



Control Panel Modernization at the KSU TRIGA Reactor Facility

Applicant Name: Kansas State University

Project Director/Principal Investigator: Jeffrey Geuther

Major Participants: NA

ABSTRACT:

Objectives

The objective of this project is to fully replace the control panel at the KSU nuclear reactor laboratory with a more modern, reliable, and capable control panel.

Project Description

The existing 30+ year-old General Atomics control panel will be removed and a new control panel will be installed by another vendor. The new control panel will add additional safety features, an automatic flux control system, improved human interface design, and additional data outputs for teaching and research, while improving the reliability of the reactor facility. Pending the completion of a bidding process, the planned console is a Thermo Fisher TR-1000 Test, Research, and Training Reactor Console.

Potential Impact

This project has the potential to have a significant impact on nuclear engineering research, training, education, and STEM outreach. The successful completion of this project will ensure that the KSU nuclear reactor, the only university reactor in an eleven-state contiguous region of the Midwest, continues to be a vital resource for research and education for years to come. Specifically the reactor will continue to be able to serve the ~2500 visitors, dozens of operators in training and other nuclear engineering students who have the opportunity to operate the reactor, and experimenters who use the reactor for a wide variety of research projects. This project will also result in an improvement in the safety, reliability, and educational usefulness of the reactor.