

PMC-EF2a

(2010)

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



RECIPIENT: State of Utah

STATE: UT

PROJECT TITLE : SEP ARRA - Large Scale Solar - Roof Mounted - Ebay

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000083	GFO-0000083-016	EE83

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:

Through the Utah State Energy Program's Competitive Grants for Renewable Energy market title eBay will receive \$973,969 of DOE funding for to purchase and install a 797.335 kW solar (PV) photovoltaic system, comprised of 3393 KYOCERA 235 watt High Efficiency PV panels or equivalents, one SMA 500kW inverter and one SMA 250kW inverter mounted on the roof of their Topaz Data Center in South Jordan, Utah (Lat. 40.56397 – Long. 112.047937). Approximate annual production estimate is 1,118,418 kWh/year.

The proposed Solar PV project will be roof mounted on an approximately 240,000 sq. ft. commercial building which is two stories tall and has a total roof area of approximately 120,000 sq. ft. The footprint of the solar array is approximately 73,000 sq. ft. Construction of the eBay Topaz Data Center was completed in early 2010. The proposed array will be installed on a flat roof in 261 strings of 13 mounted at a 15 degree tilt/180 degree orientation and will not be visible from the ground as the roof contains a parapet wall. The installation will be non-penetrating and ballasted with a SUNLINK rack system. Per the recipient, no special structural requirements are needed for this system. Bob Knight, PE with RTKL Associates Inc. www.rtkl.com; states "The structure was designed to accommodate solar panel arrays that lay flat on the roof. The roof structure design accommodates 10 psf of load uniformly distributed over the roof surface. This loading over the 3 data center modules is documented in our Loading Schedule on drawing S-001. Other elevated and/or canted rack solar panel systems would have to be investigated in terms of their effects on the roof structure design." (Statement of Structural Integrity located in the "eBay NEPA Questionnaire" uploaded to the EF1)

The eBay Data Center is located in an area zoned P-C (Planned-Community) and C-I (Commercial-Industrial) by the City of South Jordan, Utah. The following was taken from South Jordan's codifiers chapter 17.72.020: "This category is designed to accommodate (but not require) a mixture of all uses: residential (single- and multi-family), office, commercial, industrial, recreational and public/semipublic uses. The principal land use in this category should be office, commercial and industrial." Per the recipient, the eBay Data Center is surrounded by vacant industrial land, a warehouse/substation, agricultural land, a vacant manufacturing facility and a new data center. (Zoning Map uploaded to the EF1)

Per the Utah State Energy Program (USEP) all SHPO compliance will be met and that there is an executed Programmatic Agreement (PA) between Utah SHPO, Utah SEP and the US DOE signed April 14, 2010. Utah SEP has determined that that this proposed project meets the PA list of "exemptions" for certain PV system activities (Appendix B, 4, f.2): 2) Solar PV roof mounted behind parapet or "not visible from the public right of way" and will not require new building reinforcement for buildings 50 yrs or older. (SHPO statement uploaded to the EF1 as part of eBay NEPA Questionnaire.doc)

The system will be net metered and grid connected through an interconnect agreement with Rocky Mountain Power, per National Electric Codes (NEC). There will be no onsite storage (batteries) associated with this project. eBay plans to stipulate an annual cleaning and maintenance plan in their contract agreement with their chosen contractor.

According to the recipient, all construction debris associated with this proposed project will be disposed of in accordance with a clean-up plan agreed upon in their contract agreement with their chosen contractor. No permits have been received at this time. However, according to Utah SEP, eBay has contacted the City of South Jordan, UT to determine zoning area and permits needed for construction of this proposed project. EBay has included in their RFP that a proposed scope of all permits and approvals from governing agencies, be supplied to them.

No impacts to biological, cultural, visual, air, noise, wetland, threatened and endangered species, or other sensitive resources are anticipated as this project will occur on the roof of an existing facility which was recently constructed.

Based on the information above the proposed project is categorically excluded from further NEPA review under CX B5.1, Actions to Conserve Energy.

NEPA PROVISION

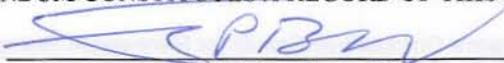
DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Completed by B.Knapp

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 2/8/11
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