

**DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory**

SECTION A. Project Title: Nokia LTE Band 4 and 5 Capability Upgrade

SECTION B. Project Description and Purpose:

To meet the demands of the INL's customers, periodic upgrades are performed to improve system performance and add additional feature functionality to the Network(s). The latest capability upgrade requirement is to add LTE Band 4 and Band 5 capability to the existing Wireless Test Bed (WTB) LTE Network.

To implement this upgrade, new LTE eNodeB RF Remote Radio Heads (RRH's) and new Band 4 and 5 antennas shall be installed at each of the three fixed INL tower locations (CFA-609, Gate 1, and EBR-1). The RRH's and antennas shall be mounted onto the 60 ft platform of each tower. All work will occur in previously disturbed areas.

A subcontractor will perform the following tasks:

- i. Installation of the new three (3) antennas for LTE Band 4 and Band 5 per cell site.
- ii. Installation of the new two (2) Remote Radio Heads for LTE Band 4 and Band 5 per cell site.
- iii. Installation of the contractor provided RF jumpers from the Remote Radio Head to each of the antennas.
- iv. Configure and validate RET functionality from the Band 4 and Band 5 eNodeBs to the new antennas.
- v. Install and secure new fiber connection runs from Remote Radio Heads to the Hybrid Trunk Cable and terminate using the existing spare (unused) fiber pairs and connections.

Removed equipment will consist of:

- A monopole antenna that spans between the 50 ft and 60 ft platforms on the CFA-609 tower will be removed.
- Three existing LTE antennas will be removed from 60 ft platform on the CFA-609 tower.
- A Satellite Dish will be removed from the EBR -1 Tower.

The uninstalled equipment will be retained and stored for future use by the Test Team.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

The removal of old equipment and installation of new equipment will involve the use of a boom lift which is power by an internal combustion engine. Since the equipment is temporary no permit is required.

Activities in this EC have the potential to produce fugitive dust.

Disturbing Cultural or Biological Resources

Activities included in this EC have the potential to disturb cultural resources. All federal undertakings (projects involving federal funding or property) must undergo cultural resource review (CRR).

Project activities have the potential to impact biological resources such as migratory birds, especially during nesting season (April 1 and October 1). Threats include, but are not limited to, noise, human activity around nests, lighting, and collisions with windows and other infrastructure.

Generating and Managing Waste

Some industrial waste will be generated in the form of scrap metal, wire, etc.

Releasing Contaminants

Typical construction chemicals such as fuels, lubricants, adhesives, etc., will be used and will be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. The Facility Chemical Coordinator will enter these chemicals into the INL Chemical Management Database. All chemicals will be managed in accordance with laboratory procedures. When dispositioning surplus chemicals, project personnel must contact the facility Chemical Coordinator for disposition instructions.

Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility Environmental Staff. If the facility Environmental Staff cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS.

Using, Reusing, and Conserving Natural Resources

All applicable waste will be diverted from disposal in the landfill when possible. 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, 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/Product>).

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.

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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 to Subpart D, B1.19 "Microwave, meteorological, and radio towers"

Justification: Project activities described in this EC are consistent with 10 CFR 1021, Appendix B to Subpart D, item B1.19 "Siting, construction, 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 this appendix) 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 Jason Sturm, DOE-ID NEPA Compliance Officer on: 01/13/20