

ATTACHMENT 71114.04

INSPECTABLE AREA: Emergency Action Level and Emergency Plan Changes

CORNERSTONE: Emergency Preparedness

INSPECTION BASES: **Emergency Action Levels (EAL) Changes: Timely and accurate emergency EAL classifications** lead to activation of the Emergency Response Organization (ERO) and notification of offsite and governmental authorities. This inspection activity is associated with risk significant planning standard 10 CFR 50.47(b)(4). However, if the emergency action level (EAL) scheme has been changed in a manner that results in a decrease in effectiveness (DIE) of the Emergency Plan, the EALs may not produce the appropriate emergency classification. This inspection activity verifies that the EAL scheme continues to meet the planning standard. **This inspection activity also ensures that the EAL scheme used by the license is in agreement with all relevant regulations and NRC endorsed guidance, up to and including, NEI 99-01 and applicable generic communications.**

In addition, this inspection activity provides monitoring of the effectiveness of the licensee's program for implementing changes to the Emergency Plan and verifies that the program is ensuring that changes meet the requirements of 10 CFR 50.54(q).

This inspection verifies aspects of the Emergency Preparedness Cornerstone for which there are no indicators to measure performance.

LEVEL OF EFFORT: Inspection activities in this area include review of all changes to the EALs **and EAL Bases Document.**

Inspection activities in this area include review of a sample (if any are submitted) of other Emergency Plan changes annually. **[Note that lower tier documents may also be in the scope of this review if these lower tier documents are controlled by the licensee via 10 CFR 50.54 (q)].**

The review of these changes consists of a regulatory review of the licensee's change documentation, i.e., their justification for their 10 CFR 50.54(q) decision. The documentation should be comprehensive enough to allow the Inspector to reasonably reach the same conclusion as the licensee.

71114.04-01 INSPECTION OBJECTIVES

- 01.01 Review all licensee EAL changes and EAL Bases Document changes to determine if any changes decreased the effectiveness of the EAL scheme and/or Emergency Plan.
- 01.02 Verify, on a sample basis, that other Emergency Plan changes did not decrease the effectiveness of the Emergency Plan. [Note that lower tier documents may also be in the scope of this review if these lower tier documents are controlled by the licensee via 10 CFR 50.54 (q)].

71114.04-02 INSPECTION REQUIREMENTS

02.01 EAL Change Review

- a. Review all EAL changes to determine if any of the changes have decreased the effectiveness of the Emergency Plan. In most cases, and all cases involving a risk significant planning standard, determining whether a change is a decrease in effectiveness will require a review of the licensee's 10 CFR 50.54(q) documentation for the specific EAL change.

02.02 Emergency Plan Change Review

- a. The inspector shall screen all Emergency Plan change submittals. If any Emergency Plan revision is extensive such that the inspector would expend an inordinate amount of time to complete a review (more than about 20 hours), then the inspector should consider submitting the revision to NRC Headquarters (Office of Nuclear Security and Incident Response - NSIR) for review.

NOTE

Licensee submittals, such as license amendments, which have already been identified as requiring NRC approval, should be reviewed by the Office of Nuclear Security and Incident Response (NSIR) rather than as an inspection activity under this inspectible area.

- b. Based on the screening, the inspector shall perform an in-depth review of a sample of Emergency Plan changes which could potentially result in a DIE. Emergency Plan changes implementing risk significant planning standards should be given priority for review. Over the course of a year, the in-depth review effort should include at least one Emergency Plan change, if any are submitted. In most cases, and all cases involving a risk significant planning standard, determining whether a change is a decrease in effectiveness will require a review of the licensee's 10 CFR 50.54(q) documentation for the specific Emergency Plan change.

- c. For any Emergency Plan change that resulted in a DIE of the Emergency plan or the changed Emergency Plan no longer meets the requirements of 10 CFR 50.54(b) or Appendix E to 10 CFR 50, the inspector shall conduct a further review. If the Emergency Plan change was implemented without prior NRC approval, the change shall be evaluated in accordance with the guidance in Section IV of the Enforcement Policy (traditional enforcement) and documented accordingly.
- d. Perform a review of the licensee's 10 CFR 50.54(q) change process, and Plan change documentation, to ensure proper implementation for maintaining Emergency Plan integrity (may be performed in the office or onsite).

71114.04-03 INSPECTION GUIDANCE

03.01 Generic Guidance

Paraphrased from 10 CFR 50.54(q): A licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards of 10 CFR 50.47(b) and the requirements in 10 CFR 50 Appendix E. Licensees may make changes to these emergency plans without Commission approval only if the changes do not decrease the effectiveness of the emergency plan and the emergency plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements in 10 CFR 50 Appendix E.

Regulatory Issue Summary (RIS) 2005-02, "Clarifying the Process for Making Emergency Plan Changes," February 14, 2005, provides additional guidance to assist in determining whether changes to the Emergency Plan decreased the effectiveness of the Emergency Plan.

Some licensees alter their Emergency Plan or EAL/EAL Basis during the time between receiving the NRC Safety Evaluation Review (SER) approval of the proposed changes and actual implementation at the licensee's site. Inspectors need to verify the licensee implements the Emergency Plan or EAL/EAL Basis that was NRC approved through the SER process and not mistake a follow-on version that was produced during the implementation process as NRC approved. As an example, a licensee receives Revision 15 of their Emergency Plan through SER and NRC approval. During the training for the implementation of Revision 15, the licensee receives feedback from the operators and decides to make revisions to the changes submitted to and approved by the NRC. The licensee makes the revisions using the 10 CFR 50.54(q) process and changes the plan to Revision 16. The licensee implements Revision 16. An inspector might easily assume that when the licensee implemented the new Emergency Plan following the SER, the licensee was implementing the version submitted for the SER verbatim, which was not the case in this example. The inspector needs to evaluate changes made to the Emergency Plan or EAL/EAL Basis between the time of NRC approval and the time of licensee implementation.

03.02 EAL, and EAL Bases Document, Change Review

Licensees will have implemented EALs based upon one of the following EAL schemes as endorsed by the NRC via Regulatory Guide 1.101, "Emergency Planning and Preparedness For Nuclear Power Reactors," Rev. 4:

- NUREG-0654/FEMA-REP-1, Appendix 1
- NUMARC/NESP-007, Rev. 2
- NEI 99-01, Rev. 4
- **NEI 99-01, Rev.5**

All licensees, except those that use the NUREG-0654 Scheme, must also have an EAL Bases Document. While the bases document is not necessary in all cases for timely classification, the bases document is considered an integral part of the EALs and must be controlled accordingly. The EAL Bases Document should be readily available for decision makers to clarify the intent of the EAL and provide the necessary context.

When reviewing Emergency Plan changes, the inspector should be sensitive to EALs that refer to other documents, such as the security contingency plan, industrial hygiene standards, ODCM, manufacturer's specifications. The referenced documents may be considered sensitive or may not be readily available to the decision makers; however, the information in the EAL Bases Document would contain the information necessary to provide the appropriate context. The inspector should review changes to the EAL and the EAL Bases Document in unison.

A review of security related EAL or EAL Bases Document changes should be performed to ensure consistency with the Security Contingency Plan. Likewise, a review of the security contingency plan should be performed to ensure consistency with the emergency plan. The inspector should also consult with NRC security specialist inspectors when conducting reviews of security-related EALs and EAL Bases Documents.

Guidance on acceptable EAL change methodology is contained in RIS 2003-18, "Use of NEI 99-01, 'Methodology for Development of Emergency Action Levels,' Revision 4, Dated January 2003," and the supplement to RIS 2003-18. NRC HQ (NSIR/DPR) assistance may be requested for review and approval of EAL changes which involve a significant portion of the EAL scheme or incorporate a unique methodology.

Perform the EAL Change Review in accordance with Figure 1, "EAL Change Review Flowchart." The following comments are intended to clarify expectations:

- Admin changes are considered to be changes a licensee made to correct typographical errors or other information other than EAL content.
- Contact NRC HQ (NSIR/DPR) if it appears that a DIE may have occurred, or when assistance in determining a potential DIE is needed. This is to ensure that DIE determinations are consistent throughout the NRC.
- Review the licensee's documentation used to support their 10 CFR 50.54(q) DIE determination. Evaluate this documentation to determine if the licensee's position is justifiable and appropriate.

- If the licensee made the EAL change(s) due to receipt of a Safety Evaluation Report (SER), or due to NRC direction given to licensees via advisories, orders, bulletins, etc., review the change and evaluate if the change was in fact in accordance with the stated NRC guidance or SER.
- The review should be documented in an inspection report in accordance with MC 0612. The report should state that a review was performed against 10 CFR 50.54(q) and that no apparent DIE was identified. See Section 03.03.c for example documentation wording. For EAL changes which result in a DIE, see Section 03.03.d.

Verify that the licensee performed the annual EAL review with State/County authorities in accordance with the requirements of 10 CFR 50, Appendix E, Section IV.B. (may be performed in the office or onsite during the baseline EP inspection) [C1]

03.03 Emergency Plan Change Review

- On occasion, Emergency Plans undergo extensive changes. For example, the combination of multiple plans from different sites due to a change of site ownership, would constitute an extensive change. These Emergency Plan changes may be implemented without prior approval if the changes are made in accordance with 10 CFR 50.54(q). In this case, the resource allocation may be at the upper end, or above if necessary, of the direct inspection effort estimate in order to ensure an adequate sample of Emergency Plan changes are inspected. However, it is intended that a sample be selected based on the guidance in Section 02.02 rather than a 100% review. If the review is estimated to take in excess of 20 hours, then the inspector should consider submitting the revision to NRC HQ (NSIR/DPR) for review.
- The inspector should consult with NRC security specialist inspectors when the emergency plan changes refer to the security contingency plan, including EALs.**
- Review of Emergency Plan changes is to be performed on a sample basis. Review changes that are not purely administrative (e.g., typographical corrections) and compare against the licensee's Emergency Plan as defined in RIS 2005-02. Refer to Figure 2 "Emergency Plan Review Flowchart" to assist in screening Emergency Plan changes.

For the sample chosen, perform an in-depth review against the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50, as articulated in NUREG-0654, Section II. Licensees may develop alternative methods for meeting the planning standards and these should be considered for adequacy, however these alternative methods should have been approved by the NRC prior to implementation. If it appears that an Emergency Plan element is not in compliance with the requirements of 10 CFR 50.47(b), the situation may be a failure to meet a planning standard. Refer to RIS 2005-02 **and contact NRC HQ** to aid in determining potential DIEs.

The review should be documented in an inspection report in accordance with MC0612. RIS 2005-02 makes clear that the inspector is performing a screening review of changes against the Emergency Plan, and that this does not constitute approval of the Plan changes. Sample documentation wording for EAL and Emergency Plan changes with no apparent DIE is as follows:

“Since the last NRC inspection of this program area, Emergency Plan Revision(s) XX to XX were implemented based on your determination, in accordance with 10 CFR 50.54(q), that the changes resulted in no decrease in effectiveness of the Plan, and that the revised Plan as changed continues to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. The inspectors conducted a {<1> sampling review of the Emergency Plan changes, and/or <2> review of EAL changes} to evaluate for potential decreases in effectiveness of the Plan. However, this review does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.”

- d. Emergency Plan changes determined to be a DIE are violations of 10 CFR 50.54(q) which are considered to potentially impact the NRC's ability to perform its regulatory function (i.e., is a failure to receive NRC approval for a change in licensee activity) and are dispositioned using the traditional enforcement process. Typically the severity level would be assigned after consideration of appropriate factors for the particular regulatory process violation in accordance with Section IV of the NRC Enforcement Policy. Generally, the process would involve the following:

Request and assess the licensee's 50.54(q) change evaluation for adequacy.

1. Discuss the assessment of the licensee's 50.54(q) evaluation and the apparent DIE with licensee EP staff and NRC Regional management.
 2. If the issue concerns the failure to comply with a risk significant 10 CFR 50.47(b) Planning Standard, then it may be considered for escalated enforcement. However, findings that potentially impede the regulatory process are not to be evaluated through the EP Significance Determination Process (IMC 0609, Appendix B, Section 2.2.e).
 3. Complete the evaluation of the finding and coordinate with the regional enforcement coordinator for assignment of severity level. The finding may be documented as a non-cited violation if it meets the requirements of the Enforcement Policy, Section VI.
- e. Inspectors should request that licensees provide a copy of the procedure(s) which governs the 10 CFR 50.54(q) change process and review, at a minimum, the following documentation (may be performed in the office or onsite during the baseline EP inspection):
1. Change documentation for all Emergency Plan changes reviewed.

2. Sample of change documentation for lower tier documents which contain Emergency Plan commitments removed from the Plan, but must be maintained under the 10 CFR 50.54(q) change process. These lower tier documents shall be administratively tracked by the licensee to ensure Plan integrity, and must be available for NRC inspection.

71114.04-04 RESOURCE ESTIMATE

04.01 The direct inspection effort for EAL reviews is estimated to be, on average, between 12 hours and 20 hours annually, regardless of the number of reactor units at a site. However, all sites do not submit EAL changes every year. This estimate is based on regional experience in reviewing EAL changes and suggests that each region will expend about 8 hours times the number of sites in the region reviewing EAL changes. This time will be spent on the few sites that submit EAL changes, but should average out to the estimate provided.

04.02 The direct inspection effort for Emergency Plan reviews is estimated to be, on average, between 12 hours and 20 hours annually, regardless of the number of reactor units at a site.

71114.04-05 PROCEDURE COMPLETION

This procedure is considered complete when all the inspection requirements listed in the procedure have been satisfied. For the purpose of reporting completion in the Reactor Program System (RPS), the sample size is defined as 1. A sample size of 1 will be reported in RPS when the procedure is completed in its entirety.

END

Figure 1: EAL Change Review Flowchart

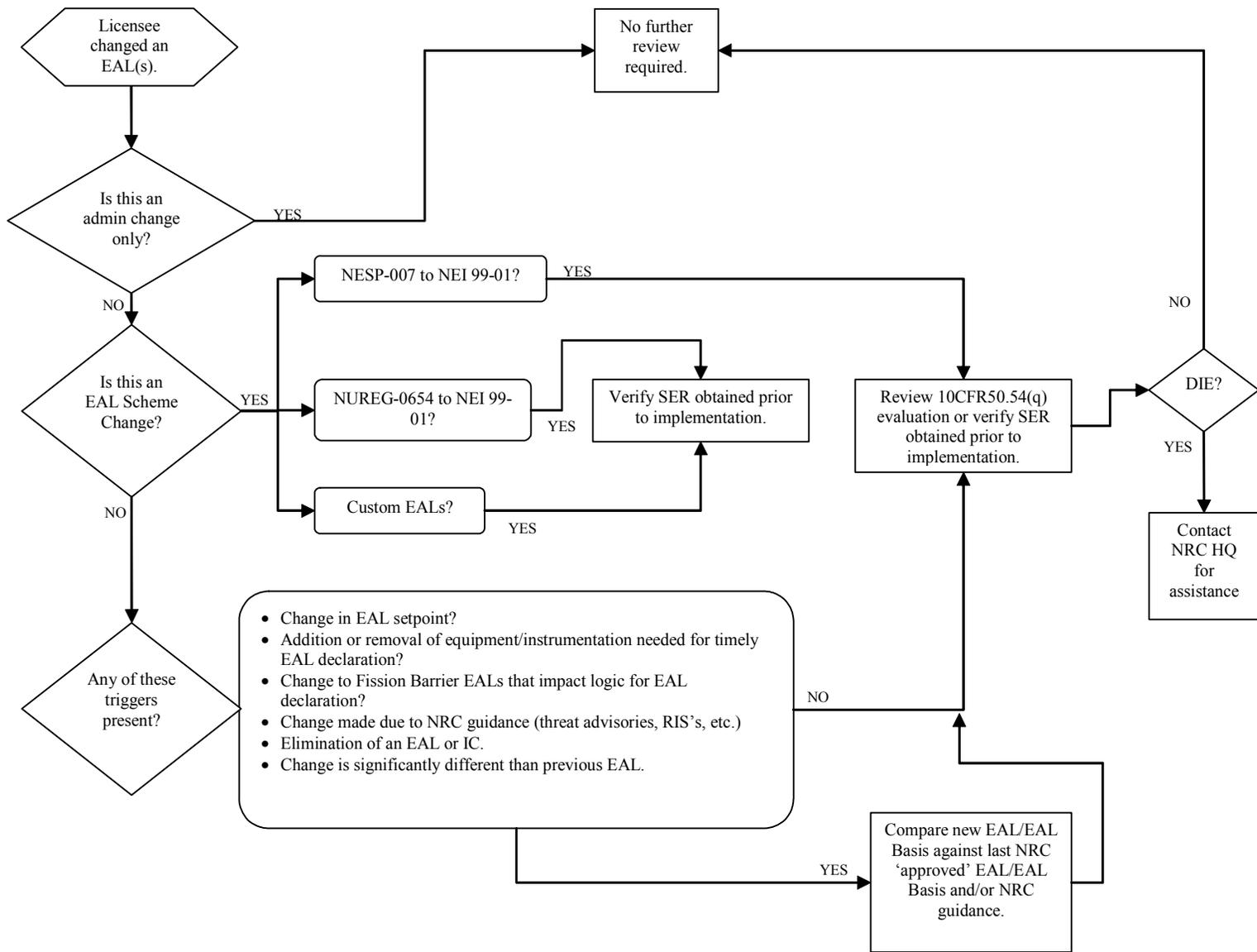
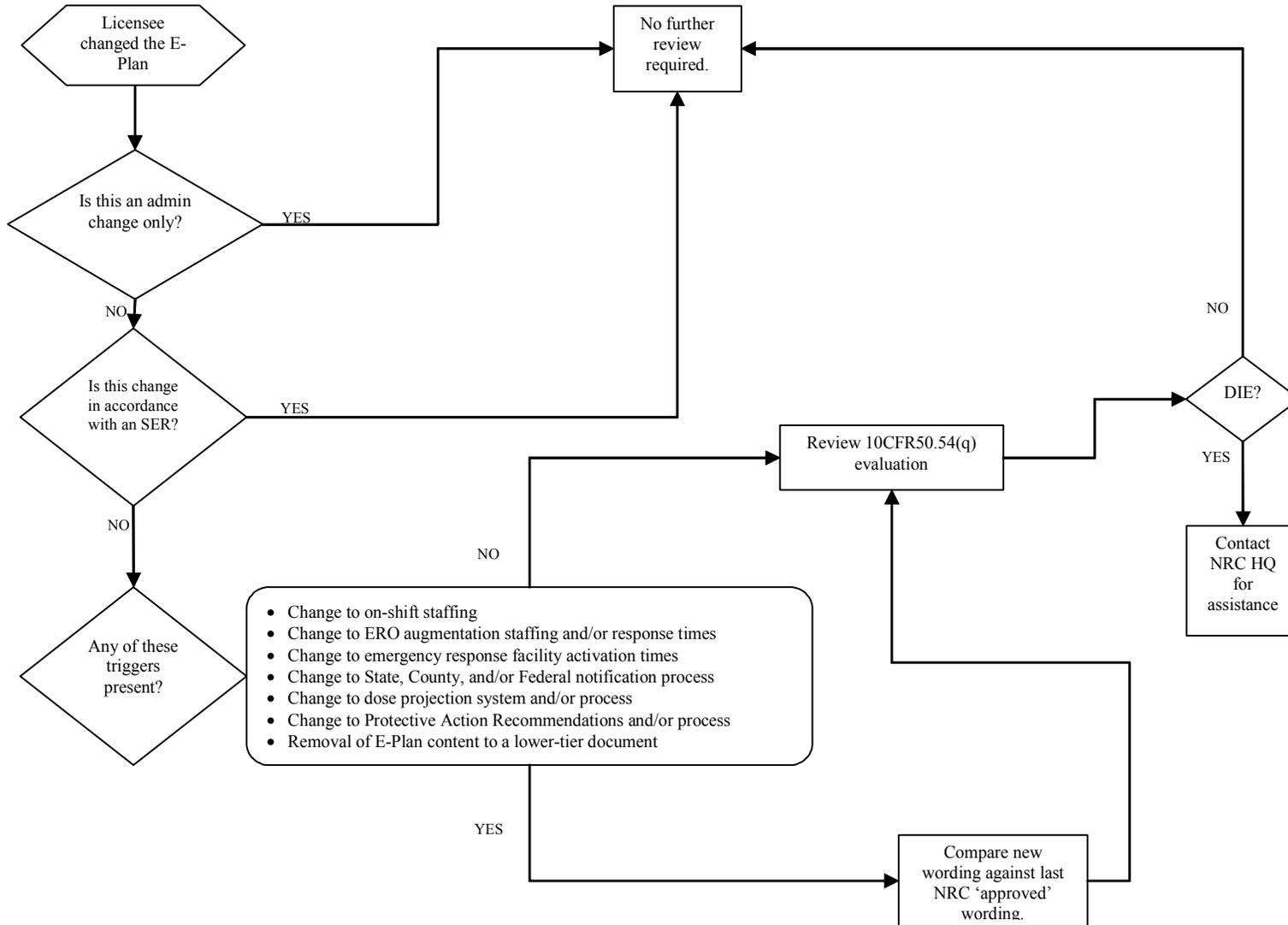


Figure 2: Emergency Plan Review Flowchart



Attachment 1

Revision History For IP 71114.04

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	10/25/06	Completed four-year historical CN search.	N/A	N/A	N/A
C1: Reference is Davis-Besse Lessons Learned Task Force Item No. 3.3.4.7. (this commitment was confirmed to be still in effect, as of 9/24/08)	09/09/01	Revised to add previously deleted inspection requirement considered necessary for the baseline inspection program.	None	N/A	N/A
	10/25/06 CN 06-029	Complete rewrite of document structure to align it with RIS 2005-02 concerning the correct process for making Emergency Plan changes with two clarifying flowcharts (Figures 1 & 2), addition to meet one commitment.	None	N/A	ML061790125

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	10/31/08 CN 08-031	Revision to incorporate a review of security-related Emergency Action Levels and Emergency Plan changes	No	N/A	ML081640372