Nuclear Reactor Facility Exhaust Gas Monitoring System Upgrade

Program: Reactor Upgrades

ABSTRACT: The Exhaust Gas Monitoring (EGM) system which is in use at the WSU research reactor facility includes some components which were first placed into service during the 1970's. The older components have accumulated approximately 60,000 hours of use—some components have exceeded or nearly reached their service lifetimes. The EGM system must be operational every time that the reactor is operating—consequently, reactor operation must cease in the case of an EGM system failure. The objective of this project is to replace the aging EGM system at the WSU research reactor facility. WSU proposes to acquire a replacement EGM system; a new system will result in less unscheduled shutdown time due to an occasional need to repair EGM system malfunctions thus increasing facility operating reliability by reducing unplanned shutdowns. The older system will be placed into service as a backup system and also repurposed as an educational tool for students to study and use to learn the operating characteristics of EGM systems.