiving space. Lighting adjustment and new switches for independent use on either side of new wall will be required. Modifications also include removal of 45 lineal feet of wall board, patching and painting throughout. New cat 5E data will be required in 2 locations of the computer lab area only.

EROB 1E East now provides office space and limited adjoining Human Factor computer lab space for this NS&T customer tasked to bring new and expanded work to the HSSL. The location of room 182 is ideal for the customer to be immediately available to support the computer lab work in the new proposed area.

Project need date is August 1, 2012.

SECTION C. Environmental Aspects / Potential Sources of Impact:

Generating and Managing Waste - General construction waste in the form of scrap metal, wood, packaging, wire, wallboard, paint related waste, etc., will be generated during the project. All waste will be characterized and dispositioned at the direction of the facility Waste Generator Services (WGS) personnel.

General Office type waste will be generated during operation of the HSSL.

Releasing Contaminants - Chemicals such as lubricants, adhesives, paints, joint compound, caulks, etc., will be used during construction. The subcontractor will submit chemical inventory lists with associated Material Safety Data Sheets (MSDS’s) through the vendor data system. The Construction Chemical Custodian will enter these chemicals into the Comply Plus Chemical Management System for tracking purposes.

Using, Reusing, and Conserving Natural Resources - Activities will likely generate materials that can be recycled, including but not limited to scrap metal. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. New equipment will meet either the Energy Star or Significant New Alternative Policy (SNAP) requirements as appropriate (see http://www.sftool.gov/GreenProcurement/ProductCategory/14). In addition, the project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, and are non-toxic or less-toxic than alternatives.

SECTION D. Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: 10 CFR 1021, Appendix B to Subpart D item B1.31 "Installation or relocation of machinery and equipment."

Justification: The proposed action is consistent with 10 CFR 1021, Appendix B to Subpart D, item B1.31 categorical exclusion, "Installation or relocation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that 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: 8/25/2009