

U.S. Department of Energy

Washington, D.C.

ORDER

DOE 5500.10

4-30-91

SUBJECT: EMERGENCY READINESS ASSURANCE PROGRAM

1. PURPOSE. To establish the requirements of the Emergency Readiness Assurance Program with a goal of assuring that the Department of Energy (DOE) Emergency Management System (EMS) is ready to respond promptly, efficiently, and effectively to any emergency involving DOE facilities or requiring DOE assistance.
2. SCOPE. The provisions of this Order apply to all DOE Elements and contractors performing work for DOE as provided for by law and/or contract and as implemented by the appropriate contracting officer.
3. EXCLUSIONS.
 - a. All DOE facilities subject to Nuclear Regulatory Commission (NRC) license requirements are specifically exempted from the requirements of this Order.
 - b. The Power Marketing Administrations are temporarily exempted from the coverage of this directive provided that, within one calendar year of the effective date of this Order, the Power Marketing Administrations shall develop, in coordination with the Director of Emergency Operations (DEO), emergency management directives appropriate to their specific regional power missions, compatible with DOE's EMS and supplementary DOE EMS directives.
 - c. If a DOE Element or contractor can demonstrate that it is subject to emergency management program requirements under the authority of other Federal regulatory agencies that are at least as stringent as the requirements of this Order, then an exemption may be requested. Requests for exemptions from the requirements of this Order shall document the basis for each exemption and shall establish and justify alternatives equivalent to, or exceeding, this Order. Requests for exemptions shall be submitted for approval by the Under Secretary, with the concurrence of: the cognizant Program Senior Official (PSO); the DEO; and, if applicable, the Assistant Secretary for Environment, Safety, and Health (EH-1). The Under Secretary shall resolve any differences among the PSO, DEO, and, if applicable, EH-1.
4. BACKGROUND. This Order establishes a formal program of emergency readiness assurance. It uses a broad definition of the term "facility" that encompasses operations and activities.

DISTRIBUTION:

All Departmental Elements

INITIATED BY:

Director of Emergency Operations

5. REFERENCES.

- a. DOE 5500.1B, EMERGENCY MANAGEMENT SYSTEM, of 4-30-91, which establishes the DOE Emergency Management System.
- b. For all other references, see Attachment 1 to DOE 5500.1B.

6. DEFINITIONS.

- a. Facility. Any equipment, structure, system, process, or activity that fulfills a specific purpose. Examples include accelerators, storage areas, fusion research devices, nuclear reactors, production or processing plants, coal conversion plants, magnetohydrodynamics experiments, windmills, radioactive waste disposal systems and burial grounds, testing laboratories, research laboratories, transportation activities, and accommodations for analytical examinations of irradiated and unirradiated components.
- b. For all other definitions, see Attachment 2 to DOE 5500.1B.
- c. Acronyms, see Attachment 4 to DOE 5500.1B.

7. POLICY. It is DOE policy to establish and maintain readiness assurance for all portions of the DOE EMS through development of:

- a. Emergency Readiness Assurance Plans (ERAPs) to ensure that emergency plans, implementing procedures, and resources are adequate and sufficiently maintained, exercised, and evaluated; and
- b. Appraisal Programs to assure that stated emergency capabilities are sufficient to implement emergency plans and that appropriate and timely improvements are made in response to needs identified through coordinated emergency planning, resource allocation, training, drills, exercises, and evaluations.

8. RESPONSIBILITIES AND AUTHORITIES. These responsibilities and authorities are supplemental to those in DOE 5560.1B.

- a. Director of Emergency Operations (DEO) shall provide overall coordination, consultation, and planning guidance for DOE EMS and emergency readiness assurance activities by:
 - (1) Participating in the PSO's review and approval process for ERAPs and annual updates;
 - (2) Using approved ERAPs to develop and present a consolidated, annual status report on DOE emergency readiness assurance, through the Under Secretary, to the Secretary;
 - (3) Scheduling all emergency readiness assurance exercise planning activities and exercises involving Headquarters (HQ) Program Offices

and/or non-DOE entities, and approving scenarios for full participation exercises at DOE facilities, in conjunction with PSOs

- (4) Conducting periodic emergency readiness assurance appraisals of HQ program offices and Emergency Management Teams (EMTs), DOE Field Elements, and contractors, including national response assets, and conducting appraisals of emergency preparedness exercises;
- (5) Participating in the evaluation of all readiness assurance functions for HW EMTs and Field Elements, including DOE national response assets;
- (6) Tracking emergency readiness assurance issues, deficiencies, and solutions resulting from evaluation and/or appraisal activities; end
- (7) Developing standards and criteria for use in the validation of the DOE EMS and emergency readiness assurance program.

b. Program Senior Officials (PSOs) shall:

- (1) Review and give final approval to all ERAPs and annual updates for facilities within their program, in coordination with EH-1 and the DEO;
- (2) Develop and maintain HQ EMT plans and procedures for response to emergencies at their program's facilities; and
- (3) Participate in and validate all DEO oversight EMS readiness assurance appraisals within their program, including those for any DOE national response assets (i.e., Nuclear Emergency Search Team, Accident Response Group, etc.) assigned to their program.

c. The Assistant Secretary for Environment, Safety, and Health (EH-1), in coordination with the DEO and the responsible PSO, shall conduct oversight, as required, to ensure that those aspects of both radiological and non-radiological emergency management which affect environmental protection, radiation safety, worker safety, and those aspects of public health and safety that deal with epidemiology and exposure to hazardous materials are properly addressed.

d. Heads of Field Elements shall:

- (1) Approve and review ERAPs and annual updates from subordinate elements;
- (2) Consolidate ERAPs and annual updates and submit them to the appropriate PSO for final approval with the DEO and EH-1 providing concurrence;
- (3) Provide the resources required to implement Field Element emergency readiness assurance activities in accordance with approved ERAPs;

- (4) Monitor and evaluate emergency readiness assurance capabilities within their areas of responsibility, including safeguards and security issues; conduct field performance reviews and assessments, on an annual basis, of all contractors to ensure that the contractor's emergency readiness assurance program is valid; and report the status to the responsible PSO;
- (5) Review contractor compliance with appropriate DOE requirements, legislation, and implementing regulations, such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, the Resource Conservation and Recovery Act (RCRA), and the Emergency Planning and Community Right-to-Know Act (EPCRA);
- (6) Act as the Federal On Scene Coordinator for contractor response under the National Oil and Hazardous Substances Pollution Contingency Plan; and
- (7) Ensure that the Manager/Administrator of each DOE- or contractor-operated facility, as the first or operating level of the line management structure:
 - (a) Performs internal EMS readiness assurance assessments of the facility, in coordination with the Head of Field Element; and
 - (b) Prepares the ERAPs and annual updates required by this Order.

9. EMERGENCY READINESS ASSURANCE PLANS (ERAPs)

- a. ERAPs addressing planning and preparedness for emergency response shall be developed for each facility. The initial ERAP and all annual updates shall cover a planning cycle of 5 fiscal years from the date of the initial or updated ERAP. Each ERAP section should be organized so as to separate the following information:
 - (1) Background material and procedures not subject to change from year-to-year, unless the facility, operation, or activity changes; and
 - (2) Annually updated information containing reports on the activities and accomplishments of the past year and plans, schedules, and budgets for the next 5 fiscal years.
- b. The ERAP shall serve as the baseline document for emergency readiness assurance evaluations and as a planning tool to identify and develop needed resources and improvements. Annual updates to the ERAPs will contain the same types of information and have the same structure as the initial plan. All updated plans shall highlight any changes in planning bases, organizations, exemptions, etc., from previous ERAPs, as well as compare actual achievements to goals, milestones, and objectives.

c. As a minimum, ERAPs shall contain the following sections:

- (1) Executive Summary. A brief summary of the overall status of the emergency area readiness assurance program plus pertinent aspects of the current program and related issues.
- (2) Program Description. A description of the emergency readiness assurance program at a level of detail sufficient to ascertain programmatic adequacy, with references to current emergency plans and implementing procedures.
- (3) Exemptions. A list of any approved or requested exemptions to requirements pertaining to the DOE EMS. A summary statement regarding changes to previous exemptions shall be included.
- (4) Hazards Assessment. A brief discussion of the range of potential radiological and non-radiological emergencies applicable to the facility with references to appropriate resource documents. This section shall include a summary of the emergency classes and the emergency action level criteria that will be used to determine the need to notify Federal, state, tribal, or local agencies and to determine protective measures to be recommended.
- (5) External Coordination. A summary of coordination activities pertaining to external emergency response and support. This section shall include a list of all current memoranda of understanding and agreements with external organizations that would provide support to the facility in the event of an emergency.
- (6) Training. A summary of all applicable individual and collective training developed and conducted for the specific types of emergencies which could be expected at the facility. Emergency training plans and goals for the current fiscal and next fiscal year shall be identified. Additionally, drills and special training plans for the following 5 fiscal years shall be included to the extent known. All training drills and exercises conducted since the previous ERAP, including the participation of any external organization shall be described in this section. Information detailing the number and type of personnel trained, the results of training evaluations, and any significant training deficiencies shall be included.
- (7) Appraisals. A description of the scheduling and appraisal process (for the 5 fiscal year period, to the extent known) and the identification of the organization conducting each appraisal.
- (8) Findings and Corrective Actions. A summary of all outstanding appraisal findings, citing the priorities assigned for their correction based-on management and technical considerations, as well as any corrective actions validated as resolved during the past

fiscal year. A schedule for the resolution of all outstanding deficiencies shall be included.

- (9) Resource Requirements. A 5 fiscal year projection of major resources, capabilities, or any other sets of requirements, including information and management support systems, budget, personnel, and facilities needed to maintain an appropriate level of emergency preparedness.
- (10) Other. A discussion of any other items pertinent to emergency readiness assurance programs.

d. ERAP Submittal Schedule.

- (1) Each facility, whether DOE or DOE contractor operated, shall submit an initial or updated ERAP to their respective Head of Field Element by September 30 each year. The ERAP shall cover the 5 fiscal year period beginning the next October 1 (e.g., an ERAP submitted September 30, 1991, will cover October 1, 1991, through September 30, 1996.)
- (2) The Head of Field Element shall review and transmit facility ERAPs and annual updates to the responsible PSO by October 31 each year.
- (3) The PSO shall review and approve each ERAP submitted, in coordination with EH-1, consolidate all ERAPs for each program, and submit the summary documents to the DEO by December 31 each year.
- (4) The DEO shall, in coordination with the cognizant PSO, prepare an annual status report which contains a summary of the programmatic consolidated plans and a list of the Individually approved ERAP plans for submittal to the Under Secretary by March 31.

10. EMERGENCY READINESS ASSURANCE APPRAISALS. Appraisals assess the ability of DOE elements and DOE- or contractor-operated facilities to meet applicable requirements of the EMS. Appraisals shall be based on specific standards and criteria promulgated by the DEO in coordination with applicable DOE oversight elements. Full participation exercises, which test and demonstrate an Integrated onsite and offsite emergency response capability, shall be appraised. Appraisals shall be scheduled, conducted, and reported in accordance with this Order, DOE 5482.1B, and DOE 5500.3A. The scheduling for all DOE and DOE contractor appraisals shall be coordinated with the DEO to minimize adverse impacts on field operations and maximize the efficiency of the overall appraisal program.

- a. DOE- or Contractor-operated facilities shall conduct annual internal readiness assurance assessments of their emergency management programs. These assessments shall be conducted by contractor personnel not directly responsible during an emergency for performing the functions being assessed. The assessment process will include implementation of management controls for evaluation and correction of assessment results.

U.S. Department of Energy
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PAGE CHANGE

DOE 5500.10 Chg 1

2-27-92

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1. PURPOSE. To transmit revised pages to DOE 5500.10, EMERGENCY READINESS ASSURANCE PROGRAM, of 4-30-91.
 2. EXPLANATION OF CHANGE. To make organizational title, routing symbol, and other administrative editorial changes required by SEN-6D-91, DEPARTMENTAL ORGANIZATIONAL AND MANAGEMENT ARRANGEMENTS, of 5-16-91. No substantive changes have been made.
 3. FILING INSTRUCTIONS.

a. <u>Remove Page</u>	<u>Dated</u>	<u>Insert Page</u>	<u>Dated</u>
1	4-30-91	1	2-27-92
2	4-30-91	2	4-30-91
3	4-30-91	3	2-27-92
4	4-30-91	4	4-30-92

- b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



JOHN J. NETTLES, JR.
Director of Administration
and Human Resource Management

DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Director of Emergency Operations

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Change 1: 2-27-92

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