NRC Authorizes Restart of National Institute of Standards and Technology Reactor

The Nuclear Regulatory Commission has concluded the National Institute of Standards and Technology has satisfied the requirements to safely restart the NIST research reactor in Gaithersburg, Maryland. The facility has been safely shut down since February 2021, when an event damaged a reactor fuel element without affecting public health and safety.

“We’ve reached this decision after extensive review of the event, NIST’s corrective actions, and additional work the facility has done to ensure safe operation,” said Andrea Veil, director of the NRC’s Office of Nuclear Reactor Regulation. “We’re satisfied this research facility’s important systems and components are ready to go, and we’re satisfied the reactor staff are ready to carry out improved procedures for maintaining safety. We’ll continue our increased oversight of the facility and its ongoing corrective actions.”

NRC approval was required before the facility could restart the reactor because the facility violated the fuel cladding temperature safety limit. The NRC’s technical evaluation report includes: review of the facility’s systems to verify there was no adverse impact from the event; NIST’s actions to comply with the Confirmatory Order issued in August 2022; and results from follow-on NRC inspections. NIST’s actions covered several areas relevant to the 2021 event, including: fuel handling and related management activities; the facility’s safety culture and corrective action program; and the facility’s emergency response resources and procedures. The NRC also separately reviewed and approved several amendments to the facility’s license that were requested by NIST to support the safe restart of the facility.