

U.S. Department of Energy
Washington, D.C.

ORDER

DOE O 151.1F

Approved: 08-05-2026

SUBJECT: COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM

1. PURPOSE.

- a. This Order establishes clear, rapid decision authority for emergency management across Department of Energy (DOE) laboratories, plants, and sites, ensuring timely activation of emergency response, protective actions, coordinated communications, and shared situational awareness. It also aligns incident management with National Incident Management System (NIMS), including Incident Command System (ICS), and the National Response Framework (NRF).
- b. The Order:
 - (1) Designates clear decision authority by requiring an Emergency Management director and alternates, empowering them to activate the Emergency Response Organization (ERO) without delay and to promptly approve protective actions for Operational Emergencies (OEs).
 - (2) Enables immediate coordination by requiring rapid engagement with first responders and with applicable external authorities, including local, state, federal, and tribal partners.
 - (3) Requires maintaining ready response facilities by ensuring an operational Emergency Operations Center (EOC), Alternate Emergency Operations Center (AEOC), and an operational Joint Information Center (JIC).
 - (4) Supports personnel accountability by requiring identified, maintained assembly and muster areas to enable rapid accountability during emergencies.
 - (5) Requires interoperable communications that function reliably across internal organizations and external response partners.
 - (6) Delivers secure shared situational awareness by requiring a cyber-secure common operating picture (COP) and ensuring the necessary digital platforms are ready to support incident operations.

- (7) Implements a risk-informed, performance-based program that spans prevention, preparedness, response, and recovery, using performance-based expectations grounded in operational realities. Ensures national doctrine compatibility by aligning emergency management practices with NIMS, including ICS, and the NRF, and by referencing the governing policy drivers Homeland Security Presidential Directive 5 (HSPD-5), Contractor Assurance System, and Presidential Policy Directive (PPD)-8, National Preparedness.

2. CANCELLATION. DOE O 151.1E, *Comprehensive Emergency Management System*, dated October 28, 2024. DOE elements and contractors transition roles and responsibilities from DOE O 151.1E to this Order without creating gaps in decision authority. Existing emergency facilities and tools remain in service during transition. This Order cancels DOE O 151.1E and supersedes prior versions of DOE O 151.1. The Order is standalone; necessary requirements, definitions, and references are included herein. Contractual obligations remain in effect until modified by the Contracting Officer per DOE O 251.1, *Departmental Directives Program*.

3. APPLICABILITY.

- a. Departmental Applicability. This Order applies to federal employees and contractors who operate, plan for, or respond to emergencies at DOE-owned or leased laboratories, plants, sites, and activities. An all-hazards approach is used. Hazardous materials are identified and an appropriate response is planned for potential response to those emergencies. Response to general incidents (e.g., chemical spills, fire response, general industrial incidents, transportation of materials in commerce), comply with the responsible federal authorities, including 29 CFR 1910, Occupational Safety and Health Administration (OSHA), (e.g., §§1910.38, Emergency action plans, and 1910.120, Hazardous waste operations and emergency response), Department of Transportation (DOT) Hazardous Materials Regulations at 49 CFR Parts 171–180, and EPA/Emergency Planning and Community Right-to-Know Act (EPCRA) at 40 CFR Part 355, Emergency Planning and Notification; and this Order does not duplicate response requirements.
- b. National Nuclear Security Administration (NNSA). The NNSA Administrator ensures NNSA federal personnel comply with this Order. NNSA facilities implement the same people-plant-process integration set by this directive. Nothing in this directive limits the Administrator’s authority under section 3212(d) of Public Law 106-65, National Defense Authorization Act for Fiscal Year 2000, to establish Administration-specific policies unless disapproved by the Secretary.

- c. Naval Nuclear Propulsion Program Equivalency.
 - (1) The Deputy Administrator for Naval Reactors (Director) retains authority to implement and oversee requirements and practices for activities under the Director's cognizance. Naval Reactors facilities and information are governed by the established Naval Reactors framework, consistent with Executive Order (EO) 12344, Naval Nuclear Propulsion Program, and 50 U.S.C. §§ 2406, Deputy Administrator for Naval Reactors, and 2511 and aligned with protection of Unclassified Controlled Nuclear Information (UCNI) at 10 CFR Part 1017, Identification and Protection of Unclassified Controlled Nuclear Information.
- d. DOE Contractors. The requirements of this Order shall be incorporated into applicable contracts, including Management and Operating contracts. The contractor is responsible for flowing down the requirements of the contractors Requirements Document, if applicable. Contractors shall comply with the requirements of applicable federal, state, and local laws and regulations in carrying out the requirements of this Order unless relief has been granted in writing. Omission of any applicable law or regulation from the Order does not affect the obligation of the contractor to comply with such law or regulation. Contractors must comply with the requirements of this Order, except to the extent modified by the equivalencies or exemptions identified herein or issued to the contractor in writing by DOE utilizing the process outlined in DOE O 251.1E, *Departmental Directives Program*, including as amended or updated.
- e. Equivalencies/Exemptions for DOE O 151.1E.
 - (1) Equivalency. Heads of Departmental Element (HDEs) may endorse risk-informed tailoring where required outcomes are preserved. Tailored implementations must maintain the availability and interoperability of emergency facilities and systems. Requests for equivalencies are processed under the Departmental Directives Program.
 - (2) Exemption. Exemptions are processed under the Departmental Directives Program. Where other federal requirements provide equal or more stringent protection for non-DOE-specific hazards, such as OSHA, DOT, and the Environmental Protection Agency (EPA)/EPCRA, DOE elements and contractors may rely on those requirements without seeking an exemption from this Order. (DOE O 251.1; 29 CFR 1910.38; 29 CFR 1910.120; 49 CFR 171–180; 40 CFR 355).
- 4. REQUIREMENTS. Any entity responsible for operating a DOE laboratory, plant, or site (LPS) must follow the requirements listed in this section:
 - a. Emergency Management System (EMS) Structure and Governance.
 - (1) Establish and maintain a comprehensive EMS that LPS personnel, facilities, and processes for site-specific hazards, compatible with NIMS/ICS and multi-agency coordination structures.

- (2) Appoint a Senior Manager as the Emergency Management Program Administrator, responsible for ensuring ongoing compliance with all Emergency Management requirements.
- (3) Designate Emergency Management directors for LPS with clear authority to activate the ERO and its response assets; confirm, validate and/or adjust protective actions; and coordinate with external authorities.
- (4) Maintain a documented list of the on-duty Emergency Management director and other time-urgent decision authorities to ensure continuity of authority.
- (5) Track and report instances when on-duty emergency responders were unavailable to respond to an incident.
- (6) Track and report an “activation success rate” to demonstrate that the ERO is available and effective when needed in response to an incident.
- (7) Identify, establish, and maintain an EOC and AEOC location, JIC location, assembly/relocation areas, personnel accountability system(s), monitoring assets, interoperable communications systems, and a process to maintain a COP.
- (8) Ensure the EMS implements scalable prevention, preparedness, response, and recovery processes that can expand or contract according to incident severity in alignment with NIMS/ICS.
- (9) Submit an Emergency Readiness Assurance Plan to the appropriate Field Office or Departmental Element when requested.

b. Hazard Identification, Analysis, and Scenario Development.

- (1) Establish a site-specific hazard identification and analysis process that includes natural, technological, and human-caused incidents related to all credible hazards.
- (2) Maintain an all-hazards survey to identify all significant hazards that is updated prior to significant changes.
- (3) Document chemical, radiological and biological screening criteria thresholds.
- (4) Engage LPS analysts, facility/activity managers, safety analysts, and Emergency Management Department managers in developing and validating hazard scenarios.
- (5) Use published analyses and facility configuration information as the technical basis for hazard and scenario analyses.

- (6) For each credible scenario, identify and document receptor locations, access routes, staging areas, and conditions relevant to protective actions.
- (7) For each credible scenario, document recognition cues, initial categorization/classification logic, initial protective actions, and notification triggers.
- (8) Perform emergency hazard assessments for shipments that do not meet DOT hazardous materials transport safety standards, addressing potential emergency scenarios.
- (9) Ensure that scenario documentation supports reproducible decision-making across qualified decision-makers.
- (10) Monitor, analyze, and learn from incorrect categorizations/classifications or decision variance observed in drills, exercises and real incidents, and use this information to improve recognition cues, Emergency Action Levels (EALs), and procedures.
- (11) Update emergency planning prior to significant operational or hazardous material changes, ensuring the Emergency Management Plan (EMP) remains effective and relevant.
- (12) Update the EMP, hazard analyses, and required emergency capabilities before introducing new or increased hazards that materially change credible scenarios or required response capabilities. Obtain the appropriate Field Office or Departmental Element approval when an update results in an increased programmatic risk.

c. Operational Emergency (OE) Identification, Categorization, and Classification.

- (1) Establish a process for early identification of an OE at LPS that supports time-urgent activation of the ERO.
- (2) Designate specific LPS decision-makers responsible for making OE categorization and classification determinations.
- (3) Develop and implement LPS-specific recognition cues and EAL logic derived from the all-hazards planning basis to guide rapid OE categorization and classification.
- (4) Require LPS decision-makers to make an initial OE determination promptly once indicators are available, using EAL logic and recognition cues.
- (5) Require LPS decision-makers to immediately confirm or validate protective actions taken by first responders and ensure those actions are commensurate with risk.

- (6) Classify OEs involving hazardous materials using the categories of Alert, Site Area Emergency, and General Emergency, anchored to the degree of loss of control over hazardous materials and projected consequences.
- (7) Use OE classification to communicate severity and trigger appropriately scaled actions and notifications.
- (8) Set performance-based time targets for categorization and notifications that are appropriate to the hazard and available detection means.
- (9) Treat the following as minimum recognition cues at LPS that typically warrant OE categorization and time-urgent protective action decision-making:
 - (a) Incidents or conditions with credible potential for serious worker or public health impacts,
 - (b) Discovery of radiological or other hazardous material contamination from past DOE operations with plausible uncontrolled exposures above defined protective action guides or health-based criteria (e.g., EPA-400/R-17/001, PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents, DOE/NNSA Protective Action Criteria [PAC]),
 - (c) Significant structural damage to LPS facilities coupled with confirmed or suspected personnel injury or death,
 - (d) Mass-casualty incidents as determined the first responder organization,
 - (e) Confirmed criticality incidents,
 - (f) Offsite hazardous material incidents not associated with LPS operations that are observed or forecasted to affect LPS and require protective actions for LPS workers.
- (10) Include additional recognition cues as OE triggers at LPS, at a minimum:
 - (a) Actual or potential release of a hazardous biological agent or toxin beyond secondary barriers of a biocontainment area,
 - (b) Actual or potential release of hazardous material or regulated pollutants with potential for significant offsite environmental consequences (e.g., impacts to wildlife, wetlands, aquifers, or downstream water supply intakes),
 - (c) Safeguards and security emergencies, including:
 - 1 Credible explosive devices,

- 2 Terrorist attack or active threat (including cybersecurity incidents with potential to endanger human life, health, or the environment),
 - 3 Sabotage of LPS facilities,
 - 4 Kidnapping or hostage situations involving an LPS worker(s) and/or visitor(s).
- (11) Notify the Headquarters EOC of incidents categorized as OEs or defined by DOE as Critical Information Requirements in accordance with LPS-specific reporting thresholds.
- (12) Recognize that Office of Secure Transportation (OST) is solely responsible for declaration and reporting of OST shipment incidents.
- (13) Maintain the OE as active until emergency response is formally terminated by the Emergency Management director.
- (14) Allow recategorization of OEs when better information indicates that the original categorization was incorrect.
- (15) Treat recognition cues as performance-based triggers for time-urgent decision-making, not as rigid prescriptive checklists.
- (16) Measure performance for OE decision-making using:
 - (a) Time from discovery to ERO activation, and
 - (b) Time from decision to protective action implementation, and
 - (c) Tracking of OE classification accuracy in exercises and real incidents as part of continuous improvement.

d. Emergency Management Plan.

- (1) Develop, approve, and maintain an EMP for site-specific hazards at LPS.
- (2) Define site-specific hazards in the EMP and clearly identify:
 - (a) Decision authorities and delegations for time-urgent decisions,
 - (b) ERO structure and position requirements,
 - (c) EOC primary and alternate locations,
 - (d) JIC location(s),
 - (e) Assembly/muster points,

- (f) Monitoring assets,
 - (g) COP and communications platforms, including continuity arrangements.
- (3) Define the integrated use of emergency facilities, the ERO, first responders, and processes and procedures in the EMP to document concepts for emergency preparedness and response.
- (4) Ensure the EMP follows controlled change management processes and remains current with LPS configuration, staffing, and technology platforms.
- (5) Complete necessary EMP updates before new or increased hazards materially alter credible scenarios or change required response capabilities.
- (6) Document roles, access points, and communications interoperability with local responders and mutual-aid partners within the EMP.
- e. Protective Actions, Monitoring, and Public Information.
 - (1) Prioritize worker protection in all emergencies, with protective actions directed initially by the Incident Commander and confirmed by the Emergency Management director and implemented by the ERO and facility staff.
 - (2) Implement protective actions at LPS using designated routes, assembly areas, and relocation areas, based on EALs.
 - (3) Tailor protective actions (evacuation, shelter/cover, shelter-in-place, lockdown) to the specific hazard and conditions.
 - (4) Establish and use personnel accountability systems following initial protective actions.
 - (5) Deploy field monitoring teams, as trained, to support worker safety confirmation, public and environmental protective actions, and reentry and recovery decisions.
 - (6) Use monitoring and assessment (including plume modeling and consequence assessment) to direct public and environmental protections, such as plume protective actions and traffic and access control.
 - (7) Maintain emergency public information processes and procedures that:
 - (a) Integrate LPS spokespersons with local, state, territorial, and federal partners,

- (b) Use templated, pre-approved risk-communication products for time-urgent release,
 - (c) Establish and implement a structure that multiple organizations can use to integrate incident information and public affairs into a cohesive organization, designed to provide consistent, coordinated, accurate, accessible, and timely information during an incident.
- (8) Measure and track decision-to-protection action time at LPS as a performance metric.

f. Technology, Data, Communications, and Common Operating Picture.

- (1) Maintain and operate a COP system that:
 - (a) Consolidates incident status, objectives, resources, actions, and decisions,
 - (b) Supports geospatial display,
 - (c) Captures an auditable log of events, decisions, and actions.
- (2) Ensure COP and communications systems:
 - (a) Are interoperable with internal and external partners,
 - (b) Are resilient and cyber-secure,
 - (c) Have continuity procedures for degraded communications.
- (3) Protect sensitive information in COP and communications systems, including compliance with 10 CFR Part 1017 for UCNI.
- (4) Maintain auditable records in COP and communications systems at LPS sufficient to reconstruct decisions and actions.
- (5) Automate notifications, resource status tracking, and performance reporting, where possible, to reduce delays and errors.
- (6) Use a qualification program to define ERO position competencies.
- (7) Measure and track partner “join-time” to the COP in drills and exercises at LPS to verify interoperability and coordination effectiveness.
- (8) Train the ERO to competently operate COP and communications tools and to protect sensitive information.
- (9) When possible, use commercial technological solutions when cost-effective and compliant with cybersecurity, privacy, and records requirements.

g. Training, Drills, Exercises, and Continuous Improvement.

- (1) Develop a risk-based training program at LPS aligned to ERO positions and scenario-critical tasks.
- (2) Base qualification for ERO and related roles at LPS on demonstrated competence, not only on course completion.
- (3) Conduct drills and exercises using actual Primary and Alternate EOC and JIC facilities and monitoring facility equipment performance where practical.
- (4) Establish a risk-based exercise program with site-level exercises at a cadence commensurate with site hazards, ERO readiness and the need to test response performance.
- (5) Periodically activate the EOC and coordinate with external partners during exercises at LPS to test full system performance.
- (6) Use proficiency evidence (e.g., pass rate and first-pass success on scenario-critical tasks) to determine the frequency of training, drills, and exercises for specific tasks.
- (7) Align training and exercise design with NIMS/ICS principles and the Homeland Security Exercise and Evaluation Program fundamentals.
- (8) Complete After-Action Reports (AARs) for exercises and significant incidents that identify issues and lessons learned and generate corrective actions.
- (9) Track corrective actions at LPS to timely and effective closure, verifying that recurrence of significant issues is minimized.
- (10) Share lessons learned at LPS through DOE Operating Experience channels consistent with DOE O 210.2A, *Corporate Operating Experience Program*.

h. Notifications and External Coordination.

- (1) Ensure the ERO can issue prompt initial notifications to workers, the appropriate Field Office or Departmental Element, DOE Headquarters, onsite and offsite response organizations, and other required authorities.
- (2) Maintain a resilient notification system with records capture and auditable logs.
- (3) Provide appropriate situational updates to partners and authorities throughout incident response and recovery.

- (4) Integrate LPS spokespersons with partner public information officers after JIC activation.
 - (5) Integrate cyber- and physical-security considerations into response and recovery.
 - (6) Measure and track notification completeness and content quality.
- i. Security, Information Protection, and Records.
 - (1) Ensure ERO are trained and required to protect sensitive information, including UCNI, during emergency planning, response, and recovery.
 - (2) Ensure emergency communications and COP/records systems meet classification, security, and cybersecurity requirements, and comply with 10 CFR Part 1017 for UCNI.
 - (3) Maintain records sufficient to reconstruct decisions and actions for oversight, lessons learned, and legal or investigative purposes.
 - (4) Treat “records reconstructability” as an auditable outcome and include it in program evaluations.
- j. Regulatory Flexibility, Tailoring, and Oversight.
 - (1) Allow graded tailoring and streamlining of Emergency Management requirements in coordination with the appropriate Field Office or Departmental Element only when performance objectives are met and risk is adequately controlled.
 - (2) Ensure tailoring at LPS does not reduce emergency facility or system availability to negatively impact emergency response effectiveness.
 - (3) Use Contractor Assurance System information, incident/exercise performance, and risk indicators to focus federal oversight on highest hazards and consequences or areas where performance lags.
 - (4) Enable reduced reporting and removal of low-value, duplicative oversight activities at LPS when strong performance is demonstrated.
 - (5) Increase targeted evaluations and engagement when performance is poor or declining until sustained improvement is demonstrated.
 - (6) Use EMS definitions delineated by the Office of Emergency Management (NA-40) to support common terminology and concepts for operations.
- k. Performance Metrics and Reporting.
 - (1) Maintain evidence of ERO qualification and currency for all ERO positions.

- (2) Maintain and report on corrective action effectiveness at LPS, including:
 - (a) Corrective action plan cycle-time,
 - (b) On-time closure rate,
 - (c) Recurrence rate of significant findings.
- (3) Track and report Primary and Alternate EOC, COP system network systems availability and reliability.
- (4) Collect, track, and report at least the following core outcome metrics for incidents and exercises quarterly to the appropriate Field Office or Departmental Element:
 - (a) Discovery-to-Activation: time from incident discovery to ERO activation.
 - (b) Decision-to-Protection: time from initial hazard confirmation to protective action implementation.
 - (c) Classification Accuracy: percent of incidents initially classified consistent with the technical basis.
 - (d) Time to First Usable Plume/Consequence Projection: time to an initial projection sufficient to inform protective action recommendations.
 - (e) Systems Availability: percentage uptime of EOC, COP system and critical communications systems.
 - (f) Exercise/AAR Effectiveness: percent of corrective actions closed on time and recurrence rate of significant findings.
 - (g) Qualification Currency: percentage of ERO positions staffed with qualified and current personnel and delegation currency rate.
 - (h) Coordination Effectiveness: time to first coordinated briefing and the number of partners participating in responses and exercises.
 - (i) Notification Quality: completeness of initial content.
- (5) Ensure that LPS management and relevant DOE managers review these metrics through Contractor Assurance System and DOE Enterprise Risk Management processes to inform oversight and priorities.

5. RESPONSIBILITIES.

a. Secretary/Deputy Secretary.

- (1) Set outcome expectations and risk tolerance for DOE-specific Emergency Management and hold HDEs accountable for results.
- (2) Champion enterprise platforms that enable field operations.
- (3) Direct risk-informed oversight that removes low-value activities and focuses on performance.
- (4) Administer, activate, convene, and chair the Emergency and Incident Management Council.

b. NNSA Administrator and HDEs.

- (1) Ensure senior federal officials have been identified and trained for each LPS and ensure clear delegations for time-urgent decisions.
- (2) Ensure EOC/JIC/COP facilities and alternates are ready.
- (3) Integrate emergency risk into Enterprise Risk Management and Contractor Assurance System reviews.
- (4) Include performance outcomes in contracts where applicable.

c. Associate Administrator for Emergency Management Office of Primary Interest.

- (1) Serve as the Department's Office of Primary Interest (OPI) for this Order and issues interpretations.
- (2) Maintain overarching Emergency Management guidance for the Department that aligns with national level emergency response doctrine.
- (3) Maintain enterprise definitions for performance metrics and minimum reporting architecture, to include effectively executing a readiness assurance program.
- (4) Provide guidance on annual Emergency Readiness Assurance Plans (ERAP) reporting.
- (5) Maintain Department emergency coordination capability, enable interoperability with field systems, and maintain common platforms for situational awareness and reporting, including developing, publishing, and providing guidance on Critical Information Requirements and HQ EOC notifications.

- (6) Keeps the Secretary, Deputy Secretary, NNSA Administrator, Under Secretaries, Program Secretarial Officers, and field and site management informed on Emergency Management matters that affect their responsibilities.
 - (7) Supports focused, risk-based evaluations and verification of corrective actions.
 - (8) Serves as the joint secretariat with DOE's Office of Cybersecurity, Energy Security, and Emergency Response for the Emergency and Incident Management Council for significant emergencies and continuity events.
- d. Field Element Managers/Site Office Manager.
 - (1) Approve site EMPs and validate ERO readiness.
 - (2) Verify EOC/JIC locations and alternates.
 - (3) Ensure the COP and communications systems are interoperable and cyber-secure.
 - (4) Oversee risk-based exercise programs.
 - (5) Use Contractor Assurance System insights to focus oversight and remove low-value activities.
 - (6) Approve local streamlining consistent with this Order.
- e. LPS Federal Directors and Operations Contractors.
 - (1) Implement the EMS for specific hazards.
 - (2) Maintain qualified ERO staffing and delegation currency.
 - (3) Maintain EMP-identified facilities and digital platforms.
 - (4) Activate the ERO and take protective actions when warranted.
 - (5) Notify authorities; coordinate with partners; report performance metrics; conduct after-action reviews; and manage corrective actions to timely, effective closure.
- f. Contracting Officer. For all applicable contracts and upon notification that a site/facility management contract is affected by this Order, incorporate the requirements into the affected contract(s) via the "Laws, Regulations, and DOE Directives" clause of the contract, or through negotiation and modification, as appropriate.

6. INVOKED TECHNICAL STANDARDS. This Order does not invoke external technical or industry standards as required methods. Any technical or industry standards mentioned in or referenced by this Order are non-invoked resources for implementation and may be used where they add value (e.g., NIMS/ICS, National Qualification System (NQS), NFPA 1660, ISO 22301).
7. REFERENCES.
 - a. HSPPD-5, "Management of Domestic Incidents." (DHS).
 - b. PPD-8, "National Preparedness." (DHS).
 - c. National Response Framework and Emergency Support Function (ESF-12), "Energy Annex." (FEMA/DOE CESER).
 - d. NIMS and NIMS Training/Implementation; NQS and position task books. (FEMA).
 - e. 10 CFR 1017, *Information and Protection of Unclassified Controlled Nuclear Information*
 - f. 29 CFR 1910.38, *Emergency Action Plans*
 - g. 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response*
 - h. 49 CFR 171, *General Information, Regulations, and Definitions*
 - i. 49 CFR 172, *Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements and Security Plans*
 - j. 49 CFR 173, *Shippers' General Requirements for Shipments and Packagings*
 - k. 49 CFR 174, *Carriage by Rail*
 - l. 49 CFR 175, *Carriage by Aircraft*
 - m. 49 CFR 176, *Carriage by Vessel*
 - n. 49 CFR 177, *Carriage by Public Highway*
 - o. 49 CFR 178, *Specifications for Packagings*
 - p. 49 CFR 179, *Specifications for Tank Cars*
 - q. 49 CFR 180, *Continuing Qualification and Maintenance of Packagings*
 - r. 40 CFR 355, *Emergency Planning and Notification, General Information*
 - s. DOE O 251.1 *Departmental Directives Program*

- t. DOE O 210.2A, *Corporate Operating Experience Program*
- u. EPA-400/R-17/001, “PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents”
- v. Consensus standards (non-invoked): National Fire Protection Association (NFPA) 1660, “Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery”
- w. International Organization for Standards (ISO) 22301, “Business Continuity Management Systems.”

8. DEFINITIONS.

- a. Accountability. For the purposes of this document, the process for communicating, assessing, and confirming the status of life and safety of all onsite personnel affected by an incident.
- b. Active Threat. A dynamic, quickly evolving situation involving an individual (or individuals) using deadly physical force.
- c. After-Action Report. A document intended to capture observations, issues, and lessons learned from an exercise or real-world incident.
- d. Alert. A condition that occurs when one or more of the following conditions are met:
 - (1) The radiation dose from any release to the environment of radioactive material or a concentration in air of hazardous chemical material is expected to exceed the applicable PAG or PAC at or beyond 30 meters, but not beyond 100 meters from the point of release or beyond the LPS boundary.
 - (2) An actual or potential substantial degradation in the level of safety or security of nuclear weapons, components, or test devices at a fixed location that would not pose an immediate threat to workers or the public.
- e. Alternate Emergency Operations Center. A physical, virtual, or hybrid location for use when the primary EOC is unable to support a response effort.
- f. Categorization. The DOE process for determining whether an incident or condition is an OE.
- g. Classification. The process of assessing potential release of hazardous materials in OEs to determine if they fall into one of the three emergency classes (Alert, Site Area Emergency, or General Emergency).

- h. Common Operating Picture. A standard overview of an incident, thereby providing incident information that enables the Incident Commander/Unified Command and any supporting agencies and organizations to make effective, consistent, and timely decisions. Compiling data from multiple sources and disseminating the collaborative information ensures that all responding entities have the same understanding and awareness of incident status and information when conducting operations.
- i. Critical Information Requirements. A comprehensive list of elements of information that DOE and NNSA leaders have identified as requiring immediate notification to facilitate timely decision making.
- j. Discovery. The point at which LPS workers or visitors identify or become aware of an incident or condition.
- k. Drill. An operations-based exercise is often employed to validate a single operation or function.
- l. Emergency. Any incident, whether natural, technological, or human-caused, that necessitates responsive action to protect life, property, critical infrastructure, or environment.
- m. Emergency Action Level. A predetermined, LPS-specific, observable threshold for an initiating condition that, when met or exceeded, places the LPS in a given emergency categorization with the potential for further classification.
- n. Emergency Operations Center. A designated location where the coordination of information and resources and advanced planning, to support the incident (on-scene operations) activities, normally takes place. The EOC may be a physical, virtual, or hybrid model.
- o. Emergency Planning Zone. A zone identified to facilitate a predetermined strategy for protective actions during a defined emergency.
- p. Emergency Readiness Assurance Plan. A documented annual report detailing the development, implementation, and maintenance status of an Emergency Management Program. The ERAP is also a planning tool to identify and develop needed resources and improvements.
- q. Emergency Response Organization. A structured organization with overall identified responsibilities for initial and ongoing emergency response and mitigation.
- r. Evacuation. The directed relocation of a population out of a high-risk area prior to or during an emergency. The evacuation of an LPS may be necessary when a hazard, be it natural, technological, or human-caused, threatens the safety of those within the LPS.

- s. Exercise. An activity delivered through discussion or action to develop, assess, or validate capabilities to achieve planned objectives. Exercises, under the Homeland Security Exercise and Evaluation Program can be discussion (examples include seminars, workshops, tabletop exercise, and games), or operations-based (drills, functional exercises, or full-scale exercises).
- t. Full-scale Exercise. An operations-based exercise that is typically those most complex and resource-intensive of the exercise types and often involves multiple agencies, onsite and offsite jurisdictions/organizations, and real-time movement of resources.
- u. General Emergency. An event that occurs when one or more of the following conditions are met:
 - (1) The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous material is expected to exceed the applicable PAG or PAC at or beyond the LPS boundary.
 - (2) Actual or likely catastrophic failures in safety or security systems threatening the integrity of a nuclear weapon, component, or test device at a fixed location that may adversely impact the health and safety of workers and the public.
- v. Hazardous Material. Any hazardous biological agents and toxins; any radioactive or radiological material that emits ionizing radiation; any solid, liquid, or gaseous chemical that is toxic, explosive, flammable, or corrosive, or could otherwise adversely affect the health and safety of the public or the workers or harm the environment. Fuel oil and gases are excluded in the definition of hazardous materials used in this Order.
- w. Homeland Security Exercise and Evaluation Program. A set of guiding principles for exercise and evaluation programs as well as a common approach to exercise program management, design and development, conduct, evaluation, and improvement planning.
- x. Incident. An unplanned occurrence (natural, technological, or human-made) that necessitates a response to protect life, property, critical infrastructure, or environment.
- y. Incident Command System. A management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.

- z. Incident Commander. The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The Incident Commander has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.
- aa. Issue. Factual statement of identified findings and deficiencies (failure to meet a documented legal, regulatory, performance, compliance, or other applicable requirements) in the Emergency Management Program at an LPS resulting from an exercise, self-assessment, independent assessment, testing and maintenance, or real-world event.
- bb. Joint Information Center. A facility established to coordinate critical emergency information, crisis communications, and public affairs functions. It is the central point of contact for all news media.
- cc. Laboratories, Plants, or Sites. Facilities owned, leased, or occupied by DOE per an occupancy agreement. These include laboratories, sites, plants, buildings, and other locations, whether operated by a DOE contractor or by DOE federal personnel.
- dd. Mass-Casualty Incident. An incident in which the number of patients and the severity of their injuries exceed the capacity of area medical systems and facilities, as identified by the LPS. The incident produces more patients than the responding jurisdiction is routinely capable of handling and necessitates an uncommon level of resource mobilization.
- ee. National Incident Management System. A set of principles that provides a systematic, proactive approach guiding government agencies at all levels, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, to reduce the loss of life or property and harm to the environment.
- ff. Operational Emergency. A major unplanned or abnormal incident or condition that involves or affects DOE facilities and activities by causing or having the potential to cause serious health, safety, or environmental impacts.
- gg. Operations-based Exercises. Operations-based exercises are characterized by actual response, mobilization of apparatus and resources, and commitment of personnel, usually held over an extended period. Operations-based exercises can be used to validate plans, policies, agreements, and procedures and include drills, functional exercises, and full-scale exercises.
- hh. Proficiency. Demonstrated skill and competency acquired from training and experience.
- ii. Protective Actions. Actions taken to minimize the consequences of emergencies and to protect the health and safety of workers and the public.

- jj. Protective Action Criteria. The level of hazardous material impact that, if observed or predicted, indicates action is needed to prevent or limit exposure of people to the hazard. PACs are used for both radiological and non-radiological consequence criteria in DOE facility emergency planning and response.
- kk. Protective Action Guides. Radiation dose guidelines that trigger protective actions such as evacuation or staying indoors. This Order follows the EPA-developed *Manual of Protective Action Guides* (PAG Manual) to help federal, state, and local authorities decide how to protect the public during radiological emergencies.
- ll. Protective Action Recommendation. Predetermined actions that are consequence-based decisions (known as protective actions for the LPS) and are designed to protect the health and safety of the public. DOE LPSs recommend protective actions to the public and community for OEs that have the potential to cause offsite consequences.
- mm. Public Information Officer. A member who serves as the conduit for information to internal and external stakeholders, including the media or other organizations seeking information directly from the incident.
- nn. Readiness Assurance. Activities that ensure emergency plans, procedures, and resources are sufficiently maintained, exercised, and evaluated, and appropriate and timely improvements are made when identified. It serves to ensure the readiness and effectiveness of LPS, or enterprise Emergency Management on a programmatic and performance level while promoting a culture of continuous improvement. It consists of evaluation (self-assessments, exercises, and performance indicators), issues management (corrective action plan and lessons learned), and the ERAP.
- oo. Recovery. The phase of activity that follows termination of an emergency. The recovery period begins when emergency response is declared terminated, but recovery planning can proceed before the response is declared terminated. The recovery phase continues until the objectives of the recovery effort have been met.
- pp. Reentry. The prioritized actions required to return processes and support functions to operational stability following an incident.
- qq. Response. Activities that address the short-term, direct effects of an incident and include immediate actions to save lives; protect property, critical infrastructure, and the environment; achieve incident stabilization; and meet basic human needs.
- rr. Senior Federal Official. Senior management federal personnel, designated by the Field Element Manager/Field Operations Manager, assigned to the EOC in his/her capacity with decision-making authority and responsibilities.

- ss. Site Area Emergency. An event that occurs when one or more of the following conditions are met:
 - (1) The radiation dose from any release of radioactive material or concentration in air from any release of other hazardous material is expected to exceed the applicable PAG or PAC at or beyond 100 meters from the point of release but not at or beyond the LPS boundary.
 - (2) An actual or potential threat to the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers in the immediate area, but not the public.
- tt. Special Nuclear Material. As defined in 10 CFR 810, *Assistance to Foreign Atomic Energy Activities*, plutonium, uranium-233, or uranium enriched above 0.711% by weight in the isotope uranium-235.
- uu. Termination. The declared conclusion of emergency response activities signaling the onset of the recovery phase.
- vv. Transportation emergency. Any accident involving an OST transportation shipment or convoy, in mission status, that cannot be categorized as an OST OE as outlined in DOE O 151.1E but that may require response beyond normal operations and local response asset capabilities. No protective action recommendations for nuclear cargo are issued, but due to the duration, location and support needed, implementation of NIMS/ICS procedures or other response actions may be required to mitigate or resolve the emergency.
- ww. Visitor. An onsite individual who is not an employee, contractor, or subcontractor of the LPS.
- xx. Walk-away. A strategy employed during an emergency as an alternative to a shutdown, whereby a facility is placed in a safe condition requiring no further on-scene operator action, allowing operations personnel to safely leave the facility until a planned reentry can be made.
- yy. Worker. Federal, contractor, subcontractor employee or visitor performing activities at a DOE LPS.

9. ACRONYMS.

AAR	After-Action Report
AEOC	Alternate Emergency Operations Center
COP	Common Operating Picture
DOE	Department of Energy
DOT	Department of Transportation
EAL	Emergency Action Level

EMP	Emergency Management Plan
EMS	Emergency Management System
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Readiness Assurance Plan
ERO	Emergency Response Organization
HDE	Head of the Departmental Element
HSPD	Homeland Security Presidential Directive
ICS	Incident Command System
ISO	Organization for International Standards
JIC	Joint Information Center
LPS	Laboratory, plant, or site
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NNSA	National Nuclear Security Administration
NQS	National Qualification System
NRF	National Response Framework
OE	Operational Emergency
OPI	Office of Primary Interest
OST	Office of Secure Transportation
PAC	Protective Action Criteria
PAG	Protective Action Guide
PPD	Presidential Policy Directive
UCNI	Unclassified Controlled Nuclear Information

10. CONTACT. Office of the Primary Interest: Associate Administrator for Emergency Management (NA-40), (202) 586-8100.

BY ORDER OF THE SECRETARY OF ENERGY:



JAMES P. DANLY
Deputy Secretary