ATTACHMENT 65001.18

INSPECTION OF EMERGENCY PLANNING ITAAC

PROGRAM APPLICABILITY: 2503

65001.18-01 INSPECTION OBJECTIVES

To provide inspection guidance to verify that the acceptance criteria have been met for the applicant's site-specific emergency planning (EP) Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) approved by the NRC.

65001.18-02 INSPECTION REQUIREMENTS AND GUIDANCE

The onsite emergency response plans (i.e., emergency plans) must meet the standards established in 10 CFR 50.47(b) and applicable requirements of Appendix E to 10 CFR Part 50. Compliance with these regulations is determined by using the guidance in Regulatory Guide (RG) 1.101, Revision 4, which endorses NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1 (hereinafter referred to as NUREG-0654). The criteria and recommendations in RG 1.101 are methods that the NRC staff considers acceptable for complying with the requirements in Appendix E to 10 CFR Part 50 and the planning standards in 10 CFR 50.47(b) that must be met in onsite and offsite emergency response plans. These criteria provide a basis for NRC licensees and State and local governments to develop acceptable radiological emergency plans and improve emergency preparedness. Additionally, this regulatory guide describes a voluntary method that the NRC staff considers acceptable for complying with the amended regulations in Appendix E to 10 CFR Part 50, as they relate to NRC approval of licensee changes to emergency action levels and exercise requirements for co-located licensees. Compliance with this regulatory guide is not a requirement, and licensees and applicants may choose this or another method to achieve compliance with these rules.

As previously noted, licensees compliance with 10 CFR 50.47(b) and applicable requirements of Appendix E to 10 CFR Part 50 is determined by using the guidance in RG 1.101, Revision 4, and through it NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," and NUREG-0696, "Functional Criteria for Emergency Response Facilities." (herein after referred to as NUREG-0696). Additional guidance is provided in NUREG-0737 and Supplement to NUREG-0737, "Clarification of TMI Action Plan Requirements."

10 CFR 52.80(b) requires the combined license (COL) applicant to include proposed EP ITAAC in the application, which are necessary and sufficient to provide reasonable assurance that, if the inspections, tests and analyses are performed and acceptance criteria are met, the facility has been constructed and will operate in conformity with the COL, the provisions of the *Atomic Energy Act*, and NRC regulations. The COL applicant

shall develop EP ITAAC to address the implementation of emergency plan elements and reference them in the Final Safety Analysis Report (FSAR).

This procedure includes inspection guidance for an acceptable set of generic EP ITAAC that an applicant may use to develop application-specific ITAAC tailored to the specific reactor design and EP program requirements. These generic ITAAC are contained in NUREG-0800, "Standard Review Plan for the Review of Safety Analyses for Nuclear Power Plants," Table 14.3.10-1, "Generic Inspections, Tests, Analyses, and Acceptance Criteria." This Standard Review Plan will be used by the staff to review an applicant's emergency planning, as described in the FSAR for a COL application submitted under 10 CFR Part 52.

A smaller set of EP ITAAC is acceptable if the COL application contains information that fully addresses EP requirements associated with any of the generic ITAAC included herein, which are not all-inclusive. Additional plant-specific EP ITAAC may be proposed, and they will be examined for acceptability on a case-by-case basis. Guidance regarding the information to be submitted in a COL application for a nuclear power plant may be found in Regulatory Guide 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)," Revision 0.

As preparation, the inspector should review the COL, and in particular the FSAR which contains the site Emergency Plan. The inspector should also review the safety evaluation report (SER) which approved the COL application since it contains the bases for acceptance of the EP program elements. If the COL application was for an additional reactor at an operating reactor site, the existing EP program elements should be acceptable and there will not be any ITAAC to review. (Note: This procedure verifies acceptance criteria for an approved COL application and therefore the applicant will be referred to as the licensee.)

The alphanumeric reference at the end of each inspection requirement (and before the inspection guidance) is the associated evaluation criteria in Section II of NUREG-0654.

02.01 <u>Assignment of Responsibility (Organization Control)</u>. Review the licensee's closeout documentation of this ITAAC to verify that sufficient staff exists to provide 24-hour per day emergency response and staffing of communications links, and that the applicant's staff is of sufficient depth to be capable of continuous (24-hour) operations for a protracted period. (A.1.e, A.4)

<u>Guidance</u>. The inspector should obtain and review the NRC-approved ITAAC pertaining to organization control, and the Emergency Plan, which are both contained in the COL. Review the Plan sections which describe the licensee's emergency response organization (ERO).

Verify through inspection of available documentation (Emergency Plan Implementing Procedures (EPIPs), Administrative Procedures, staffing rosters, training records, etc.) that there are sufficient trained staff to fill all positions specified by the licensee on a 24-hour basis for a protracted period (a number of days), including the staffing of communications links. The licensee shall be able to provide staff rosters which list sufficient staff by

position, to demonstrate that the acceptance criteria have been met.

02.02 <u>Onsite Emergency Organization</u>. Review the licensee's close-out documentation of this ITAAC to verify that sufficient staff exists to provide minimum on-shift and augmented staffing levels, consistent with the COL and NUREG-0654, Table B-1, "Minimum Staffing Requirements For NRC Licensees For Nuclear Power Plant Emergencies." (B.5, B.7)

<u>Guidance</u>. The inspector should obtain and review the NRC-approved ITAAC concerning onsite emergency organization, and the Emergency Plan, which describe the staffing positions in the licensee's ERO. Review the Plan section which describes the licensee's implementation of NUREG-0654, Table B-1.

Verify that there are sufficient numbers of trained personnel to fill each emergency position within the times specified in the licensee's COL Emergency Plan. The inspector should determine this by viewing staffing rosters of personnel who have been previously verified by the licensee to live within a geographic area such that they can meet the time constraints of Table B-1. The licensee may have documentation of pager tests or augmentation "report-in" drills which would provide further assurance that the augmentation staff are capable of meeting the required response times.

If the licensee has proposed an alternative process to ensure sufficient ERO staff other than that prescribed by NUREG-0654, then verify that there are sufficient numbers of trained staff to meet the commitments of the alternative process. The inspector should determine that there are sufficient trained staff who live within the vicinity of the plant such that they can respond in the required time-frame.

- 02.03 <u>Emergency Response Support and Resources</u>. There are no generic ITAAC specified for this planning standard. Review for acceptability will be on a case-by-case basis if included in the COL application.
- 02.04 <u>Emergency Classification System</u>. Review the licensee's close-out documentation of this ITAAC to verify that the facility system and effluent parameters used as the bases for the standard emergency classification and emergency action level (EAL) scheme are retrievable in the Control Room (CR), Technical Support Center (TSC), and the Emergency Operations Facility (EOF); and that the ranges of displays of those parameters encompass the values specified in that EAL scheme. (D.1)

<u>Guidance</u>. The inspector should obtain and review the NRC-approved ITAAC concerning system and effluent parameters used as the bases for the emergency classification and EAL scheme; and the Emergency Plan and/or EPIPs which describe the emergency classification and EAL scheme.

Verify that the parameters associated with the licensee's EAL scheme are consistent in range, units, and conversion factors with appropriate CR instrumentation used for measuring those parameters. Also verify by visual inspection that the CR, TSC, and EOF have adequate displays for retrieving facility system and effluent parameters specified in the EALs (i.e., ranges of displays encompass the values specified in the emergency classification and EAL scheme) such that decision-makers can use those displays to

accurately classify emergency events.

02.05 <u>Notification Methods and Procedures</u>. Review the licensee's close-out documentation of this ITAAC to verify that the licensee has the capability to notify State and local agencies within 15 minutes of declaring an emergency, to notify and mobilize emergency response personnel, and to notify and provide instructions to the public to meet the design objectives stated in the Emergency Plan. (E.1, E.2, E.6)

Guidance.

a. Notification of State and local agencies (E.1)

The inspector should obtain and review the NRC-approved ITAAC concerning the notification of State and local agencies within 15 minutes of an emergency declaration. Verify that the licensee has established the administrative and physical means for this notification and that the communications links and equipment are as described in the Emergency Plan.

Verify by test documentation review or observation of an actual test of the licensee's notification capabilities, that communication systems will enable the licensee to notify State and local agencies within 15 minutes after declaring an emergency.

b. Notification of emergency response personnel (E.2)

The inspector should obtain and review the NRC-approved ITAAC concerning the notification of the ERO for mobilization in an emergency. Verify that the licensee has established the administrative and physical means for this notification, and that the communication links and equipment are as described in the Emergency Plan. Also verify that the equipment (e.g., pagers, cell phones, automated telephone systems) is available and functional.

Verify by test documentation review or observation of an actual test of the licensee's ERO notification system, that it is capable of alerting the ERO such that responders are capable of achieving the response times required by the Emergency Plan.

c. Notification of the public within the plume exposure emergency planning zone (EPZ) (E.6)

The inspector should obtain and review the NRC-approved ITAAC concerning the notification of, and provision of instructions to the public in the event of an emergency. Verify that the licensee has established administrative and physical means for prompt notification of the public as described in the Emergency Plan. The system for public notification (i.e., Prompt Notification System - PNS) usually consists of pole-mounted sirens, sometimes complemented by devices such as tone alert radios in remote areas of the EPZ. These devices alert the public to go indoors and tune to their pre-determined radio and/or television stations for

emergency instructions. It shall be the licensee's responsibility to demonstrate that such means exist, regardless of who implements this requirement.

Verify by test documentation review or observation of an actual test of the licensee's PNS that it is capable of alerting the public per the design objectives stated in the Emergency Plan.

02.06 <u>Emergency Communications</u>. Review the licensee's close-out documentation of this ITAAC to verify that prompt communications exist among principal response organizations to emergency personnel and to the public. (F.1.d, F.1.f)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC concerning the provision of prompt communications among principal response organizations to emergency personnel and to the public.

- a. Verify that communications have been established between the CR, TSC, EOF, principal State and local Emergency Operations Centers (EOCs), and field radiological assessment teams (RATs). Verify that the licensee has established the administrative and physical means for these communication links and that the equipment is as described in the Emergency Plan. Also, verify that the equipment is available and functional.
- b. Verify that communications have been established from the CR, TSC, and EOF to the NRC headquarters and regional office emergency response centers (ERCs) and that an access port for the licensee's Emergency Response Data System (ERDS), or its successor system, has been provided. Verify that this equipment is available and functional.

Verify by test documentation review or observation of an actual test of the licensee's emergency communications links that the equipment has the capabilities delineated in the Emergency Plan.

02.07 <u>Public Education and Information</u>. Review the licensee's close-out documentation of this ITAAC to verify that the licensee has provided space which may be used for the number of news media specified in the COL. (G.3.b)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the provision of space for news media personnel. Verify by visual inspection that the appropriate amount of space has been made available. Also, verify that any location provided in the EOF for news media briefings is outside the controlled access area.

02.08 <u>Emergency Facilities and Equipment</u>. Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria for emergency facilities and equipment have been met. (H.1, H.2, H.5, H.6, H.7, H.8, H.9)

Guidance.

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a. Technical Support Center (TSC) (H.1)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of a TSC in accordance with NUREG-0696.

The inspector shall verify the following by visual inspection and/or review of design specifications:

- 1. The total floor space is at least 1875 square feet, i.e., 75 ft² per person for a minimum of 25 persons, including 20 persons designated by the licensee and five NRC personnel. This minimum size shall be increased appropriately if the maximum staffing level specified by the licensee's Emergency Plan is greater than 20 persons. There shall also be a separate room adequate to be used by at least three persons for private NRC consultations.
- 2. The TSC is located close to the Control Room (CR) such that the walking time from the TSC to the CR should not exceed two minutes. Advanced communication capabilities may be used to satisfy the two-minute travel time if approved in the COL. (The licensee will adopt design certification criteria, if applicable, or otherwise specify TSC location)
- 3. The TSC shall have the same radiological habitability as the CR under accident conditions. That is, adequate radiation protection shall be provided to ensure that radiation exposures shall not exceed 0.05 Sv (5 Rem) total effective dose equivalent (TEDE) for the duration of any radiological accident (per 10 CFR 50, Appendix A, "General Design Criteria For Nuclear Power Plants," Criterion 19). (The licensee will adopt design certification criteria, if applicable, or otherwise identify specific capabilities)
- 4. The TSC ventilation system shall function in a manner comparable to the CR ventilation system.
- 5. As a minimum, the TSC ventilation system shall include high-efficiency particulate air (HEPA) and charcoal filters.
- 6. Communications equipment is installed, and voice transmission and reception are accomplished. Verify that the TSC has reliable voice communications with the CR, OSC, EOF, and the NRC (i.e., NRC Emergency Telecommunications System ETS). There shall also be provisions for communications with State and local operations centers to provide early notification and recommendations to offsite authorities prior to EOF activation. Voice communications facilities shall include means for reliable primary and backup communication.
- 7. Verify by test documentation review or observation of an actual test or demonstration of voice communications equipment that the equipment has the capabilities delineated in the Emergency Plan and/or COL. (The licensee will adopt design certification criteria, if applicable, or otherwise identify

specific capabilities)

- 8. The TSC has the means to receive, store, process, and display plant and environmental information, to initiate emergency measures, and to conduct emergency assessment per COL commitments.
- 9. As a minimum, the set of Type A, B, C, D, and E variables specified in Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," Revision 2, shall be available for display and printout in the TSC.
- A sufficient number of data display and printout devices shall be provided to allow all TSC personnel to perform their assigned tasks with unhindered data access.
- 11. TSC displays shall include, but not be limited to, alphanumeric and/or graphical representations of: plant systems variables, in-plant radiological variables, meteorological information, and offsite radiological information.
- 12. The Safety Parameter Display System (SPDS) shall be displayed in the TSC.
- b. Operational Support Center (OSC) (H.9)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of an OSC in accordance with NUREG-0696. (The licensee will adopt design certification criteria, if applicable, or otherwise specify OSC location and identify specific capabilities)

The inspector shall verify the following by visual inspection:

- 1. The OSC is located onsite, and may be combined with the TSC at a single location.
- 2. OSC communications equipment is installed, and voice transmission and reception are accomplished.
- 3. The communication system, as a minimum, shall consist of one dedicated telephone extension to the CR, one dedicated telephone extension to the TSC, and one dial telephone capable of reaching onsite and offsite locations.

Verify by test documentation review or observation of an actual test or demonstration of voice communications equipment that the equipment has the capabilities delineated in the Emergency Plan and/or COL. (The licensee will adopt design certification criteria, if applicable, or otherwise identify specific capabilities)

c. Emergency Operations Facility (EOF) (H.2)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of an EOF in accordance with NUREG-0696.

The inspector shall verify the following by visual inspection:

- 1. The total floor space is at least 2625 square feet, i.e., 75 ft² per person for a minimum of 35 persons, including 25 persons designated by the licensee, 9 persons from the NRC, and 1 person from the Federal Emergency Management Agency (FEMA). This size shall be increased appropriately if the staffing level specified in the Emergency Plan, including representatives from State and local agencies, is greater than 25 persons. There shall also be separate office space to accommodate at least five NRC personnel during periods that the EOF is activated for emergencies. (The licensee will identify EOF size characteristics)
- 2. The EOF habitability is consistent with Table 2 of NUREG-0696. Note that the ventilation system shall function in a manner comparable to the CR and TSC, but need not have charcoal filters, and need not be seismic Category I qualified, redundant, instrumented, or automatically activated. (The licensee will specify the acceptance criteria for EOF habitability)
- 3. EOF communications equipment is installed, and voice transmission and reception are accomplished with the CR, TSC, NRC (i.e., NRC ETS), and State and local agencies. Voice communications facilities shall include means for reliable primary and backup communication.
- Verify by test documentation review or observation of an actual test or demonstration of voice communications equipment that the equipment has the capabilities delineated in the Emergency Plan and/or COL. (The licensee will identify specific capabilities.)
- 5. The EOF has the capability to acquire, display and evaluate radiological, meteorological, and plant system data pertinent to determining offsite protective measures. (The licensee will identify specific capabilities)
- 6. As a minimum, sensor data of the Type A, B, C, D, and E variables specified in RG 1.97, and of those meteorological variables specified in RG 1.23, Revision 1, "Meteorological Monitoring Programs for Nuclear Power Plants," and in NUREG-0654, Appendix 2, shall be available for display in the EOF.
- 7. A sufficient number of data display devices shall be provided in the EOF to allow all EOF personnel to perform their assigned tasks with unhindered access to alphanumeric and/or graphical representations of: plant systems variables, in-plant radiological variables, meteorological information, and offsite radiological information.
- 8. The SPDS shall be displayed in the EOF.

d. Onsite Monitoring Systems (H.5)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of onsite monitoring systems such that the licensee has the capability to initiate emergency measures consistent with the NRC-approved EAL scheme. (The licensee will identify specific capabilities)

The onsite monitoring equipment shall include, as a minimum:

- 1. Geophysical phenomena monitors (e.g., meteorological, hydrological, seismic)
- 2. Radiological monitors (e.g., process, area, emergency, effluent, portable monitors, sampling equipment)
- 3. Process monitors (e.g., reactor coolant system temperature/pressure, containment temperature/pressure, liquid levels, flow rates, status or lineup of equipment components)
- 4. Fire and combustion products detectors

Verify that installed monitoring equipment provides the facility system and effluent parameters used as the bases for the licensee's standard emergency classification and EAL scheme, and that the ranges of displays of those parameters encompass the values specified in that EAL scheme.

e. Data Acquisition From Offsite Monitoring and Analysis Equipment (H.6)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of offsite monitoring and analysis equipment such that the licensee has the capability to acquire data from, or have emergency access to, offsite monitoring and analysis equipment. (The licensee will identify specific capabilities)

The offsite monitoring and analysis equipment shall include, as a minimum:

- 1. Geophysical phenomena monitors (e.g., meteorological, hydrological, seismic)
- 2. Radiological monitors including rate meters and sampling devices. Dosimetry shall be provided which meets the NRC criteria for the Environmental Radiological Monitoring Program
- 3. Laboratory facilities for radiological sample analysis
- 4. Verify that this equipment is available and functional.
- f. Provision of Offsite Monitoring Equipment (H.7)

The inspector should obtain and review the NRC-approved ITAAC concerning the establishment of offsite monitoring and analysis equipment such that the licensee has the capability to provide for offsite monitoring in the vicinity of the nuclear facility. (The licensee will identify specific capabilities)

Verify that the equipment specified in the licensee's Emergency Plan is available and functional.

g. Provision of Meteorological Instrumentation and Procedures (H.8)

The inspector should obtain and review the NRC-approved ITAAC concerning the provision of meteorological instrumentation and procedures which satisfy the criteria in NUREG-0654, Appendix 2, and provisions to obtain representative current meteorological information from other sources. (The licensee will identify specific capabilities)

Verify that the applicant's meteorological instrumentation is available and functional, and meets the following criteria:

- 1. The licensee shall have a primary and backup meteorological measurement system.
- 2. The meteorological measurement system shall be capable of making current, site-specific estimates of atmospheric effluent transport and diffusion during and immediately following an accidental airborne radioactivity release.
- 3. The meteorological measurement system shall have the capability of being remotely interrogated.

02.09 <u>Accident Assessment</u>. Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria for the methods, systems, and equipment for assessing radiological consequences of a radiological emergency, have been met. (I.2, I.3, I.4, I.5, I.6, I.7, I.8, I.9, I.10)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the methods, systems, and equipment necessary for assessing and monitoring radiological consequences of an emergency condition at the nuclear plant.

- a. Verify that the onsite radiation monitoring equipment, instrumentation, and resources specified in the COL are available and functional, and have been tested to provide the capability for radiological assessment throughout the course of an accident. (I.2)
- b. Verify that the established methods and techniques specified in the COL for determining the source term of releases of radioactive material within plant systems, and the magnitude of radioactive releases based on plant system parameters and effluent monitors, are available and functional, and have been

tested to provide the capability specified in the application. (1.3)

- c. Verify that the established relationship between effluent monitor readings and onsite/offsite exposures and contamination for various meteorological conditions specified in the COL provides the capability to continuously assess the impact of a release of radioactive material to the environment. (I.4)
- d. Verify that the licensee has the capability of acquiring and evaluating meteorological information, as specified in the COL, and that this information is available at the EOF, TSC, CR, an offsite NRC center, and to the affected State(s). (I.5)
- e. Verify that the licensee has the capability, as specified in the COL application, to determine the radiological release rate and projected doses if the instrumentation used for assessment is off-scale or inoperable. (I.6)
- f. Verify that the licensee has the capability and resources, as specified in the COL, for field radiological monitoring within the plume exposure EPZ. (I.7)
- g. Verify that the licensee possesses the methods, equipment, and expertise, as specified in the COL, to make rapid assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways. (I.8)
- h. Verify that the licensee has the capability, as specified in the COL, to detect and measure radioiodine concentrations in air in the plume exposure EPZ as low as $10^{-7} \mu \text{Ci/cc.}$ (I.9)
- i. Verify that the licensee has the capability, as specified in the COL, to estimate integrated dose from the projected and actual dose rates, and for comparing these estimates with the EPA protective action guidelines. (I.10)
- 02.10 <u>Protective Response.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria for the development of (1) a range of protective actions (PA) for the plume exposure pathway EPZ, and (2) guidelines for the choice of PAs during an emergency, including PAs for the ingestion exposure pathway EPZ, have been met. (J.1, J.3, J.5, J.10)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the range of protective actions for the plume exposure pathway EPZ and the guidelines for the choice of PAs.

a. Verify that the licensee has the capability to warn or advise onsite individuals and individuals who may be in areas controlled by the applicant of an emergency, including: (1) employees not having emergency assignments, (2) visitors, (3) contractor and construction personnel, and (4) other persons who may be in the public access areas on or passing through the site or within the owner-controlled area. (J.1)

- b. Verify that the licensee has the capability to radiologically monitor people evacuated from the site. (J.3)
- c. Verify that the licensee has the capability to account for all individuals onsite at the time of the emergency and ascertain the names of missing individuals within 30 minutes of the start of any emergency. (J.5)
- d. Verify that the licensee has the capability to implement protective measures to notify and protect all segments of the transient and resident populations. The applicant shall utilize the methods specified in NUREG-0654, Section II.J.10, or acceptable alternative methodology detailed in the COL application. (J.10)
- 02.11 <u>Radiological Exposure Control.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria have been met for controlling radiological exposures for emergency workers in an emergency. (K.2, K.3, K.5.b, K.6, K.7)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the licensee's capability for controlling radiological exposures for emergency workers in an emergency. The capability for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

- a. Verify that the licensee has established an onsite radiation protection program to be implemented during emergencies, including methods to implement exposure guidelines. Also, verify that the Emergency Plan identifies individuals by position or title, who can authorize emergency workers to receive doses in excess of 10 CFR 20 limits. (K.2)
- b. Verify that the licensee has the 24-hour-per-day capability to determine radiation doses received by emergency personnel in a nuclear accident. Verify that the licensee has a sufficient quantity of self-reading and permanent dosimeters, and has made provision for their distribution. Determine if the licensee has a system for maintaining dose records for emergency workers. (K.3)
- Verify that the licensee has the capability for radiological decontamination of emergency personnel and their equipment, and relocated onsite personnel. Also, verify that there is provision for radioactive waste disposal. (K.5.b, K.7)
- Verify that the licensee has the capability to provide onsite contamination control measures to include area access control and control of drinking water and food supplies. (K.6)
- 02.12 <u>Medical and Public Health Support.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria have been met for providing medical services for contaminated, injured personnel. (L.1, L.2, L.4)

Guidance. The inspector should obtain and review the applicable NRC-approved ITAAC

pertaining to the licensee's capability for providing medical services for contaminated, injured personnel.

- a. Verify that the licensee has made arrangements for local and backup hospital and medical services having the capability for evaluation of radiation exposure and uptake. Verify that the persons providing these services are adequately prepared to handle contaminated individuals. (L.1)
- b. Verify that the licensee has made provision for onsite first aid capability. (L.2)
- c. Verify that the licensee has made provision for transporting victims of radiological accidents, including contaminated injured individuals, from the site to offsite medical support facilities. (L.4)
- 02.13 Recovery and Re-entry Planning and Post-Accident Operations. There are no generic ITAAC specified for this planning standard. Review for acceptability will be on a case-by-case basis if included in the COL.
- 02.14 <u>Exercises and Drills.</u> Review the licensee's NRC-approved ITAAC concerning the performance of a full-participation exercise within two years of the scheduled date for initial loading of fuel and operation under 10 CFR 52.103. Determine the exercise date and plan to observe the exercise for evaluation. (N.1)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the licensee's conduct of a full-participation exercise within two years of the scheduled date for initial loading of fuel and operation, and shall include participation by each State and local government within the plume exposure pathway EPZ. If the first full-participation exercise is conducted more than one year before the scheduled date for initial loading of fuel and operation, the licensee shall conduct an exercise which tests the onsite Emergency Plan within one year before the scheduled date for initial loading of fuel and operation, which need not have State or local government participation. The NRC shall observe and evaluate both of these exercises, if applicable. See Inspection Procedure Attachment 71114.01, "Exercise Evaluation," for further guidance on evaluating exercises.

The exercise(s) is a test of major portions of the licensee's emergency response capabilities, and is evaluated by NRC to determine if there is reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency. As such, the inspectors shall evaluate the licensee's response, including whether onsite emergency response personnel were mobilized in sufficient numbers to fill emergency response positions, and that they successfully performed their assigned responsibilities. The inspector should review other NRC-approved ITAAC to determine if there are other ITAAC acceptance criteria which may be demonstrated during the exercise.

If there is already an operating reactor at the site, the licensee shall conduct either a full or partial participation exercise for each subsequent reactor constructed on the site. This exercise may be incorporated into the site exercise requirements described in Appendix E to 10 CFR 50, Sections IV.F.2.b and c, which requires each licensee to conduct an exercise of its onsite Emergency Plan every two years.

Verify that the licensee has scheduled a full-participation exercise within two years of initial fuel loading. Subsequently, the licensee shall schedule an exercise which tests the onsite emergency plans within one year of initial fuel loading if the full-participation exercise was conducted more than one year prior to initial fuel loading.

Review the onsite exercise objectives for the full-participation exercise and, if applicable, the exercise performed to test onsite emergency plans. Verify by exercise observation and personnel interviews that all onsite exercise objectives have been met. Any unmet exercise objectives should be documented in the corrective action program.

Verify by exercise observation and/or personnel interviews that ERO personnel were mobilized in sufficient numbers to fill all emergency response positions within the time limitations specified in the NRC-approved Emergency Plan. Also, verify that emergency responders successfully performed their assigned responsibilities.

Evaluate if EP weakness(es) identified by the inspectors were appropriately identified by the licensee's formal critique and entered into the corrective action program. All weaknesses must be identified and corrected. Any disagreement with the licensee's staff concerning EP weaknesses should be reported to NRC management for resolution.

Verify by conferring with the appropriate FEMA staff personnel that all offsite objectives for the full-participation exercise have been met and that there are no uncorrected offsite exercise deficiencies. If there are outstanding offsite deficiencies, verify that the licensee either limited operation to 5% of rated thermal power, or a license condition exists which requires that those deficiencies be corrected prior to operation above 5% of rated thermal power.

02.15 <u>Radiological Emergency Response Training.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria have been met for the provision of training to those personnel who may be called upon to provide assistance in the event of an emergency. (O.2, O.4)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the licensee's training program for instructing and qualifying personnel who will implement radiological emergency response plans.

Verify by documentation review and/or personnel interviews that the licensee has established a training program per its COL and is providing specialized initial training to response personnel which includes classroom training and practical drills, in which responders demonstrate their ability to perform their assigned emergency functions.

02.16 <u>Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria have been met for the distribution of emergency response plans and approved changes to those plans. (P.5)

Guidance: The inspector should obtain and review the applicable NRC-approved ITAAC

pertaining to the distribution of emergency response plans and approved changes to those plans, to all organizations and appropriate individuals with responsibility for implementation of the plans.

Verify by distribution list review and direct observation that the licensee has forwarded emergency response plans, and approved plan changes, to all organizations and appropriate individuals with responsibility for plan implementation.

02.17 <u>Implementing Procedures.</u> Review the licensee's close-out documentation of this ITAAC to verify that the acceptance criteria have been met for the submission of detailed emergency plan implementing procedures (EPIPs). (10 CFR 50, Appendix E, Section V)

<u>Guidance</u>. The inspector should obtain and review the applicable NRC-approved ITAAC pertaining to the submission of detailed EPIPs no less than 180 days prior to initial loading of fuel in the reactor vessel.

Verify by submittal letter review and direct observation of procedures that the licensee has submitted detailed EPIPs within the required time.

02.18 <u>Problem Identification and Resolution:</u> The inspector should confirm that problems identified during the inspection are entered into the licensee's corrective action program in accordance with program requirements. The inspector may review licensee actions to address similar or related problems that were previously identified, in order to check the extent of condition and confirm the effectiveness of the licensee's corrective measures.

<u>Guidance</u>. This inspection is to ensure that problems are entered into the applicable process to assure that corrective actions appropriate to the circumstances are developed and prioritized.

65001.18-03 RESOURCE ESTIMATE

The average resource expenditure for this inspection procedure is estimated to be 140 direct inspection hours per Unit.

65001.18-04 REFERENCES

NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November, 1980.

Regulatory Guide 1.101, Revision 4, "Emergency Planning and Preparedness for Nuclear Power Reactors," October, 1981.

NUREG-0396, EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," December, 1978.

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NUREG-0696, "Functional Criteria for Emergency Response Facilities," February, 1981.

NUREG-0737 and Supplement 1, "Clarification of TMI Action Plan Requirements," November, 1980.

NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analyses for Nuclear Power Plants," March, 2007.

Regulatory Guide 1.206, Revision 0, "Combined License Applications for Nuclear Power Plants (LWR Edition)," April, 2007.

END

Attachment 1 Revision History For 65001.18

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	10/30/08 CN 08-030	Initial issuance to support ITAAC related inspections under 10CFR part 52. Researched commitments for 4 years and found none.	None	N/A	ML080980330