



U.S. Department of Energy Categorical Exclusion Determination Form

Submit by E-mail

Proposed Action Title: University of Michigan - High Fidelity, Year Long Power Network Data Sets for Replicable Power System Research

Program or Field Office: Advanced Research Projects Agency - Energy

Location(s) (City/County/State): Ann Arbor, MI; Los Alamos, NM; New York, NY; Pasadena, CA; and Paris, France

Proposed Action Description:

Funding will support development and testing of a transmission system data set with greater reliability, size, and scope compared to current models. The project will use power systems data provided by team collaborator(s), and advanced techniques to anonymize data and to create anonymized open access models. In addition, the project will deliver year-long test cases that capture grid network behavior to enable analysis of optimization algorithms over different time scales, develop a new format for capturing power system model data, and design, develop, and implement a replicable research portal to release test cases and software developed during the project. If successful, this project could provide a means of comprehensively evaluating emerging electric grid operation optimization algorithms that have the potential to substantially reduce the costs of integrating variable renewable generation technologies into the electric power system in the United States. As with all of the GRID DATA Program teams, Michigan and its sub-awardees/collaborators will certify to ARPA-E that publicly-available data models resulting from the award do not contain any security-sensitive information.

The proposed project activities under this award are limited exclusively to intellectual, academic, or analytical activities. Project activities will take place at the University of Michigan's; Los Alamos National Laboratory's; Columbia University's; and the California Institute of Technology's office facilities located in Ann Arbor, MI; Los Alamos, NM; New York, NY; and Pasadena, CA, respectively. Analytical, computer-based validation activities will also take place at RTE France's office facilities in Paris, France.

Categorical Exclusion(s) Applied:

A9 - Information gathering, analysis, and dissemination

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 1021.

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:


(This form will be locked for editing upon signature)

Date Determined: 05/10/2016