PMC-EF2a

(2.04.02)

## II.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER NEPA DETERMINATION



RECIPIENT: California Institute of Technology

STATE: CA

**PROJECT** 

TITLE:

Power Minimization Techniques for Networked Data Centers

Funding Opportunity Announcement Number DE-FOA-0000107

DE-E0002890

Procurement Instrument Number NEPA Control Number CID Number

GFO-10-246

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:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

## Rational for determination:

California Institute of Technology is proposing to use ARRA funding through the DOE to develop a mathematical model that represents the problems inherent in data center power optimization.

Project work will be accomplished by researching industry publications including technical journals and magazines in order to fully describe the problems in mathematical terms. Further mathematical and software will be done to test how well the algorithms resolve the mathematical model. This will either require them to write the software themselves or purchase existing software.

This project comprises information gathering and computer modeling and analysis; therefore a CX A9 will apply.

## 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:  NEPA Compliance Officer  Date: 3/5//0	

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

<ul> <li>Proposed action fits within a categorical exclusion Manager's attention.</li> </ul>		
Proposed action falls within an EA or EIS category	and therefore requires Field Office Manager's rev	view and determination.
BASED ON MY REVIEW I CONCUR WITH THE	DETERMINATION OF THE NCO .	
	DETERMINATION OF THE NEO.	NEXT PERSON Conference in the Internal Conferenc
Field Office Manager's Signature:	Field Office Manager	Date:
SPA Compilance Officer (unihorized under DOE		