

# U.S. NUCLEAR REGULATORY COMMISSION MANAGEMENT DIRECTIVE (MD)

<b>MD 5.12</b>	<b>INTERNATIONAL NUCLEAR AND RADIOLOGICAL EVENT SCALE (INES) PARTICIPATION</b>	<b>DT-17-11</b>
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<i>Approved By:</i>	Steven K. West, Acting Director Office of Nuclear Security and Incident Response	
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<i>Contact Name:</i>	Patricia A. Milligan	
<b>EXECUTIVE SUMMARY</b>		
<p>Management Directive 5.12, “International Nuclear and Radiological Event Scale (INES) Participation,” is being republished as part of the NRC Plan to Update Management Directives. This revision updates organizational information, titles, and references.</p> <p>The “International Nuclear and Radiological Event Scale (INES) User’s Manual, 2008 Edition,” serves as the handbook for this directive.</p>		

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## **I. POLICY**

It is the policy of the U.S. Nuclear Regulatory Commission to participate in the International Nuclear and Radiological Event Scale (INES), jointly developed in 1990 by international experts convened by the International Atomic Energy Agency (IAEA) and the Organization for Economic Cooperation and Development/Nuclear Energy Agency (OECD/NEA). NRC participation includes evaluating all events (reactors, fuel cycle facilities, transportation, and licensed materials), except medical events, reported to the NRC Operations Center and submitting an INES Event Rating Form (ERF) to the IAEA for events rated as level 2 or higher and, on rare occasions, for level 0 and level 1 events that attract international public interest.

## **II. OBJECTIVE**

Ensure that the rating of events involving reactors, fuel cycle facilities, transportation, and licensed materials is performed in accordance with the guidance provided in “The International Nuclear and Radiological Event Scale (INES) User’s Manual, 2008 Edition” (the INES User’s Manual) (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML092230008](#)).

## **III. ORGANIZATIONAL RESPONSIBILITIES AND DELEGATIONS OF AUTHORITY**

### **A. Executive Director for Operations (EDO)**

1. Oversees NRC participation in the INES.
2. Ensures the cooperation and support of all NRC offices in providing cognizant personnel to support the rating of events using the INES.

### **B. Director, Office of Nuclear Security and Incident Response (NSIR)**

1. Designates the U.S. “INES National Officer” to represent the NRC in matters involving the development and use of the INES in the United States.
2. Supports training for individuals performing INES rating of events.

3. Calls on other NRC offices to provide the resources needed to promptly and accurately rate events using the INES.
4. Ensures that INES ratings are performed accurately, efficiently, and in a timely manner.
5. Directs the INES National Officer and the Headquarters Operations Officers (HOOs) to facilitate the rating of events using the INES and to submit these ratings, as appropriate, to the IAEA and other member countries.
6. Coordinates with other Federal Government and State agencies, through various interagency working groups, in matters involving the use of the INES.

**C. Director, Office of Nuclear Material Safety and Safeguards (NMSS)**

1. Provides personnel to rate events using the INES scale involving transportation; fuel cycle facilities; academic, industrial, and research and development licensees that use source, special nuclear, and byproduct materials; and non-licensees that possess nuclear or radioactive materials, such as radium, that are under NRC oversight, but excluding byproduct material used in medical patient treatment that results in medical events as defined in 10 CFR 35.3045, "Report and Notification of a Medical Event."
2. Provides office procedures for the rating of events involving transportation; fuel cycle facilities; academic, industrial, and research and development licensees that use source, special nuclear, and byproduct materials; and non-licensees that possess nuclear or radioactive materials, such as radium, that are under NRC oversight.
3. Supports training for individuals performing INES rating of events.
4. Ensures that INES ratings are performed accurately, efficiently, and in a timely manner, coordinating with the NRC regions for the rating of byproduct material events that are regulated by the Agreement States.
5. Approves (or designee approves) INES event ratings provided by NMSS to the INES National Officer.

**D. Director, Office of Nuclear Reactor Regulation (NRR)**

1. Provides personnel to rate events using the INES involving production and utilization facilities licensed under 10 CFR Part 50 or Part 52.
2. Provides office procedures for the rating of events involving production and utilization facilities licensed under 10 CFR Part 50 or Part 52.
3. Supports training for individuals performing INES rating of events.

4. Ensures that INES ratings are performed accurately, efficiently, and in a timely manner.
5. Approves (or designee approves) INES event ratings provided by NRR to the INES National Officer.

**E. Director, Office of Public Affairs (OPA)**

Responds to requests from the news media and the general public, in coordination with the INES National Officer, about the INES and the rating of specific events.

**IV. APPLICABILITY**

The policy and guidance in this directive apply to all NRC employees.

**V. DIRECTIVE HANDBOOK**

The INES User's Manual serves as the handbook for this directive. It contains information regarding the rating of events using the INES.

**VI. IMPLEMENTATION GUIDELINES**

**A. General Guidance**

In general, the NRC will implement the INES in accordance with the guidance and rating methodology provided in the INES User's Manual.

**B. Additional Guidance**

Several additional points regarding the NRC's participation are summarized below.

1. Review of events for potential transmission to IAEA using the INES will be incorporated into the normal event assessment process of the respective program office.
2. The methodology for reviewing events using the INES will follow the methodology provided in the INES User's Manual. Each program office will prepare specific review criteria and procedures for timely transmittal of the proposed INES level (usually within 48 hours from the time that cognizant staff has determined the report can be shared) to the INES National Officer.
3. When more time (greater than 48 hours) is required to determine or estimate the consequences of the event, each program office will provide a provisional rating to the INES National Officer, who will send it to the IAEA, with the final rating provided at a later date.

4. Rated events will be submitted to the IAEA in accordance with the rating criteria in the INES User's Manual. Such events include—
  - (a) Events rated level 2 or above, or
  - (b) Events that attract international public interest.
5. Provisional and final ERFs require approval by the cognizant office director or deputy office director or designee.
6. For INES level 0 or level 1 events that have attracted international public interest in accordance with Section VI.B.4(b) of this directive, the INES National Officer must provide the proposed ERF to the Commission for a 3 business day review before it is submitted to the IAEA. If the Commission takes no action during that time, the level 0 or level 1 ERF may be submitted to the IAEA.
7. The INES National Officer or HOOs shall submit INES event ratings to the IAEA.
8. The INES National Officer or HOOs shall submit a copy of the INES event rating for awareness to—
  - (a) The Commissioner Assistants,
  - (b) NMSS,
  - (c) NRR,
  - (d) OPA,
  - (e) Office of International Programs (OIP),
  - (f) Office of Congressional Affairs (OCA), and
  - (g) Office of the Executive Director for Operations (OEDO).

## VII. DEFINITION

### **International Nuclear and Radiological Event Scale (INES)**

INES is a tool for communicating to the public, in consistent terms, the safety significance of reported nuclear and radiological incidents and accidents, using a seven level numerical scale. Levels 4-7 are termed "accidents," and levels 1-3 are termed "incidents." Events without safety significance are classified as "Below Scale/Level 0" (<http://www.nrc.gov/about-nrc/emerg-preparedness/about-emerg-preparedness/emerg-classification/event-scale.html>).

## VIII. REFERENCES

10 CFR 35.3045, "Report and Notification of a Medical Event."

"The International Nuclear and Radiological Event Scale (INES) User's Manual, 2008 Edition" ([ML092230008](#)).

### ***Nuclear Regulatory Commission Documents***

FSME-09-052, All Agreement States and Non-Agreement States, "Revised International Nuclear Event Scale (INES) User's Manual," July 13, 2009 ([ML091880143](#)).

FSME-10-027, All Agreement States and Non-Agreement States, "Revised International Nuclear and Radiological Event Scale (INES) User's Manual," March 15, 2010 ([ML100600368](#)).

International Nuclear and Radiological Event Scale (about emergency preparedness), available at <http://www.nrc.gov/about-nrc/emerg-preparedness/about-emerg-preparedness/emerg-classification/event-scale.html>.

NRC Generic Letter 92-09, "Limited Participation by NRC in the IAEA International Nuclear Event Scale," December 31, 1992, available at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/gen-letters/1992/gl92009.html>.

NRC Information Notice 2009-27, "Revised International Nuclear and Radiological Event Scale User's Manual," November 13, 2009 ([ML092510055](#)).

NRC Regulatory Issue Summary 2002-01, "Changes to NRC Participation in the International Nuclear Event Scale," January 14, 2002 ([ML013200502](#)).

SECY-01-0071, "Expanded NRC Participation in the Use of the International Nuclear Event Scale," April 25, 2001 ([ML003735913](#)).

Staff Requirements Memorandum, SECY-01-0071, "Expanded NRC Participation in the Use of the International Nuclear Event Scale," May 31, 2001 ([ML011510164](#)).