

PMC-FF2a

(30402)

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



RECIPIENT: IEE Grand Challenge Awards

STATE: Mult

PROJECT TITLE : Industrial Energy Efficiency Grand Challenge

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000113	EE0003452 - EE0003500	GFO-10-494	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:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

Project activities and tasks associated with the 47 awards selected under the DOE Funding Announcement (DE-FOA-0000113, "Industrial Energy Efficiency Grand Challenge") consist of one-year duration, cost shared, and concept definition research and development (R&D) studies.

The objectives of these projects are to develop transformational industrial and manufacturing processes and technologies that reduce the energy intensity or greenhouse gas emissions of a system by a minimum of 25 percent while providing a return on investment of 10 percent or greater. The transformational technologies that these projects are addressing include new industrial procedures, processes, technologies, and materials that drastically reduce or alter energy use in manufacturing with no negative effect on production, throughput, or system economics.

This NEPA determination applies to the following awards:

- 1) DE-EE0003452 – Caterpillar Inc.
- 2) DE-EE0003453 - Ceralink Inc. (Ceralink – 01)
- 3) DE-EE0003454 - Metal Oxygen Separation Technologies, Inc.
- 4) DE-EE0003455 - University of California Santa Cruz
- 5) DE-EE0003456 - Georgia Tech University
- 6) DE-EE0003457 – Lummus
- 7) DE-EE0003458 – Southwire
- 8) DE-EE0003459 - The University of Alabama
- 9) DE-EE0003460 - Northwestern University
- 10) DE-EE0003461 - Power Environmental and Energy Research Institute (PEERI)
- 11) DE-EE0003462 - Membrane Technology and Research, Inc.
- 12) DE-EE0003464 - GE Global Research Center (Microwave)
- 13) DE-EE0003465 - Friction Stir Link, Inc.
- 14) DE-EE0003466 - Alcoa Inc.
- 15) DE-EE0003467 - Oasys Water, Inc.
- 16) DE-EE0003468 – Smart Koncepts Inc.
- 17) DE-EE0003469 - Ceralink Inc. (Ceralink -02)
- 18) DE-EE0003470 - Rive Technology, Inc.
- 19) DE-EE0003471 - Velocys
- 20) DE-EE0003472 - Ceralink Inc. (Ceralink - 03)
- 21) DE-EE0003473 - University of Minnesota
- 22) DE-EE0003474 - Caterpillar Inc. (CAT - 13)

- 23) DE-EE0003475 - Guided Wave
- 24) DE-EE0003476 - University of Utah-Salt Lake City
- 25) DE-EE0003477 - Gas Technology Institute (GTI - 03)
- 26) DE-EE0003478 - University of Michigan
- 27) DE-EE0003479 - FMC Corporation
- 28) DE-EE0003480 - Boeing Company (Boeing - 04)
- 29) DE-EE0003481 - Caterpillar Inc. (CAT -07)
- 30) DE-EE0003482 - US Council for Automotive Research
- 31) DE-EE0003483 - Boeing Company (Boeing - 03)
- 32) DE-EE0003484 - State University of New York
- 33) DE-EE0003485 - Cool Clean Technologies
- 34) DE-EE0003486 - Carpenter Tech
- 35) DE-EE0003487 - GE Global Research Center (Nano)
- 36) DE-EE0003488 - Aspen Aerogel
- 37) DE-EE0003489 - UES, Inc.
- 38) DE-EE0003490 - Eaton
- 39) DE-EE0003491 - 3M
- 40) DE-EE0003492 - Hi-Z Technology, Inc.
- 41) DE-EE0003493 - Structured Materials Industries
- 42) DE-EE0003494 - Advanced Electron Beams, Inc.
- 43) DE-EE0003495 - CCS Materials, Inc.
- 44) DE-EE0003496 - University of Pacific
- 45) DE-EE0003497 - North Carolina State University
- 46) DE-EE0003498 - SolidUV
- 47) DE-EE0003500 - Wireless Industrial Technologies, Inc.

The aforementioned projects all consist of conventional laboratory research activities. Each project will conduct early stage research required to investigate and define technical concepts. The activities of these projects include laboratory scale experiments, investigation of fundamental scientific concepts associated with the technology, data generation and analysis, and computer modeling. All project work will be performed in the existing labs of DOE grant recipients and their sub-recipients (large and small companies, universities and national labs).

All award recipients have submitted a Statement of Project Objectives (SOPO) and an R&D Environmental Questionnaire (R&D Laboratory Environmental Impact Questions) for all locations, including sub-recipients, performing the work. The GO NEPA office has reviewed each SOPO and R&D questionnaire submitted by the 47 recipients and their subs that have been uploaded to the NEPA PMC. Each submission thoroughly describes project activities, locations of each laboratory/research facility, established safety protocols, acquired permits necessary for operations, chemical handling, and waste handling protocols.

The activities comprise data analysis, computer modeling, dissemination of information, and conventional laboratory research and development in established facilities that have previously submitted a DOE R&D questionnaire (as uploaded and listed in the EF1); therefore a CX B3.6 applies to all projects listed above.

NEPA PROVISION

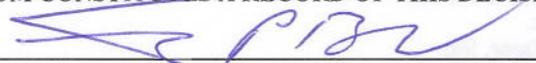
DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 7/12/10
 NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required