



Department of Energy
National Nuclear Security Administration
Categorical Exclusion Determination Form



Categorical Exclusion ID#: NA-24-0006

Proposed Action Title: Defense Nuclear Nonproliferation's Consortium for Enabling Technologies and Innovations 2.0 Award – Lead Institution, Georgia Institute of Technology

Program or Field Office: Office of Projects & Acquisition, (NA-20)

Location(s) (City/County/State): Various locations

Proposed Action Description

The Consortium for Enabling Technologies and Innovations (ETI 2.0) team was assembled with a mission to strategically innovate research and drive advancements in technologies supporting and enabling the National Nuclear Security Administration's mission through integration of data science and digital technologies with real-time need for precision environmental analysis and the forecasting power afforded by analysis of emerging technologies. It serves to connect university basic research with the mission-related applications of national laboratories. Georgia Institute of Technology is the lead institution, joined by, Abilene Christian University, Colorado School of Mines, Massachusetts Institute of Technology, Ohio State University, Rensselaer Polytechnic Institute, Stony Brook University, Texas A&M University, University of Alaska Fairbanks, University of Texas at Austin, University of Wisconsin-Madison, and Virginia Commonwealth University, in collaboration with national laboratory partners. Objectives of the team include:

1. Develop a diverse and highly talented cadre of professionals with skill sets to support critical nonproliferation missions in early proliferation detection, nuclear security, and cross cutting areas.
2. Push the boundaries of predictive capabilities for nuclear nonproliferation through integration of data science, precision environmental measurements, and analysis of emerging technologies.
3. Develop cutting-edge diagnostic tools and testbeds, models and digital twins, and radiation detection materials and devices, and facilitate their integration into DNN R&D programs and ventures.
4. Cultivate a comprehensive and collaborative research environment for multidisciplinary teams across academia, national laboratories, and industry through student and faculty research, fellowships, scholarship, laboratory internships and student-faculty visits, annual workshops, and summer schools.

Research would be conducted in existing research facilities. This determination would cover minor equipment modifications, upgrades, and/or purchases at existing research facilities. This determination does not include facility upgrades that require new construction, the installation of major stationary sources or equipment, or the interior/exterior renovation of a historic or potentially historic building. If federal funds are proposed to be used for these purposes or the scope of the awards changes, a new environmental checklist is required to be submitted to NNSA for additional NEPA analysis.

Categorical Exclusion(s) Applied:

A 9 Information gathering, analysis, and dissemination



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- B 1.31 Installation or relocation of machinery and equipment
- B 3.6 Small-scale research and development, laboratory operations, and pilot projects
- B 3.10 Particle accelerators
- B 3.11 Outdoor test and experiments on materials and equipment components
- B 3.15 Small-scale indoor research and development projects using nanoscale materials

Regulatory Requirements in 10 CFR 1021:

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 1021.

To find that a proposal is categorically excluded, DOE shall determine the following:

- (1) The proposal fits within a class of actions listed in Appendix A or B to 10 CFR Part 1021, Subpart D;
- (2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and
- (3) The proposal has not been segmented to meet the definition of a categorical exclusion. The 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.

The classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, include the following conditions as integral elements of the classes of actions. To fit within the classes of actions in 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 of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

NEPA Compliance Officer Determination:

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as authorized under NNSA NAP 451.1 and DOE P 451.1), I have determined that the proposed action fits within the specified class(es) of action and I have reviewed the proposal for integral elements. I have determined that there are no extraordinary circumstances present and that the proposal has not been segmented to meet the definition of a categorical exclusion. Therefore, the application of a categorical exclusion is appropriate.



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NEPA Compliance Officer:

Date Determined: