PMC-EF2n

2.04.02

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



RECIPIENT: Dehlsen Associates, LLC (DA)

STATE: CA

PROJECT

High Energy Density Distributed Hydrostatic Direct Drive for Large Wind Turbine and MHK Device

TITLE:

Applications

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number

DE-FOA-0000439

DE-EE0005139

GFO-0005139-001

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:

DOE is proposing to provide federal funding to Dehlsen Associates, LLC to develop and refine a high energy Hydrostatic Direct Drivetrain (HDD) for large wind turbine (1.5+ MW) and marine hydro-kinetic energy technology application. The proposed outcome would produce a more efficient HDD component that would to eliminate gearboxes, power electronics, rare earth materials and transformers from the design.

Tasks include:

Budget Period 1 (BP1)-

Task 1.0 Component System and Test Article details

Task 1.2 Test and Analysis Results (analysis and modeling)

Task 1.3 Final Result (cost analysis, risk analysis, supply chain analysis)

Budget Period 2 (BP2)-

Task 2.1 Component System and Test Article Details

Task 2.2 Test and Analysis Results Task 8: Subscale Testing and Evaluation

Task 3 Documentation

Task 4 Project Management and Reporting: Deliverables/Toll Gates

This NEPA review is for project tasks 1, 3, and 4. Task 2 (BP2) would involve laboratory R&D and prototype testing, but details on specific locations and activities have not been finalized; therefore a NEPA determination cannot be made for this task at this time.

Tasks 1, 3 and 4 activities involve conducting various materials, cost and risk analyses in additional to preliminary design studies, desktop research and computer modeling. For tasks 1, 3 and 4 there would be no laboratory work and no prototypes fabricated or tested.

Tasks 1, 3 and 4 involve, data gathering, data analysis, computer modeling, preliminary designs and project management activities. These tasks are consistent with actions outlined in categorical exclusion A9 (information gathering, data analysis, dissemination) and are categorically excluded from further NEPA review.

## NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Task 2 including all sub-tasks (BP2 activities)

This restriction does not preclude you from:

Tasks 1, 3, and 4 (BP1 activities)

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

Submit an additional EF1 with details on location and all activities for a project activities occurring under Task 2 and all its sub-tasks (BP2), as described in the final SOPO.

Note to Specialist:

This project has activities that are conditioned under NEPA. We recommend that this project be placed on ASAP approval and that funding for activities under task 2 be unallowable.

DOE Share \$560,733 Cost Share \$140,183 Total Project Cost \$700,917 (does not

Total Project Cost \$700,917 (does not include BP 2)	
Review completed by Laura Margason	
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  NEPA Compliance Officer Signature:  NEPA Compliance Officer	Date: 8[6 2011
FIELD OFFICE MANAGER DETERMINATION	
☐ Field Office Manager review required	
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASO	N:
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue to Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's revenue.</li> </ul>	
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:	
Field Office Manager's Signature:	Date:
Field Office Manager	