U.S. Department of Energy
Categorical Exclusion Determination Form

Proposed Action Title: Grizzly Peak Substation Modification (LB-CX-20-03)

Program or Field Office: Bay Area Site Office, Lawrence Berkeley National Laboratory

Location(s) (City/County/State): Berkeley, California

Proposed Action Description: The US Department of Energy (DOE) proposes to modernize and expand the capacity of the Lawrence Berkeley National Laboratory (LBNL) Grizzly Peak Substation from its current (approx.) 30 MW to 70 MW of electrical power. The condition of the substation limits the ability for LBNL to support forecasted electrical demand growth and operational requirements. Such power demand growth is anticipated as LBNL continues to modernize and develop new facilities and adopts newer and more energy-intensive technologies: for example, for the increasingly more powerful high-performance computing systems that are periodically replaced at LBNL's Building 59, and for potential future development that may occur in recently vacated development space in LBNL's Bayview and Old Town planning areas. In order to support the DOE Office of Science mission, LBNL must have sufficient, modern infrastructure already in place or well underway. Electrical reliability is critical to achieving LBNL operational goals. Future LBNL projects that would contribute to the increase in electrical demand are at present speculative and hence would be addressed in future project NEPA evaluations.

The proposed project would expand the Grizzly Peak Substation footprint from approximately 19,000 square feet (ft^2) to approximately 33,000 ft^2 to make room for additional ductbank, transformers, and switching facilities (See Figures 1 and 2). The expanded footprint area (approximately 14,000 ft^2) would occur on previously disturbed or developed land. Excavation of approximately 1,500 cubic yards of soil would be required to accommodate new equipment pads and ductbanks. In the newly expanded footprint area, two new 3-winding transformers ("Bank 3" and "Bank 4") would be installed along with a 12.47-KV switchstation ("SW-A0") and a 34.5-kV switchstation ("SW-B0"). The new switchstations would be housed in an electrical control enclosure. New ductbank would then be routed in an east-to-west orientation to deliver electrical power to existing electrical vaults and/or ductbanks.

To accommodate expansion of the Grizzly Peak Substation footprint, Building 79, an adjacent, roughly 4,500 gross-square-foot storage building, would be demolished and removed. Building 79's current materials and equipment storage functions would be assumed in other locations (at this time, these locations are expected to include LBNL Building 69 and the Richmond Field Station in Richmond, California). Building 79 was constructed in 1965 and was found to "lack historic significance" and to not meet any of the National Historic Preservation Act criteria for listing eligibility in a 2017 evaluation conducted pursuant to LBNL's Cultural Resources Management Program.

The project site is located centrally within LBNL's 202-acre site, approximately 2,000 feet distant from the nearest residential homes. The site and its environs have an industrial character, with heavily graded, paved surfaces; large-scale, electrical transmission towers, lines, and equipment; austere, functional building structures; and storage bins, dumpsters, and chain-link fencing populating the area. The site is surrounded by uptrending slopes, McMillan Road, and Building 76 (Facilities offices and shops) to the north; Road "S" and the "Old Town" area (research buildings) to the west; a PG&E transmission tower and two 115kV breaker platforms, Glaser and McMillan Roads, and downtrending slopes (perimeter open space) to the south; and Building 79 (storage building) and Building 77 (engineering shops building) to the east (See Figure 3). UC Berkeley's 115kV electrical substation, which is located inside of LBNL's management area, abuts the project site immediately to the southwest.

Proposed project construction is expected to begin with deactivation and abatement of Bldg. 79 in September 2020; demolition would occur through July 2021. The substation expansion work would begin with site preparation, excavation, and earthwork occurring between September 2021 and August 2022. Installation of substation electrical equipment, ductbanks, housings, and other appurtenances would then be completed by around February 2024, when the proposed project would be expected to become fully operational. All dates are approximate and based on current project schedule expectations.

Building 79 and any site soils to be excavated would be fully investigated and characterized for contaminants prior to disturbance activities. Such contaminants could include small amounts of asbestos, lead, and/or polychlorinated biphenyl (PCB) associated with older buildings and electrical transmission facilities; these would be identified, handled, remediated, and disposed of in accordance with all applicable regulatory requirements and LBNL best-management practices (BMPs). A total of approximately 100 truck trips

are expected throughout the 5-year duration of the project; peak number of workers on site at any single time would not be expected to exceed 25. All applicable LBNL "Standard Project Features" would be exercised throughout project construction, including measures to minimize dust and criteria pollutant air emissions. Due to square-footage of affected area, the proposed project would be regulated by LBNL's Industrial General Permit Stormwater Pollution Prevention Plan and would meet its terms, conditions, and BMPs; it would also be subject to the Energy Independence and Security Act (EISA) Section 438 requirements and would include features designed to restore, to the maximum extent technically feasible, predevelopment hydrology to the site with regard to temperature, rate, volume, and flow duration. EISA Section 438 technical feasibility and design would be undertaken during the design and planning phase of the proposed project.

Categorical Exclusion(s) Applied:

B1.16 - Asbestos removal

B1.17 - Polychlorinated biphenyl removal

B1.23 - Demolition and disposal of buildings

B1.31 - Installation or relocation of machinery and equipment

B1.34 - Lead-based paint containment, removal, and disposal

B4.11 - Electric power substations and interconnection facilities

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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.

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

LBNL Environmental Planner: Jeff Philliber — **4/6/2020** Date Determined

BASO Project Manager: Rick Chapman — 4/7/2020 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.

BASO NEPA Program Manager: MARY GROSS Digitally signed by MARY GROSS Date: 2020.04.07 13:40:40 -07'00' — Mary Gross — Date Determined

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1 B), 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: PETER SIEBACH Digitally signed by PETER SIEBACH Date: 2020.04.07 16:28:00 -05'00' — Peter Siebach — Date Determined

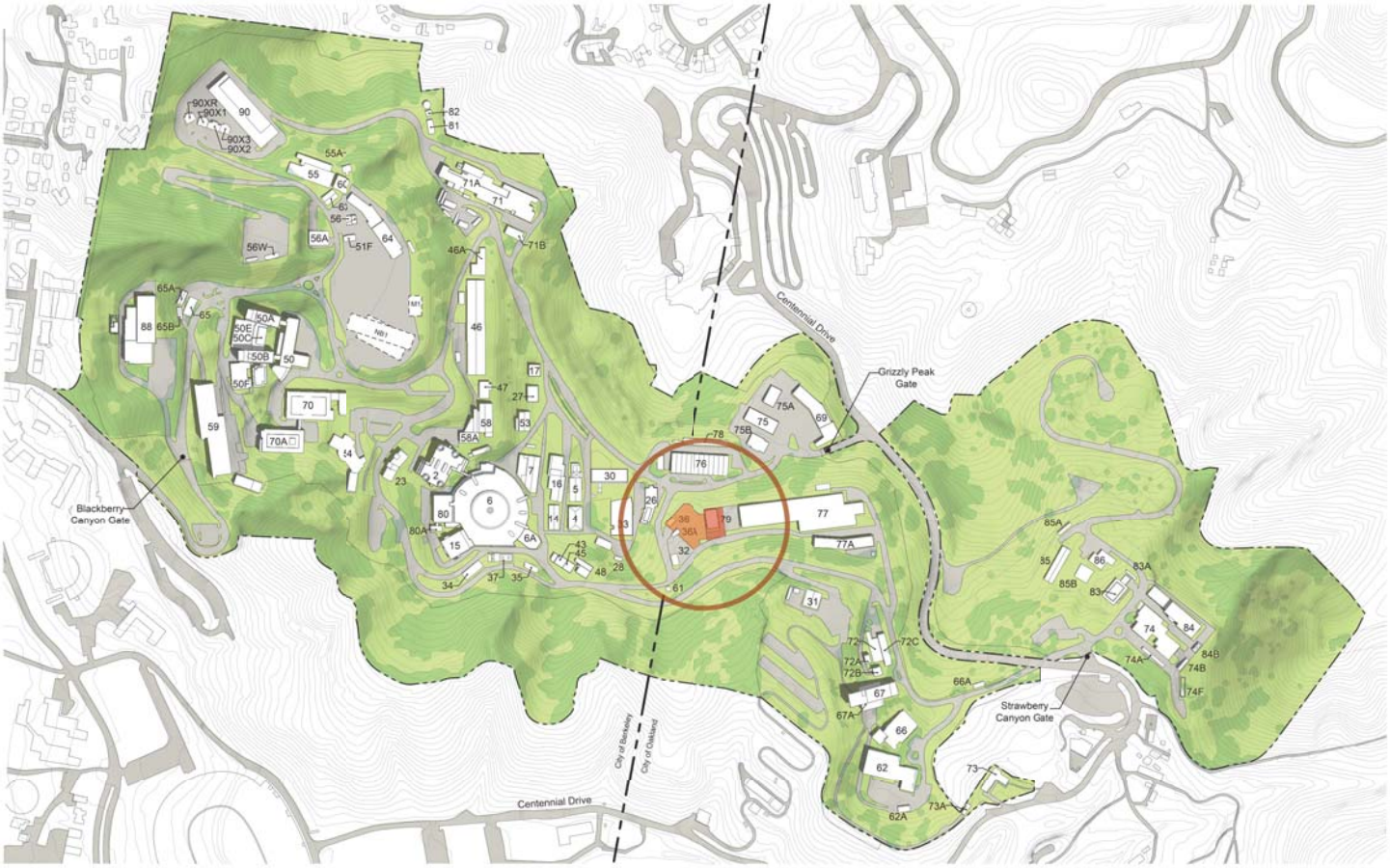

Figure 1: Location

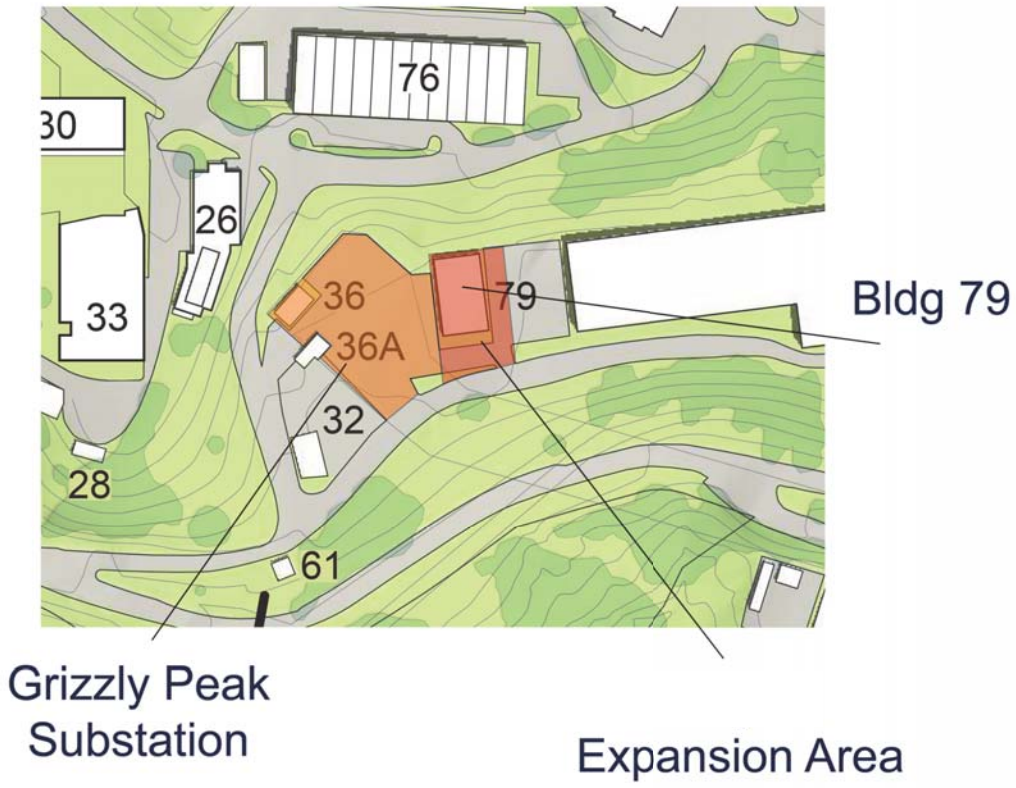

Figure 2: Activity Area, Plan View

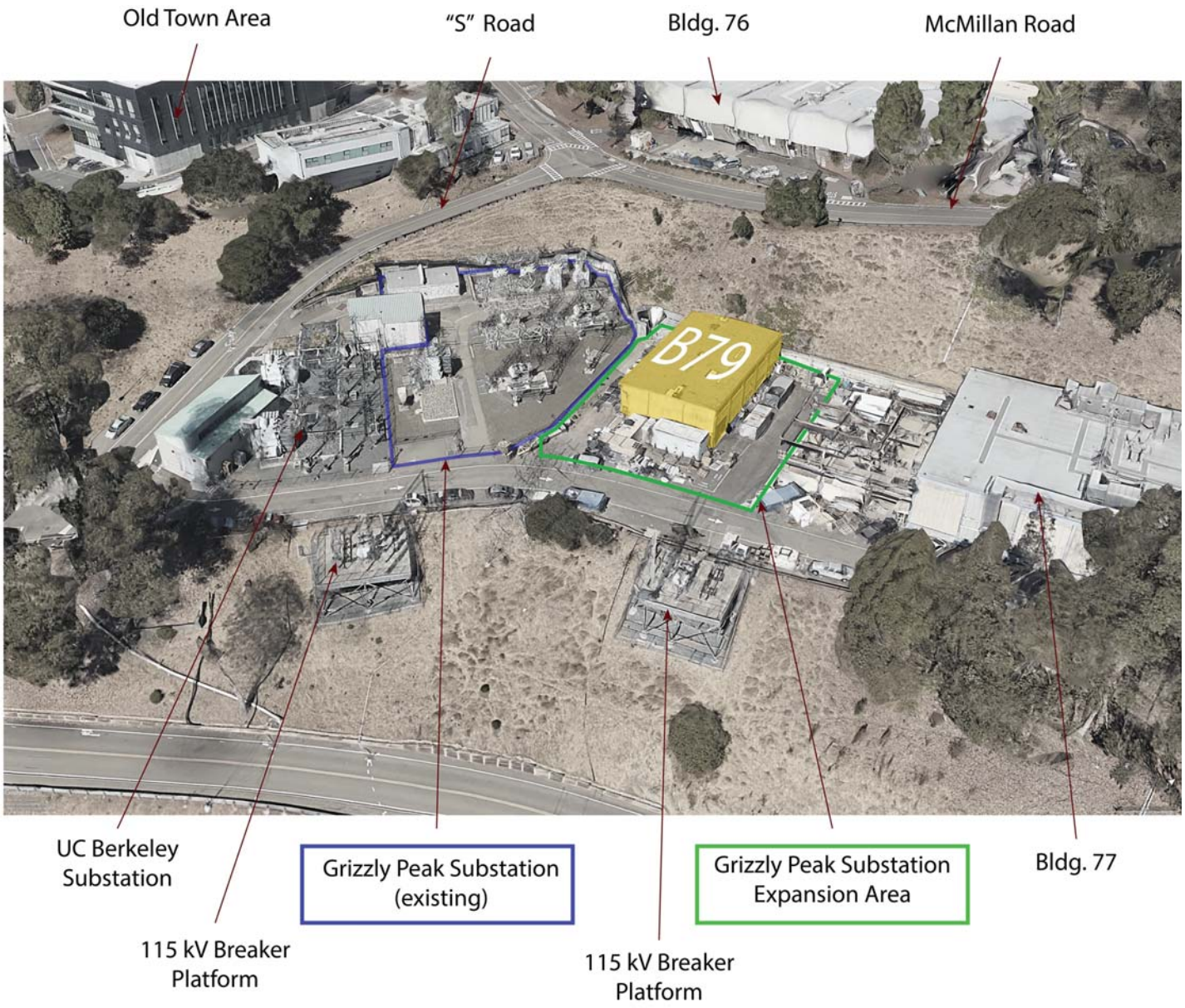

Figure 3: Activity Area, Aerial View, Surrounding Land Uses