

special nuclear material. The Corporation shall retain the record of confirmation for 3 years from the date the record is made.

**§ 76.85 Assessment of accidents.**

The Corporation shall perform an analysis of potential accidents and consequences to establish the basis for limiting conditions for operation of the plant with respect to the potential for releases of radioactive material. Special attention must be directed to assurance that plant operation will be conducted in a manner to prevent or to mitigate the consequences from a reasonable spectrum of postulated accidents which include internal and external events and natural phenomena in order to ensure adequate protection of the public health and safety. Plant operating history relevant to the assessment should be included. In performing this assessment, the full range of operations should be considered including, but not necessarily limited to, operation at the maximum capacity contemplated. The assessment must be performed using an expected release rate resulting from anticipated operational occurrences and accidents with existing systems and procedures intended to mitigate the release consequences, along with site characteristics, including meteorology, to evaluate the offsite radiological consequences.

**§ 76.87 Technical safety requirements.**

(a) The Corporation shall establish technical safety requirements. In establishing the requirements, the Corporation shall consider the analyses and results of the safety analysis report submitted pursuant to § 76.35.

(b) The format for the technical safety requirements must be appropriate for each individual requirement.

(c) Appropriate references to established procedures and/or equipment to address each of the following safety topics must be included in technical safety requirements:

- (1) Effects of natural phenomena;
- (2) Building and process ventilation and offgas;
- (3) Criticality prevention;
- (4) Fire prevention;
- (5) Radiation protection;

- (6) Radioactive waste management;
- (7) Maintenance;
- (8) Environmental protection;
- (9) Packaging and transporting nuclear materials;
- (10) Accident analysis;
- (11) Chemical safety;
- (12) Sharing of facilities, structures, systems and components;
- (13) Utilities essential to radiological safety; and
- (14) Operations.

(d) Technical safety requirements must include items in the following categories:

(1) Safety limits.

(i) If any safety limit is exceeded, corrective action must be taken as stated in the response procedures associated with the technical safety requirements or the affected part of the process must be shut down unless this action would increase the risk to the health and safety of the public or plant personnel.

(ii) If any safety limit is exceeded, the Corporation shall notify the Commission if required by § 76.120, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence.

(iii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority.

(2) Limiting control settings.

(i) Where a limiting control setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that protective action, either automatic or manual, will correct the abnormal situation before a safety limit is exceeded. If, during operation, the automatic alarm or protective devices do not function as required, appropriate action must be taken to maintain the variables within the limiting control-setting values and to repair promptly the automatic devices or to shut down the affected part of the process.

(ii) If, during operation, an automatic alarm or protective device does not function as required, the Corporation shall notify the Commission if required by 76.120, review the matter, and record the results of the review, including the cause of the condition and the

basis for corrective action taken to preclude recurrence.

(iii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority.

(3) Limiting conditions for operation. When a limiting condition for operation of any process step in the system is not met, the Corporation shall shut down that part of the operation or follow any remedial action permitted by the technical safety requirements until the condition can be met.

(i) If a limiting condition for operation of any process step in the system is not met, the Corporation shall notify the Commission if required by § 76.120, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence.

(ii) The Corporation shall retain the record of the results of each review until the Commission no longer has certification authority.

(4) Design features. Design features to be included are those systems, components, or structures of the plant which, if altered or modified, would have a significant effect on safety and are not covered in categories described in paragraphs (d) (1), (2), and (3) of this section.

(5) Surveillance requirement.

(6) Administrative controls.

**§ 76.89 Criticality accident requirements.**

(a) The Corporation must maintain and operate a criticality monitoring and audible alarm system meeting the requirements of paragraph (b) of this section in all areas of the facility. The Corporation may describe for the approval of the Commission defined areas to be excluded from the monitoring requirement. This submittal must describe the measures that will be used to ensure against criticality, including kinds and quantities of material that will be permitted and measures that will be used to control those kinds and quantities of material.

(b) The system must detect and announce a criticality that produces an absorbed dose in soft tissue of 20 rads of combined neutron and gamma radi-

ation at an unshielded distance of 2 meters from the reacting material within 1 minute. Coverage of all monitored areas must be provided by two detectors.

**§ 76.91 Emergency planning.**

The Corporation shall establish, maintain, and be prepared to follow a written emergency plan. The emergency plan submitted under § 76.35(f) must include the following information:

(a) Plant description. A brief description of the plant and area near the plant site.

(b) Types of accidents. An identification of each type of radioactive materials accident for which protective actions may be needed.

(c) Classification of accidents. A system for classifying accidents as alerts or site area emergencies.

(d) Detection of accidents. Identification of the means of detecting each type of accident in a timely manner.

(e) Mitigation of consequences. A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

(f) Assessment of releases. A brief description of the methods and equipment to assess releases of radioactive materials.

(g) Responsibilities. A brief description of the responsibilities of all individuals supporting emergency response should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the NRC, as well as a brief description of responsibilities for developing, maintaining, and updating the plan.

(h) Notification and coordination. A commitment to and a brief description of the means to promptly notify offsite response organizations, including the request for offsite assistance and medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The notification and coordination must be planned so that unavailability of some personnel, parts of the plant, and some equipment