



# U.S. Department of Energy Categorical Exclusion Determination Form

Proposed Action Title: 33 MVA Electrical Power Substation Project - TJSO-SC-14-01

Program or Field Office: Thomas Jefferson Site Office

Location(s) (City/County/State): Newport News, VA

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Proposed Action Description:

Jefferson Science Associates, LLC (JSA) proposes to construct a new 33 MVA electrical power substation at the Thomas Jefferson National Accelerator Facility that operates at 34.5 kV (utility supplied voltage), construct and operate a new 15 kV switchgear (secondary distribution side voltage 12.47 kV), and construct and operate both new overhead and underground power lines of less than a mile. New power lines installed by the project would be approximately 160 ft. This project is estimated to affect approximately 16,000 ft<sup>2</sup> of previously disturbed land (or < 1/2 acre) located inside the accelerator site fenced area.

The project would be completed by two construction groups. The first group would be electrical subcontractors working for JSA that would clear and prepare the site, provide a new access road, install a new manhole, and connect the manhole to existing manholes and the new switchgear. The fenced area surrounding existing switchgear would then be modified to enclose both the existing and new switchgear. Concurrently, Dominion Virginia Power would construct a 33 MVA substation that would supply power to the new switchgear from their existing overhead lines. Additional overhead lines would be modified by tapping them and extending them to the new substation. After this work is completed, the fence surrounding the existing substation would be modified to include both substations. The construction groups would install concrete foundations for the electrical equipment. The action would also include other standard construction activities such as stockpiling and transporting excess soil materials to an approved offsite facility.

No trees would be removed within the project footprint, and approximately 85 yd<sup>3</sup> of soil would be removed during grading to allow for installation of the duct bank. An erosion and sediment control plan would be prepared; and after construction, the project would result in approximately 5,000 ft<sup>2</sup> of additional impervious area. All work would be performed in close coordination with Dominion Virginia Power, JSA, and JSA's subcontractors.

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Categorical Exclusion(s) Applied:

- B4.11 - Electric power substations and interconnection facilities
  - B4.12 - Construction of powerlines
  - B1.13 - Pathways, short access roads, and rail lines
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For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, 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 facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

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

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

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.

**Program Point of Contact:** Richard Korynta

**Date Determined:** 1/27/2014

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), 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.

**NEPA Compliance Officer:** Gary S. Hartman

**Date Determined:** 2/10/2014