

PMC-EF2a

(20102)

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



RECIPIENT: Federspiel Controls, Inc.

STATE: CA

PROJECT TITLE : California Department of General Services Data Center Energy Efficient Cooling Control

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000107	DE-E0002900	GFO-10-275	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:

- 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.
- 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:

Federspiel Controls, Inc. will demonstrate their proprietary data center environment management solutions. Their combination of hardware and software technologies will be demonstrated in 12 data centers located in the San Francisco, Sacramento, and Los Angeles areas. This is a 1-year demonstration project utilizing DOE and cost-share funding.

To prove their technologies robustness, Federspiel will be performing demonstrations in small, medium and large size data centers. To provide further evidence their technology is commercial ready, successful performances at each data center with their unique heating ventilation, and air-conditioning (HVAC) system will be valuable. All of the demonstrations will be identical in scope except the larger data centers will require more setup and installation time than the smaller ones.

Data centers owned and operated by the State of California Department of General Services will be on loan for the demonstrations. These are existing data centers varying in size and application located in or near the major metropolitan California cities of San Francisco, Sacramento, and Los Angeles.

Each demonstration will consist of a site survey, installation, data collection, and data analysis phase. In addition to installation of their software and hardware, Federspiel will also employ data center best practices for improving their efficiencies. In other words, they will optimize the floor tile layouts, hot and cold/aisle containment, blanking panel installation, and server virtualization among other things based on the site survey findings. The work will be performed by Federspiel along with vendors who specialize in the installation of the HVAC control systems integral to Federspiel's technologies.

Federspiel has completed a Laboratory, Fabrication, Manufacturing, and Testing Facility Questionnaire. This project includes demonstration of potential energy conservation, information gathering and data analysis, and information dissemination; therefore it qualifies for a CX under A9 and B5.1.

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:

[Signature]
NEPA Compliance Officer

Date:

3/21/10

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:

Field Office Manager

Date:
