

PMC-EF2a

(2.0 (02)

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



RECIPIENT: American Samoa Government

STATE: AS

**PROJECT
TITLE :** 1MW PV Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000218	GFO-0000218-007	EE218

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 American Samoa Government proposes to provide \$9,000,000 of SEP ARRA funding to the American Samoa Power Authority (ASPA) for the purchase & installation of a ground-mounted 1 MW Solar (PV) photovoltaic system located at the Tafuna International Airport. The proposed project will be a ground-mounted system located adjacent to Tafuna Airport Runway 5/23 on the west side of the airport.

Total area of disturbance will include 3.9 acres of previously disturbed airport property. The proposed location for the PV array was previously disturbed via bulldozer by airport officials in order to clear vegetation, leveled for security and to prevent birds from nesting near the runway which would greatly reduce bird-strikes from inbound aircraft.

The approximate dimensions of PV system are 400' L x 410' W x 5' H. The PV panels will face North, while the inbound flights will land in an Eastern direction. The PV system will use seven (7) 150 kW inverters and will be grid-connected via two (2) 480V to 13.2kV pad-mounted transformers. The pad-mounted transformers will be connected to the grid via underground riser cables to a single 3 Phase 13.2 kW overhead power line that will be approximately 1 mile in length. There are currently three (3) power poles already installed on this site which will be utilized for this project. No Purchase Power Agreement is needed as ASPA is implementing this project and the PV system will tie directly into their existing lines.

Potential environmental impacts resulting from the proposed action:

Land Disturbance - As previously stated, this site has been previously disturbed and leveled. The area currently contains maintained vegetation. Primary site disturbance for this project will be for the installation of galvanized steel frames/brackets (approximately 3' L x 3' W x 4' D) attached to concrete footings (approximately 354-414 depending on which manufacturer is chosen), electrical cabling, transformers and other inverters/switchgear necessary to complete installation and intertie to the grid. An additional small footprint building (approximately 8' x 12') will be needed in order to house the inverters and switchgear. The building will be built with Marine-grade 445D2 stainless steel metal clad frame housing with reinforcement for the harsh tropical environment. Current roadways are sufficient for construction/delivery traffic.

Air Quality - Per the recipient, this site falls within a Non-attainment Zone and no new or modified air permits will be required for this project.

Potential Historic/Cultural Resource Impacts - The recipient states that there are no potential impacts regarding cultural sites, burial sites, etc. and that they have received clearance from the Preservation Office to that effect. Please see attached letter from the ASHPO uploaded in the PMC (AS - Historic Preservation Letter 3-2-2011.jpg)

Potential Threatened/Endangered Species Impacts – No areas of nesting or wildlife habitat are present as the project is located within the property boundaries for the developed and maintained Tafuna Airport. No impacts to this resource are anticipated.

Hydrologic Conditions/Water Quality – The closest body of water is the Pacific Ocean which is approximately 1 mile from the project site. The recipient states that they are not installing a septic system at this site and that they are not anticipated wastewater discharge either as the ground beneath and surrounding the proposed solar array is comprised of porous lava rock.

Wetlands – The project site is located on previously disturbed ground with maintained grass and forb vegetation; there is no occurrence of any wetlands associated with the project location. Additionally, this site is not located in or near a 100-year Floodplain.

Waste Stream Plan – Per the recipient, bins will utilized for waste gathering. Regular solid waste pick-up will be arranged for the site by ASPA. ASPA, along with being an electricity provider is also a provider of waste services on the island. All construction debris will be handled in accordance with the EPA established standards.

Potential Visual Impacts – The recipient states that this PV system will be low-profile, ground-mounted and located behind an airport security fence, out of view from the main highway to the Northeast and adjacent private properties.

Federal Aviation Administration – The recipient has provided a compliance approval letter (2/16/2011) provided by local FAA personal per the FAA Advisory Circular 150/5370-2E, "Operational Safety on Airports During Construction." Within their approval letter the FAA provided language stating that they 'do not object to the construction described in this proposal.'

Right of Way (ROW) – Per Ted Le'iato at ASPA, a second circuit will be added on existing poles for transfer of energy. There is already existing easement for all existing and proposed poles associated with this project. No new ROW permits will be required.

Land Lease Agreement/Use Permit – ASPA is waiting to enter into a Land Lease Agreement with the Tafuna Airport. The permit has been received sign-off from the Governor and is being routed through the remainder of the process. No proposed work will be initiated until this permit is secured.

Per the above referenced information, this project is categorically excluded from further NEPA review under CX number B5.1, Actions to Conserve Energy.

NEPA PROVISION

DOE has made a final NEPA determination for this award

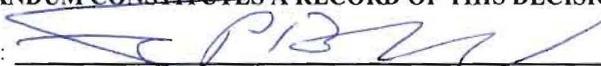
Insert the following language in the award:

Note to Specialist :

Completed by B. Knapp

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

3/9/11

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.