



What Agreement States Need to Know About Abnormal Occurrences (AO)

AO Definition: Section 208 of the Energy Reorganization Act of 1974, as amended, defines an AO as an unscheduled incident or event that the NRC determines to be significant from the standpoint of public health or safety.

AO Criteria: The incident or event has a moderate or severe impact on public health or safety and could include, but need not be limited to, the following:

- (1) Moderate exposure to, or release of, radioactive material licensed by or otherwise regulated by the Commission or Agreement State;
- (2) Major degradation of essential safety-related equipment;
- (3) Major deficiencies in design, construction, or use of, or management controls for, facilities or radioactive material licensed by or otherwise regulated by the Commission or Agreement State; or
- (4) Substantiated case of actual loss, theft, or diversion of risk-significant radioactive material licensed by or otherwise regulated by the Commission or Agreement State.

Examples:

- (1) Human Exposure to Radiation from Licensed Material;
- (2) Discharge or Dispersal of Radioactive Material from Its Intended Place of Confinement;
- (3) Theft, Diversion, or Loss of Licensed Material; Sabotage; or Security Breach;
- (4) Transportation Events; and
- (5) Events Involving the Medical Use of Radioactive Materials in Patients or Human Research Subjects.

NUREG-0090 is published every April and provides a summary of the AOs for the previous year as well as an appendix of the current criteria determining whether an incident or event at a facility is an abnormal occurrence.

Process: The NRC is responsible for determining if events reported by Agreement States meet the criteria of an AO. NRC performs an initial screening of all events following the criteria in accordance with MD 8.1, "AO Reporting," and may have follow up questions to these events.

The Regional State Agreements Officer (RSAO) will contact the Agreement State if a potential AO is identified. The Agreement State supports the NRC by providing information on potential AOs that have occurred in their State. The RSAO provides the Agreement State with a draft AO write-up. The Agreement State staff reviews the draft to verify that the details are correct and provide corrections to their assigned RSAO.

