

PMC-EF2a

(20402)

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



RECIPIENT: Town of Carver

STATE: MA

PROJECT TITLE : EECBG - Carver Ground-Mounted Solar PV

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000737		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:

The Town of Carver is proposing to use \$150,000 in EECBG funding to install a ground mounted solar PV array in a 25 year highway easement consisting of approximately 1.26 acres (55,000 square feet) on the northern embankment of Route 44, between highway stations 73 and 84. The installation will have a capacity of 112 kW. The solar PV system will provide energy for the new North Carver Water Treatment Facility and Supply System currently under construction.

Potential environmental impacts from the proposed project and associated actions include:

- **Water Quality** – As required by the Town of Carver, special consideration will be given to erosion control on the relatively steep slopes along the highway embankment. Geotextiles, silt fencing, mulching and/or other best practices will be used to prevent soil exposed during the construction of the solar array foundations from erosion. Erosion control measures, such as silt fences and hay bales will be required on the slope and protecting existing catch basins. The effectiveness of erosion control measures will be monitored until disturbed soil is stabilized. There will be no changes to the existing drainage patterns. Swales at the bottom of the highway embankment lead to storm drains and ultimately to a large infiltration basin. Storm drains located in the highway easement are designed to catch potential spills or pollutants from runoff from the roadway and embankment area. The proposed project is not expected to have adverse effects to water quality.
- **Ground Disturbance** – The entire project site is expected to be a maximum of approximately 1.46 acres. This includes 1.26 acres along highway embankment for the solar array and 0.2 acres through town-owned, wooded area for the utility interconnection. However, actual ground disturbance will be much less than 1 acre as only the foundations and conduit run will require alteration/excavation of the land. The preferred utility route utilizes existing access roads and previously disturbed land to the greatest extent possible. Soil to be excavated will be minimized to local areas specifically requiring excavation such as foundations of individual units and electrical conduit trench locations. No extensive stripping of topsoil and existing vegetation is anticipated. The solar PV installation and utility run will be located more than 100 feet from any wetland resource area. The proximity of the proposed project to wetland resource areas and floodplains are shown on the attached maps. There will be no adverse effects to wetlands or floodplains as a result of the proposed project.
- **Visual Resources** – There are no residences within several hundred feet of the site, and none with a clear line of sight to the proposed area. The proposed solar array is surrounded by wooded areas further reducing visual impacts. The solar array will be visible from Route 44. Adverse visual effects are not expected as a result of the proposed project.

• Threatened and Endangered Species – The proposed solar PV array and utility connection do not occur within a Priority Habitat of Rare Species or an Estimated Habitat of Rare Wildlife. No state-listed rare species or federally-listed threatened/endangered species are known to occur on the project site. Therefore, the proposed project does not require review by the Natural Heritage and Endangered Species Program (NHESP) under the Massachusetts Endangered Species Act (MESA, M.G.L. c. 131A) and its implementing Regulations (321 CMR 10.00). A letter documenting "No Species Present" from USFWS has been obtained. The solar PV array will occur on a highway embankment created as part of the road construction. There will be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed project.

• Cultural Resources – A Project Notification Form (PNF) was filed with the Massachusetts Historic Commission (MHC) on June 23, 2010. A response from the MHC dated July 13, 2010 determined that the proposed project is unlikely to affect significant historic or archeological resources.

• Permits – Documentation of the acquisition of the easement from the Massachusetts DOT regarding the use of the highway embankment for the proposed project has been obtained. A waiver determining the proposed project exempt from review under MEPA by the Massachusetts Environmental Protection Act Office has been obtained.

After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categoricaly Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Note to Specialist :

EF-2A completed by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 9/30/2010
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager