Project Title

Enhanced Safety, Operations, and Utilization Infrastructure at the NCSU PULSTAR Reactor

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Program: University
Research Reactor Upgrades

ABSTRACT:

The objective of this project is to upgrade and enhance the safety, operations, and utilization infrastructure at the PULSTAR reactor of North Carolina State University (NCSU). This upgrade will include installation of comprehensive and facility wide radiation protection and moisture/temperature sensor systems, environmental sample assay instrumentation upgrade, and items in support of the facility utilization infrastructure. The enhancements will also be synergistic with the operation of the PULSTAR at the upgraded power of 2-MW (anticipated during 2022), and will generally support the implementation of new capabilities at the PULSTAR (e.g., the advanced reactor experimental program) that are consistent with its mission and the mission of DOE NE. The proposed upgrades are expected to have direct impact on the PULSTAR reactor by enhancing its operational experience and to facilitate its safe utilization by various user groups including academic faculty, staff and students, and engineers and researchers nationally and internationally.