DOE-ID NEPA CX DETERMINATION

SECTION A.	**Project Title: Hot Cell Laboratory Upgrades to Support the Integrated Nuclear Fuel and Structural Materials Research Center at the University of Florida Training Reactor**

SECTION B. Project Description

The University of Florida proposes to expand the capabilities and developments at the reactor Integrated Nuclear Fuel and Structural Materials (INFS) research center to improve the material's handling capabilities by expanding and refurbishing the hot cell and sample handling capabilities. The proposed project has three key components:

1. Refinish the existing reactor hot cell by replacing the existing manipulators with more capable modern units and reconnecting the reactor fast rabbit to the hot cell. The present hot cell manipulators are nonfunctional and the cell has sat unused for many years.
2. Install the infrastructure necessary for upgraded radioactive materials storage capability through hot cell upgrades to ventilation, monitoring, detection, and transfer (pigs/casks) capabilities.
3. Upgrade the fast rabbit system to a direct connection with the hot cell via a new trench connection between the cell and the reactor core. This will enable new kinds of reactor experiments and tests on materials without a cooldown period.

SECTION C. Environmental Aspects / Potential Sources of Impact

The action consists of purchasing equipment to update and replace existing equipment. The University of Florida Training Reactor has licenses to ship, receive, and handle radioactive material; a hot cell with connections to a fast rabbit system for sample transfer into and from the reactor core, and the ability to safely handle irradiated material. The action would not create additional environmental impacts above those already occurring at the university.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B; give the appropriate justification, and the approval date.

Note: For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B2.2 Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

B2.3 Installation of, or improvements to, equipment for personnel safety and health (including, but not limited to, eye washes, safety showers, radiation monitoring devices, fumehoods and associated collection and exhaust systems), provided that the covered actions would not have the potential to cause a significant increase in emissions.

Justification: The activity consists of purchasing and installing equipment to replace existing equipment and for personnel safety and health.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)   ☐ Yes ☒ No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on 4/10/2017