

W13 National Institute of Standards and Technology Test Reactor Event: The Response, Review, and Status

On February 3, 2021, following an outage for reactor refueling, operators were performing a startup of the National Institute of Standards and Technology (NIST) test reactor when the reactor automatically tripped in response to indications of high exhaust stack radiation levels. NIST operators declared an Alert and notified the NRC Operations Center. On February 9, the NRC began a special inspection to examine NIST’s response to the event. On March 2, based on remote visual inspection and radiation conditions in the facility, NIST notified the NRC Operations Center that it had exceeded the fuel temperature safety limit and a fuel element was damaged during the event. Both the NIST and NRC responses to the event are ongoing.

This session will describe the event and initial response, the technical details behind the event and the recovery, lessons learned, and the status of the NRC’s inspection and licensing activities.

SESSION CHAIR(S):

- Jeremy Bowen, Deputy Director, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR/NRC e-mail: Jeremy.Bowen@nrc.gov

SPEAKER(S):

- Introductory Remarks
[Jeremy Bowen](#), Deputy Director, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR/NRC
- [February 3, 2021 Alert at the NIST Center for Neutron Research](#)
[Thomas Newton](#), Deputy Director, Center for Neutron Research, National Institute of Standards and Technology
- [U.S. NRC Response to the Event at the NIST Center for Neutron Research](#)

[Travis Tate](#), Chief, Non-power Production and Utilization Facility Oversight Branch, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR/NRC

- [NRC Approach to Considering the National Institute of Standards and Technology Request to Restart the National Bureau of Standards Reactor](#)

[Joshua Borromeo](#), Chief, Non-power Production and Utilization Facility Licensing Branch, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR/NRC

SESSION COORDINATOR(S):

- Andrew Waugh, Reactor Inspector, NPUF Oversight Branch, Division of Advanced Reactors and Non-power Production and Utilization Facilities, NRR/NRC e-mail: Andrew.Waugh@nrc.gov