PMC-FF2n

(2.01.02)

U.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER NEPA DETERMINATION



RECIPIENT: Sacramento Municipal Utility District

STATE: CA

PROJECT

TITLE:

CRED - SMUD: New Hope Dairy

Funding Opportunity Announcement Number DE-FOA-0000122

DE-EE0003070

Procurement Instrument Number NEPA Control Number CID Number

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

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The proposed project would involve installation of a covered lagoon digester, 500 kW GreenguardTM engine for combined heat and power, solids separator, biogas collection system, engine generation set, heat exchanger, and grid interconnection. The project would also require a new concrete drainage canal and mix tank. All facilities and equipment will be installed within the existing operating area of the dairy. The electricity generated would be sold to SMUD. The waste heat from the engine would be captured to heat the digester.

- Air quality The project would occur in an area that is in nonattainment for ozone and particulate matter. Operation of the digester and CHP system would cause minimal air emissions; thus, a Clean Air Act conformity analysis would not be required. NOx emissions will be below 9 ppm (approximately 18 micrograms/cubic meter), and emissions of others regulated pollutants will be very low to near zero, consistent with a best practice, low-NOx lean-burn engine with catalytic convertor. Hydrogen sulfide would be captured and removed prior to burning of the gas. The generator would comply with California Air Resources Board air emissions standards.
- · Odor There should be a beneficial decrease in odors.
- Land Use The project would disturb 2 to 3 acres of land that is disturbed and used for dairy operations. No wetlands or wildlife habitat would be disturbed.
- · Waste water and solid waste All wastewater will be recycled and solid waste will be used at the dairy as fertilizer.

There would be no or negligible impacts to surface waters, wetlands, biological resources, or other sensitive resources.

No public controversy was noted.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist:

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Date:

Signature:

NEPA Compliance Officer Signature:

Date:

Signature:

Date:

Field Office Manager