

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

**SECTION A. Project Title:** Advanced Test Reactor (ATR) Primary Coolant Pump Motor Starters Replacement

**SECTION B. Project Description:**

The proposed action would replace the existing ATR Primary Coolant Pump circuit breakers located in Switchgear 670-E-1 Cubicle 3 & 4 and Switchgear 670-E-2, Cubicles 9 and 10 with Vacuum Starters specifically designed for motor starting applications. Replace the existing electrically operated auxiliary relay with a new electrically operated auxiliary relay mounted in the same location. The scope is to replace four obsolete medium voltage vacuum circuit breakers with new vacuum motor starters. These motor starters are associated with each of the four 2000 HP primary coolant pump motors. The circuit breaker cubicles are located in the 670-E-1 and 670-E-2 4160 Vac switchgear. Each motor starter is a direct roll-in replacement, with same form, fit, and function as the old circuit breakers. The new motor starters have different internal features and are rated for more open/shut cycles through design lifetime.

The existing vacuum breakers are designed to close into and interrupt short circuit currents. They are not specifically designed for repetitive motor starting applications without regular maintenance and repair. During pre-start checks, the circuit breakers are cycled many times; this along with normal start and stop operations limits the life of a circuit breaker to a maximum of three years. The new vacuum starters are specifically designed and manufactured for repetitive motor starting. This feature will alleviate/minimize unnecessary maintenance and repair, waste associated with repair, and unscheduled reactor shutdown due to potential circuit breaker malfunction. There is no paint, asbestos or mercooid switches involved in this action.

Projected Start Date: May of 2015  
Projected End Date: December of 2015  
Projected Cost: Approximately \$600,000

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Disturbing Cultural or Biological Resources** - Test Reactor Area (TRA)-670 is eligible for nomination to the National Register of Historic Places. The activities described in the project description are exempted from cultural resource review ("Idaho National Laboratory [INL] Cultural Resource Management Plan" Table 2, exemptions 3 and 6 [Department of Energy Idaho Operations Office (DOE/ID)-10997 rev. 5]). Therefore, the project could proceed as described without further cultural resource review.

**Generating and Managing Waste** - All waste generated from this activity will be managed in accordance with company procedure. Pollution prevention/waste minimization will be implemented where economically practicable to reduce the volume and/or toxicity of waste generated. All waste generated will be transferred to Waste Generator Services (WGS) for appropriate disposition. All waste generated from these activities will have an identified disposition path prior to it being generated.

**Using, Reusing, and Conserving Natural Resources** - All material will be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill when possible. Project personnel would use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. 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, and are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see <http://www.sftool.gov/GreenProcurement/ProductCategory/14>).

**SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s):** Identify the applicable categorical exclusion from 10 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 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 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:** 10 CFR 1021 Appendix B to Subpart D Categorical Exclusion B1.31

**Justification:** Project activities described in this environmental checklist (EC) are consistent with 10 CFR 1021, Appendix B to Subpart D, item 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 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: 6/24/2014