

PMC-EF2a

(20102)

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



RECIPIENT: North Dakota Department of Commerce

STATE: ND

PROJECT TITLE : SEP Flare Gas to Electricity Commercial Viability Project - Site 3

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DOE-FOA-0000052	DE-EE0000142	GFO-0000142-008	0

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:

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:

North Dakota's Department of Commerce would pass \$540,000 in SEP ARRA funding to Blaise Energy for a Flare Gas to Electricity Commercial Viability project. Blaise Energy would use turbine generators to transform wellhead flare gas into three-phase electricity. This process would use the flare gas to generate electricity and would reduce emissions caused by the flaring of the waste gas.

Site #3 - This site is comprised of the Wolter 13-21H, Wolter 1-28H, Wolter 13-22H wells. It is 4mi east of Fortuna, ND in a rural area surrounded by actively cultivated farmland. The nearest residence is .5mi from the project site. The proposed project would install a 680kW capacity generator at each of the three existing wells.

Site Considerations and Impact:

Both the generator and natural gas conditioning equipment (if needed) are in an enclosed, standardized 40ft x 8ft container which is skid mounted. The containers would be placed on the existing gravel pad of the well site within the footprint prepared by the oil operator during the initial well site construction. These containers would enclose the gas conditioning, generation, control, switching and interconnect equipment. There are not expected to be adverse impacts to threatened or endangered species, wetlands, floodplains, or cultural resources as these resources are not present at the project site.

There are two equipment interconnects required:

The natural gas line from the treater shack to the container would be buried or placed aboveground, depending on oil operator preference and duration of installation. The length of this interconnect is equal to or less than 100 ft. and would be located entirely within the confines of the existing well location's gravel pad.

The electric line from the utility to the generator container is equal to or less than 100 ft. in length and is located entirely within the confines of the existing well location's gravel pad. Utility cross connect equipment would follow existing site specifications.

All equipment would be constantly monitored and remotely controlled. All required equipment would be on existing petroleum well sites that are already in compliance with existing environmental regulations. Due to the rural location of the three project sites, the fact that the generators will be in sound attenuated containers, and the location of the nearest residences there are not expected to be adverse effects from noise as a result of the proposed projects.

The proposed projects are required to have and will obtain a WAPA Interconnect Agreement, Local coop Interconnect

Agreement, and a ND Department of Health Construction Permit. Emissions permits (if required) will be issued by the ND Dept. of Health. The other Blaise Energy project previously approved that is identical to these did not require an emissions permit. Impacts from emissions will not be significant as the project will be converting flared gas to electricity, in effect reducing the amount of CO2 and CO that is released into the atmosphere.

Safety precautions:

Gas line pressure regulators will ensure the gas goes back to flare should the gen-set stop. The gas line feeding the gen-set will also have backflow prevention valves to ensure any flames/fire originating from the gen-set would not make it back into the operators system. All site safety guidelines established by the operator as well as electric utilities must and will be followed during installation and operations.

After a thorough review of the information submitted for the proposed project, it has been concluded that the proposed project will not have a significant impact to human health and /or the environment. Therefore the proposed project is hereby Categoricaly Excluded under B5.1 "actions to conserve energy."

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

5/25/11

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

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

Field Office Manager's Signature:

Field Office Manager

Date:
