

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: City of Burlington, VT Electric Department

STATE: VT

PROJECT TITLE: District Energy Construction

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDS	DE-EE0010131	GFO-0010131-001	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering, analysis, and dissemination

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B1.15 Support buildings

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

B5.2 Modifications to pumps and piping

Modifications to existing pump and piping configurations (including, but not limited to, manifolds, metering systems, and other instrumentation on such configurations conveying materials such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water). Covered modifications would not have the potential to cause significant changes to design process flow rates or permitted air emissions.

B5.14 Combined heat and power or cogeneration systems

Conversion to, replacement of, or modification of combined heat and power or cogeneration systems (the sequential or simultaneous production of multiple forms of energy, such as thermal and electrical energy, in a single integrated system) at existing facilities, provided that the conversion, replacement, or modification would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to administer Congressionally Directed Spending (CDS) to the City of Burlington, Electric Department for building a new annex at the existing 50 MW wood-fired biomass McNeil Generating Station in Burlington, VT and installation of an electric backup boiler and flue gas heat recovery system.

Tasks within the project would include work to install, startup, and commission equipment at the McNeil Generating Station to extract steam from the existing steam turbine, recover waste heat from the flue gas, and install a 10 MW electric backup boiler as part of an addition to add a combined heat and power component to the existing biomass powerplant. The 10 MW boiler and associated equipment would be housed within a new, approximately 2000 square foot, annex being built as part of this project on previously disturbed ground (currently used for surface parking) adjacent to the southeast corner of the existing McNeil Generating Station. All work associated with the CDS would occur at the McNeil Generating Station.

Wood feedstock throughput at McNeil is expected to increase approximately 5% and additional steam extraction from the turbine and waste heat recovery from the stack would be sources of thermal energy. Modifications to air permits are not expected since wood consumption/throughput would remain below existing permitted levels. The proposed project is not expected to materially change the amount of wastewater or stormwater discharge at McNeil and no modification of the existing permits are anticipated. While the new annex being built at McNeil would be impervious

and would have runoff from the roof, the annex addition is planned for a location that is currently impervious paving, so no change in total runoff for the site is expected due to the new structure. No additional water, sewer, or electric distribution or transmission lines are anticipated. The volume of the current waste streams is not anticipated to be increased by the proposed project.

The project would involve typical construction risks. Licensed contractors would be used where applicable. Health and safety impacts associated with operation of the project are expected to be minimal. Risks associated with the completion of project activities would be mitigated through adherence to established health and safety policies and procedures. Project proponents and contractors would observe all applicable federal, state, and local health, safety, and environmental regulations. Due to the location and scale of the installation and operational activities, DOE does not anticipate any impacts to resources of concern due to the proposed activities associated with the CDS.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Advanced Materials & Manufacturing Technologies Office

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) 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 proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____


NEPA Compliance Officer

Date: 8/8/2023

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
 Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____

Field Office Manager

Date: _____