PMC-EF2a
(2.04.02)

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

RECIPIENT: Norwich Technologies Inc. **STATE:** VT

PROJECT TITLE : Advanced Low Cost Receivers for Solar Parabolic Trough

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000595	DE-EE0005803	GFO-0005803-001	GO5803

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:

B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.
B5.17 Solar thermal systems	The installation, modification, operation, and removal of commercially available smallscale solar thermal systems (including, but not limited to, solar hot water systems) located on or contiguous to a building, and if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

DOE is proposing to provide federal funding to Norwich Technologies, Inc. (Norwich) to conduct research and development activities that develop a novel cavity receiver for parabolic-trough concentrating solar power (CSP) systems. DOE funding would be used to design, build, test and demonstrate a prototype receiver for a solar parabolic trough.

Laboratory work and a final demonstration would be conducted at a leased, 1,900 square-foot commercial/industrial facility located at 198 Church Street, Norwich, Vermont 05055. The facility is located one mile northwest of Hanover, Vermont. The site is surrounded by trees and the nearest building is 500 feet away. The facility is fully outfitted with electrical service and cooling water needed to perform the design, development and testing work. Thermal testing would take place inside the laboratory and the optical testing would take place in the parking lot area outside the facility. The footprint of the reflector assembly would be 48 feet X 15 feet.

Norwich has completed an R&D questionnaire addressing the protocols for laboratory safety, risk management, chemical handling and waste disposal. Norwich complies with standard safety procedures. All liquid waste, including trace amounts of solvents for cleaning, will be stored and chemical disposal will be contracted with a third-party company, Enpro.

Based on this information, DOE has determined the work outlined is consistent with activities identified in categorical exclusion B3.6 (small-scale research and development, laboratory operations and pilot projects) and B5.17 (solar thermal systems).

If a different site than the one described above will be used for the proposed project, an additional NEPA review of the new location will be required.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

If a different site than the one described above will be used for the proposed project, an additional NEPA review of the new location will be required.

Cristina Tyler 8.8.2012

DOE Funding: $251,483
Cost Share: $252,00
Total Project Cost: $503,483

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Kristin Kerwin Date: 8/9/2012
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