

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

### SECTION A. Project Title: Sitewide Electrical Energy and Water Use Monitoring

### SECTION B. Project Description and Purpose:

Idaho National Laboratory (INL) must meet certain sustainability goals, and utility use measurement devices can be a valuable tool for monitoring sustainability goal metrics. Installation of water and power meters is needed to improve tracking capabilities for determining energy and water usage. The proposed action installs power and water metering equipment throughout INL at buildings CF-608, IF-603, IF-627, IF-638, MFC-1702, TAN-678, TRA-658, TRA-678, and TRA-1608. Only water metering equipment will be installed at buildings CFA-609, TAN-675, and TRA-628. Installation of power and water metering equipment at other INL facilities may occur during FY 2018 if funding allows. Power meters will be installed at or near the incoming electrical service and will require one transmitter, three current transmitters, and one fused disconnect switch plus associated conduit and wiring. Water meters will be installed at the incoming water service and will require one transmitter and one set of transducers plus associated conduit and wiring. At five locations it will be necessary to install an electrical receptacle at the water meter location requiring one 20A, 1P circuit breaker and one duplex receptacle and associated box, cover, conduit and wiring. Conduit and a BACnet network cable will be installed from each water and power meter to a network cabinet, located in the same or an adjacent room. In one or two locations, as needed, contractor supplied cabinet and interface modules will be installed. Estimated cost for installation at locations requiring both power and water meters is \$25K and at locations requiring water meter installation only is \$20K. Installation is estimated during to take one week per location.

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

#### Air Emissions

Project activities have the potential to disturb asbestos.

#### Generating and Managing Waste

Scrap metal, conduit, wire, cable, drywall, packaging material etc. will be generated during the project. Scrap metal will be diverted from landfill disposal and recycled where practical. Any circuit boards or electronics with solders will be sent out as RCRA scrap metal through WGS. All waste will be characterized and disposed at the direction of WGS.

#### Releasing Contaminants

Typical construction chemicals such as lubricants, fuels, adhesives, paints etc. will be used on the project. The subcontractor will submit a chemical inventory list via vendor data with associated SDS's. The Construction Chemical Coordinator will track these chemicals in the INL Comply Plus Chemical Management System.

Water meters will be non-intrusive and not contact any potable water, therefore NSF approved meters and materials will not be required.

#### Using, Reusing, and Conserving Natural Resources

Scrap metal such as conduit, wire, and cable will be diverted from landfill disposal and recycled where practical.

Water and energy metering is an additional tool for evaluating INL conservation practices.

### 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:** 10 CFR 1021, Appendix B, B2.2 "Building and equipment instrumentation" and B5.1 "Actions to conserve energy or water."

**Justification:** Project activities are consistent with 10 CFR 1021, Appendix B, B2.2 "Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment);" and B5.1 "(a) Actions to conserve energy or water,

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demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances..."

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: 9/208/2017