TEMPORARY INSTRUCTION 2600/015

EVALUATION OF LICENSEE STRATEGIES FOR THE PREVENTION AND/OR MITIGATION OF EMERGENCIES AT FUEL FACILITIES

APPLICABILITY: This Temporary Instruction (TI) applies to all Part 70 licensees with an Integrated Safety Analysis (ISA), all Part 40 licensees with a license-required ISA and all Part 76 certificate-holders currently in operation.

2600/015-01 OBJECTIVES

The objective of this TI is to independently verify that licensees are adequately prepared to prevent and/or mitigate the consequences of selected safety/licensing bases events and to evaluate the adequacy of those emergency prevention and/or mitigation strategies for dealing with the consequences of selected beyond safety/licensing bases events. The inspection results from this TI will be used to evaluate readiness for such an event and to aid in determining whether additional regulatory actions by the U.S. Nuclear Regulatory Commission are warranted.

2600/015-02 BACKGROUND

On March 11, 2011, the Tohoku-Taiheiyou-Oki Earthquake occurred near the east coast of Honshu, Japan. This magnitude 9.0 earthquake and the subsequent tsunami caused significant damage to at least four of the six units of the Fukushima Daiichi nuclear power station. The unavailability of both offsite and onsite power systems, challenges to emergency response capabilities and extensive structural damage continue to challenge and hamper response efforts.

The resulting damage to Fukushima Daiichi nuclear power station appears to have been caused by initiating events that may have exceeded the design bases for the facilities.

2600/015-03 INSPECTION REQUIREMENTS AND GUIDANCE

NRC inspection staff will confirm that licensee's are prepared to prevent and/or mitigate the consequences of credible events and evaluate the adequacy of those emergency strategies for dealing with selected beyond safety/licensing bases events.

03.01 Verification of the adequacy of emergency prevention and/or mitigative strategies for the consequences for safety/licensing bases events. This inspection is based on regulatory requirements and credible initiating events for the given facility location.

a. Inspection Scope. During preparation, inspectors will identify and document the events considered in the facilities design and licensing bases. Assistance will

be provided by the licensing project manager for each facility under consideration in this regard. As part of this effort, any clear gaps between regulatory requirements and the design and licensing bases will be documented as unresolved items for further consideration.

Requirements for Part 70 licensees are contained in Subpart H and the specific licensee integrated safety analysis (ISA). Honeywell Conversion Facility, a Part 40 licensee, has completed an ISA which is captured in its licensing bases. Paducah Gaseous Diffusion Plant (GDP), a Part 76 certificate holder, has not completed an ISA; however, design bases information related to natural phenomena is contained in its safety analysis report and other licensing bases documents. Portsmouth GDP is currently in cold shutdown and the main process buildings are de-leased and under the regulatory authority of the Department of Energy and therefore outside the scope of this TI.

b. Verification. The inspector will verify that procedures, personnel, and equipment credited in the licensee's mitigation strategy for each of the safety or licensing bases events are properly implemented. In addition, the inspector will verify that the licensee ensures that the emergency prevention and/or mitigation strategy for the consequences from each selected safety and licensing bases event is appropriate.

03.02 Evaluation of the adequacy of emergency prevention and/or mitigative strategies for dealing with the consequences of selected beyond design bases events.

a. Inspection Scope. During preparation, inspectors with assistance from the licensing project manager will postulate and select a sample of beyond safety/licensing bases events. The bases of this selection will be documented and to the extent practical, the licensee's ISA, engineering analyses and safety/licensing information, accident analyses, and other pertinent external data sources should be considered in the selection.

b. Evaluation. Under each of the postulated and selected beyond safety/licensing bases events, the inspectors will evaluate:

1. Whether the emergency equipment needed to prevent and/or mitigate the consequences for the selected beyond safety/licensing bases events would be available and functional.

2. Whether existing procedures would be sufficient to prevent and/or mitigate the consequences for the selected beyond safety/licensing bases events.

3. Training and qualifications of operators, on-site emergency response personnel and support staff needed to implement procedures for the selected beyond safety/licensing bases events.

4. Whether the requirements or commitments for offsite support or assistance, including agreements and contracts would be sufficient to

address the consequences for the selected beyond safety/licensing bases events.

If the licensee has already considered certain beyond safety/licensing events, the inspectors may also conduct an evaluation of the licensee's review in addition to any additional measures implemented or planned.

2600/015-04 REPORTING REQUIREMENTS

The results of this evaluation will be used to aid in determining whether additional NRC regulatory actions are warranted. The inspection results should be documented in a public report. The inspection report should have the Chief of the Technical Support Branch, NMSS/SPTSD on distribution. The inspection results from this TI will be used, in part, to evaluate the adequacy of those emergency mitigating strategies for dealing with selected beyond design bases events.

2600/015-05 COMPLETION SCHEDULE

This TI is to be initiated upon issuance. Inspection activities are to be completed within one year of issuance of the TI.

2600/015-06 EXPIRATION

The TI will expire on September 30, 2012.

2600/015-07 CONTACT

Any technical questions regarding this TI should be addressed to Chief, Technical Support Branch, NMSS/SPTSD.

2600/015-08 STATISTICAL DATA REPORTING

All direct inspection effort expended on this TI is to be charged to 2600/015 with an IPE code of TI. All indirect inspection effort expended on this TI for preparation and documentation should be attributed to activity codes TIP and TID respectively.

2600/015-09 RESOURCE ESTIMATE

The estimated average time to complete the TI inspection requirements is 96 hours of direct inspection per site. Where applicable, inspectors should credit the baseline inspection program for samples reviewed during this TI evaluation.

2600/015-10 TRAINING

No additional training is required.

END

ATTACHMENT 1

Revision History for TI 2600/015

EVALUATION OF LICENSEE STRATEGIES FOR THE PREVENTION AND/OR MITIGATION OF EMERGENCIES AT FUEL FACILITIES

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	09/30/11 CN 11-018	This is a new document issued for inspections related to safe/licensing events and beyond safety/licensing bases events.	No	N/A	ML111030453