**ATTACHMENT 82002.06**

EMERGENCY RESPONSE ORGANIZATION, DOSE ASSESSMENT DRILLS

82002.06-01 INSPECTION OBJECTIVES

To verify, prior to fuel load of the plant, the adequacy of the licensee’s Emergency Response Organization (ERO) Dose Assessment Program; to ensure its ability to transition to monitoring under the reactor oversight process.

82002.06-02 INSPECTION REQUIREMENTS

02.01 Review specific elements for the drill scenario. If appropriate, the drill scenarios developed by the licensee for this attachment may be combined with IP 82002.05 (Attachment 5).

02.02 Review the listing of licensee participants expected to fill emergency response organization (ERO) positions for this drill.

02.03 Determine through evaluation of ERO dose assessment in the drill whether ERO members can implement the Emergency Plan as appropriate for the scenario presented.

02.04 Determine the effectiveness of licensee corrective actions in addressing ERO dose assessment issues.

02.05 Provide inspection information based on the results of the ERO dose assessment drill evaluation to support the determination of whether the EP program is operationally ready.

82002.06-03 INSPECTION GUIDANCE

General Guidance

The inspector(s) shall become familiar with the scenario(s) upon arrival on site to understand how to evaluate ERO dose assessment. Review any changes made to the scenarios and tour the location(s) to be used for the drills to become familiar with equipment, displays, procedures and supplies to be used to perform the evaluated tasks.

Specific Guidance

03.01 For all sites, the licensee shall develop several dose assessment scenarios with the understanding that the different ones would be used with different participants. The licensee must keep the scenarios confidential. If confidentiality is not maintained, the inspection may be postponed until a later date when confidential scenarios are available for use.

Scenarios must be designed to address dose assessment and may be combined with the elements of IP 82002, Attachment 5. However, it should be recognized that increasing the number of functions and elements involved will increase the resources and time needed to conduct the drill.

Items that the licensee shall consider for incorporation into scenarios include:

a. Various levels of fission product barrier degradation.

b. Events escalating core damage (coolant only, to clad damage to core damage).

c. Releases resulting in exceeding radiological emergency action levels, including the General Emergency.

d. Events resulting in releases of radioactive material offsite.

e. Diverse meteorological conditions.

f. Unmonitored releases.

g. Releases from monitored release points.

h. Conflicting field monitoring team data.

i. Effluent sample data.

j. Post-accident sampling system (PASS), or the licensee’s equivalent capability, sample data.

03.02 No inspection guidance.

03.03 The licensee must take reasonable steps to make the drills closely simulate the actual emergency response task(s). This is accomplished through the use of the emergency response facilities and computer equipment. If the site is co-located with operating power reactor(s), drills should be conducted so as not to interfere with plant operations and activities. The inspector should not interrupt drills, but await the end of performance to ask questions or to determine the causes of problems. Interruptions and numerous probing questions may create an atmosphere in which participants can not respond in a manner that simulates an emergency. In addition, questioning mistakes may eliminate an opportunity for the responding team to self correct. The scope of each drill may include the unit of personnel expected to respond, e.g., the duty roster dose projection staff. Although individual response proficiency may be assessed through this procedure, the performance may not be representative of an actual emergency where a team response is expected.

To determine whether key dose assessment ERO members perform dose assessments, the licensee shall evaluate drill performance. In addition, the inspector will perform an independent evaluation of the drill participant’s performance, to confirm the licensee’s results. Performance standards for assessment include:

a. Responsible personnel must be able to correctly perform the calculation in a timely manner.

b. The results of dose calculations should be incorporated into classification efforts. Crossing an emergency action level (EAL) threshold should be recognized by licensee personnel.

c. The results of dose calculations should be incorporated into protective action recommendation (PAR) decision making and, if in accordance with the site Emergency Plan, the PAR should be developed.

d. There are persons on every shift performing dose assessment.

e. Dose values should include total effective dose equivalent and thyroid committed dose equivalent.

f. Doses should be calculated for the applicable distances where PAR considerations are made (e.g., site boundary, 2 miles radius, 5 mile radius and 10 mile radius.)

g. The assumed release duration should be reasonable for the release pathway and projected plant conditions. When technically appropriate, release duration should be modified based on plant conditions.

h. Dose assessment personnel should demonstrate ability to incorporate field team survey data in the refinement of dose assessments.

i. Dose assessment personnel should demonstrate ability to recognize data that is outside the credible range of parameters.

j. The objective is to develop scenarios that are realistic and sufficiently complex to evaluate performance ability.

k. Licensee performance in the following areas shall be observed and may provide valuable inspection information:

1. procedure usability

2. familiarity with procedures

3. familiarity with equipment, displays, indications and calculational tools

l. Licensee prompting of drill participants is not a finding under the assessment process because it represents no risk significance in itself. However, prompting could negate the validity of the drill and may create the need for another drill evaluation for the involved ERO members.

03.04 Based on early results from the ERO performance drills, the licensee may determine if additional drills need to be conducted or if the scope of the remaining drills needs to be modified.

03.05 No inspection guidance.

82002.06-04 RESOURCE ESTIMATE

It is estimated that conduct of this attachment will take 40 hours.

END

Exhibit 1

Revision History for IP 82002.06

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| --- | --- | --- | --- | --- | --- |
| Commitment Tracking Number | Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| N/A | 11/08/11  CN 11-030  ML111040314 | Initial issue to support inspections of construction programs described in IMC 2504, Construction Inspection Program: Inspection of Construction and Operational Programs.  Completed 4 year search of historical CNs and found no commitments related to this Inspection Procedure. | None | N/A | N/A |