PMC-ND

(1.08.09.13)

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



RECIPIENT: Clinton P2G, LLC STATE: ME

PROJECT TITLE: Technical Feasibility and Market Demonstration of Biomethanation as a Means for Biogas Upgrading

and Renewable Natural Gas Production

Notice of Funding Opportunity Number Procurement Instrument Number NEPA Control Number CID Number

DE-FOA-002396 DE-EE0009773 GFO-0009773-002 GO9773

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.

B3.6 Small-scale research and development, laboratory operations, and pilot projects Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Clinton P2G, LLC, for the development, assembly, installation, and operation of a pilot-scale bioreactor.

DOE previously completed a NEPA Determination (ND) for Funding Opportunity Announcement (FOA) DE-FOA-0002396 (FOA-0002396-001; A9, B3.6; 5/20/2021). That ND for the FOA applies to initial verification activities for awards issued under the FOA, including this award (DE-EE0009773). DOE also previously completed an ND for this award with a different recipient (GFO-0009773-001; A9, B3.6; 3/8/2022). That ND covered the research, design, and fabrication of an electrolyzer that would be used in a bioreactor, as well as additional research and analysis.

Project activities for this award (GFO-0009773-002) would involve the temporary installation and operation of a bioreactor at an existing dairy manure digester that produces renewable natural gas. The National Renewable Energy Laboratory (NREL) in Golden, Colorado, would be responsible for design and data analysis during all phases of the project. Testing and assembly of the advanced cell stack would occur at Nel Hydrogen USA in Wallingford, Connecticut. Final bioreactor modifications before shipment to the installation site would be carried out at NREL.

The bioreactor unit would be installed and operated over a two-year period at the Clinton Digestor Facility in Clinton, Maine. Installation would require that an existing paved surface, located immediately adjacent to Clinton P2G's existing facilities, be replaced by a new 12 feet by 12 feet concrete pad. The bioreactor would be installed on this pad. A trench, 20 feet long by 3 feet wide by 4 feet deep, would be dug for piping that would connect the bioreactor to the

existing facilities. All ground disturbance would occur in developed, previously disturbed areas.

Potential hazards include operation of bioreactor equipment and flammable gases. Award recipients would adhere to established health and safety policies and procedures when performing project work, and would observe all applicable federal, state, and local health, safety, and environmental regulations.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

EERE is aware of the November 12, 2024, decision in Marin Audubon Society v. FAA, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, EERE has nonetheless elected to follow those regulations at 40 C.F.R. Parts 1500-1508, in addition to DOE's procedures/regulations implementing NEPA at 10 C.F.R. Part 1021, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Bioenergy Technologies Office NEPA review completed by Andrew McClellan, 13 December 2024

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 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 proposed action is categorically excluded from further NEPA review.

NEPA Compliance Officer Signature:	Rectronically Signed By: Andrew Montano	Date:	12/13/2024	
	NEPA Compliance Officer			

~	Field Office Manager review not required		
	Field Office Manager review required		
BAS	ASED ON MY REVIEW I CONCUR WITH THE DETERMINA	ATION OF THE NCO :	
Fiel	eld Office Manager's Signature:	Date:	
	Field Office M	lanager	