



U.S. Department of Energy Categorical Exclusion Determination Form

Proposed Action Title: ESnet Oak Ridge Fiber Project (LB-CX-25-02)

Program or Field Office: Berkeley Site Office, Lawrence Berkeley National Laboratory (LBNL)

Location(s): Oak Ridge and various rural locations in Wilson and Anderson Counties, Tennessee

Proposed Action Description:

The U.S. Department of Energy (DOE) proposes to execute a 20-year service agreement with a prime contractor for high quality fiber optic service extending from Nashville, Tennessee into the Oak Ridge Associated Universities campus at 512 Badger Avenue, Oak Ridge, Tennessee. This improved fiber optic service would enable the Oak Ridge campus to better integrate into DOE's Energy Sciences Network (ESnet) system. The current infrastructure lacks system resiliency and is underserved by aging fiber that experiences outages due to multiple single-points of failure. The action would involve the following elements:

1. Lash and strand ~16,500 feet of new fiber onto existing aerial towers in utility rights-of-ways through rural/agricultural areas.
2. Connect two existing aerial towers with ~350 of new underground conduit through a rural cow pasture.
3. Emplace a ~120 sq. ft. prefab telecommunications structure (Telco Hut) in the Tennessee Valley Authority (TVA) utility corridor right of way in a rural/agricultural area; connect Telco Hut to an adjacent aerial tower with ~110 feet of underground conduit.
4. Create "last mile" connection to Oak Ridge campus receiving facility by extending ~3,600 feet of underground conduit through urban street network utility rights-of-way.

Once in place, and with the exception of the Telco Hut on TVA easement land, the Proposed Action would leave no noticeable changes to the environment. DOE analyzed the potential for environmental impacts using various methods, including aerial and street-view photography; available maps, databases, and literature; and resource agency tools such as the National Park Service's National Register Spatial Data Map and National Register of Historic Places Database, and the Information for Planning and Consultation (IPaC) tool maintained by the U.S. Fish and Wildlife Service (USFWS). The U.S. DOE sought informal consultation with and received a no-impact concurrence from the Tennessee State Historic Preservation Officer (SHPO). In keeping with Endangered Species Act Section 7(a)(4), the U.S. DOE made No Effect determinations for all IPaC-identified federally threatened and endangered species based on a lack of suitable habitat and a lack of USFWS-identified critical habitat for all such species in each of the three project areas.

Categorical Exclusion(s) Applied:

B1.7 – Electronic Equipment
B1.15 – Support Buildings
B1.24 – Property transfers
B1.31 – Installation or relocation of machinery and equipment
B4.7 – Fiber Optic Cable

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Appendix B of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021 (See full text in regulation)

☒ There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

☒ The proposal is not connected to other reasonably foreseeable DOE actions.

I concur that the above description accurately describes the proposed action.

**LBNL Sr. Site &
Environmental Planner:**



Jeff Philliber

September 22, 2025

Date Determined

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

**BSO NEPA Program
Manager:**

JOSE ROLDAN

Digitally signed by JOSE ROLDAN
Date: 2025.09.23 06:50:53 -07'00'

Jose Roldan

[Click here to enter a date.](#)

Date Determined

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

BSO Site Manager:

Hanley Lee

[Click here to enter a date.](#)

Date Determined

As DOE Counsel, I have reviewed the proposed action description and above-cited CX at the request of the NEPA Compliance Officer and concur that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met.

DOE Counsel:
(if requested)

Michelle McKown

[Click here to enter a date.](#)

Date Determined

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE P 451.1), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

**DOE NEPA
Compliance Officer:**

Jayashree Jayaraj

[Click here to enter a date.](#)

Date Determined