
Enhanced Security and Monitoring to Support Growth at the OSURR

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Collaborators: n/a

Program: Reactor Upgrade

ABSTRACT:

The objective of this proposal is to support continued growth and to reduce risk and liability at the Ohio State University Nuclear Reactor Laboratory (NRL) by upgrading security infrastructure to incorporate the facility's 5,000 sq. ft. expansion into an existing adjoining building, thus increasing the total footprint of the NRL building. Current security systems meet the minimum legal requirements but do not provide all the necessary functionality to support further growth. An internal risk and liability analysis identified that upgrades to visitor monitoring, facility-wide communication, and visitor admittance are needed to adequately respond to emergencies and efficiently meet the needs of all OSURR users, contribute to both national and institutional missions, encourage collaborations and partnerships, support additional capabilities currently being developed. The proposed upgrades improve an existing Nuclear Science User Facilities (NSUF) partner.

The addition of new space (referred to as the adjacent building) to support the research at OSURR has allowed for additional capabilities, such as post-irradiation examination, and the workspace needed for the additional staff and visiting researchers. However, present systems, including communication systems, do not cover the entire research reactor facility. The items requested fall under three subcategories that together will upgrade the OSURR security infrastructure to properly support the growing lab.

- Access control
- Visitor monitoring
- Facility-wide communication and visitor admittance

Appropriate security is one of the foundations that all facility utilization rests on, and the proposed upgrades will enhance systems that enable facility compliance and efficiency.

Because the NRL was initially built as a teaching facility for a low-power reactor, for decades there was not adequate workspace to support the expansion of staff and research. The addition of new space enabled staff expansion and researcher flex space, which then enabled expansion of research at the NRL, including heated in-situ experiments. However, the adjoining building that the NRL acquired in 2021 for its expansion originally served a separate organization, so this space was not integrated into the NRL's security-related systems. The proposed upgrades are essential for the NRL's continued growth.