Appendix L

B.5.b Significance Determination Process

1.0 OBJECTIVE

The objective of this SDP is to accommodate all potential more than minor inspection findings associated with the development and implementation of guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire as required by Section B.5.b of the Interim Compensatory Measures (ICM) Order, EA-02-026, dated February 25, 2002, the license conditions imposed during the implementation of B.5.b, and 10 CFR 50.54(hh)(2) for findings after March 31, 2010.

2.0 ENTRY CONDITIONS

Each issue entering the SDP process must first be screened to determine its documentation threshold (i.e. if more than minor in significance) using Inspection Manual Chapter (IMC) 0612, Appendix B, "Initial Screening." Issues screened as minor are not subjected to further SDP screening**.**

3.0 DEFINITIONS

B.5.b event – a beyond design basis loss of a large area of a reactor plant due to fires or explosions initiated by a terrorist threat as stated in Attachment 2 to order EA-02-026.

Unrecoverable – an unavailable mitigating strategy is unrecoverable if licensee actions could neither reasonably correct nor compensate for the conditions creating the unavailability in time during a B.5.b event for the mitigating strategy to achieve its objective. The time limit is the time allowed by NEI 06-12, Revision 2, for establishment of the strategy where applicable, or a reasonable time.

Unavailability – a mitigating strategy is unavailable if its hardware or components are not functional and ready for intended use, or personnel training and procedures are inadequate, as described in the licensee submittal and SER supporting the B.5.b license condition.

> Note: These strategies for each operating reactor licensee were reviewed by the staff who issued a safety evaluation report (SER) to document the commitments to implement these strategies. The site specific responses delineating each licensee's commitment and the SERs are available through the B.5.b Community of Practice. These responses are not available to the public due to the highly sensitive nature for plant security contained in these responses.

4.0 GUIDANCE

Record the performance deficiency and factually describe known observations associated with the deficiency in Table 1 - SDP Screening Worksheet for B.5.b. Evaluation of the listed attributes may be informative in determining the significance of the finding. Consider only attributes which relate directly to the significance of the finding and document the basis for the consideration. If Table 1 is used to document a performance deficiency and the factual description of the condition, the table will be properly labeled as **Official Use Only – Security Related Information**.

TABLE 1 – SDP Screening Worksheet for B.5.b	
Inspection Report #	
Performance Deficiency (concise statement clearly stating the deficient licensee performance)	
Factual Description of Condition (facts about the condition that resulted from the performance deficiency without hypothetical failures included)	
Systems/Trains Degraded by Condition or Programmatic Weakness (list the Hardware, Procedures or Training)	
Extent of Condition (describe what other strategies are directly affected by the deficiency)	
Exposure Time (Period of time the performance deficiency existed; and if opportunity to identify the finding during such period was missed (operating experience, licensee's programs such as surveillance testing)	
Recovery (The likelihood that the licensee's recovery actions would successfully mitigate the performance deficiency)	
Cornerstone (For findings that affect core cooling select Mitigating Systems. For findings that affect the containment or spent fuel pool select Barrier Integrity)	____ Mitigating Systems ____ Barrier Integrity

The examples provided for each level of significance in Table 2 – Significance Characterization, serve as guidance in determining the appropriate characterization for findings; however, they are neither exhaustive nor controlling. The characterization of each finding is dependent on the circumstances of the issue defined in Table 1. In addition, these examples do not create new requirements. Each is intended to illustrate the significance that the NRC places on a particular type of finding. Each potential finding must be considered on its own merits to ensure that its significance is characterized at the level best suited to the circumstances using qualitative engineering judgment and regulatory oversight experience in each case. This is necessary because the examples provided are intentionally limited to deter a mechanistic approach or unreasoned conclusion. With this in mind, the entire spectrum of characterizations should be considered with the particular finding placed in context in consideration of its particular circumstances.

TABLE 2 – Significance Characterization	
GREEN	Unrecoverable unavailability of any individual mitigating strategy.
WHITE	1. Unrecoverable unavailability of multiple mitigating strategies such that SFP cooling, injection to RPV, or injection to SGs cannot occur, or 2. Unrecoverable unavailability of on-site, self powered, portable pumping capability, or 3. Substantial inability to perform Command and Control Enhancements. Examples: - Unrecoverable unavailability of injection to the reactor vessel or steam generators (concurrent unavailability of low pressure pumping/depressurization strategies and unavailability of manual operation of RCIC/Isolation Condenser or turbine (or diesel) driven AFW) - Unrecoverable unavailability of SFP internal strategy, SFP external fill strategy, AND SFP external spray strategy - Substantial inability to perform Command and Control Enhancements
YELLOW	A failure to substantially establish mitigating strategies in one or more of the following overall mitigating strategies areas: - Fire fighting response strategies - Operations to mitigate reactor core fuel damage including command and control and actions to minimize release - Operations to mitigate Spent Fuel Pool fuel damage including command and control and actions to minimize release
RED	In an actual B.5.b event, a substantial failure of mitigating strategies to function as intended (i.e. achieve the strategies' objectives) in one or more of the following overall mitigating strategies areas: - Fire fighting response strategies - Operations to mitigate reactor core fuel damage including command and control and actions to minimize release - Operations to mitigate Spent Fuel Pool fuel damage including command and control and actions to minimize release

ATTACHMENT 1 – Revision History for IMC 0609 Appendix L

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	12/24/09 CN 09-032	Researched commitments for 4 years and found none. This Appendix to the IMC 0609, "Significance Determination Process" incorporates the lessons learned from the performance of Temporary Instruction (TI) 2515/171 on Verification of Site Specification Implementation of B.5.b Phase 2 & 3 Mitigation Strategies and provides the framework for determining the significance of B.5.b findings.	None	N/A	N/A