

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

**SECTION A. Project Title:** National Cybersecurity and Communications Integration Center (NCCIC)/Industrial Control Systems Cyber Emergency Response Team (ICS-CERT) Idaho High Frequency (HF) Shared Resources (SHARES) Station

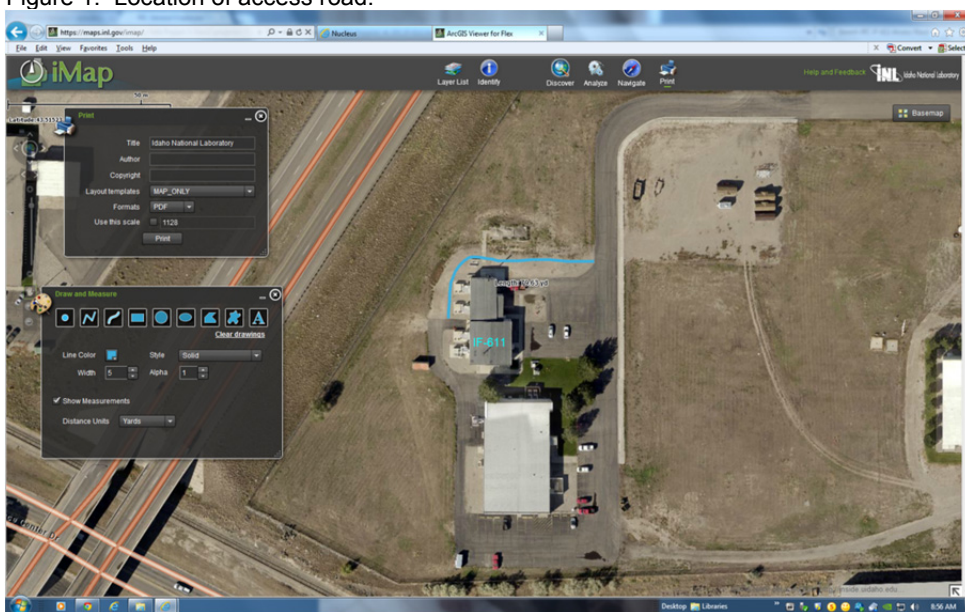
### SECTION B. Project Description:

The purpose of this revision is to add road maintenance to the scope of the work. In order to install, access, and maintain the proposed communication system, approximately 75-80 linear yards of the road near the facility (see Figure 1) will be graded and crushed gravel (up to 6 inches in depth) will be applied.

The purpose of this work is to construct a new Department of Homeland Security (DHS) High Frequency (HF) Shared Resources (SHARES) Station at the Idaho National Laboratory (INL) behind the Systems Analysis Facility (SAF; Idaho Falls [IF]-627) to connect to a new radio room in the vault area of the building. The SHARES HF Radio Program provides an additional means for users with a national security and emergency preparedness mission to communicate when landline and cellular communications are unavailable. SHARES members use existing HF radio resources to coordinate and transmit messages needed to perform critical functions, including those areas related to leadership, safety, maintenance of law and order, finance, and public health.

The proposed action would require operation of a generator for as a back-up emergency standby power source to the HF SHARES communication system equipment and supporting loads inside and outside the SAF building. Monthly routine maintenance will be performed which requires running the generator for a short period of time to ensure functionality should loss of power occur. This will be recorded in a run history log book for the generator.

Figure 1. Location of access road.



Construction Activities are expected to include:

- Install new antenna towers (100' and 20') & supporting concrete and guy wires (see Figure 2)
- Install conduit at grade level to support radio cabling to antennas
- Install ductbank/conduit across grassy area to asphalt then onto building to support cabling (see Figure 2)
- Install new chain link fence around antenna area, tie to existing west and south end fences
- Install grounding around antennas per manufacturers recommendations
- Tie antenna grounding to building ground loop
- Ground chain link fence
- Ground existing fence (south and west)
- Ground all metal within fenced in area to antenna grounding
- Install lightning protection as required
- Install natural gas genset (Olympian 60KW – G60LG2-Natural Gas - 208/120v, 3 phase)
- Install radio cabling from vault area to tower area
- Install antenna equipment on towers and connect cabling
- Install 120v "bangboard" near the base of the 100' tower with 2 outdoor 120v duplex receptacle (approx. 200' run)
- Install Cabinet enclosure against building to support cabling entry into building with ground bus bar to building ground
- Install Dual base pass antenna on side/top of building
- Install wireway across top west side of building to support future growth/use of additional communication devices on roof
- Install connecting wireway to cabinet on west side for cable building entry
- Install building electrical power to outdoor receptacles for exercise vehicle support during emergency exercises

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- Upgrade sub panel D (in vault) from 60 amp panel to 100 amp panel
- Design area for antenna cabling penetrations and wireway installation
- Route antenna cabling to vault area
- Route power from building out to Tower Operations Panel
- Install new UPS (Powerware 9330 Model 40 - 25Kva, 208/120v, 3phase) to existing 60 amp panel (P-SAF-D) in vault area with 26 minute battery protection at full load
- Install generator transfer switch to interface with UPS and P-SAF-D power panel
- Install ground bus bar in vault by radio cable wireway
- Construct new custom work bench
- Rewire/install new receptacle in Vault area to support radio bench

Figure 2. Proposed SHARES Station Configuration at the SAF Building



Construction is estimated to begin in November 2014 and end in February-April 2015 (weather dependent). The estimated cost for the new HF SHARES station is approximately \$800,000.

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

**Air Emissions** - Construction activities have the potential to generate fugitive dust as well as small quantities of welding fumes. A 60 KWe natural gas generator will be installed to provide emergency power upon the loss of commercial power. The genset must comply with current air emissions limits for emergency use, as specified in 40 CFR 60, Subpart JJJJ, at the time of purchase. An APAD for genset operation will be required. Efforts to control fugitive dust must be documented in project files.

**Generating and Managing Waste** - Construction activities are expected to generate a variety of Industrial waste streams, ranging from scrap metal to excavated asphalt and general construction waste. Materials such as scrap metal and asphalt will be recycled to the extent practicable. Routine operations are expected to generate small amounts of common trash. All solid waste will be managed by WGS.

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**Releasing Contaminants** - Typical construction chemicals such as lubricants, fuels, 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 INL Comply Plus Chemical Management System by the Construction Chemical Coordinator.

**Using, Reusing, and Conserving Natural Resources** - All materials would be reused and recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow. 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, or 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 <https://sftool.gov/green-products/0?agency=0>).

**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, B1.19 "Microwave, meteorological, and radio towers."

**Justification:** The proposed action is consistent with categorical exclusion B1.19 "Siting, onstruction, modification, operation, and removal of microwave, radio communication, and meteorological towers and associated facilities, provided that the towers and associated facilities would not be in a governmentally designated scenic area (see B(4)(iv) of Appendix B) unless otherwise authorized by the appropriate governmental entity."

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: 11/17/2014