

Attachment VI to IPN-95-028

**Fission Product Barrier Evaluation, Revision 1,
New York Power Authority, Indian Point Station Unit 3,
January 10, 1995, OSSI 92-402A-2-IP3**

**New York Power Authority
Docket No. 50-286**

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Fission Product Barrier
Evaluation

Revision 1

New York Power Authority

Indian Point Station Unit 3

1/10/95

Operations Support Services, Inc.
233 Water Street 2nd Floor Plymouth, MA 02360

Evaluation of
IP-3 Fission Product Barrier
Emergency Action Levels

The Fission Product Barrier (FPB) degradation category for a PWR plant is illustrated in the following table which is designated "Table 4" in NESP-007, Revision 2.

The Initiating Condition (IC) for each of the four emergency classifications (Unusual Event, Alert, Site Area Emergency, and General Emergency) are designated FU1, FA1, FS1, and FG1, respectively.

Each IC is defined by one or more EALs or combination of EALs which are indicative of a loss or potential loss of one or more of the three fission product barriers. The three fission product barriers are:

- Fuel Clad (FC)
- Reactor Coolant System (RCS)
- Primary Containment (PC)

NESP-007, Revision 2, prescribes example EALs for each of the three fission product barriers. An EAL is defined by one or more plant conditions. For example, there are seven FC barrier example EALs, eight RCS barrier example EALs, and eleven PC example EALs. Each EAL may consist of one or more conditions representing a loss of the barrier and a potential loss of the barrier. Some EALs may have only loss conditions, others only potential loss conditions, some have both loss and potential loss conditions. Each EAL is given a sequential number in Table 4. In the following list, NESP-007 EALs with a defined condition (i. e., labeled as needing "site-specific" input in Table 4) are identified with a "yes", and those without a defined condition (i. e. labeled "not applicable" in Table 4) are identified with a "no":

<u>Barrier</u>	<u>EAL #</u>	<u>NUMARC</u>		<u>IP3</u>	
		<u>Loss</u>	<u>Pot. Loss</u>	<u>Loss</u>	<u>Pot. Loss</u>
FC	1a	Yes	Yes	Yes(FC1.1)	Yes(FC1.2)
	1b	No	Yes	No	Yes(FC1.3)
	2	Yes	No	Yes(FC2.1)	No
	3	Yes	Yes	Yes(FC3.1)	Yes(FC3.2)
	4	No	Yes	No	Yes(FC4.1)
	5	Yes	No	Yes(FC5.1)	No
	6	Yes	Yes	No	No
	7	Yes	Yes	Yes(FC7.1)	Yes(FC7.1)
RCS	1a	No	Yes	No	Yes(RCS1.1)
	1b	No	Yes	No	Yes(RCS1.2)
	2	Yes	Yes	Yes(RCS2.1)	Yes(RCS2.2)
	3a	Yes	Yes	Yes(RCS3.1)	No
	3b	Yes	No	No	Yes(RCS3.2)
	4	Yes	No	Yes(RCS4.1)	No
	5	Yes	Yes	No	No
	6	Yes	Yes	Yes(RCS6.1)	Yes(RCS6.1)
PC	1	No	Yes	No	Yes(PC1.1)
	2a	Yes	Yes	Yes(PC2.1)	Yes(PC2.3)
	2b	Yes	Yes	Yes(PC2.2)	Yes(PC2.4)
	2c	No	Yes	No	Yes(PC2.5)
	3	Yes	No	Yes(PC3.1)	No
	4	Yes	No	Yes(PC4.1)	No
	5	No	Yes	No	Yes(PC5.1)
	6a	No	Yes	No	Yes(PC6.1)
6b	No	Yes	No	Yes(PC6.2)	
	7	Yes	Yes	Yes(PC7.1)	No
	8	Yes	Yes	Yes(PC8.1)	Yes(PC8.1)

Based on the classification key given at the beginning of Table 4, the number of example EALs, and the number of loss and potential loss conditions, the set of conditions that can yield a given emergency classification can be computed.

The maximum, theoretically possible set of conditions that can yield an Unusual Event classification is given in column 1 of Table A. These consist of the PC loss and PC potential loss conditions.

The maximum, theoretically possible set of conditions that can yield an Alert classification is given in column 1 of Table B. These consist of FC loss and potential loss conditions, and RCS loss and potential loss conditions.

The maximum, theoretically possible set of conditions that can yield a Site Area Emergency classification is given in column 1 of Table C. These consist of any of the following conditions:

- Loss of FC and RCS, or
- Potential loss of FC and RCS, or
- Potential loss of FC or RCS
and
Loss of another barrier

The third set of conditions listed above can be represented by the following conditions to eliminate reference to "loss of another barrier":

- Potential loss of FC and loss of RCS, or
- Potential loss of FC and loss of PC, or
- Potential loss of RCS and loss of FC, or
- Potential loss of RCS and loss of PC

While not explicitly stated within NUMARC/NESP-007, the following combinations are also appropriate for inclusion as Site Area Emergency classifications:

- Loss of FC and loss of PC
- Loss of RCS and loss of PC

The maximum, theoretically possible set of conditions that can yield a General Emergency classification is given in column 1 of Table D. These consist of the following conditions:

- Loss of any two barriers, and
- Potential loss of a third

These conditions can be represented by the following conditions to correlate barrier loss and potential loss to the three specific barriers:

- Loss of FC and loss of RCS and potential loss of PC, or
- Loss of RCS and loss of PC and potential loss of FC, or
- Loss of PC and loss of FC and potential loss of RCS

Note that the loss of all three barriers justifies a General Emergency classification as well.

Since the EAL conditions are listed numerically in Table 4, Tables A through D utilize a similar numbering system which is modified by letter abbreviations to define each set of conditions. For example, condition "FC2-loss" corresponds to a loss of the Fuel Clad barrier due to primary coolant activity level greater than (site-specific) value. Similarly, "RCS1b-pot. loss" corresponds to a potential loss of the Reactor Coolant System barrier due to a Critical Safety Function Status Heat Sink-RED condition, and so on.

An evaluation of each condition or set of conditions listed in Tables A through D is made to determine if it properly defines the appropriate threshold for the classification. If a condition or set of conditions is appropriate, a comment reflecting this conclusion is recorded in the "Remarks" column. If a condition or set of conditions is determined to be inappropriate, it is lined out and the reason for this conclusion is similarly recorded in the "Remarks" column. Where additional space is required to complete comments, the comments are recorded by number in Appendix 1 of this document. The numbers of the comments are recorded in the "Remarks" column with the associated condition or set of conditions to which they apply.

A summary of the results of the fission product barrier evaluation is presented in Appendix 2.

RECOGNITION CATEGORY F
FISSION PRODUCT BARRIER DEGRADATION
INITIATING CONDITION MATRIX TABLE 4 PWR

UNUSUAL EVENT		ALERT		SITE AREA EMERGENCY		GENERAL EMERGENCY	
FU1	Any loss or any potential loss of containment Op. Modes: Power operation Hot Shutdown	FA1	Any loss or any potential loss of either fuel clad or RCS. Op. Modes: Power operation Hot Shutdown	FS1	Loss of both fuel clad and RCS OR Potential loss of both fuel clad and RCS OR Potential loss of either fuel clad or RCS, and loss of any additional barrier. Op. Modes: Power operation Hot Shutdown	FG1	Loss of any two barriers AND Potential loss of third barrier. Op. Modes: Power operation Hot Shutdown

NOTES:

1. Although the logic used for these initiating conditions appears overly complex, it is necessary to reflect the following considerations:
 - The fuel clad barrier and the RCS barrier are weighted more heavily than the containment barrier (see Sections 3.4 and 3.8 for more information on this point). Unusual Event ICs associated with RCS and Fuel Clad barriers are addressed under System Malfunction ICs.
 - At the Site Area Emergency level, there must be some ability to dynamically assess how far present conditions are for General Emergency. For example, if Fuel Clad barrier and RCS barrier "Loss" EALs existed, this would indicate to the Emergency Director that, in addition to offsite dose assessments, continual assessments of radioactive inventory and containment integrity must be focused on. If, on the other hand, both Fuel Clad barrier and RCS barrier "Potential Loss" EALs existed, the Emergency Director would have more assurance that there was no immediate need to escalate to a General Emergency.
 - The ability to escalate to higher emergency classes as an event gets worse must be maintained. For example, RCS leakage steadily increasing would represent an increasing risk to public health and safety.
2. Fission Product Barrier ICs must be capable of addressing event dynamics. Thus, the EAL Reference Tables 3 and 4 state that IMMEDIATE (i. e., within 1 to 2 hours) loss or potential loss should result in a classification as if the affected threshold(s) are already exceeded, particularly for the higher emergency classes.

RECOGNITION CATEGORY F
INITIATING CONDITION MATRIX TABLE 4 PWR
Fuel Clad Barrier Example EALs

<u>Loss</u>	<u>Potential Loss</u>
1. <u>Critical Safety Function Status</u> Core cooling - red	Core cooling - orange OR Heat sink - red
2. <u>Primary Coolant Activity</u> Coolant activity greater than (site-specific) value	Not applicable
3. <u>Core Exit Thermocouple Readings</u> Greater than (site-specific) °F	Greater than (site-specific) °F
4. <u>Reactor Vessel Water Level</u> Not applicable	Level less than (site-specific) value
5. <u>Containment Radiation Monitoring</u> Containment rad monitor reading greater than (site-specific) R/hr	Not applicable
6. <u>Other (site-specific) Indication</u> (site-specific) as applicable	(site-specific) as applicable
7. <u>Emergency Director Judgment</u> Any condition in the judgment of the Emergency Director that indicates loss or potential loss of the fuel clad barrier	
<ul style="list-style-type: none"> • Determine which combination of the three barriers are lost or have a potential loss and use the following key to classify the event. Also, an event for multiple events could occur which result in the conclusion that exceeding the loss or potential loss thresholds is imminent (i. e., within 1 to 2 hours). In this imminent loss situation use judgment and classify as if the thresholds are exceeded. 	

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RECOGNITION CATEGORY F
INITIATING CONDITION MATRIX TABLE 4 PWR
RCB Barrier Example EALs

<u>Loss</u>	<u>Potential Loss</u>
1. <u>Critical Safety Function Status</u> Not applicable	RCB integrity - red OR Heat sink - red
2. <u>RCB Leak Rate</u> Greater than available makeup capacity as indicated by a loss of RCB subcooling	Unsolable leak exceeding the capacity of one charging pump in the normal charging mode
3. <u>SG Tube Rupture</u> (site-specific) indication that a SG is ruptured AND has a non-isolable secondary line break OR (site-specific) indication that a SG is ruptured AND a prolonged release of contaminated secondary coolant is occurring from the affected SG to the environment	(site-specific) indication that a SG is ruptured AND the primary-to-secondary leak rate exceeds the capacity of one charging pump in the normal charging mode
4. <u>Containment Radiation Monitoring</u> Containment radiation monitor reading greater than (site-specific) R/hr	Not applicable
5. <u>Other (site-specific) indications</u> (site-specific) as applicable	(site-specific) as applicable
6. <u>Emergency Director Judgment</u> Any condition in the judgment of the Emergency Director that indicates loss or potential loss of the RCS barrier	

RECOGNITION CATEGORY F
INITIATING CONDITION MATRIX TABLE 4 PWR
Containment Barrier Example EALs

<u>Loss</u>	<u>Potential Loss</u>
1. <u>Critical Safety Function Status</u> Not applicable	Containment - red
2. <u>Containment Pressure</u> Rapid unexplained decrease following initial increase OR Containment pressure or sump level response not consistent with LOCA conditions	(site-specific) psig and increasing OR Explosive mixture exists OR Containment pressure greater than containment depressurization system setpoint with less than one full train of depressurization equipment operating
3. <u>Containment Isolation Valve Status after Containment Isolation</u> Valve(s) not closed AND downstream pathway to the environment exists	Not applicable
4. <u>SG Secondary Side Release with Primary-to-Secondary Leakage</u> Release of secondary side to atmosphere with primary to secondary leakage greater than tech spec allowable	Not applicable
5. <u>Significant Radioactive Inventory in Containment</u> Not applicable	Containment radiation monitor reading greater than (site-specific) R/hr

**RECOGNITION CATEGORY F
INITIATING CONDITION MATRIX TABLE 4 PWR
Containment Barrier Example EALs**

<u>Loss</u>	<u>Potential Loss</u>
<p>6. <u>Core Exit Thermocouple Readings</u></p> <p>Not applicable</p>	<p>Core exit thermocouples in excess of 1200°F AND restoration procedures not effective within 15 minutes OR Core exit thermocouples in excess of 700 °F with reactor vessel level below top of active fuel AND restoration procedures not effective within 15 minutes</p>
<p>7. <u>Other (site-specific) indications</u></p> <p>(site-specific) as applicable</p>	<p>(site-specific) as applicable</p>
<p>8. <u>Emergency Director Judgment</u></p> <p>Any condition in the judgment of the Emergency Director that indicates loss or potential loss of the containment barrier</p>	

Table A - IP-2/3 Fission Product Barrier**Unusual Events**

<u>NESP-007</u>	<u>Remarks</u>
Loss or pot. loss of PC	
PC1-loss	Condition not supported in PEG.
PC2a-loss	1
PC2b-loss	2
PC2c-loss	Condition not supported in PEG.
PC3-loss	3
PC4-loss	Secret
PC5-loss	Condition not supported in PEG.
PC6a-loss	Condition not supported in PEG.
PC6b-loss	Condition not supported in PEG.
PC7-loss	Airlock
PC8-loss	Subsumed in "Judgment" EAL.
PC1-pot. loss	4
PC2a-pot. loss	5
PC2b-pot. loss	6
PC2c-pot. loss	7
PC3-pot. loss	Condition not supported in PEG.
PC4-pot. loss	Condition not supported in PEG.
PC5-pot. loss	8
PC6a-pot. loss	9
PC6b-pot. loss	9
PC7-pot. loss	Condition not supported in PEG.
PC8-pot. loss	Subsumed in "Judgment" EAL.

Table B - IP-2/3 Fission Product Barrier

Alerts

<u>NESP-007</u>	<u>Remarks</u>
Loss or pot. loss of FC	
FC1a-loss	11
FC1b-loss	Condition not supported in PEG.
FC2-loss	Act5%
FC3-loss	11
FC4-loss	Condition not supported in PEG.
FC5-loss	18
FC6-loss	Condition not supported in PEG.
FC7-loss	Subsumed in "Judgment" EAL.
FC1a-pot. loss	12
FC1b-pot. loss	13
FC2-pot. loss	Condition not supported in PEG.
FC3-pot. loss	14
FC4-pot. loss	15
FC5-pot. loss	Condition not supported in PEG.
FC6-pot. loss	Condition not supported in PEG.
FC7-pot. loss	Subsumed in "Judgment" EAL.
Loss or pot. loss of RCS	
RCS1a-loss	Condition not supported in PEG.
RCS1b-loss	Condition not supported in PEG.
RCS2-loss	Nosubcool
RCS3a-loss	17
RCS3b-loss	Condition not supported in PEG.
RCS4-loss	Radts
RCS5-loss	Condition not supported in PEG.
RCS6-loss	Subsumed in "Judgment" EAL.
RCS1a-pot. loss	Intred
RCS1b-pot. loss	19
RCS2-pot. loss	Ichgplk
RCS3a-pot. loss	Condition not supported in PEG.
RCS3b-pot. loss	20
RCS4-pot. loss	Condition not supported in PEG.
RCS5-pot. loss	Condition not supported in PEG.
RCS6-pot. loss	Subsumed in "Judgment" EAL.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
Loss of FC and RCS	
FC1a-loss + RCS1a-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss	11
FC1a-loss + RCS3a-loss	11
FC1a-loss + RCS3b-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss	11
FC1a-loss + RCS5-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC1b-loss + RCS1a-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss	Condition not supported in PEG.
FC2-loss + RCSa1a-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss	Act5% + Nosubcool
FC2-loss + RCS3a-loss	17. SGTRrel
FC2-loss + RCS3b-loss	Condition not supported in PEG.
FC2-loss + RCS4-loss	Act5% + Radts
FC2-loss + RCS5-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCSa1a-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss	11
FC3-loss + RCS3a-loss	11
FC3-loss + RCS3b-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss	11
FC3-loss + RCS5-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC4-loss + RCS1a-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + RCS2-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss	21. Rad5%
FC5-loss + RCS3a-loss	17
FC5-loss + RCS3b-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss	21
FC5-loss + RCS5-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC6-loss + RCS1a-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss	Subsumed in "Judgment" EAL.

Pot. loss of FC and RCS

FC1a-pot. loss + RCS1a-pot. loss	11, 12
FC1a-pot. loss + RCS1b-pot. loss	11, 12
FC1a-pot. loss + RCS2-pot. loss	11, 12

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-pot. loss + RC3a-pot. loss	Condition not supported in PEG. 11, 12
FC1a-pot. loss + RCS3b-pot. loss	
FC1a-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC1a-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC1a-pot. loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
FC1b-pot. loss + RCS1a-pot. loss	13, HSred
FC1b-pot. loss + RCS1b-pot. loss	13
FC1b-pot. loss + RCS2-pot. loss	13
FC1b-pot. loss + RC3a-pot. loss	Condition not supported in PEG.
FC1b-pot. loss + RCS3b-pot. loss	13
FC1b-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC1b-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC1b-pot. loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
FC2-pot. loss + RCS1a-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS1b-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS2-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RC3a-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS3b-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC2-pot. loss + RCS6-pot. loss	Condition not supported in PEG.
FC3-pot. loss + RCS1a-pot. loss	14, 25
FC3-pot. loss + RCS1b-pot. loss	14
FC3-pot. loss + RCS2-pot. loss	14
FC3-pot. loss + RCS3a-pot. loss	Condition not supported in PEG.
FC3-pot. loss + RCS3b-pot. loss	14
FC3-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC3-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC3-pot. loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
FC4-pot. loss + RCS1a-pot. loss	15, 24
FC4-pot. loss + RCS1b-pot. loss	15
FC4-pot. loss + RCS2-pot. loss	15
FC4-pot. loss + RCS3a-pot. loss	Condition not supported in PEG.
FC4-pot. loss + RCS3b-pot. loss	15
FC4-pot. loss + RCS4-pot. loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC4-pot. loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
FC5-pot. loss + RCS1a-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS1b-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS2-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS3a-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS3b-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC5-pot. loss + RCS6-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS1a-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS1b-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS2-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS3a-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS3b-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS4-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS5-pot. loss	Condition not supported in PEG.
FC6-pot. loss + RCS6-pot. loss	Condition not supported in PEG.
FC7-pot. loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS3a-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS4-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
 Pot. loss of FC and loss of RCS	
FC1a-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC1a-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC1a-pot. loss + RCS2-loss	11, 12, COrange
FC1a-pot. loss + RCS3a-loss	11, 12
FC1a-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC1a-pot. loss + RCS4-loss	11, 12
FC1a-pot. loss + RCS5-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-pot. loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC1b-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC1b-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC1b-pot. loss + RCS2-loss	13
FC1b-pot. loss + RCS3a-loss	13
FC1b-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC1b-pot. loss + RCS4-loss	13
FC1b-pot. loss + RCS5-loss	Condition not supported in PEG.
FC1b-pot. loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC2-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC12-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC2-pot. loss + RCS2-loss	Condition not supported in PEG.
FC2-pot. loss + RCS3a-loss	Condition not supported in PEG.
FC2-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC2-pot. loss + RCS4-loss	Condition not supported in PEG.
FC2-pot. loss + RCS5-loss	Condition not supported in PEG.
FC2-pot. loss + RCS6-loss	Condition not supported in PEG.
FC3-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC3-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC3-pot. loss + RCS2-loss	14
FC3-pot. loss + RCS3a-loss	14
FC3-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC3-pot. loss + RCS4-loss	14
FC3-pot. loss + RCS5-loss	Condition not supported in PEG.
FC3-pot. loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC4-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC4-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC4-pot. loss + RCS2-loss	15
FC4-pot. loss + RCS3a-loss	15
FC4-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC4-pot. loss + RCS4-loss	15
FC4-pot. loss + RCS5-loss	Condition not supported in PEG.
FC4-pot. loss + RCS6-loss	Subsumed in "Judgment" EAL.
FC6-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC6-pot. loss + RCS1b-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC6-pot. loss + RCS2-loss	Condition not supported in PEG.
FC6-pot. loss + RCS3a-loss	Condition not supported in PEG.
FC6-pot. loss + RCS3b-loss	Condition not supported in PEG.
FC6-pot. loss + RCS4-loss	Condition not supported in PEG.
FC6-pot. loss + RCS5-loss	Condition not supported in PEG.
FC6-pot. loss + RCS6-loss	Condition not supported in PEG.
FC7-pot. loss + RCS1a-loss	Condition not supported in PEG.
FC7-pot. loss + RCS1b-loss	Condition not supported in PEG.
FC7-pot. loss + RCS2-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS3a-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS3b-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS4-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS5-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + RCS6-loss	Subsumed in "Judgment" EAL.
Pot. loss of FC and loss of PC	
FC1a-pot. loss + PC1-loss	Condition not supported in PEG.
FC1a-pot. loss + PC2a-loss	1, Cont press dec
FC1a-pot. loss + PC2b-loss	2, Inc loca resp
FC1a-pot. loss + PC2e-loss	Condition not supported in PEG.
FC1a-pot. loss + PC3-loss	3, Fallisol
FC1a-pot. loss + PC4-loss	12
FC1a-pot. loss + PC5-loss	Condition not supported in PEG.
FC1a-pot. loss + PC6a-loss	Condition not supported in PEG.
FC1a-pot. loss + PC6b-loss	Condition not supported in PEG.
FC1a-pot. loss + PC7-loss	12
FC1a-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1b-pot. loss + PC1-loss	Condition not supported in PEG.
FC1b-pot. loss + PC2a-loss	1,13
FC1b-pot. loss + PC2b-loss	2, 13
FC1b-pot. loss + PC2e-loss	Condition not supported in PEG.
FC1b-pot. loss + PC3-loss	3, 13
FC1b-pot. loss + PC4-loss	13
FC1b-pot. loss + PC5-loss	Condition not supported in PEG.
FC1b-pot. loss + PC6a-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-pot. loss + PC6b-loss	Condition not supported in PEG.
FC1b-pot. loss + PC7-loss	13
FC1b-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
FC2-pot. loss + PC1-loss	Condition not supported in PEG.
FC2-pot. loss + PC2a-loss	Condition not supported in PEG.
FC2-pot. loss + PC2b-loss	Condition not supported in PEG.
FC2-pot. loss + PC2c-loss	Condition not supported in PEG.
FC2-pot. loss + PC3-loss	Condition not supported in PEG.
FC2-pot. loss + PC4-loss	Condition not supported in PEG.
FC2-pot. loss + PC5-loss	Condition not supported in PEG.
FC2-pot. loss + PC6b-loss	Condition not supported in PEG.
FC2-pot. loss + PC6a-loss	Condition not supported in PEG.
FC2-pot. loss + PC6b-loss	Condition not supported in PEG.
FC2-pot. loss + PC7-loss	Condition not supported in PEG.
FC2-pot. loss + PC8-loss	Condition not supported in PEG.
FC3-pot. loss + PC1-loss	Condition not supported in PEG.
FC3-pot. loss + PC2a-loss	1, 14
FC3-pot. loss + PC2b-loss	2, 14
FC3-pot. loss + PC2c-loss	Condition not supported in PEG.
FC3-pot. loss + PC3-loss	3, 14
FC3-pot. loss + PC4-loss	14
FC3-pot. loss + PC5-loss	Condition not supported in PEG.
FC3-pot. loss + PC6a-loss	Condition not supported in PEG.
FC3-pot. loss + PC6b-loss	Condition not supported in PEG.
FC3-pot. loss + PC7-loss	14
FC3-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
FC4-pot. loss + PC1-loss	Condition not supported in PEG.
FC4-pot. loss + PC2a-loss	1, 15
FC4-pot. loss + PC2b-loss	2, 15
FC4-pot. loss + PC2c-loss	Condition not supported in PEG.
FC4-pot. loss + PC3-loss	3, 15
FC4-pot. loss + PC4-loss	15
FC4-pot. loss + PC5-loss	Condition not supported in PEG.
FC4-pot. loss + PC6a-loss	Condition not supported in PEG.
FC4-pot. loss + PC6b-loss	Condition not supported in PEG.

**Table C – IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-pot. loss + PC7-loss	15
FC4-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
FC5-pot. loss + PC1-loss	Condition not supported in PEG.
FC5-pot. loss + PC2a-loss	Condition not supported in PEG.
FC5-pot. loss + PC2b-loss	Condition not supported in PEG.
FC5-pot. loss + PC2c-loss	Condition not supported in PEG.
FC5-pot. loss + PC3-loss	Condition not supported in PEG.
FC5-pot. loss + PC4-loss	Condition not supported in PEG.
FC5-pot. loss + PC5-loss	Condition not supported in PEG.
FC5-pot. loss + PC6b-loss	Condition not supported in PEG.
FC5-pot. loss + PC6a-loss	Condition not supported in PEG.
FC5-pot. loss + PC6b-loss	Condition not supported in PEG.
FC5-pot. loss + PC7-loss	Condition not supported in PEG.
FC5-pot. loss + PC8-loss	Condition not supported in PEG.
FC6-pot. loss + PC1-loss	Condition not supported in PEG.
FC6-pot. loss + PC2a-loss	Condition not supported in PEG.
FC6-pot. loss + PC2b-loss	Condition not supported in PEG.
FC6-pot. loss + PC2c-loss	Condition not supported in PEG.
FC6-pot. loss + PC3-loss	Condition not supported in PEG.
FC6-pot. loss + PC4-loss	Condition not supported in PEG.
FC6-pot. loss + PC5-loss	Condition not supported in PEG.
FC6-pot. loss + PC6a-loss	Condition not supported in PEG.
FC6-pot. loss + PC6b-loss	Condition not supported in PEG.
FC6-pot. loss + PC7-loss	Condition not supported in PEG.
FC6-pot. loss + PC8-loss	Condition not supported in PEG.
FC7-pot. loss + PC1-loss	Condition not supported in PEG.
FC7-pot. loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + PC2c-loss	Condition not supported in PEG.
FC7-pot. loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-pot. loss + PC5-loss	Condition not supported in PEG.
FC7-pot. loss + PC6a-loss	Condition not supported in PEG.
FC7-pot. loss + PC6b-loss	Condition not supported in PEG.
FC7-pot. loss + PC7-loss	Subsumed in "Judgment" EAL.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-pot. loss + FC8-loss	Subsumed in "Judgment" EAL.
Pot. loss of RCS and loss of FC	
RCS1a-pot. loss + FC1a-loss	Condition not supported in PEG.
RCS1a-pot. loss + FC1b-loss	13
RCS1a-pot. loss + FC2-loss	Intred + Act5%
RCS1a-pot. loss + FC3-loss	11
RCS1a-pot. loss + FC4-loss	Condition not supported in PEG.
RCS1a-pot. loss + FC5-loss	21
RCS1a-pot. loss + FC6-loss	Condition not supported in PEG.
RCS1a-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
RCS1b-pot. loss + FC1a-loss	11, 13
RCS1b-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS1b-pot. loss + FC2-loss	19, 21
RCS1b-pot. loss + FC3-loss	11, 13
RCS1b-pot. loss + FC4-loss	Condition not supported in PEG.
RCS1b-pot. loss + FC5-loss	19, 21
RCS1b-pot. loss + FC6-loss	Condition not supported in PEG.
RCS1b-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
RCS2-pot. loss + FC1a-loss	11
RCS2-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS2-pot. loss + FC2-loss	Ichgplk + Act5%
RCS2-pot. loss + FC3-loss	11
RCS2-pot. loss + FC4-loss	Condition not supported in PEG.
RCS2-pot. loss + FC5-loss	21
RCS2-pot. loss + FC6-loss	Condition not supported in PEG.
RCS2-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
RCS3a-pot. loss + FC1a-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC2-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC3-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC4-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC5-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC6-loss	Condition not supported in PEG.
RCS3a-pot. loss + FC7-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3b-pot. loss + FC1a-loss	11
RCS3b-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS3b-pot. loss + FC2-loss	20
RCS3b-pot. loss + FC3-loss	11
RCS3b-pot. loss + FC4-loss	Condition not supported in PEG.
RCS3b-pot. loss + FC5-loss	21
RCS3b-pot. loss + FC6-loss	Condition not supported in PEG.
RCS3b-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
RCS4-pot. loss + FC1a-loss	Condition not supported in PEG.
RCS4-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS4-pot. loss + FC2-loss	Condition not supported in PEG.
RCS4-pot. loss + FC3-loss	Condition not supported in PEG.
RCS4-pot. loss + FC4-loss	Condition not supported in PEG.
RCS4-pot. loss + FC5-loss	Condition not supported in PEG.
RCS4-pot. loss + FC6-loss	Condition not supported in PEG.
RCS4-pot. loss + FC7-loss	Condition not supported in PEG.
RCS5-pot. loss + FC1a-loss	Condition not supported in PEG.
RCS5-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS5-pot. loss + FC2-loss	Condition not supported in PEG.
RCS5-pot. loss + FC3-loss	Condition not supported in PEG.
RCS5-pot. loss + FC4-loss	Condition not supported in PEG.
RCS5-pot. loss + FC5-loss	Condition not supported in PEG.
RCS5-pot. loss + FC6-loss	Condition not supported in PEG.
RCS5-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + FC1a-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + FC1b-loss	Condition not supported in PEG.
RCS6-pot. loss + FC2-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + FC3-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + FC4-loss	Condition not supported in PEG.
RCS6-pot. loss + FC5-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + FC6-loss	Condition not supported in PEG.
RCS6-pot. loss + FC7-loss	Subsumed in "Judgment" EAL.
Pot. loss of RCS and loss of PC	
RCS1a-pot. loss + PC1-loss	Condition not supported in PEG.

**Table C – IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1a-pot. loss + PC2a-loss	1
RCS1a-pot. loss + PC2b-loss	2
RCS1a-pot. loss + PC2e-loss	Condition not supported in PEG.
RCS1a-pot. loss + PC3-loss	3
RCS1a-pot. loss + PC4-loss	46
RCS1a-pot. loss + PC5-loss	Condition not supported in PEG.
RCS1a-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS1a-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS1a-pot. loss + PC7-loss	40
RCS1a-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS1b-pot. loss + PC1-loss	Condition not supported in PEG.
RCS1b-pot. loss + PC2a-loss	1, 19
RCS1b-pot. loss + PC2b-loss	2, 19
RCS1b-pot. loss + PC2e-loss	Condition not supported in PEG.
RCS1b-pot. loss + PC3-loss	3, 19
RCS1b-pot. loss + PC4-loss	19
RCS1b-pot. loss + PC5-loss	Condition not supported in PEG.
RCS1b-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS1b-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS1b-pot. loss + PC7-loss	19
RCS1b-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS2-pot. loss + PC1-loss	Condition not supported in PEG.
RCS2-pot. loss + PC2a-loss	1
RCS2-pot. loss + PC2b-loss	2
RCS2-pot. loss + PC2e-loss	Condition not supported in PEG.
RCS2-pot. loss + PC3-loss	3
RCS2-pot. loss + PC4-loss	1chgplk + Secret
RCS2-pot. loss + PC5-loss	Condition not supported in PEG.
RCS2-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS2-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS2-pot. loss + PC7-loss	40
RCS2-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS3a-pot. loss + PC1-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC2a-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC2b-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3a-pot. loss + PC2e-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC3-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC4-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC5-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC7-loss	Condition not supported in PEG.
RCS3a-pot. loss + PC8-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC1-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC2a-loss	1
RCS3b-pot. loss + PC2b-loss	2
RCS3b-pot. loss + PC2c-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC3-loss	3
RCS3b-pot. loss + PC4-loss	20
RCS3b-pot. loss + PC5-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS3b-pot. loss + PC7-loss	40
RCS3b-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS4-pot. loss + PC1-loss	Condition not supported in PEG.
RCS4-pot. loss + PC2a-loss	Condition not supported in PEG.
RCS4-pot. loss + PC2b-loss	Condition not supported in PEG.
RCS4-pot. loss + PC2c-loss	Condition not supported in PEG.
RCS4-pot. loss + PC3-loss	Condition not supported in PEG.
RCS4-pot. loss + PC4-loss	Condition not supported in PEG.
RCS4-pot. loss + PC5-loss	Condition not supported in PEG.
RCS4-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS4-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS4-pot. loss + PC7-loss	Condition not supported in PEG.
RCS4-pot. loss + PC8-loss	Condition not supported in PEG.
RCS5-pot. loss + PC1-loss	Condition not supported in PEG.
RCS5-pot. loss + PC2a-loss	Condition not supported in PEG.
RCS5-pot. loss + PC2b-loss	Condition not supported in PEG.
RCS5-pot. loss + PC2c-loss	Condition not supported in PEG.
RCS5-pot. loss + PC3-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS5-pot. loss + PC4-loss	Condition not supported in PEG.
RCS5-pot. loss + PC5-loss	Condition not supported in PEG.
RCS5-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS5-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS5-pot. loss + PC7-loss	Condition not supported in PEG.
RCS5-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC1-loss	Condition not supported in PEG.
RCS6-pot. loss + PC2a-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC2b-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC2c-loss	Condition not supported in PEG.
RCS6-pot. loss + PC3-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC4-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC5-loss	Condition not supported in PEG.
RCS6-pot. loss + PC6a-loss	Condition not supported in PEG.
RCS6-pot. loss + PC6b-loss	Condition not supported in PEG.
RCS6-pot. loss + PC7-loss	Subsumed in "Judgment" EAL.
RCS6-pot. loss + PC8-loss	Subsumed in "Judgment" EAL.
Loss of FC and PC	
FC1a-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + PC2a-loss	1, 11
FC1a-loss + PC2b-loss	2, 11
FC1a-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + PC3-loss	3, 11
FC1a-loss + PC4-loss	11
FC1a-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + PC7-loss	11
FC1a-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1b-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + PC2c-loss	Condition not supported in PEG.
FC1b-loss + PC3-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + PC2a-loss	1
FC2-loss + PC2b-loss	2
FC2-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + PC3-loss	3
FC2-loss + PC4-loss	Act5% + Secret
FC2-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + PC7-loss	40
FC2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + PC2a-loss	1, 11
FC3-loss + PC2b-loss	2, 11
FC3-loss + PC2e-loss	Condition not supported in PEG.
FC3-loss + PC3-loss	3, 11
FC3-loss + PC4-loss	11
FC3-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + PC7-loss	11
FC3-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC4-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + PC2e-loss	Condition not supported in PEG.
FC4-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + PC5-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + PC8-loss	Condition not supported in PEG.
FC5-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + PC2a-loss	1, 21
FC5-loss + PC2b-loss	2, 21
FC5-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + PC3-loss	3, 21
FC5-loss + PC4-loss	21
FC5-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + PC7-loss	21
FC5-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC6-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + PC2e-loss	Condition not supported in PEG.
FC6-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + PC8-loss	Condition not supported in PEG.
FC7-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + PC2e-loss	Condition not supported in PEG.
FC7-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + PC6b-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + PC8-loss	Subsumed in "Judgment" EAL.
Loss of RCS and PC	
RCS1a-loss + PC1-loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss	Condition not supported in PEG.
RCS1a-loss + PC2e-loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss	Condition not supported in PEG.
RCS1b-loss + PC2e-loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss	Condition not supported in PEG.
RCS2-loss + PC1-loss	Condition not supported in PEG.
RCS2-loss + PC2a-loss	1
RCS2-loss + PC2b-loss	2
RCS2-loss + PC2e-loss	Condition not supported in PEG.
RCS2-loss + PC3-loss	3
RCS2-loss + PC4-loss	47
RCS2-loss + PC5-loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss	Condition not supported in PEG.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS2-loss + PC7-loss	40
RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC1-loss	Condition not supported in PEG.
RCS3a-loss + PC2a-loss	1, 17
RCS3a-loss + PC2b-loss	2, 17
RCS3a-loss + PC2c-loss	Condition not supported in PEG.
RCS3a-loss + PC3-loss	3, 17
RCS3a-loss + PC4-loss	17
RCS3a-loss + PC5-loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss	Condition not supported in PEG.
RCS3a-loss + PC7-loss	17
RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC1-loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss	Condition not supported in PEG.
RCS3b-loss + PC8-loss	Condition not supported in PEG.
RCS4-loss + PC1-loss	Condition not supported in PEG.
RCS4-loss + PC2a-loss	1
RCS4-loss + PC2b-loss	2
RCS4-loss + PC2c-loss	Condition not supported in PEG.
RCS4-loss + PC3-loss	3
RCS4-loss + PC4-loss	47
RCS4-loss + PC5-loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss	Condition not supported in PEG.
RCS4-loss + PC7-loss	40
RCS4-loss + PC8-loss	Subsumed in "Judgment" EAL.

**Table C - IP-2/3 Fission Product Barrier
Site Area Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS5-loss + PC1-loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss	Condition not supported in PEG.
RCS5-loss + PC3-loss	Condition not supported in PEG.
RCS5-loss + PC4-loss	Condition not supported in PEG.
RCS5-loss + PC5-loss	Condition not supported in PEG.
RCS5-loss + PC6a-loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss	Condition not supported in PEG.
RCS5-loss + PC7-loss	Condition not supported in PEG.
RCS5-loss + PC8-loss	Condition not supported in PEG.
RCS6-loss + PC1-loss	Condition not supported in PEG.
RCS6-loss + PC2a-loss	1
RCS6-loss + PC2b-loss	2
RCS6-loss + PC2c-loss	Condition not supported in PEG.
RCS6-loss + PC3-loss	3
RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC5-loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss	Condition not supported in PEG.
RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
Loss of FC + loss of RCS + pot. loss of PC	
FC1a-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC1-pot. loss	4, Contred
FC1a-loss + RCS2-loss + PC2a-pot. loss	5, 26
FC1a-loss + RCS2-loss + PC2b-pot. loss	6, H2
FC1a-loss + RCS2-loss + PC2c-pot. loss	27, CCred + Dep stpt pres
FC1a-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC6a-pot. loss	11, CCred
FC1a-loss + RCS2-loss + PC6b-pot. loss	11, 27, 28, CCred
FC1a-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS3a-loss + PC1-pot. loss	4
FC1a-loss + RCS3a-loss + PC2a-pot. loss	5, 26

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-loss + RCS3a-loss + PC2b-pot. loss	5, 26
FC1a-loss + RCS3a-loss + PC2c-pot. loss	27
FC1a-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC5-pot. loss	8
FC1a-loss + RCS3a-loss + PC6a-pot. loss	9
FC1a-loss + RCS3a-loss + PC6b-pot. loss	9
FC1a-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS4-loss + PC1-pot. loss	4
FC1a-loss + RCS4-loss + PC2a-pot. loss	5, 26
FC1a-loss + RCS4-loss + PC2b-pot. loss	6
FC1a-loss + RCS4-loss + PC2c-pot. loss	16, 29
FC1a-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC5-pot. loss	8
FC1a-loss + RCS4-loss + PC6a-pot. loss	9
FC1a-loss + RCS4-loss + PC6b-pot. loss	9
FC1a-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC2e-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC3-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC4-pot. loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC1b-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2e-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2e-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC8-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC1-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2c-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC3-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC4-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC5-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC6a-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC6b-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC7-pot. loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC8-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC2-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC1-pot. loss	4
FC2-loss + RCS2-loss + PC2a-pot. loss	5, 26
FC2-loss + RCS2-loss + PC2b-pot. loss	6
FC2-loss + RCS2-loss + PC2c-pot. loss	32, Act5% + Dep stpt pres
FC2-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC5-pot. loss	8
FC2-loss + RCS2-loss + PC6a-pot. loss	9
FC2-loss + RCS2-loss + PC6b-pot. loss	9
FC2-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS3a-loss + PC1-pot. loss	4
FC2-loss + RCS3a-loss + PC2a-pot. loss	5, 26

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC2-loss + RCS3a-loss + PC2b-pot. loss	6
FC2-loss + RCS3a-loss + PC2c-pot. loss	33, Act5% + SGTRel
FC2-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC5-pot. loss	8
FC2-loss + RCS3a-loss + PC6a-pot. loss	9
FC2-loss + RCS3a-loss + PC6b-pot. loss	9
FC2-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS4-loss + PC1-pot. loss	4
FC2-loss + RCS4-loss + PC2a-pot. loss	5, 26
FC2-loss + RCS4-loss + PC2b-pot. loss	6
FC2-loss + RCS4-loss + PC2c-pot. loss	35, Addressed in Act5%+Dep stpt pres, above.
FC2-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC5-pot. loss	8
FC2-loss + RCS4-loss + PC6a-pot. loss	9
FC2-loss + RCS4-loss + PC6b-pot. loss	10
FC2-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC2-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS5-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS5-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC1-pot. loss	4
FC3-loss + RCS2-loss + PC2a-pot. loss	5, 26
FC3-loss + RCS2-loss + PC2b-pot. loss	6
FC3-loss + RCS2-loss + PC2e-pot. loss	10
FC3-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC5-pot. loss	8
FC3-loss + RCS2-loss + PC6a-pot. loss	9
FC3-loss + RCS2-loss + PC6b-pot. loss	9
FC3-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS3a-loss + PC1-pot. loss	4
FC3-loss + RCS3a-loss + PC2a-pot. loss	5, 26
FC3-loss + RCS3a-loss + PC2b-pot. loss	6
FC3-loss + RCS3a-loss + PC2e-pot. loss	10
FC3-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC5-pot. loss	8
FC3-loss + RCS3a-loss + PC6a-pot. loss	9
FC3-loss + RCS3a-loss + PC6b-pot. loss	9
FC3-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS4-loss + PC1-pot. loss	4
FC3-loss + RCS4-loss + PC2a-pot. loss	5, 26
FC3-loss + RCS4-loss + PC2b-pot. loss	6
FC3-loss + RCS4-loss + PC2c-pot. loss	10
FC3-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC5-pot. loss	8
FC3-loss + RCS4-loss + PC6a-pot. loss	9
FC3-loss + RCS4-loss + PC6b-pot. loss	9
FC3-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS6-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC4-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2c-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC2a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + RCS3a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC2e-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2e-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2e-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2e-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC8-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC1-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2c-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC3-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC4-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC5-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC6a-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC6b-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC7-pot. loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC8-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC1-pot. loss	4
FC5-loss + RCS2-loss + PC2a-pot. loss	5, 26
FC5-loss + RCS2-loss + PC2b-pot. loss	6
FC5-loss + RCS2-loss + PC2c-pot. loss	32, Rad5% + Dep stpt pres
FC5-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC5-pot. loss	8
FC5-loss + RCS2-loss + PC6a-pot. loss	9
FC5-loss + RCS2-loss + PC6b-pot. loss	9
FC5-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS3a-loss + PC1-pot. loss	4
FC5-loss + RCS3a-loss + PC2a-pot. loss	5, 26
FC5-loss + RCS3a-loss + PC2b-pot. loss	6
FC5-loss + RCS3a-loss + PC2c-pot. loss	33, Rad5% + SCTRrel
FC5-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC5-pot. loss	8
FC5-loss + RCS3a-loss + PC6a-pot. loss	9
FC5-loss + RCS3a-loss + PC6b-pot. loss	9
FC5-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS4-loss + PC1-pot. loss	4
FC5-loss + RCS4-loss + PC2a-pot. loss	5, 26
FC5-loss + RCS4-loss + PC2b-pot. loss	6
FC5-loss + RCS4-loss + PC2c-pot. loss	34, Addressed in Rad5%+Dep stpt pres, above.
FC5-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC5-pot. loss	8
FC5-loss + RCS4-loss + PC6a-pot. loss	9
FC5-loss + RCS4-loss + PC6b-pot. loss	9
FC5-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS6-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC6-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC1-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC6-loss + RCS3a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC2b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC6-loss + RCS5-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC8-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC1-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2c-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC3-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC4-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC5-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC6a-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC6b-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC7-pot. loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC8-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC1-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2a-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2b-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2c-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC3-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC4-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC5-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC6a-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC6b-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC7-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC8-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC1-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2a-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2b-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2c-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC3-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS1b-loss + PC4-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC5-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC6a-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC6b-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC7-pot. loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC8-pot. loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.

Table D - IP-2/3 Fission Product Barrier

General Emergencies

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS3b-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC1-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC2a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC2b-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC2c-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC3-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC4-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC5-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC6a-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC6b-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS6-loss + PC7-pot. loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC8-pot. loss	Subsumed in "Judgment" EAL.
Loss of RCS + loss of PC + pot. loss of FC	
RCS1a-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1a-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC3-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS1a-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1a-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC7-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1a-loss + PC8-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1b-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC3-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1b-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC7-loss + FC7-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS1b-loss + PC8-loss + FC3-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC4-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS1b-loss + PC8-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2a-loss + FC1a-pot. loss	36, Cont press dec + CCorange
RCS2-loss + PC2a-loss + FC1b-pot. loss	38, Cont pres dec + HSred
RCS2-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2a-loss + FC3-pot. loss	38, Cont press dec + CET700
RCS2-loss + PC2a-loss + FC4-pot. loss	38, Cont press dec + RVILStaf
RCS2-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2a-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC2b-loss + FC1a-pot. loss	36, Inc loca resp + CCorange
RCS2-loss + PC2b-loss + FC1b-pot. loss	38, Inc loca resp + HSred
RCS2-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2b-loss + FC3-pot. loss	38, Inc loca resp + CET700
RCS2-loss + PC2b-loss + FC4-pot. loss	38, Inc loca resp + RVILStaf
RCS2-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2b-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC2e-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC3-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC4-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC5-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS2-loss + PC2e-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC2e-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC3-loss + FC1a-pot. loss	36, Failisol + CCorange
RCS2-loss + PC3-loss + FC1b-pot. loss	38, Failisol + HSred
RCS2-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC3-loss + FC3-pot. loss	38, Failisol + CET700
RCS2-loss + PC3-loss + FC4-pot. loss	38, Failisol + RVILStaf
RCS2-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC3-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC4-loss + FC1a-pot. loss	48
RCS2-loss + PC4-loss + FC1b-pot. loss	48
RCS2-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC4-loss + FC3-pot. loss	48
RCS2-loss + PC4-loss + FC4-pot. loss	48
RCS2-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS2-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS2-loss + PC7-loss + FC1a-pot. loss	40
RCS2-loss + PC7-loss + FC1b-pot. loss	40
RCS2-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC7-loss + FC3-pot. loss	40
RCS2-loss + PC7-loss + FC4-pot. loss	40
RCS2-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.
RCS2-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS2-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS2-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS2-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2a-loss + FC1a-pot. loss	37, SGTRrel + CCorange
RCS3a-loss + PC2a-loss + FC1b-pot. loss	37, SGTRrel + HSred
RCS3a-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2a-loss + FC3-pot. loss	37, SGTRrel + CET700

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3a-loss + PC2a-loss + FC4-pot. loss	37, SGTRrel + RVILStaf
RCS3a-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2a-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC2b-loss + FC1a-pot. loss	39
RCS3a-loss + PC2b-loss + FC1b-pot. loss	39
RCS3a-loss + PC2b-loss + FC3-pot. loss	39
RCS3a-loss + PC2b-loss + FC4-pot. loss	39
RCS3a-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2b-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC3-loss + FC1a-pot. loss	39
RCS3a-loss + PC3-loss + FC1b-pot. loss	39
RCS3a-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC3-loss + FC3-pot. loss	39
RCS3a-loss + PC3-loss + FC4-pot. loss	39
RCS3a-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC3-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC4-loss + FC1a-pot. loss	39
RCS3a-loss + PC4-loss + FC1b-pot. loss	39
RCS3a-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC4-loss + FC3-pot. loss	39
RCS3a-loss + PC4-loss + FC4-pot. loss	39
RCS3a-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3a-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC7-loss + FC1a-pot. loss	40
RCS3a-loss + PC7-loss + FC1b-pot. loss	40
RCS3a-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC7-loss + FC3-pot. loss	40
RCS3a-loss + PC7-loss + FC4-pot. loss	40
RCS3a-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3a-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS3a-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3a-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3b-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC3-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC4-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC4-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS3b-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC3-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC4-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC2-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC5-pot. loss	Subsumed in "Judgment" EAL.
RCS3b-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS3b-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2a-loss + FC1a-pot. loss	39
RCS4-loss + PC2a-loss + FC1b-pot. loss	39
RCS4-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2a-loss + FC3-pot. loss	39
RCS4-loss + PC2a-loss + FC4-pot. loss	39

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS4-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2a-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC2b-loss + FC1a-pot. loss	39
RCS4-loss + PC2b-loss + FC1b-pot. loss	39
RCS4-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2b-loss + FC3-pot. loss	39
RCS4-loss + PC2b-loss + FC4-pot. loss	39
RCS4-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2b-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS4-loss + PC3-loss + FC1a-pot. loss	39
RCS4-loss + PC3-loss + FC1b-pot. loss	39
RCS4-loss + PC3-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC3-loss + FC3-pot. loss	39
RCS4-loss + PC3-loss + FC4-pot. loss	39
RCS4-loss + PC3-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC3-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC4-loss + FC1a-pot. loss	39
RCS4-loss + PC4-loss + FC1b-pot. loss	39
RCS4-loss + PC4-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC4-loss + FC3-pot. loss	39
RCS4-loss + PC4-loss + FC4-pot. loss	39
RCS4-loss + PC4-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS4-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS4-loss + PC7-loss + FC1a-pot. loss	40
RCS4-loss + PC7-loss + FC1b-pot. loss	40
RCS4-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS4-loss + PC7-loss + FC3-pot. loss	40
RCS4-loss + PC7-loss + FC4-pot. loss	40
RCS4-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS4-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS4-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS4-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS4-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2a-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC2b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2b-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.

Table

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS5-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC3-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC4-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC2-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC5-pot. loss	Subsumed in "Judgment" EAL.
RCS5-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS5-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC1-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC3-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC4-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC1-loss + FC7-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2a-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2a-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2a-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS6-loss + PC2a-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2a-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2b-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2b-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2b-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2b-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2b-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC2c-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC3-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC4-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC2c-loss + FC7-pot. loss	Condition not supported in PEG.
RCS6-loss + PC3-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC2-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC5-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC3-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC3-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC2-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC5-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC4-loss + FC6-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS6-loss + PC4-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC5-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC3-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC4-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC5-loss + FC7-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC3-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC4-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6a-loss + FC7-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC1a-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC1b-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC3-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC4-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC6b-loss + FC7-pot. loss	Condition not supported in PEG.
RCS6-loss + PC7-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC7-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC7-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC7-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC7-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC7-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC7-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC7-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC8-loss + FC1a-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC8-loss + FC1b-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
RCS6-loss + PC8-loss + FC2-pot. loss	Condition not supported in PEG.
RCS6-loss + PC8-loss + FC3-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC8-loss + FC4-pot. loss	Subsumed in "Judgment" EAL.
RCS6-loss + PC8-loss + FC5-pot. loss	Condition not supported in PEG.
RCS6-loss + PC8-loss + FC6-pot. loss	Condition not supported in PEG.
RCS6-loss + PC8-loss + FC7-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
Loss of PC + loss of FC + pot. loss of RCS	
PC1-loss + FC1a-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC1a-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC2-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC3-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC1-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC5-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS5-pot. loss	Condition not supported in PEG.
PC1-loss + FC7-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1a-loss + RCS1a-pot. loss	16
PC2a-loss + FC1a-loss + RCS1b-pot. loss	16
PC2a-loss + FC1a-loss + RCS2-pot. loss	16
PC2a-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1a-loss + RCS3b-pot. loss	16

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2a-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2a-loss + FC2-loss + RCS1a-pot. loss	41. Cont press dec + Act5%
PC2a-loss + FC2-loss + RCS1b-pot. loss	41
PC2a-loss + FC2-loss + RCS2-pot. loss	41
PC2a-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC2-loss + RCS3b-pot. loss	41
PC2a-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC3-loss + RCS1a-pot. loss	41
PC2a-loss + FC3-loss + RCS1b-pot. loss	41
PC2a-loss + FC3-loss + RCS2-pot. loss	41
PC2a-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC3-loss + RCS3b-pot. loss	41
PC2a-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2a-loss + FC5-loss + RCS1a-pot. loss	41, Cont press dec + Rad5%
PC2a-loss + FC5-loss + RCS1b-pot. loss	41
PC2a-loss + FC5-loss + RCS2-pot. loss	41
PC2a-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC5-loss + RCS3b-pot. loss	41
PC2a-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2a-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2a-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC7-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2a-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2a-loss + FC7-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC2a-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC1a-loss + RCS1a-pot. loss	39
PC2b-loss + FC1a-loss + RCS1b-pot. loss	39
PC2b-loss + FC1a-loss + RCS2-pot. loss	39
PC2b-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1a-loss + RCS3b-pot. loss	39
PC2b-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2b-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2b-loss + FC2-loss + RCS1a-pot. loss	42. Inc loca resp + Act5%
PC2b-loss + FC2-loss + RCS1b-pot. loss	42
PC2b-loss + FC2-loss + RCS2-pot. loss	42
PC2b-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC2-loss + RCS3b-pot. loss	42
PC2b-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC3-loss + RCS1a-pot. loss	39
PC2b-loss + FC3-loss + RCS1b-pot. loss	39
PC2b-loss + FC3-loss + RCS2-pot. loss	39
PC2b-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC3-loss + RCS3b-pot. loss	39
PC2b-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2b-loss + FC5-loss + RCS1a-pot. loss	42. Inc loca resp + Rad5%
PC2b-loss + FC5-loss + RCS1b-pot. loss	42
PC2b-loss + FC5-loss + RCS2-pot. loss	42
PC2b-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC5-loss + RCS3b-pot. loss	42
PC2b-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2b-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2b-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2b-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC7-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2b-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2b-loss + FC7-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC2b-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC2c-loss + FC1a-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1a-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2c-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2c-loss + FC2-loss + RCS1a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2e-loss + FC2-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC2-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC3-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC5-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC2e-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS5-pot. loss	Condition not supported in PEG.
PC2e-loss + FC7-loss + RCS6-pot. loss	Condition not supported in PEG.
PC3-loss + FC1a-loss + RCS1a-pot. loss	39
PC3-loss + FC1a-loss + RCS1b-pot. loss	39
PC3-loss + FC1a-loss + RCS2-pot. loss	39
PC3-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC1a-loss + RCS3b-pot. loss	39
PC3-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC3-loss + FC2-loss + RCS1a-pot. loss	43, failisol + Act5%
PC3-loss + FC2-loss + RCS1b-pot. loss	43
PC3-loss + FC2-loss + RCS2-pot. loss	43
PC3-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC2-loss + RCS3b-pot. loss	43
PC3-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC3-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC3-loss + RCS1a-pot. loss	39
PC3-loss + FC3-loss + RCS1b-pot. loss	39
PC3-loss + FC3-loss + RCS2-pot. loss	39
PC3-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC3-loss + RCS3b-pot. loss	39
PC3-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC3-loss + FC5-loss + RCS1a-pot. loss	43, failisol + Rad5%
PC3-loss + FC5-loss + RCS1b-pot. loss	43
PC3-loss + FC5-loss + RCS2-pot. loss	43
PC3-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC5-loss + RCS3b-pot. loss	43
PC3-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC3-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC3-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC3-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC3-loss + FC7-loss + RCS3a-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC3-loss + FC7-loss + RCS4-pot. loss	Subsumed in "Judgment" EAL.
PC3-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC1a-loss + RCS1a-pot. loss	46
PC4-loss + FC1a-loss + RCS1b-pot. loss	48
PC4-loss + FC1a-loss + RCS2-pot. loss	48
PC4-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC1a-loss + RCS3b-pot. loss	20, 48
PC4-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC4-loss + FC2-loss + RCS1a-pot. loss	48
PC4-loss + FC2-loss + RCS1b-pot. loss	48
PC4-loss + FC2-loss + RCS2-pot. loss	48
PC4-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC2-loss + RCS3b-pot. loss	48
PC4-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC3-loss + RCS1a-pot. loss	46
PC4-loss + FC3-loss + RCS1b-pot. loss	48
PC4-loss + FC3-loss + RCS2-pot. loss	48
PC4-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC3-loss + RCS3b-pot. loss	20, 48

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC4-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC4-loss + FC5-loss + RCS1a-pot. loss	48
PC4-loss + FC5-loss + RCS1b-pot. loss	48
PC4-loss + FC5-loss + RCS2-pot. loss	48
PC4-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC5-loss + RCS3b-pot. loss	48
PC4-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC4-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC4-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC7-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC4-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC4-loss + FC7-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC4-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC5-loss + FC1a-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC1a-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC2-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC3-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC5-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC5-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS5-pot. loss	Condition not supported in PEG.
PC5-loss + FC7-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC6a-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1a-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC2-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC3-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS1a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC6a-loss + FC5-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC5-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6a-loss + FC7-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1a-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC6b-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC2-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC3-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC6b-loss + FC5-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS2-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS5-pot. loss	Condition not supported in PEG.
PC6b-loss + FC7-loss + RCS6-pot. loss	Condition not supported in PEG.
PC7-loss + FC1a-loss + RCS1a-pot. loss	40
PC7-loss + FC1a-loss + RCS1b-pot. loss	40
PC7-loss + FC1a-loss + RCS2-pot. loss	40
PC7-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC1a-loss + RCS3b-pot. loss	40
PC7-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC1a-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC7-loss + FC2-loss + RCS1a-pot. loss	40
PC7-loss + FC2-loss + RCS1b-pot. loss	40

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC7-loss + FC2-loss + RCS2-pot. loss	40
PC7-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC2-loss + RCS3b-pot. loss	40
PC7-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC2-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC3-loss + RCS1a-pot. loss	40
PC7-loss + FC3-loss + RCS1b-pot. loss	40
PC7-loss + FC3-loss + RCS2-pot. loss	40
PC7-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC3-loss + RCS3b-pot. loss	40
PC7-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC3-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC7-loss + FC5-loss + RCS1a-pot. loss	40
PC7-loss + FC5-loss + RCS1b-pot. loss	40
PC7-loss + FC5-loss + RCS2-pot. loss	40
PC7-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC5-loss + RCS3b-pot. loss	40
PC7-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC5-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC7-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC7-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC7-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC7-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC7-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC7-loss + FC7-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC7-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC1a-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC1a-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1a-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC1b-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS2-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS5-pot. loss	Condition not supported in PEG.
PC8-loss + FC1b-loss + RCS6-pot. loss	Condition not supported in PEG.
PC8-loss + FC2-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC2-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC2-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC2-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC2-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC2-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC2-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC2-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC8-loss + FC3-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC3-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC3-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC3-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC3-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC3-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC3-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC3-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC4-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS2-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS5-pot. loss	Condition not supported in PEG.
PC8-loss + FC4-loss + RCS6-pot. loss	Condition not supported in PEG.
PC8-loss + FC5-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC5-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC5-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC5-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC5-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC5-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC5-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC5-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC6-loss + RCS1a-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS1b-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS2-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS3b-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS5-pot. loss	Condition not supported in PEG.
PC8-loss + FC6-loss + RCS6-pot. loss	Condition not supported in PEG.
PC8-loss + FC7-loss + RCS1a-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC7-loss + RCS1b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC7-loss + RCS2-pot. loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
PC8-loss + FC7-loss + RCS3a-pot. loss	Condition not supported in PEG.
PC8-loss + FC7-loss + RCS3b-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC7-loss + RCS4-pot. loss	Condition not supported in PEG.
PC8-loss + FC7-loss + RCS5-pot. loss	Subsumed in "Judgment" EAL.
PC8-loss + FC7-loss + RCS6-pot. loss	Subsumed in "Judgment" EAL.
Loss of FC + loss of RCS + loss of PC	
FC1a-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.
FC1a-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC1a-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC2a-loss	16, 41
FC1a-loss + RCS2-loss + PC2b-loss	16, 42
FC1a-loss + RCS2-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC3-loss	16, 43

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-loss + RCS2-loss + PC4-loss	48
FC1a-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS2-loss + PC7-loss	40
FC1a-loss + RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC2a-loss	17, 41
FC1a-loss + RCS3a-loss + PC2b-loss	17, 42
FC1a-loss + RCS3a-loss + PC2c-loss	Condition not supported in PEG
FC1a-loss + RCS3a-loss + PC3-loss	17, 43
FC1a-loss + RCS3a-loss + PC4-loss	48
FC1a-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS3a-loss + PC7-loss	40
FC1a-loss + RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC1a-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC2a-loss	16, 41
FC1a-loss + RCS4-loss + PC2b-loss	16, 42
FC1a-loss + RCS4-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC3-loss	16, 43
FC1a-loss + RCS4-loss + PC4-loss	48
FC1a-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1a-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS4-loss + PC7-loss	40
FC1a-loss + RCS4-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC1a-loss + RCS5-loss + PC8-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC2e-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC1a-loss + RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC1a-loss + RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC1b-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC2e-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC2c-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC2c-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS2-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC2c-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS3a-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC2e-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC2c-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS4-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC2e-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS5-loss + PC8-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2a-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2b-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC1b-loss + RCS6-loss + PC3-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC4-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC7-loss	Condition not supported in PEG.
FC1b-loss + RCS6-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.
FC2-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC2-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC2a-loss	41
FC2-loss + RCS2-loss + PC2b-loss	42
FC2-loss + RCS2-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC3-loss	43
FC2-loss + RCS2-loss + PC4-loss	48

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC2-loss + RCS2-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS2-loss + PC7-loss	40
FC2-loss + RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC2a-loss	17, 41
FC2-loss + RCS3a-loss + PC2b-loss	17, 41
FC2-loss + RCS3a-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC3-loss	17, 41
FC2-loss + RCS3a-loss + PC4-loss	48
FC2-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS3a-loss + PC7-loss	40
FC2-loss + RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC2-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC2a-loss	16, 41
FC2-loss + RCS4-loss + PC2b-loss	16, 42
FC2-loss + RCS4-loss + PC2e-loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC3-loss	16, 43
FC2-loss + RCS4-loss + PC4-loss	48
FC2-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC2-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG. 40
FC2-loss + RCS4-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS4-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC2-loss + RCS5-loss + PC8-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC3-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC2-loss + RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC2-loss + RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC2e-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC3-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC2a-loss	41
FC3-loss + RCS2-loss + PC2b-loss	42
FC3-loss + RCS2-loss + PC2e-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC3-loss	43
FC3-loss + RCS2-loss + PC4-loss	48
FC3-loss + RCS2-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS2-loss + PC7-loss	40
FC3-loss + RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC2a-loss	17, 41
FC3-loss + RCS3a-loss + PC2b-loss	17, 42
FC3-loss + RCS3a-loss + PC2e-loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC3-loss	17, 43
FC3-loss + RCS3a-loss + PC4-loss	48
FC3-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS3a-loss + PC7-loss	40
FC3-loss + RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC2c-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC3-loss + RCS3b-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC2a-loss	41
FC3-loss + RCS4-loss + PC2b-loss	42
FC3-loss + RCS4-loss + PC2c-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC3-loss	43
FC3-loss + RCS4-loss + PC4-loss	48
FC3-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS4-loss + PC7-loss	40
FC3-loss + RCS4-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC3-loss + RCS5-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC2b-loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC3-loss + RCS6-loss + PC2e-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC3-loss + RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC3-loss + RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC4-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC2c-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC2c-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC3-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + RCS2-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS2-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC2e-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS3a-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC2e-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC2e-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC4-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS4-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS5-loss + PC8-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2a-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2b-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC3-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC4-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC7-loss	Condition not supported in PEG.
FC4-loss + RCS6-loss + PC8-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC5-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC2a-loss	41
FC5-loss + RCS2-loss + PC2b-loss	42
FC5-loss + RCS2-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC3-loss	43
FC5-loss + RCS2-loss + PC4-loss	48
FC5-loss + RCS2-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS2-loss + PC7-loss	40
FC5-loss + RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC2a-loss	41
FC5-loss + RCS3a-loss + PC2b-loss	42
FC5-loss + RCS3a-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC3-loss	43
FC5-loss + RCS3a-loss + PC4-loss	48
FC5-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS3a-loss + PC7-loss	40
FC5-loss + RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC5-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC2a-loss	41
FC5-loss + RCS4-loss + PC2b-loss	42
FC5-loss + RCS4-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC3-loss	43
FC5-loss + RCS4-loss + PC4-loss	48
FC5-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS4-loss + PC7-loss	40
FC5-loss + RCS4-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC2e-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC5-loss + RCS5-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC2b-loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC5-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC5-loss + RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC5-loss + RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC6-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC3-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC6-loss + RCS2-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS2-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS3a-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS3b-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC6-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS4-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS5-loss + PC8-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2a-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2b-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC3-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC4-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC7-loss	Condition not supported in PEG.
FC6-loss + RCS6-loss + PC8-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2a-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2b-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC3-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC4-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC6b-loss	Condition not supported in PEG.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS1a-loss + PC7-loss	Condition not supported in PEG.
FC7-loss + RCS1a-loss + PC8-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2a-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2b-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC3-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC4-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC7-loss	Condition not supported in PEG.
FC7-loss + RCS1b-loss + PC8-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS2-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS2-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS3a-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS3a-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS3a-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS3a-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS3a-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3a-loss + PC8-loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS3b-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS3b-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS3b-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS3b-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS3b-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS3b-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS3b-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS4-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS4-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS4-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS4-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS4-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS4-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS5-loss + PC2a-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS5-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS5-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS5-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS5-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS5-loss + PC8-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC1-loss	Condition not supported in PEG.
FC7-loss + RCS6-loss + PC2a-loss	Subsumed in "Judgment" EAL.

**Table D - IP-2/3 Fission Product Barrier
General Emergencies**

<u>NESP-007</u>	<u>Remarks</u>
FC7-loss + RCS6-loss + PC2b-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC2c-loss	Condition not supported in PEG.
FC7-loss + RCS6-loss + PC3-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC4-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC5-loss	Condition not supported in PEG.
FC7-loss + RCS6-loss + PC6a-loss	Condition not supported in PEG.
FC7-loss + RCS6-loss + PC6b-loss	Condition not supported in PEG.
FC7-loss + RCS6-loss + PC7-loss	Subsumed in "Judgment" EAL.
FC7-loss + RCS6-loss + PC8-loss	Subsumed in "Judgment" EAL.

Appendix 1 - Fission Product Barrier Remarks

1. The only source of significant containment pressure increase other than a faulted steam generator is an RCS boundary breach. By definition, loss of the RCS boundary and the loss of the primary containment boundary require a Site Area Emergency classification. Therefore, this EAL is unnecessary and can be deleted.
2. If an inconsistent loca response is observed, a loss of the RCS has occurred. By definition, loss of the RCS boundary and the loss of the primary containment boundary require a Site Area Emergency classification. Therefore, this EAL is unnecessary and can be deleted.
3. The initiation signal for containment isolations defined for this EAL have been specified as those resulting from of an RCS breach. By definition, loss of the RCS boundary and the loss of the primary containment boundary require a Site Area Emergency classification. Therefore, this EAL is unnecessary and can be deleted. To address failure to isolate conditions which are not a result of an RCS breach, this condition has been incorporated into PC7.1 - Other Conditions.
4. In order to reach containment-red on the CSFST, containment design pressure has been reached or exceeded. This is indicative of a loss of both RCS and fuel clad boundaries. The source of energy must be the result of severe degradation of core cooling or loss of heat sink. Since the EAL is a potential loss of containment by definition, this combination of conditions requires the declaration of a General Emergency. Therefore, this EAL is unnecessary and can be deleted.
5. Containment pressure > 47 psig (containment design pressure) requires entry into RED path - Containment and is indicative of a severe loca event with actual or imminent loss of fuel clad. Therefore, this EAL is adequately addressed in PC1.1 and can be deleted.
6. Generation of this level of hydrogen concentration in the containment indicates that a loss of fuel clad barrier and loss of RCS barrier has occurred with a potential loss of the primary containment barrier. By definition, this combination of conditions requires the declaration of a General Emergency. Therefore, this EAL is unnecessary and can be deleted.
7. The conditions listed in this EAL represent a loss of the RCS barrier with a potential loss of containment. By definition, the loss of the RCS barrier requires the declaration of an Alert. Therefore, this EAL is unnecessary and can be deleted.

Appendix 1 - Fission Product Barrier Remarks

8. These containment radiation levels can only be reached as a result of a severe core damage. This represents a loss of the fuel clad barrier and the loss of the RCS barrier with a potential loss of the primary containment. By definition, this combination of conditions requires the declaration of a General Emergency. Therefore, this EAL is unnecessary and can be deleted.
9. Core Exit Thermocouple readings ≥ 1200 °F or ≥ 700 °F with RVLIS < TAF with a failure of restoration procedures represent a potential loss of the primary containment, a loss of fuel clad barrier, and a loss of subcooling which is a fundamental indication of a loss of the RCS barrier. By definition, this combination of conditions requires the declaration of a General Emergency. Therefore, this EAL is unnecessary and can be deleted.
10. FC3.1 - Core exit thermocouples reading ≥ 1200 °F is an entry condition for Core Cooling RED path. Therefore, any combination of FC3.1 with PC 2.5 - containment isolation failure, is redundant to FC1.1 in combination with PC2.5 and can be deleted.
11. Core Cooling-Red on the CSFST is indicative of a Core Exit Thermocouple reading of ≥ 1200 °F, or reactor vessel water level below the top of active fuel with a Core Exit Thermocouple reading of ≥ 700 °F. EAL# FC3.1 and EAL# FC3.2 represent a loss and potential loss of the fuel clad based on Core Exit Thermocouple readings of 1200 °F and 700 °F, respectively. EAL# RCS2.1 represents a loss of subcooling, therefore, entry into Core Cooling-Red or Orange also represents a loss of the RCS barrier. Thus, entry into Core Cooling-Red or Orange by itself requires declaration of a Site Area Emergency. Therefore, this EAL is unnecessary and can be deleted for consideration of Site Area Emergencies.
12. Core Cooling-Orange on the CSFST represents a potential loss of the fuel clad barrier and a loss of RCS resulting in a loss of subcooling. By definition, this combination of conditions requires the declaration of a Site Area Emergency. Therefore, this EAL is unnecessary and can be deleted.
13. Heat Sink-Red on the CSFST represents an extreme challenge to the heat sink function and, by EAL# SS4.1, requires the declaration of a Site Area Emergency. Heat Sink-Red is also a potential loss of both fuel clad and RCS thus requiring declaration of a Site Area Emergency by itself. Therefore, this EAL is unnecessary and can be deleted.

Appendix 1 - Fission Product Barrier Remarks

14. A Core Exit Thermocouple reading ≥ 700 °F represents a potential loss of the fuel clad and a loss of RCS resulting in a loss of subcooling. Core Exit Thermocouple reading ≥ 700 °F also requires entry into Core Cooling - Orange path (see explanation in 12 above). By definition, this combination of conditions requires the declaration of a Site Area Emergency. Therefore, this EAL is unnecessary and can be deleted.
15. RVLIS less than or equal to the top of active fuel requires, by EAL# SS5.1, the declaration of a Site Area Emergency. RVLIS \leq TAF also requires entry into Core Cooling - Orange path (see explanation 12 above). Therefore, this EAL is unnecessary and can be deleted.
16. Core Cooling Red on CSFST or Core exit thermocouples ≥ 1200 °F represent both a loss of fuel clad and RCS. Therefore, any combination of FC1.1 or FC3.1 with PC2.1, PC2.2 or PC3.1 requires declaration of a General Emergency.
17. A SGTR with a resultant path to the environment represents breach of both the RCS and the primary containment barriers. This combination of conditions requires, by definition, a Site Area Emergency declaration. Therefore, this EAL is unnecessary and can be deleted for consideration of Site Area Emergencies. Any combination of RCS3.1 with one or more fuel clad loss or potential loss indicators results in a General Emergency.
18. The containment radiation monitor reading for EAL# RCS4.1 bounds the reading given in EAL# FC5.1. Therefore, EAL# FC5.1 is unnecessary and can be deleted.
19. Heat Sink-Red on the CSFST represents a potential loss of the fuel clad barrier and the RCS barrier. This combination of conditions requires, by definition, the declaration of a Site Area Emergency. Therefore, this EAL is unnecessary and can be deleted.
20. The RCS leakage for EAL# RCS2.2 bounds the leakage given in EAL# RCS3.2. Therefore, EAL# RCS3.2 is unnecessary and can be deleted.
21. EAL# FC5.1 is a containment radiation level corresponding to 5% fuel clad failure. It is also indicative of an RCS failure because EAL# RCS4.1 will always be a value less than EAL# FC5.1. Therefore, EAL# FC5.1 alone requires declaration of a Site Area Emergency.
22. Deleted

Appendix 1 - Fission Product Barrier Remarks

23. Deleted
24. EAL# FC4.1 is indicative of reactor vessel water level less than the top of active fuel. This condition always requires a CSFST entry to Core Cooling-Orange or Core Cooling-Red. Core Cooling-Orange is addressed in EAL# FC1.2 and Core Cooling-Red is addressed in EAL# FC1.1. Therefore, declaration of a Site Area Emergency due to EAL# FC4.1 is unnecessary and can be deleted.
25. EAL# FC3.2 is indicative of a Core Exit Thermocouple reading at or above 700 °F. This condition always requires a CSFST entry to Core Cooling-Orange or Core Cooling-Red. Core Cooling-Orange is addressed in EAL# FC1.2 and Core Cooling-Red is addressed in EAL# FC1.1. Therefore, declaration of a Site Area Emergency due to EAL# FC3.1 is unnecessary and can be deleted.
26. EAL# PC2.3 is an entry into Containment Cooling-Red CSFST which requires a declaration of a General Emergency under EAL# PC1.1. Therefore, all combinations of conditions involving EAL# PC2.3 are unnecessary and can be deleted.
27. EAL# RCS2.1 is indicative of a loss of subcooling. EAL# FC1.1 is based on entry to Core Cooling-Red CSFST which is indicative of a loss of subcooling. Therefore, EAL# RCS2.1 can be deleted from this combination of conditions.
28. EAL# PC6.2 is indicative of a Core Exit Thermocouple reading of 700 °F. EAL# FC1.1 is based on entry to Core Cooling-Red CSFST. Core Cooling-Red cannot be entered without exceeding a 700 °F Core Exit Thermocouple reading. Therefore, this combination of conditions is unnecessary and can be deleted.
29. This combination of conditions is adequately covered by EAL# FC1.1 in combination with EAL# PC2.5.
30. [Deleted]
31. [Deleted]
32. The purpose of EAL# RCS2.1 is to indicate the loss of the RCS barrier. In order to reach the condition of EAL# PC2.5, a breach of the RCS barrier is required. Thus, EAL# RCS2.1 is bounded by EAL# PC2.5. Therefore,

Appendix 1 - Fission Product Barrier Remarks

- EAL# RCS2.1 is unnecessary and can be deleted from this combination of conditions.
33. EAL# PC2.5 is indicative of a loss of the RCS barrier and a potential loss of the primary containment barrier. EAL# RCS3.1 is indicative of a loss of both RCS and primary containment barriers. A potential loss of primary containment barrier is irrelevant to this combination of conditions. Therefore, EAL# PC2.5 is unnecessary and can be deleted from this combination of conditions.
34. EAL# RCS4.1 corresponds to a containment radiation level which is always less than that in EAL# FC5.1. EAL# RCS4.1 only indicates a loss of the RCS barrier where as EAL# FC5.1 indicates a loss of both RCS and fuel clad barriers. Therefore, EAL# RCS4.1 is unnecessary in defining the General Emergency conditions. With this change, the resulting combination of conditions is identical to those given above with justification #32.
35. EAL# RCS4.1 represents containment radiation levels resulting from a loss of the RCS barrier. However, EAL# PC2.5 is indicative of a potential loss of the primary containment barrier and a loss of the RCS barrier. Therefore, EAL# RCS4.1 is bounded by EAL# PC2.5 and can be deleted from this combination of conditions.
36. EAL# FC1.2 is an entry to Core Cooling-Orange on the CSFST. EAL# RCS2.1 is an indication of a loss of subcooling and is also an entry to Core Cooling-Orange on the CSFST. Thus, EAL# FC1.2 bounds EAL# RCS2.1. Therefore, EAL# RCS2.1 is unnecessary and can be deleted from this combination of conditions.
37. RCS3.1 represents both a loss of RCS and loss of primary containment barrier. Therefore, PC2.1 can be deleted from any combination of RCS3.1 loss and fuel clad potential loss.
38. EAL# PC2.1, EAL# PC2.2 and EAL# PC3.1 represent a loss of the RCS and primary containment barriers. Therefore, EAL# RCS2.1 which represents a loss of RCS barrier is unnecessary and can be deleted from this combination of conditions.
39. By justification #38 above, any combination of EAL# PC2.1, EAL# PC2.2 or EAL# PC3.1 and any of the following: EAL# FC1.2, EAL# FC3.1, EAL# FC4.1 or FC5.1, results in the declaration of a General Emergency.

Appendix 1 - Fission Product Barrier Remarks

Therefore, this combination of conditions is redundant and can be deleted.

40. EAL# PC7.1 is used only as loss of primary containment barrier for the Unusual Event declaration. For the Site Area Emergency and the General Emergency declaration, EAL# PC7.1 is subsumed into the "Judgment" EAL. It is the only NUMARC primary containment barrier loss which is not associated with a loss of the RCS barrier. Loss of containment airlock doors is event dependent. The airlock doors may be open for reasons other than an emergency situation (e. g., maintenance activities, etc.). Shift personnel will rapidly respond to failure of other barriers by reclosing the doors. If the doors are not reclosed, any loss of the RCS barrier that occurs with the doors open will appear as an inconsistent loca response. Therefore, this event need not be used to indicate a loss of the primary containment barrier unless the Emergency Director determines such a declaration is needed.
41. EAL# PC2.1 is indicative of a loss of the primary containment barrier and a loss of the RCS barrier. Any combination of EAL# PC2.1 with a loss of the fuel clad barrier alone requires declaration of a General Emergency. Therefore, the third EAL condition is unnecessary and can be deleted. Any other combinations of conditions using EAL# PC2.1 and fuel clad barrier losses are redundant and can be deleted.
42. EAL# PC2.2 is indicative of a loss of the primary containment barrier and a loss of the RCS barrier. Any combination of EAL# PC2.2 with a loss of the fuel clad barrier alone requires declaration of a General Emergency. Therefore, the third EAL condition is unnecessary and can be deleted. Any other combinations of conditions using EAL# PC2.2 and fuel clad barrier losses are redundant and can be deleted.
43. EAL# PC3.1 is indicative of a loss of the primary containment barrier and a loss of the RCS barrier. Any combination of EAL# PC3.1 with a loss of the fuel clad barrier alone requires declaration of a General Emergency. Therefore, the third EAL condition is unnecessary and can be deleted. Any other combinations of conditions using EAL# PC3.1 and fuel clad barrier losses are redundant and can be deleted.
44. [Deleted]
45. [Deleted]

Appendix 1 - Fission Product Barrier Remarks

46. While RCS 1.1 is a potential loss of RCS, the concern for RCS loss is reactor vessel integrity. PC4.1 is a loss of containment in that a secondary side release with primary to secondary leakage > Tech. Spec. provides a pathway from the RCS to outside containment. While it is feasible for both of these conditions to exist simultaneously, they are not related such that the failure associated with red path integrity (reactor vessel structural failure) interfaces with the containment loss mechanism (steam generator tube leakage). Therefore this combination is not appropriate.
47. While RCS 2.1 and RCS4.1 are losses of RCS, the concern for RCS loss is reactor vessel integrity. PC4.1 is a loss of containment in that a secondary side release with primary to secondary leakage > Tech. Spec. provides a pathway from the RCS to outside containment. While it is feasible for both of these conditions to exist simultaneously, they are not related such that the failure associated with a loss of coolant (reactor vessel structural failure) interfaces with the containment loss mechanism (steam generator tube leakage). If primary to secondary leakage was of the magnitude to have caused the loss of inventory, then declaration would be made per RCS 3.1. Therefore this combination is not appropriate.
48. While RCS 1.1, RCS1.2, RCS 2.1, RCS 2.2 and RCS4.1 are losses or potential losses of RCS, the concern for RCS loss is reactor vessel integrity. PC4.1 is a loss of containment in that a secondary side release with primary to secondary leakage > Tech. Spec. provides a pathway from the RCS to outside containment. While it is feasible for both of these conditions to exist simultaneously in conjunction with one or more of the fuel clad loss indicators (FC1.2, FC1.3, FC2.1, FC3.2, FC4.1, FC5.1), they are not related such that the failure associated with a loss of coolant (reactor vessel structural failure) interfaces with the containment loss mechanism (steam generator tube leakage). If SG leakage was of the magnitude to have caused the loss of inventory, then declaration would be made per RCS 3.1 + one of the fuel clad loss indicators. Therefore this combination is not appropriate.

Appendix 2 – Summary of Fission Product Barrier Evaluation

The following summarizes the EALs which resulted from the analysis performed of the fission product barrier methodology of NUMARC-007 for Indian Point 2:

Unusual Event

- PC4.1-loss
- PC7.1-loss
- Emergency Director Judgement

Alert:

- FC2.1-loss
- RCS1.1-pot loss
- RCS2.1-loss
- RCS4.1-loss
- RCS2.2-pot loss
- Emergency Director Judgement

Site Area Emergency:

- FC1.1-loss
- FC1.2-pot loss
- FC1.3-pot loss/RCS1.2-pot loss
- RCS3.1-loss
- FC5.1-loss

Appendix 2 - Summary of Fission Product Barrier Evaluation**Site Area Emergency (cont):**

- FC2.1 loss + ANY:
 - RCS1.1-pot. loss
 - RCS2.2-pot. loss
 - RCS2.1-loss
 - RCS4.1-loss
- PC2.1-loss
- PC2.2-loss
- PC3.1-loss
- RCS2.2-pot loss + PC4.1-loss
- Emergency Director Judgement

General Emergency:

- PC1.1-pot. loss
- PC2.4-pot. loss
- PC5.1-pot. loss
- PC2.5-pot loss + ANY:
 - FC1.1-loss
 - FC2.1-loss
 - FC5.1-loss
- RCS3.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

Appendix 2 - Summary of Fission Product Barrier Evaluation**General Emergency (cont):**

- PC2.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC2.2-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC3.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC6.1-pot. loss

- PC6.2-pot loss

- Emergency Director Judgement

Appendix 2 - Summary of Fission Product Barrier Evaluation

The following summarizes the EALs which resulted from the analysis performed of the fission product barrier methodology of NUMARC-007 for Indian Point 2:

Unusual Event

- PC4.1-loss
- PC7.1-loss
- Emergency Director Judgement

Alert:

- FC2.1-loss
- RCS1.1-pot loss
- RCS2.1-loss
- RCS4.1-loss
- RCS2.2-pot loss
- Emergency Director Judgement

Site Area Emergency:

- FC1.1-loss
- FC1.2-pot loss
- FC1.3-pot loss/RCS1.2-pot loss
- RCS3.1-loss
- FC5.1-loss

Appendix 2 - Summary of Fission Product Barrier Evaluation**Site Area Emergency (cont):**

- FC2.1 loss + ANY:
 - RCS1.1-pot. loss
 - RCS2.2-pot. loss
 - RCS2.1-loss
 - RCS4.1-loss
- PC2.1-loss
- PC2.2-loss
- PC3.1-loss
- RCS2.2-pot loss + PC4.1-loss
- Emergency Director Judgement

General Emergency:

- PC1.1-pot. loss
- PC2.4-pot. loss
- PC5.1-pot. loss
- PC2.5-pot loss + ANY:
 - FC1.1-loss
 - FC2.1-loss
 - FC5.1-loss
- RCS3.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

Appendix 2 - Summary of Fission Product Barrier Evaluation**General Emergency (cont):**

- PC2.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC2.2-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC3.1-loss + ANY:
 - FC1.2-pot loss
 - FC1.3-pot loss
 - FC2.1-loss
 - FC3.2-pot loss
 - FC4.1-pot loss
 - FC5.1-loss

- PC6.1-pot. loss
- PC6.2-pot loss
- Emergency Director Judgement

Attachment V to IPN-95-028

**EAL Upgrade Project, Plant Specific EAL Guideline (PEG)
Indian Point 3, Revision 1, January 10, 1995**

**New York Power Authority
Docket No. 50-286**

EAL Upgrade Project

Plant Specific EAL Guideline (PEG)

Indian Point Unit 3

Revision 1
1/10/95

Since this document was prepared, the Authority has changed the Job Title "Shift Supervisor" to "Shift Manager." The duties and responsibilities of the Shift Manager are the same as those previously assigned to the Shift Supervisor. This document will be revised, prior to implementation, to reflect this change.

*Operations Support Services, Inc.
233 Water Street 2nd Floor Plymouth, MA 02360*

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Unit 3

IC#: AU1 Any unplanned release of gaseous or liquid radioactivity to the environment that exceeds two times the radiological Technical Specifications for 60 minutes or longer.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AU1.1

A valid reading on one or more of the following monitors that exceeds the "value shown" (~~site-specific monitors~~) which indicates that the release may have exceeded the above criterion and indicates the need to assess the release with (~~site-specific procedure~~) IP-1001 "Determining the Magnitude of Release."

Monitors	"Value Shown"
R-27, Plant Vent Wide Range Monitor	7.2E4 $\mu\text{Ci}/\text{sec}$
R-24/24A, Containment Vent Monitor	9.4 mR/hr
R-14, Plant Vent Gas Activity Monitor	150,000 cpm
R-19, SG Blowdown Activity Monitor	9.50 $\mu\text{Ci}/\text{cc}$

Note: If the monitor readings ~~is~~ are sustained for longer than 60 minutes and the required assessments cannot be completed within this period, then the declaration must be made based on the valid reading.

AU1.3

Valid reading on perimeter radiation monitoring system greater than 0.10 mR/hr above normal background for 60 minutes [for sites having telemetered perimeter monitors].

AU1.2

Confirmed sample analyses for gaseous or liquid releases indicates concentrations or release rates with a release duration of 60 minutes or longer in excess of ~~two times (site-specific technical specifications)~~.

Liquid Releases:

Two times 10CFR20, Appendix B, Table II, Column 2, or
4E-4 $\mu\text{Ci}/\text{ml}$ for dissolved or entrained noble gases

Gaseous Releases:

1000 mrem/yr whole body and 6000 mrem/yr skin dose from noble gases
3000 mrem/yr any organ from I-131, I-133, tritium and particulates with ≥ 8 day half lives

Air Dose, Noble Gases:

10/qtr mrad gamma / 20/qtr mrad beta

or

20 mrad/yr gamma / 40 mrad/yr beta

These are determined via methods in ODCM

AU1.4

Valid indication on automatic real-time dose assessment capability greater than (~~site-specific values~~) for 60 minutes or longer [for sites having such capability].

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Units 3

Bases

The term "Unplanned", as used in this context, includes any release for which a radioactive discharge permit was not prepared, or a release that exceeds the conditions (e. g., minimum dilution flow, maximum discharge flow, alarm setpoints, etc.) on the applicable permit.

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

Unplanned releases in excess of two times the site technical specifications that continue for 60 minutes or longer represent an uncontrolled situation and hence, a potential degradation in the level of safety. The final integrated dose (which is very low in the Unusual Event emergency class) is not the primary concern here; it is the degradation in plant control implied by the fact that the release was not isolated within 60 minutes. Therefore, it is not intended that the release be averaged over 60 minutes. For example, a release of 4 times T/S for 30 minutes does not exceed this initiating condition. Further, the Emergency Director should not wait until 60 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 60 minutes.

~~For sites that have eliminated effluent technical specifications as provided in NRC Generic Letter 89-01, the corresponding maximum limit from the site's Offsite Dose Calculation Manual should be used as the numeric basis of EAL.~~

~~10CFR50.72 requires a non-emergency four hour report for release that exceeds 2 times maximum permissible concentration (MPC) in unrestricted areas averaged over a period of one hour. There is generally more than one applicable technical specification (e. g., air dose rate, organ dose rate, organ doses, release rate, etc.). Often, effluent monitor alarms are based on instantaneous release rate. Depending on the source term, other technical specifications may be more applicable specifications.~~

~~Monitor indications are should be calculated on the basis of the methodology of the site Offsite Dose Calculation Manual (ODCM), or other site procedures that are used to demonstrate compliance with 10CFR20 and/or 10CFR50 Appendix I requirements. Annual average meteorology should be used where allowed.~~

~~In EAL 3, the 0.10 mR/hr value is based on a proration of two times the 500 mR/yr basis of the 10CFR20 non-occupational MPC limits, rounded down to 0.10 mR/hr. If other site specific values are applicable, those should be used.~~

~~Some sites may find it advantageous to address gaseous and liquid releases with separate initiating conditions and EALs.~~

~~The alarm setpoints for the listed monitors are conservatively set to ensure Technical Specification radioactivity release limits are not exceeded. The "value shown" for each monitor is two times the alarm setpoint.~~

The values assigned to EAL AU1-2 are based on two times the Technical Specification values given in: Facility Operating License No. DPR-64, Appendix B, Radiological Technical Specifications, Sections 2.3 and 2.4

IP3 design does not utilize telemetered perimeter monitors.

IP3 design does not utilize automatic real-time dose assessment.

References:

1. System Description No. 12.0 Rev. 0. RADIATION MONITORING SYSTEM
2. IP-1001, Rev. 12, "Determining the Magnitude of Release."
3. Letter from M. Mozzor to OSSI "IP3 Site Boundary Dose Equal to 2 x TS and 100 x TS"

Plant Specific EAL ~~Outline~~ (A,H,S)
Indian Point Units 3

IC#: AU2 Unexpected Increase In plant radiation or airborne concentration.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AU2.1

~~(Site-specific) Spent fuel pool (reactor cavity during refueling) water level cannot be restored and maintained above the spent fuel pool low water level alarm setpoint indication of uncontrolled water level decrease in the reactor refueling cavity with all irradiated fuel assemblies remaining covered by water.~~

AU2.3

~~(Site-specific) radiation reading for irradiated spent fuel in dry storage.~~

AU2.2

Uncontrolled water level decrease in the spent fuel pool and fuel transfer canal with all irradiated fuel assemblies remaining covered by water.

AU2.4

Valid Any sustained direct area radiation monitor readings ≥ 100 times the alarm setpoint or offscale high resulting from an uncontrolled process increase by a factor of 1000 over normal* levels.
* Normal levels can be considered as the highest reading in the past twenty-four hours excluding the current peak value.

Plant Specific EAL Outline (A,H,S)

Indian Point Units

Bases

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

All of the above events tend to have long lead times relative to potential for radiological release outside the site boundary, thus impact to public health and safety is very low.

In light of Reactor Cavity Seal failure, incidents at two different PWRs and loss of water in the Spent Fuel Pit/Fuel Transfer Canal at a BWR all occurring since 1984, explicit coverage of these types of events via EALs #1 and #2 is appropriate given their potential for increased doses to plant staff. Classification as an Unusual Event is warranted as a precursor to a more serious event.

For EAL AU2.2, the spent fuel pool low water level alarm setpoint is actuated by LC-650. The operator may observe the low water level condition, if possible, and attempt water level restoration as long as water level remains above the top of irradiated fuel. Water level restoration instructions for loss of refueling cavity water level during refueling are performed in accordance with ONOP-RP-3. The words "with all irradiated fuel assemblies remaining covered by water" were deleted as it is unnecessary. AA2.2 requires declaration of an Alert if the fuel becomes uncovered.

For the BWR Mark III containment designs, the fuel transfer canal is directly connected to the spent fuel pool and reactor cavity when there could exist the possibility of uncovering irradiated fuel in the fuel transfer canal. Therefore, EAL AU2-1 addresses the conditions for which this EAL is applicable.

EAL #3 AU2.3 applies to plants with licensed dry storage of older irradiated spent fuel to address degradation of this spent fuel. One utility uses values of 2 R/hr at the face of any dry storage module or 1 R/hr one foot away from a damaged module. IP-3 design does not utilize dry storage for spent fuel.

EAL #4 AU2.4 addresses unplanned increases in in-plant radiation levels that represent a degradation in the control of radioactive material, and represent a potential degradation in the level of safety of the plant. Indication of area radiation levels increasing to ≥ 100 times the alarm setpoint or offscale hi has been selected because these values are more readily identifiable than a multiple of "normal" levels. Since ARM setpoints are nominally set one decade over normal levels, 100 times the alarm setpoint or offscale hi provides an equivalent threshold. This EAL escalates to an Alert per IC AA3, if the increases impair the level of safe operation. Only prolonged ARM readings are considered in this EAL to avoid unnecessary emergency declaration due to momentary and temporary radiation levels that briefly exceed 100 times the alarm setpoint.

Reference:

1. ONOP-SFP-1, Rev. 5, LOSS OF SFP COOLING
2. ONOP RP-3, Rev. 4, LOSS OF REFUELING CAVITY WATER LEVEL DURING REFUELING

Plant Specific EAL ~~Baseline~~ (A,H,S)

Indian Point Unit 3

IC#: AA1

Any unplanned release of gaseous or liquid radioactivity to the environment that exceeds 200 times radiological Technical Specifications for 15 minutes or longer.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AA1.1

A valid reading on one or more of the following monitors that exceeds the "value shown" (~~site-specific monitors~~) which indicates that the release may have exceeded the above criterion and indicates the need to assess the release with (~~site-specific procedure~~) Offsite Dose Calculation Manual, Rev. 7, 1-1-93

Monitors
R-27, Plant Vent Wide Range Monitor
R-24/24A, Containment Vent Monitor
R-19, SG Blowdown Activity Monitor

"Value Shown"
3.60 Ci/sec
470 mR/hr
475 μ Ci/cc

Note: If the monitor readings is are sustained for longer than 15 minutes and the required assessments cannot be completed within this period, then the declaration must be made based on the valid reading.

AA1.3

Valid reading on perimeter radiation monitoring system greater than 10.0 mR/hr sustained for 15 minutes or longer. [for sites having telemetered perimeter monitors]

AA1.2

Confirmed sample analyses for gaseous or liquid releases indicates concentrations or release rates with a release duration of 15 minutes or longer in excess of (~~200 x site-specific technical specifications~~) for 15 minutes or longer:

Liquid Releases:

200 times 10CFR20, Appendix B, Table II, Column 2
4x10 E-2 μ Ci/ml for dissolved or entrained noble gases

Gaseous Releases:

100 rem/yr whole body and \leq 600 rem/yr skin dose from noble gases
300 rem/yr any organ from I-131, I-133, tritium and particulates with \leq 8 day half lives

Air Dose, Noble Gases:

1000/qr mrad gamma
 \leq 2000/qr mrad beta

or

2000 mrad/yr gamma
4000 mrad/yr beta

These are determined via methods in ODCM

AA1.4

Valid indication on automatic real-time dose assessment capability greater than (~~200 x site-specific technical specifications~~) for 15 minutes or longer. [for sites having such capability]

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Unit 3

Bases

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

This event escalates from the Unusual Event by escalating the magnitude of the release by a factor of 100. Prorating the 500 mR/yr criterion for both time (8766 hr/yr and the 200 multiplier, the associated site boundary dose rate would be 10 mR/hr. The required release duration was reduced to 15 minutes in recognition of the increased severity.

~~For sites that have eliminated effluent technical specifications as provided in NRC Generic Letter 89-021, the corresponding maximum limit from the site's Offsite Dose Calculation Manual, multiplied by 200, should be used as the numeric basis for this EAL.~~

~~Monitor indications should be~~ are calculated on the basis of the methodology of the site Offsite Dose Calculation Manual (ODCM), or other site procedures that are used to demonstrate compliance with 10CFR20 and/or 10CFR50 Appendix I requirements -- adjusted upwards by a factor of 200. IP-1001, "Determining the Magnitude of Release." Annual average meteorology should be ~~is~~ used where allowed.

~~In EAL #3, the 10 mR/hr value is based on a proration of 200 times the 500 mR/yr basis of the 10CFR20 non-occupational MPC limits, rounded down to 10 mR/hr. If other site specific values are applicable, these should be used. The values for the gaseous effluent radiation monitors are based upon not exceeding 10 mR/hr at the site boundary as a result of the release.~~

The alarm setpoints for the listed monitors are conservatively set to ensure Technical Specification radioactivity release limits are not exceeded.

IP-3 design does not utilize telemetered perimeter monitors.

Facility Operating License No. DPR-59, Appendix A, Radiological Technical Specifications

IP-3 design does not utilize automatic real-time dose assessment.

References:

1. OP-31 Process Radiation Monitoring Systems
2. ODP-15 Offsite Dose Calculation Manual
3. Facility Operating License No. DPR-59, Appendix A, Radiological Technical Specifications
4. Letter from M. Mozzor to OSSI "IP3 Site Boundary Dose Equal to 2 x TS and 100 x TS"

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Units 3

IC#: AA2 Major damage to irradiated fuel or loss of water level that has or will result in the uncovering of irradiated fuel outside the reactor vessel.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AA2.1

~~A (site-specific setpoint)~~ Confirmed sustained alarm on one or more of the following radiation monitors resulting from an uncontrolled fuel handling process: ~~(site-specific monitors)~~

R-2/R-7. Vapor Containment Area Monitors: 20 mr/hr shutdown, variable

R-5. Fuel Storage Building Area Monitor: 100 mr/hr

R-25/26. Vapor Containment High Radiation Area Monitors: 3 R/hr

R-12. Containment Gas Activity: Variable

AA2.3

Water level less than (site-specific) feet for the reactor refueling cavity that will result in irradiated fuel uncovering.

AA2.2

Report of visual observation of irradiated fuel uncovered.

AA2.4

Water level less than (site-specific) feet for the spent fuel pool and fuel transfer canal that will result in irradiated fuel uncovering.

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Unit 3

Bases

This IC applies to spent fuel requiring water coverage and is not intended to address spent fuel which is licensed for dry storage, which is discussed in NUMARC IC AU2, "Unexpected Increase in Plant Radiation or Airborne Concentration."

NUREG-0818, "Emergency Action Levels for Light Water Reactors," forms the basis for these EALs. ~~Each site should also define its~~ The above EALs are defined by the specific area where irradiated fuel is located such as reactor cavity, reactor vessel, or spent fuel pool.

The radiation monitor alarm associated with this EAL must be confirmed to avoid unnecessary declaration of an emergency due to a spurious alarm signal.

An "uncontrolled fuel handling process" is defined as any event or activity related to the movement of irradiated fuel which results in unexpected or uncontrolled conditions. This terminology has been specifically added to exclude anticipated increases in area radiation levels as a result of actions performed in accordance with approved procedures during refueling operations.

There is time available to take corrective actions, and there is little potential for substantial fuel damage. In addition, NUREG/CR-4982, "Severe Accident in Spent Fuel Pools in Support of Generic Safety Issue 82," July 1987, indicates that even if corrective actions are not taken, no prompt fatalities are predicted, and that risk of injury is low. In addition, NRC Information Notice No. 90-08, "KR-85 Hazards from Decayed Fuel" presents the following in its discussion:

"In the event of a serious accident involving decayed spent fuel, protective actions would be needed for personnel on site, while offsite doses (assuming an exclusion area radius of one mile from the plant site) would be well below the Environmental Protection Agency's Protective Action Guides. Accordingly, it is important to be able to properly survey and monitor for Kr-85 in the event of an accident with decayed spent fuel.

There is no indication that water level in the spent fuel pool or refueling cavity has dropped to the level of the fuel other than by visual observation. Since AA2.2 addresses visual observation of fuel uncover, EAL AA2.3 is unnecessary. Since there is no level indicating system in the fuel transfer canal, visual observation of loss of water level would also be required, EAL AA2.4 is unnecessary.

~~Licensees may wish to reevaluate whether Emergency Action Levels specified in the emergency plan and procedures governing decayed fuel handling activities appropriately focus on concern for onsite workers and Kr-85 releases in areas where decayed spent fuel accidents could occur, for example, the spent fuel pool working floor. Furthermore, licensees may wish to determine if emergency plans and corresponding implementing procedures address the means for limiting radiological exposures of onsite personnel who are in other areas of the plant. Among other things, moving onsite personnel away from the plume and shutting of building air intakes downwind from the source may be appropriate."~~

Thus, an Alert Classification for this event is appropriate. Escalation, if appropriate, would occur via Abnormal Rad level/Radiological Effluent or Emergency Director judgement.

References:

1. ONOP RP-3, Rev. 4, LOSS OF REFUELING CAVITY WATER LEVEL DURING REFUELING.
2. System Description No. 12.0, Radiation Monitoring System
3. System Description No. 17, Fuel and Core Component Handling System, page 17/18
4. SOP-RM-10, Rev. 4, Radiation Setpoint Control Program, effective 12/2/92

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Unit 3

IC#: AA3

Release of radioactive material or increases in radiation levels within the facility that impedes operation of systems required to maintain safe operations or to establish or maintain cold shutdown.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AA3.1

~~Valid Sustained area radiation monitor reading greater than 15 mR/hr in areas requiring continuous occupancy to maintain plant safety functions:~~

~~The Control Room~~

~~OR~~

~~Central Alarm Station (CAS) and Secondary Alarm Station (SAS)~~

Radiation monitors in these areas include:

~~-(Site-specific) list- R-1 is the permanently installed Monitor.~~

AA3.2

~~One or more sustained abnormal valid (site-specific) radiation monitor readings greater than (site-specific) 8 R/hr values in areas requiring infrequent access to maintain plant safety functions.~~

~~-(Site-specific) list.~~

- : Auxiliary Feedpump Building
- : P.A.B.
- : Fuel Storage Building
- : Control Building
- : Service Water Pumps
- : Refueling Water Tank
- : Diesel Fuel Tanks
- : Vital Area Access to Containment
- : Appendix R Diesel Generator
- : Backup Service Water

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Unit 3

Bases

Valid means that a radiation monitor reading has been confirmed by the operators to be correct. Only prolonged ARM readings are considered in this EAL to avoid unnecessary emergency declaration due to momentary and temporary radiation levels that briefly 8 R/hr.

This IC addresses increased radiation levels that impede necessary access to operating stations, or other areas containing equipment that must be operated manually, in order to maintain safe operation or perform a safe shutdown. It is this impaired ability to operate the plant that results in the actual or potential substantial degradation of the level of safety of the plant. The cause and/or magnitude of the increase in radiation levels is not a concern of this IC. The Emergency Director must consider the source or cause of the increased radiation levels and determine if any other IC may be involved. For example, a dose rate of 15 mR/hr in the control room may be a problem in itself. However, the increase may also be indicative of high dose rates in the containment due to a LOCA. In this latter case, an SAE or GE may be indicated by the fission product barrier matrix ICs.

~~At multiple unit sites,~~ These EALs could result in declaration of an Alert at Indian Point 3 due to a radioactivity release or radiation shine resulting from a major accident at ~~the other unit Indian Point Unit Two.~~ This is appropriate if the increase impairs operations at the operating unit.

This IC is not meant to apply to increases in the containment dome radiation monitors as these are events which are addressed in the fission product barrier matrix ICs. Nor is it intended to apply to anticipated temporary increases due to planned events (e. g., incore detector movement, radwaste container movement, deplete resin transfers, etc.)

~~Emergency planners developing the (site-specific) lists may refer to the site's Indian Point-3's off-normal operating procedures, emergency operating procedures, the 10CFR50 Appendix R analysis, and/or, the analyses performed in response to Section 2.1.6b or NUREG-0578, "TMI--2 Lessons Learned Task Force Status Report and Short-term Recommendations" were considered when identifying areas containing safe shutdown equipment. With regard to the NUREG-0578 analyses, do not use the dose rates postulated therein as a basis for the radiation monitor reading for this IC, as the NUREG-0578 analyses address general emergency conditions.~~

Areas requiring continuous occupancy at IP-3 include the control room and, ~~as appropriate to the site, any other control stations that are manned continuously, such as a radwaste control room or a Central Alarm Station (CAS), and Secondary Alarm Station (SAS).~~ The value of 15 mR/hr is derived from the GDC 19 value of 5 rem in 30 days with adjustment for expected occupancy times. Although Section III.D.3 of NUREG-0737, "Clarification of TMI Action Plan Requirements", provides that the 15 mR/hr value can be averaged over the 30 days, the value is used here without averaging, as a 30 day duration implies an event potentially more significant than an Alert.

~~For other areas requiring infrequent access, the radiation level is (site-specific) value(s) should be based on abnormal radiation levels which result in exposure control measures intended to maintain doses within normal occupational exposure guidelines and limits (i. e., 10CFR20), and in doing so, will impede necessary access. For many areas, it may be possible to establish a single generic EAL that represents a multiple of the normal radiation levels (e. g., 1000 times normal). However, areas that have normally high dose rates may require a lower multiple (e. g., 10 times normal).~~

Area radiation levels at or above 8 R/hr are indicative of radiation fields which may limit personnel access or adversely affect equipment whose operation may be needed to assure adequate core cooling or shutdown the reactor. This basis of the 8 R/hr is described in a Niagara Mohawk Power Corp. memo dated 3/18/93 File Code NMP31027 "Exposure Guidelines For Unusual/Accident Conditions. Rev 1." The areas selected are consistent with those listed in HA3.1 and represent those structures which house systems and equipment necessary for the safe operation and shutdown of the plant.

Reference:

1. System Description 12.0, Rev. 0, RADIATION MONITORING
2. Niagara Mohawk Power Corp. memo dated 3/18/93 File Code NMP31027 "Exposure Guidelines For Unusual/Accident Conditions. Rev 1."

Plant Specific EAL ~~Baseline~~ (A,H,S)
Indian Point Unit 3

IC#: AS1

Boundary dose resulting from an actual or imminent release of gaseous radioactivity exceeds 100 mR Whole Body or 500 mR Child Thyroid for the actual or projected duration of the release.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AS1.1

A valid reading on one or more of the following monitors that ~~exceeds or is expected to exceed the value shown~~ indicates that the release may have exceeded the above criterion and indicates the need to assess the release with ~~(site specific procedure)~~
IP-1001. "Determining the Magnitude of Release."

Monitors:

R-27, Wide Range Plant Vent Gas Activity Monitor: 36.0 Ci/sec

Note: If the monitor reading(s) is sustained for longer than 15 minutes and the required assessments cannot be completed within this period, then the declaration must be made based on the valid reading.

AS1.2

Valid dose assessment capability indicates dose consequences greater than 100 mR TEDE whole body or 500 mR child CDE thyroid.

AS1.2

~~A valid reading sustained for 15 minutes or longer on perimeter radiation monitoring system [for sites having telemetered perimeter monitors]~~

AS1.4

Field survey results indicate site boundary dose rates exceeding 100 mR/hr TEDE expected to continue for more than one hour; or analyses of field survey samples indicate child CDE thyroid dose commitment of 500 mR for one hour of inhalation.

Plant Specific EAL ~~●●●●●~~eline (A,H,S) Indian Point Unit 3

Bases

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

The 100 mR TEDE integrated dose in this initiating condition is based on the proposed 10CFR20 annual average population exposure. This value also provides a desirable gradient (one order of magnitude) between the Alert, Site Area Emergency, and General Emergency classes. It is deemed that exposures less than this limit are not consistent with the Site Area Emergency class description. The 500 mR integrated ~~child thyroid~~ CDE thyroid dose was established in consideration of the 1:5 ratio of the EPA Protective Action Guidelines for TEDE whole body and CDE thyroid.

~~Integrated doses are generally not monitored in real time. In establishing the emergency action levels, it is suggested that a duration of one hour be assumed, and that the EALs be based on a site boundary dose of 100 mR/hour whole body TEDE or 500 mR/hour CDE Thyroid child thyroid, whichever is more limiting (depends on source term assumptions). If individual site analyses indicate a longer or shorter duration for the period in which the substantial portion of the activity is released, these dose rates should be adjusted.~~

The FSAR source terms applicable to each monitored pathway should be used in conjunction with annual average meteorology in determining indications for the monitors on that pathway.

R-19 is a liquid effluent process monitor. This release path only applies to NUMARC/NESP-007 IC AU1.1 and AA1.1. The upper range of R-14 is 1E6 cpm. The value associated with the Alert criteria is in excess of this instruments range and is therefore indicated as N/A. The upper range of R-24 is 1000 mR/hr. The value associated with the SAE criteria is in excess of this instruments range and is therefore indicated as N/A.

Steam dump and main steam safety valve monitors are not specified since release from these paths are dependent upon system flow rate which in turn is dependent upon the number of valves open and the RCS pressure over the duration of the release. Due to the wide range of release rates possible for a given monitor reading, no single trigger value would be appropriate. Releases from these paths are classified under the AS1.3 or AS1.4.

IP-3 does not use telemetered perimeter monitors.

References:

1. System Description No. 12.0. Radiation Monitoring System
2. IP-1001. "Determining the Magnitude of Release."
3. Environmental Technical Specification Requirements. Part II. Radiological and Environmental
4. Facility Operating License No. DPR-59. Appendix A. Radiological Technical Specifications
5. Letter from M. Mozzor to OSSI "IP3 Site Boundary Dose Equal to 2 x TS and 100 x TS"

Plant Specific EAL ~~Baseline~~ (A,H,S)
Indian Point Unit 3

IC#: AG1 Boundary dose resulting from an actual or imminent release of gaseous radioactivity exceeds 1000 mR Whole Body or 5000 mR Child Thyroid for the actual or projected duration of the release using actual meteorology.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

AG1.1

A valid reading on one or more of the following monitors that ~~exceeds or is expected to exceed the value shown~~ indicates that the release may have exceeded the above criterion and indicates the need to assess the release with ~~(site specific procedure)~~
IP-1001, "Determining the Magnitude of Release."

Monitors:

R-27, Wide Range Plant Vent Gas Activity Monitor: 360 Ci/sec

Note: If the monitor reading(s) is sustained for longer than 15 minutes and the required assessments cannot be completed within this period, then the declaration must be made based on the valid reading.

AG1.3

Valid dose assessment capability indicates dose consequences greater than 1000 mR ~~TEDE~~ whole body or 5000 mR ~~CDE~~ child thyroid.

AG1.2

A valid reading sustained for 15 minutes or longer on perimeter radiation monitoring system ~~greater than 1000 mR/hr. [for sites having telemetered perimeter monitors]~~

AG1.4

Field survey results indicate site boundary dose rates exceeding 1000 mR/hr ~~TEDE~~ expected to continue for more than one hour; or analyses of field survey samples indicate ~~child CDE~~ thyroid dose commitment of 5000 mR for one hour of inhalation.

Plant Specific EAL eline (A,H,S)

Indian Point Unit 3

Bases

Valid means that a radiation monitor reading has been confirmed by the operators to be correct.

The 1000 mR ~~TEDE whole body~~ and the 5000 mR ~~CDE child thyroid~~ integrated dose are based on the EPA protective action guidance which indicates that public protective actions are indicated if the dose exceeds 1 rem ~~TEDE whole body~~ or 5 rem ~~CDE child thyroid~~. This is consistent with the emergency class description for a General Emergency. This level constitutes the upper level of the desirable gradient for the Site Area Emergency. Actual meteorology is specifically identified in the initiating condition since it gives the most accurate dose assessment. Actual meteorology (including forecasts) should be used whenever possible.

~~Integrated doses are generally not monitored in real time. In establishing the dose rate emergency action levels, it is suggested that a duration of one hour be assumed, and that the EALs be based on site boundary doses for either whole body TEDE or child thyroid CDE thyroid, whichever is more limiting (depends on source term assumptions(s). If individual site analyses indicate a longer or shorter duration for the period in which the substantial portion of the activity is released, these dose rates should be adjusted.~~

The FSAR source terms applicable to each monitored pathway should be used in conjunction with annual average meteorology in determining indications for the monitors on that pathway.

R-19 is a liquid effluent process monitor. This release path only applies to NUMARC/NESP-007 IC AU1.1 and AA1.1. The upper range of R-14 is 1E6 cpm. The value associated with the Alert criteria is in excess of this instruments range and is therefore indicated as N/A. The upper range of R-24 is 1000 mR/hr. The value associated with the GE criteria is in excess of this instruments range and is therefore indicated as N/A.

Steam dump and main steam safety valve monitors are not specified since release from these paths are dependent upon system flow rate which in turn is dependent upon the number of valves open and the RCS pressure over the duration of the release. Due to the wide range of release rates possible for a given monitor reading, no single trigger value would be appropriate. Releases from these paths are classified under the AG1.3 or AG1.4.

IP-3 does not use telemetered perimeter monitors.

References:

1. System Description No. 12.0. Radiation Monitoring System
2. IP-1001, "Determining the Magnitude of Release."
3. Environmental Technical Specification Requirements, Part II, Radiological and Environmental
4. Facility Operating License No. DPR-59, Appendix A, Radiological Technical Specifications
5. Letter from M. Mozzor to OSSI "IP3 Site Boundary Dose Equal to 2 x TS and 100 x TS"

Plant Specific EAL ~~_____~~ Line (A,H,S)
Indian Point Unit 3

IC#: HU1 Natural and destructive phenomena affecting the protected area.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HU1.1

~~(Site-specific) method indicates felt earthquake.~~

Earthquake felt inplant based upon a consensus of Control Room Operators on duty

AND EITHER

Kinematics Strong Motion Accelographs in the VC produce an alarm in the Control Room if ground motion greater than 0.01g is sensed. OR amber and red Peak Shock Annunciators by Engdahl Enterprises indicate seismic activity.

HU1.3

Assessment by the control room that an event precluding access to a plant area has occurred.

(See HA1.3 for list of plant areas.)

HU1.5

Report by plant personnel of an unanticipated explosion within protected area boundary resulting in visible damage to permanent structure or equipment.

HU1.7

~~(Site-specific) occurrences.~~ River level equal to or greater than 14.5' (OMSL) at site. Intake structure level less than -4.5' (OMSL) at site.

HU1.2

Report by plant personnel of tornado ~~striking~~ within plant protected area boundary.

HU1.4

Vehicle crash into, or projectile which impacts, plant structures or systems within protected area boundary.

HU1.6

Report of turbine failure requiring turbine trip resulting in casing penetration or damage to turbine or generator seals.

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Units 3

Bases

The protected area boundary is typically that part within the security isolation zone and is defined in the site security plan. The IP-3 protected area boundary is illustrated in the Site Plot Plan, IP-3 Nuclear Power Plant, Rev. 1, July 1984.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be factor in escalating the emergency class. IP-3 and IP-2 share no common safety systems. Therefore it is expected that turbine failure on one site would have minimal effect on the other.~~

~~For EAL #HU1.1 should be developed on site-specific basis. IP-3 seismic instrumentation actuates at 0.01 g. Damage may be caused to some portions of the site, but should not affect ability of safety functions to operate. Method of detection can be is based on instrumentation, validated by a reliable source, or operator assessment. As defined in the EPRI-sponsored "Guidelines for Nuclear Plant Response to an Earthquake", dated October 1989, a "felt earthquake" is: "An earthquake of sufficient intensity such that : (a) the inventory ground motion is felt at the nuclear plant site and recognized as an earthquake based on a consensus of control room operators on duty at the time, and (b) for plants with operable seismic instrumentation, the seismic monitors of the plant are activated. For most plants with seismic instrumentation, the seismic monitors are set at an acceleration of about 0.01 g."~~

EAL #HU1.2 is based on the assumption that a tornado striking (touching down) within the protected boundary may have potentially damaged plant structures containing functions or systems required for safe shutdown of the plant. If such damage is confirmed visually or by other in-plant indications, the event may be escalated to Alert.

EAL #HU1.3 allows for ~~the~~ control room personnel to determine that an event has occurred and take appropriate action based on personal assessment as opposed to verification (i. e., an earthquake is felt but does not register on any plant-specific instrumentation, etc.).

EAL #HU1.4 is intended to address such items as plane or helicopter crash, ~~or on some sites, train crash, or barge watercraft crash or other projectile impact~~ that may potentially damage plant structures containing functions and systems required for safe shutdown of the plant. If the crash is confirmed to affect a plant vital area, the event may be escalated to Alert.

For EAL #HU1.5, only those explosions of sufficient force to damage permanent structures or equipment within the protected area should be considered. As used here, an explosion is a rapid, violent, unconfined combustion, or a catastrophic failure of pressurized equipment, that potentially imparts significant energy to nearby structures and materials. No attempt is made in this EAL to assess the actual magnitude of the damage. The occurrence of the explosion with reports of evidence of damage (e. g., deformation, scorching) is sufficient for declaration. The Emergency Director also needs to consider any security aspects of the explosion, if applicable.

EAL #HU1.6 is intended to address main turbine rotating component failures of sufficient magnitude to cause observable damage to the turbine casing or to the seals of the turbine generator. Of major concern is the potential for leakage of combustible fluids (lubricating oils) and gases (hydrogen cooling) to the plant environs. Actual fires and flammable gas build up are appropriately classified via HU2 and HU3. This EAL is consistent with the definition of an Unusual Event while maintaining the anticipatory nature desired and recognizing the risk to non-safety related equipment. Escalation of the emergency classification is based on potential damage done by missiles generated by the failure or by the radiological releases ~~for a BWR, or in conjunction with a steam generator tube rupture, for a PWR.~~ These latter events would be classified by the radiological ICs or fission product barrier ICs. For EAL #HU1.6, operating mode applicability is limited to Power Operations only since other modes of operation require that the turbine generator be secured or isolated from the vessel. Minor operational leakage would not trigger this action level.

EAL #HU1.7 covers high and low lake river water level conditions that could ~~other (site-specific phenomena such as hurricane, flood, or seiche).~~ These EALs can also be precursors of more serious events. ~~In particular, sites subject to severe weather as defined in the NIMARC station blackout initiatives, should include an EAL based on activation of the severe weather mitigation procedures (e. g., precautionary shutdowns, diesel testing, staff call-outs, etc.).~~ River water level > 14.5 ft. corresponds to the maximum anticipated river runup level. Intake structure level < -4.5 ft. corresponds to the minimum level to support design service water flow rate..

Hurricane was combined into EAL HU1.2.

Reference:

1. System Description No. 31, Rev. 0, SEISMIC MONITORING
2. Site Plot Plan
3. FSAR Update, para. 16.2, Tornado Design Criteria
4. ONOP-RW-3, Plant Flooding
5. FSAR Section 2.5

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Units 3

IC#: HU2 Fire within protected area boundary not extinguished within 15 minutes of detection.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HU2.1

~~Confirmed~~ fire in buildings or areas contiguous to any of the following ~~(site-specific)~~ areas not extinguished within 15 minutes of control room notification ~~or verification of a control room alarm~~:

~~(Site-specific) list~~

- Auxiliary Feedpump Building
- P.A.B.
- CAS/SAS
- Fuel Storage Building
- Control Building
- Control Room
- Service Water Pumps
- Refueling Water Tank
- EDG Rooms
- Diesel Fuel Tanks
- Vital Area Access to Containment
- Appendix B Diesel Generator
- Backup Service Water

Plant Specific EAL Helpline (A,H,S)

Indian Point Units

Bases

The purpose of this IC is to address the magnitude and extent of fires that may be potentially significant precursors to damage to safety systems. This excludes such items as fires within administration buildings, waste-basket fires, and other small fires of no safety consequence. This IC applies to buildings and areas that are not contiguous or immediately adjacent to plant vital areas. Verification of the alarm in this context means those actions taken in the control room to determine that the control room alarm is not spurious.

Escalation to a higher emergency class is by IC HA2, "Fire Affecting the Operability of Plant Safety Systems Required for the Current Operating Mode".

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class. IP-3 and IP-2 share no common safety systems, but their protected area boundaries border on each other in some places. Therefore a fire on one unit could affect the other unit.~~

Reference:

REQUEST FOR UNESCORTED ACCESS - PART II, list of Vital Areas.

Plant Specific EAL ~~_____~~ (A,H,S)
Indian Point ~~Unit 2~~

IC#: HU3 Release of toxic or flammable gases deemed detrimental to safe operation of the plant.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HU3.1

Report or detection of toxic or flammable gases that could enter or have entered within the site protected area boundary in amounts that ~~can affect normal~~ could affect the health of plant personnel or safe operation of the plant.

HU3.2

Report by local, county or state officials, or Unit 2, for potential evacuation of site personnel based on offsite event.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Units

Bases

This IC is based on releases in concentrations within the site protected area boundary that will affect the health of plant personnel or affecting the safe operation of the plant with the plant being within the evacuation area of an offsite event (i. e., tanker truck accident releasing toxic gases, etc.). The evacuation area is as determined from the DOT Evacuation Tables for Selected Hazardous Materials, in the DOT Emergency Response Guide for Hazardous Materials.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~
IP-2 and IP-3 share no common safety systems, but their respective protected area boundaries share common borders in some places. Therefore it is possible that a toxic or flammable gas incident happening on one site could affect the other site.

Plant Specific EAL ~~_____~~ (A,H,S)
Indian Point Unit 3

IC#: HU4 Confirmed security event which indicates a potential degradation in the level of safety of the plant.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HU4.1

HU4.2

Bomb device discovered within plant protected area and but outside the following plant vital areas:

Auxiliary Feedpump Building, P.A.B. Building, CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, Vital Area Access to Containment, Appendix R Diesel Generator, Backup Service Water.

Other security events as determined from ~~(site-specific)~~ Security Contingency Plan.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Unit 3

Bases

This EAL is based on ~~(site-specific) Site Security Plan~~ the Indian Point Unit 3 Security Contingency Plan. Security events which do not represent at least a potential degradation in the level of safety of the plant, are reported under 10CFR73.71 or in some cases under 10CFR50.72. The plant protected area boundary is ~~typically~~ that part within the security isolation zone and is defined in the ~~(site-specific) security plan~~ Indian Point Unit 3 Security Contingency Plan. Plant vital areas are also defined within the Indian Point Unit 3 Security Contingency Plan. Bomb devices discovered within the plant vital area would result in EAL escalation.

Reference:

1. Indian Point Unit 3 Security Contingency Plan
2. REQUEST FOR UNESCORTED ACCESS - PART II. list of Vital Areas

Plant Specific EAL ~~_____~~ (A,H,S)
Indian Point Unit 3

IC#: HU5 Other conditions existing which in the judgement of the Emergency Director warrant declaration of an Unusual Event.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HU5.1

Other conditions exist which in the judgement of the ~~Emergency Director~~ Shift Supervisor indicate a potential degradation of the level of safety of the plant.

Plant Specific EAL Outline (A,H,S)

Indian Point Units

Bases

This EAL is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the ~~Emergency Director~~ Shift Supervisor to fall under the Unusual Event emergency class.

From a broad perspective, one area that may warrant ~~Emergency Director~~ Shift Supervisor judgement is related to likely or actual breakdown or site specific event mitigating actions. Examples to consider include inadequate emergency response procedures, transient response either unexpected or not understood, failure of unavailability of emergency systems during an accident in excess of that assumed in accident analysis, or insufficient availability of equipment and/or support personnel.

Specific example of actual events that may require ~~Emergency Director~~ Shift Supervisor judgement for Unusual Event declaration are listed here for consideration. However, this list is by no means all inclusive and is not intended to limit the discretion of the site to provide further examples:

~~Aircraft crash onsite (Aircraft crash onsite is addressed in EAL HU1.5.)~~

~~Train derailment onsite There are no train tracks on the IP-3 site.~~

~~Near site explosion which may adversely affect normal site activities (Explosions are addressed in EAL HU4.1)~~

~~Near site release of toxic or flammable gas which may adversely affect normal site activities (Toxic or flammable gas release is addressed in EAL HU3.1 and EAL HU3.2.)~~

~~Uncontrolled RCS cooldown due to secondary depressurization~~

It is also intended that the ~~Emergency Director's~~ Shift Supervisor judgement not be limited by any list of events as defined here or as augmented by the site. This list is provided solely as examples for consideration and it is recognized that actual events may not always follow a pre-conceived description.

NOTE: Since this is a NUE EAL, the position of Emergency Director would not be manned, so the Shift Supervisor would make the declaration.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Unit 3

IC#: HA1 Natural and destructive phenomena affecting the plant vital area.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA1.1

(Site-specific) method-
Earthquake felt inplant based upon a consensus of Control Room Operators on duty
AND
Kinematics Strong Motion Accelerographs in the VC produce an alarm in the Control Room and at least one amber Peak Shock Annunciator is lit indicating an earthquake producing acceleration approaching operating basis levels (0.15g horizontal and 0.10g vertical), but no red annunciators are lit, and an earthquake is felt on site
Operating-Basis Earthquake (OBE).

HA1.3

EAL #HA1.3 should specify (site-specific) structures containing systems and functions required for safe plant operation safe shutdown of the plant.
- Reactor building - Intake building - Ultimate heat sink - Refueling water storage tank - Diesel generator building
- Turbine building - Condensate storage tank - Control room, - Other (site-specific) structures
Auxiliary Feedpump Building, P.A.B., CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, EDG Rooms, Vital Area Access to Containment, Appendix B Diesel Generator, Backup Service Water.

HA1.5

Vehicle crash or projectile impact affecting which causes or potentially causes any required safety related system or structure to become inoperableplant vital areas. (See HA3.1 for list of vital areas.)

HA1.7

(Site-specific) occurrences. River level equal to or greater than 15' (OMSL) at site OR Low intake structure level resulting in a loss of service water flow

HA1.2

Tornado or high winds striking plant vital areas: Tornado or high winds greater than (site-specific) mph strike within the protected area boundary.

Sustained winds greater than 90 mph

OR

Tornado strikes a plant vital area

(see HA1.3 for list of plant vital areas.)

HA1.4

(Site-specific) indications

HA1.6

Turbine failure generated missiles result in any visible structural damage to or penetration of any of the following plant areas: which causes or potentially causes any safety related system or structure to become inoperable

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Unit 3

Bases

Each of these EALs is intended to address events that may have resulted in a plant vital area being subjected to forces beyond design limits, and thus damage may be assumed to have occurred to plant safety systems. The initial "report" should not be interpreted as mandating a lengthy damage assessment prior to classification. No attempt is made in this EAL to assess the actual magnitude of the damage. Escalation to a higher emergency class, if appropriate, will be based on System Malfunction, Fission Product Barrier Degradation, Abnormal Rad Releases/Radiological Effluent, or Emergency Director Judgement ICs.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

EAL #HA1.1 ~~should be~~ is based on ~~(site-specific)~~ FSAR design basis of 0.15g horizontal and 0.10g vertical. Seismic events of this magnitude can cause damage to safety functions.

EAL #HA1.2 ~~should be~~ is based on ~~(site-specific)~~ FSAR design basis of 90 mph. Wind loads of this magnitude can cause damage to safety functions.

EAL #HA1.3 should specify ~~(site-specific)~~ structures containing systems and functions required for safe plant operation safe shutdown of the plant.

~~EAL #HA1.4 should specify specifies the types of instrumentation or indications including judgements which are to be used to assess occurrence. The methods by which natural and destructive phenomena are indicated in the control room are adequately given by the means in which EAL HA1.1, 1.2 and 1.3 are determined. Therefore there is no need for this EAL.~~

EAL #HA1.5 is intended to address such items as plane or helicopter crash, ~~or on some sites~~, train crash, or barge watercraft crash, or impact of projectiles, into a plant vital area.

~~EAL #HA1.6 is intended to addresses~~ the threat to safety related equipment imposed by missiles generated by main turbine rotating component failures. ~~The is (site-specific) list of areas~~ should include all areas containing safety-related equipment, their controls, and their power supplies. This EAL is, therefore, consistent with the definition of an ALERT in that if missiles have damaged or penetrated areas containing safety-related equipment the potential exists for substantial degradation of the level of safety of the plant.

~~EAL #HA1.7 covers other (site-specific phenomena such as hurricane, flood, or seiche). These EALs can also be a precursors of more serious events. In particular, sites subject to severe weather as defined in the NUMARC station blackout initiatives, should include an EAL based on activation of the severe weather mitigation procedures (e.g., precautionary shutdowns, diesel testing, staff call-outs, etc.) covers high and low river water level conditions that could other (site-specific) phenomena such as flood, result in loss of vital plant equipment. River levels \geq 15 ft, corresponds to levels threatening vital equipment. Intake structure level which results in a loss of service water flow will result in loss of cooling to vital components.~~

References:

1. ONOP-S-1, Rev. 3, SEISMIC MONITORING EQUIPMENT ACTUATION
2. FSAR Update, page 16.1-7, General Seismic Design Criteria and Damping Values.
3. FSAR Update, Rev. 0, para. 16.2, TORNADO DESIGN CRITERIA
4. FSAR Update, Rev. 0, Chapter 1.3, GENERAL DESIGN CRITERIA
5. ONOP-RW-3, Rev. 4, PLANT FLOODING
6. ONOP-TG-2, Rev. 2, TURBINE MISSILE GENERATION
7. Tech Specs Section 3.12, "River Level"
8. Request For Unescorted Access - Part II, list of Vital Areas
9. System Description No. 31, Seismic Monitoring

Plant Specific EAL ~~Outline~~ (A,H,S)
Indian Point Unit 3

IC#: HA2 Fire or explosion affecting the operability of plant safety systems required to establish or maintain safe shutdown.

Op. Mode

Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA2.1

The following conditions exist:

a. Fire or explosion in any of the following ~~(site specific)~~ areas:

Auxiliary Feedpump Building, P.A.B., CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, EDG Rooms, Vital Area Access to Containment, Appendix R Diesel Generator, Backup Service Water.

AND

~~b. Affected system parameter indications show degraded performance or plant personnel report visible damage to permanent structures or equipment within the specified area~~
causes or potentially causes any safety related system or structure to become inoperable

Plant Specific EAL Outline (A,H,S)

Indian Point Units

Bases

~~(Site-specific) The listed~~ areas containing functions and systems required for the safe shutdown of the plant ~~should be specified.~~ ~~(Site-specific) The IP-3~~ safe shutdown analysis should be consulted for equipment and plant areas required for the applicable mode. This will make it easier to determine if the fire or explosion is potentially affecting one or more redundant trains of safety systems. Escalation to a higher emergency class, if appropriate, will be based on System Malfunction, Fission Product Barrier Degradation, Abnormal Rad Releases/Radiological Effluent, or Emergency Director Judgement ICs.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

With regard to explosions, only those explosions of sufficient force to damage permanent structures or equipment required for safe operation within the identified plant areas should be considered. As used here, an explosion is a rapid, violent, unconfined combustion, or a catastrophic failure of pressurized equipment, that potentially imparts significant energy to nearby structures and materials. The inclusion of a "report of visible damage" should not be interpreted as mandating a lengthy damage assessment prior to classification. No attempt is made in this EAL to assess the actual magnitude of the damage. The occurrence of the explosion with reports of evidence of declaration of an Alert and the activation of the TSC will provide the Emergency Director with the resources needed to perform these damage assessments. The Emergency Director also needs to consider any security aspects of the explosions, if applicable.

Reference: FSAR, Section 12.3

Plant Specific EAL Helix (A,H,S)
Indian Point Unit 2

IC#: HA3

Release of toxic or flammable gases within a facility structure which jeopardizes operation of systems required to maintain safe operations or to establish or maintain cold shutdown.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA3.1

Report or detection of toxic gases within a the following facility structures in concentrations that will be life threatening to plant personnel:

Auxiliary Feedpump Building, P.A.B., CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, EDG Rooms, Vital Area Access to Containment, Appendix B Diesel Generator, Backup Service Water.

HA3.2

Report or detection of flammable gases within a the following structures in concentrations that will ~~affect~~ preclude access to equipment (even when using personal protective equipment) necessary for the safe operation of the plant:

Auxiliary Feedpump Building, P.A.B. and R.A.M.S. Buildings, CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, EDG Rooms, Vital Area Access to Containment, Appendix B Diesel Generator, Backup Service Water.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Units

Bases

This IC is based on gases that have entered a plant structure ~~affecting~~ precluding access to equipment necessary for the safe operation of the plant. This IC applies to buildings and areas contiguous to plant vital areas or other significant buildings or areas (i. e., Service Water Pump house). The intent of this IC is not to include buildings (i. e., warehouses) or other areas that are not contiguous or immediately adjacent to plant vital areas. It is appropriate that increased monitoring be done to ascertain whether consequential damage has occurred. Escalation to a higher emergency class, if appropriate, will be based on System Malfunction, Fission Product Barrier Degradation, Abnormal Rad Releases/Radiological Effluent, or Emergency Director Judgement ICs.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference: ESAR Section 12.3

Plant Specific EAL Outline (A,H,S)
Indian Point Unit 3

IC#: HA4 Security event in a plant protected area.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA4.1

Intrusion into plant protected area by a hostile force an adversary.

HA4.2

Other security events as determined from ~~(site-specific)~~ IP-3 Safeguards Security Contingency Plan.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Units

Bases

This class of security events represents an escalated threat to plant safety above that contained in the Unusual Event. For the purposes of this IC, ~~a civil disturbance which penetrates the protected area boundary can be considered a hostile force~~ intrusion by an adversary inside the Protected Area boundary can be considered a significant security threat. Intrusion into a vital area by a hostile force will escalate this event to a Site Area Emergency.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class. IP-3 and IP-2 protected areas share a common boundary in some places, and it is possible that a security event in one unit could affect the other.~~

Plant Specific EAL ~~_____~~ Line (A,H,S)
Indian Point Unit 3

IC#: HA5 Control room evacuation has been initiated.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA5.1

Entry into ~~(site-specific) procedure~~ QNOP-FP-1A, Rev. 7, SAFE SHUTDOWN FROM
OUTSIDE THE CONTROL ROOM, 7/25/91, for control room evacuation.

Plant Specific EAL Helpline (A,H,S)

Indian Point Units

Bases

With the control room evacuated, additional support, monitoring and direction through the Technical Support Center and/or other Emergency ~~Operations Center~~ facilities is necessary. Inability to establish plant control from outside the control room will escalate this event to a Site Area Emergency.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

ONOP-FP-1A, Rev. 7, SAFE SHUTDOWN FROM OUTSIDE THE CONTROL ROOM

Plant Specific EAL **Timeline** (A,H,S)
Indian Point Unit 2

IC#: HA6 Other conditions existing which in the judgement of the Emergency Director warrant declaration of an Alert.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HA6.1

Other conditions existing which in the judgement of the Emergency Director indicate that plant safety systems may be degraded and that increased monitoring of plant functions is warranted.

Plant Specific EAL  eline (A,H,S)
Indian Point Unit 3

Bases

This EAL is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the Alert emergency class.

Plant Specific EAL ~~_____~~ Line (A,H,S)
Indian Point Unit 3

IC#: HS1 Security event in a plant vital area.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HS1.1

Intrusion into ~~the following~~ plant security vital areas by a hostile force ~~an~~ adversary:

Auxiliary Feedpump Building, P.A.B., CAS/SAS, Fuel Storage Building, Control Building, Control Room, Service Water Pumps, Refueling Water Tank, Diesel Fuel Tanks, Vital Area Access to Containment, Appendix B Diesel Generator, Backup Service Water, Security Building, Emergency Security Generator

HS1.2

Other security events as determined from ~~(site-specific)~~ IP-3 Safeguards Security Contingency Plan.

Plant Specific EAL ~~Outline~~ (A,H,S)

Indian Point Units

Bases

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC in that ~~a hostile force~~ an adversary has progressed from the protected area to the vital area.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class. IP-3 and IP-2 protected areas share a common boundary in some places, and it is possible that a security event in one unit could affect the other.~~

The IP-3 protected area boundary is illustrated on the site plot plan

Reference:

FSAR Section 2.1.1

Plant Specific EAL ~~●●●●●~~eline (A,H,S)
Indian Point Unit 3

IC#: HS2 Control room evacuation has been initiated and ~~plant control of core cooling~~ cannot be established.

Op. Mode
Applicability

- 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HS2.1

The following conditions exist:

a. Control room evacuation has been initiated.

AND

b. Control of the plant cannot be established per ~~(site-specific) procedure ONOP-FP-1A,~~
Rev. 7. SAFE SHUTDOWN FROM OUTSIDE THE CONTROL ROOM, 7/25/91, within
~~(site-specific)~~ 15 minutes.

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Units

Bases

Expeditious transfer of safety systems has not occurred but fission product barrier damage may not yet be indicated. ~~(Site specific)~~ The time for transfer is based on analysis or assessments as to how quickly control must be reestablished without core uncovering and/or core damage. This time should not exceed 15 minutes. In cold shutdown and refueling modes, operator concern is directed toward maintaining core cooling such as is discussed in Generic Letter 88-17, "Loss of Decay Heat Removal." In power operation, hot standby, and hot shutdown modes, operator concern is primarily directed toward maintaining critical safety functions and thereby assuring fission product barrier integrity. Escalation of this event, if appropriate, would be by Fission Product Barrier Degradation, Abnormal Rad Releases/Radiological Effluent, or Emergency Director Judgement ICs.

With respect to protection of the public and safe plant operations, "plant control" must focus primarily on the ability to maintain the reactor in a cooled condition. Therefore, it is appropriate to change the IC and EAL so that it emphasizes the need for core cooling when controlling the plant from outside the Control Room.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

ONOP-FP-1A, Rev. 7, SAFE SHUTDOWN FROM OUTSIDE THE CONTROL ROOM

Plant Specific EAL **Line (A,H,S)**
Indian Point Unit 3

IC#: HS3

Other conditions which in the judgement of the Emergency Director warrant declaration of Site Area Emergency.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HS3.1

Other conditions which in the judgement of the Emergency Director warrant declaration of Site Area Emergency.

Plant Specific EAL **Baseline** (A,H,S)
Indian Point Unit 3

Bases

This EAL is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the emergency class description for Site Area Emergency.

Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: HG1 Security event resulting in loss of ability to reach and maintain cold shutdown.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HG1.1

Loss of ~~plant~~ physical control of ~~from~~ the control room due to security event.

AND

Loss of physical control of the remote shutdown capability due to security event.

HG1.2

~~Loss of physical control of the remote shutdown capability due to security event.~~

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Unit 3

Bases

This IC encompasses conditions under which a hostile force has taken physical control of vital area required to reach and maintain safe shutdown. The concern here is the loss of ability to shutdown the reactor and maintain core cooling. Therefore this EAL has been modified to reflect a loss of plant control from both the control room and remote shutdown panels.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in how rapidly a General Emergency is declared.~~

Plant Specific EAL **eline (A,H,S)**
Indian Point Unit 3

IC#: HG2 Other conditions existing which in the judgement of the Emergency Director warrant declaration of General Emergency.

Op. Mode
Applicability

- 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

HG2.1

Other conditions existing which in the judgement of the Emergency Director indicate: (1) actual or imminent substantial core degradation with potential for loss of containment, or (2) potential for uncontrolled radionuclide releases. These releases can reasonably be expected to exceed EPA PAG plume exposure levels outside the site boundary.

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Unit 3

Bases

This EAL is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the General Emergency class.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in how rapidly a General Emergency is declared.~~

Plant Specific EAL eline (A,H,S)
Indian Point Units

IC#: SU1 Loss of all offsite power to essential busses for greater than 15 minutes.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU1.1

The following conditions exist:

a. Loss of power to ~~(site-specific)~~ :

Station Service Transformers 2, 3, 5 and 6 feeding 480V buses 2A/3A, 5A, 6A respectively from the Unit and Station Aux Transformers, and the 13W92 and 13W93 feeders

for greater than 15 minutes.

AND

b. At least ~~(site-specific)~~ one emergency diesel generator is capable of supplying power to its 480V bus ~~emergency generators are supplying power to emergency buses.~~

Plant Specific EAL ~~Baseline~~ (A,H,S)

Indian Point Unit 3

Bases

Prolonged loss of offsite AC power sources reduces required redundancy and potentially degrades the level of safety of the plant by rendering the plant more vulnerable to a complete loss of AC power (station blackout). Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

System Description No. 27.1. Electrical Systems

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SU2 Inability to reach required shutdown within Technical Specification Limits.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU2.1

Plant is not brought to required operating mode within ~~(site-specific)~~ Technical Specifications LCO Action Statement Time.

Plant Specific EAL ~~Line~~ (A,H,S)

Indian Point Unit 3

Bases

Limiting Conditions of Operation (LCOs) require the plant to be brought to a required shutdown mode when the Technical Specification required configuration cannot be restored. Depending on the circumstances, this may or may not be an emergency or precursor to a more severe condition. In any case, the initiation of plant shutdown required by the site Technical Specification requires a one hour report under 10CFR50.72 (b) non-emergency events. The plant is within its safety envelope when being shut down within the allowable action statement time in the Technical Specifications. An immediate Notification of an Unusual Event is required when the plant is not brought to the required operating mode within the allowable action statement time in the Technical Specifications. Declaration of an Unusual Event is based on the time at which the LCO-specified action statement time period elapses under the site Technical Specifications and is not related to how long a condition may have existed. Other required Technical Specification shutdowns that involve precursors to more serious events are addressed by other System malfunction Hazards, or Fission Product Barrier Degradation ICs.

Reference:

Technical Specifications Section 3.0

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SU3 Unplanned loss of most or all safety system annunciation or indication in the control room for greater than 15 minutes.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU3.1

The following conditions exist:

a. ~~Loss of most or all (site-specific) safety system annunciators or indicators on Control Room Panels SAF, SBF-1, SBF-2, C, D, E, F, G, H, J, K, L, M, N, O, FAF, FBE, FCF, FDE associated with safety systems for greater than 15 minutes.~~

AND

b. ~~Compensatory non-alarming indications are is available.~~

AND

c. In the opinion of the Shift Supervisor, the loss of the annunciators or indicators requires increased surveillance to safely operate the unit(s).

AND

d. Annunciator or indicator loss does not result from planned action.

Plant Specific EAL ~~_____~~ Line (A,H,S)

Indian Point Unit 3

Bases

This IC and its associated EAL are intended to recognize the difficulty associated with monitoring changing plant conditions without the use of a major portion of the annunciation or indication equipment.

Recognition of the availability of computer based indication equipment is considered ~~(SPDS, plant computer, etc. (CFMS, QSPDS).~~

"Unplanned" loss of annunciators or indicator excludes scheduled maintenance and testing activities.

"Compensatory non-alarming indications: in this context includes computer based information such as SPDS. This should include all computer systems available for this use depending on specific plant design and subsequent retrofits. The words "Compensatory non-alarming indications are available" have been deleted because they are unnecessary. SA4.1 requires declaration of an Alert based on their loss.

~~Quantification of "Most" is arbitrary, however, it is estimated that if approximately 75% of the safety system annunciators or indicators are lost there is an increased risk that a degraded plant condition could go undetected.~~ It is not intended that plant personnel perform a detailed count of instrumentation lost but the use of the value as a judgement by the Shift Supervisor as the threshold for determining the severity of the plant conditions. This judgement is supported by the specific opinion of the Shift Supervisor that additional operating personnel will be required to provide increased monitoring of system operation to safely operate the unit(s).

It is further recognized that most plant designs provide redundant safety system indication powered from separate uninterruptable power supplies. While failure of a large portion of annunciators is more likely than a failure of a large portion of indications, the concern is included in this EAL due to difficulty associated with assessment of plant conditions. The loss of specific, or several, safety system indicators should remain a function of that specific system or component operability status. This will be addressed by their specific Technical Specification. The initiation of a Technical Specification imposed plant shutdown related to the instrument loss will be reported via 10CFR50.72. If the shutdown is not in compliance with the Technical Specification action, the Unusual Event is based on SU2, Inability to Reach Required Shutdown Within Technical Specification Limits."
~~(Site specific)~~ Annunciators or indicators for this EAL must include those identified in the Abnormal Operating procedures, in the Emergency Operating Procedures, and in other EALs (e. g., area, process, and/or effluent rad monitors, etc.).

Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

Due to the limited number of safety systems in operation during cold shutdown, refueling, and defueled modes, no IC is indicated during these modes of operation.

This Unusual Event will be escalated to an Alert if a transient is in progress during the loss of annunciation or indication.

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SU4 Fuel clad degradation.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU4.1

~~(Site specific) radiation monitor readings indicating fuel clad degradation greater than Technical Specification allowable limits.~~

SU4.2

~~(Site specific) coolant sample activity value indicating fuel clad degradation greater than Technical Specification allowable limits. ≥ 1.0 $\mu\text{Ci/cc}$ dose equivalent I-131 or >100 (E Bar) $\mu\text{Ci/cc}$ for all noble gases with half-lives greater than 10 minutes~~

Plant Specific EAL Baseline (A,H,S)

Indian Point Unit 3

Bases

This IC is included as an Unusual Event because it is considered to be a potential degradation in the level of safety of the plant and a potential precursor of more serious problems.

EAL #SU4.1 addresses ~~(site specific)~~ radiation monitor readings such as ~~BWR air ejector monitors~~, PWR failed fuel monitors, etc., that provide indication of fuel clad integrity. The only radiation monitor reading that could be used to predict this degree of fuel clad degradation is the Gross Failed Fuel Detector (GFFD) but this monitor has been retired and therefore cannot be used.

EAL #SU4.2 addresses coolant samples exceeding coolant technical specifications ~~for iodine spike~~. Escalation of this IC to the Alert level is via the fission product barrier degradation monitoring ICs.

Reference:

Tech Specs para. 3.1.D, page 3.1-26

Plant Specific EAL **Baseline (A,H,S)**
Indian Point Unit 3

IC#: SU5 RCS leakage.

Op. Mode

Applicability

- 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU5.1

Either of the following conditions exist:

a. Unidentified or pressure boundary leakage greater than 10 gpm

OR

b. Identified leakage greater than 25 gpm.

Plant Specific EAL Baseline (A,H,S)

Indian Point Unit 3

Bases

This IC is included as an Unusual Event because it may be a precursor of more serious conditions and, as a result, is considered to be a potential degradation of the level of safety of the plant. The 10 gpm value for the unidentified and pressure boundary leakage was selected as it is observable with normal control room indications. Lesser values must generally be determined through time-consuming surveillance test (e. g., mass balances). The EAL for identified leakage is set at a higher value due to the lesser significance of identified leakage in comparison to unidentified or pressure boundary leakage. In either case, escalation of this IC to the Alert level is via Fission Product Barrier Degradation ICs or IC SA3, "Inability to Maintain Plant in Cold Shutdown."

Only operating modes in which there is fuel in the reactor coolant system and the system is pressurized are specified.

Plant Specific EAL ~~_____~~ Line (A,H,S)
Indian Point Unit 3

IC#: SU6 Unplanned loss of all onsite or offsite communications capabilities.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU6.1

Either of the following conditions exist:

a. Loss of all ~~(site-specific list)~~ of the following onsite communications capability affecting the ability to perform routine operations:

Plant telephone, Plant page, 5-party system page, Portable radio systems.

OR

b. Loss of all ~~(site-specific list)~~ of the following offsite communications capability:

Emergency Notification System (ENS) for NRC, 4-party phones for communication with other Consolidated Edison emergency facilities, Radiological Emergency Communications system (RECS), Local Government Radio System, direct lines to Peekskill Police Department and State Police.

Plant Specific EAL Helpline (A,H,S)

Indian Point Units 3

Bases

The purpose of this IC and its associated EALs is to recognize a loss of communications capability that either defeats the plant operations staff ability to perform routine tasks necessary for plant operations or the ability to communicate problems with offsite authorities. The loss of offsite communications ability is expected to be significantly more comprehensive than the condition addressed by 10CFR50.72.

~~(Site specific list)~~ The onsite communications loss must encompass the loss of all means of routine communications (i. e., phones, sound powered phone systems, page party system and radios/walkie talkies).

~~(Site specific list)~~ The offsite communications loss must encompass the loss of all means of communications with offsite authorities. This should include ENS, Bell lines, FAX transmissions, and dedicated EPP phone systems. This EAL is intended to be used only when extraordinary means are being utilized to make communications possible (relaying of information from radio transmissions, individuals being sent to offsite locations, etc.).

Reference:

Tour of control room to determine communication methods.

Plant Specific EAL ~~Guideline~~ (A,H,S)
Indian Point Unit 3

IC#: SU7 Unplanned loss of required DC power during cold shutdown or refueling mode for greater than 15 minutes.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SU7.1

Either Both of the following conditions exist:

a. ~~Unplanned loss of vital DC power to required all DC busses based on (site-specific) Total~~
or partial loss of DC voltage indication on DC buses 31, 32, 33, and 34 as read on the
switchable meter on Panel FBR.

AND

b. Failure to restore power to all required DC bus within 15 minutes from the time of loss.

Plant Specific EAL Helpline (A,H,S)

Indian Point Units 3

Bases

The purpose of this IC and its associated EALs is to recognize a loss of DC power compromising the ability to monitor and control the removal of decay heat during cold shutdown or refueling operations. This EAL is intended to be anticipatory in as much as the operating crew may not have necessary indication and control of equipment needed to respond to the loss.

"Unplanned" is included in this IC and EAL to preclude the declaration of an emergency as a result of planned maintenance activities. Routinely plants will perform maintenance on a train related basis during shutdown periods. It is intended that the loss of the operating (operable) train is to be considered. If this loss results in the inability to maintain cold shutdown, the escalation to an Alert will be per SA3 "Inability to Maintain Plant in Cold Shutdown."

~~(Site-specific)~~ The bus voltage should be based on the minimum bus voltage necessary for the operation of safety related equipment. This voltage value should incorporate a margin of at least 15 minutes of operation before the onset of inability to operate those loads. This voltage is usually near the minimum voltage selected when battery sizing is performed. Typically the value for the entire battery set is approximately 105 volts per cell. For a 56 string battery set the minimum voltage is typically 1.81 volts per cell.

Reference:

1. System Description No. 27.1. ELECTRICAL SYSTEMS, Rev. 0
2. ONOP-EL-5, Rev. 2, LOSS OF A DC BUS

Plant Specific EAL ~~Outline~~ (A,H,S)
Indian Point Unit 3

IC#: SA1 Loss of all offsite power and loss of all onsite AC power to essential busses during cold shutdown or refueling mode.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SA1.1

- a. Loss of power to ~~(site-specific)~~ :
- Station Service Transformers 5, 2, 3 and 6 feeding buses 2A/3A, 5A and 6A respectively
AND
- b. Failure of ~~(site-specific)~~ 480 V Diesel Generators 31, 32, 33 to supply power to any safeguard bus (2A/3A, 5A and 6A) emergency generators are supplying power to ~~emergency buses.~~
- AND
- c. Failure to restore power to bus 2A/3A, 6A or 5A ~~at least one emergency bus~~ within 15 minutes from the time of loss of both offsite and onsite AC power.

Plant Specific EAL Baseline (A,H,S)

Indian Point Unit 3

Bases

Loss of all AC power compromises all plant safety systems requiring electric power including RHR, ECCS, containment heat removal, Spent Fuel Heat Removal and the Ultimate Heat Sink. When in cold shutdown, refueling, or defueled mode the event can be classified as an Alert, because of the significantly reduced decay heat, lower temperature and pressure, increasing the time to restore one of the emergency busses, relative to that specified for the Site Area Emergency EAL. Escalating to the Site Area Emergency, if appropriate, is by Abnormal Rad Levels/Radiological Effluent, or Emergency Director Judgement ICs. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

Note that Defuel mode is not applicable to this IC because the IC is specifically written for cold shutdown and refuel modes.

Reference:

1. System Description No. 27.1. Electrical Systems
2. ONOP EL-4, Rev. 5. LOSS OF OFFSITE POWER

Plant Specific EAL ~~Outline~~ (A,H,S)
Indian Point Unit 3

IC#: SA2 Failure of Reactor Protection system instrumentation to complete or initiate an automatic reactor ~~scram~~ trip once a Reactor Protection system setpoint has been exceeded and manual ~~scram~~ trip was not successful.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SA2.1

~~(Site-specific) indication(s) exist that indicate that Reactor Protection system setpoint was exceeded and automatic scram did not occur, and a successful manual scram occurred.~~

Any failure of an automatic trip signal to reduce power range \leq 5%

AND

Manual trip is successful

Plant Specific EAL Helpline (A,H,S)

Indian Point Units 3

Bases

This condition indicates failure of the automatic protection system to ~~trip~~ ~~scram~~ the reactor. This condition is more than a potential degradation of a safety system in that a front line automatic protection system did not function in response to a plant transient and thus the plant safety has been compromised, and design limits of the fuel may have been exceeded. An Alert is indicated because conditions exist that lead to potential loss of fuel clad or RCS. Reactor Protection system setpoint being exceeded (rather than limiting safety system setpoint being exceeded) is specified here because failure of the automatic protection system is the issue. A manual ~~trip~~ ~~scram~~ is any set of actions by the reactor operator(s) at the reactor control console which causes control rods to be rapidly inserted into the core and brings the reactor subcritical (e. g., reactor trip button). Failure of manual scram would escalate the event to a Site Area Emergency.

In determining whether to declare an emergency based on this EAL the following guidance is provided by NUMARC:

Regarding the occurrence of an event in which the EAL is reached with no adverse consequences:

"If an emergency condition no longer exists, there is no reason to declare an emergency. The NRC shall be notified after discovery within 1 hour, meeting 10CFR50.72 reporting criteria. State and local authorities should also be notified as soon as practical, or in accordance with arrangements made in advance."

Reference:

1. FR-S.1, Rev. 4, RESPONSE TO NUCLEAR GENERATION/ATWS
2. F-0.1, SUBCRITICALITY
3. "Methodology for Development of Emergency Action Levels NUMARC/NESP-007 Revision 2 - Questions and Answers, June 1993"

Plant Specific EAL Helix (A,H,S)
Indian Point Unit 3

IC#: SA3 Inability to maintain plant in cold shutdown.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SA3.1

The following conditions exist:

~~a. Loss of (site-specific) Technical Specification required functions to maintain cold shutdown.~~

~~AND~~

b. Reactor coolant temperature increase that either:

• Exceeds 200 °F ~~cold shutdown temperature limit~~ Technical Specification

OR

• Results in uncontrolled temperature rise approaching 200 °F ~~cold shutdown temperature limit~~ technical specification.

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Units 3

Bases

This EAL addresses complete loss of functions required for core cooling during refueling and cold shutdown modes. Escalation to Site Area Emergency or General Emergency would be via Abnormal Rad Levels/Radiological Effluent or Emergency Director Judgement ICs.

~~For PWRs, this IC and its associated EAL are based on concerns raised by Generic Letter 88-17, "Loss of Decay Heat Removal." A number of phenomena such as pressurization, vortexing, steam generator U-tube draining, RCS level differences when operating at a mid-loop condition, decay heat removal system design, and level instrumentation problems can lead to conditions where decay heat removal is lost and core uncover can occur. NRC analyses show that sequences that can cause core uncover in 15 to 20 minutes and severe core damage within an hour after decay heat removal is lost. Under these conditions, RCS integrity is lost and fuel clad integrity is lost or potentially lost, which is consistent with a Site Area Emergency. (Site specific) indicators for these EALs are those methods used by the plant in response to Generic Letter 88-17 which include core exit temperature monitoring and RCS water level monitoring. In addition, radiation monitor readings may also be appropriate as an indicator of this condition.~~

A reactor coolant temperature increase that approaches or exceeds the cold shutdown technical specification limit warrants declaration of an Alert irrespective of the availability of technical specification required functions to maintain cold shutdown. The concern of this IC is the loss of ability to maintain the plant in cold shutdown which is defined by reactor coolant temperature and not the operability of equipment which supports removal of heat from the reactor.

"Uncontrolled" means that system temperature increase is not the result of planned actions by the plant staff.

The EAL guidance related to uncontrolled temperature rise is necessary to preserve the anticipatory philosophy of NUREG-0654 for events starting from temperatures much lower than the cold shutdown temperature limit.

Escalation to the Site Area Emergency is by IC SS5, "Loss of Water Level in the Reactor Vessel that has or will Uncover Fuel in the Reactor Vessel," or by Abnormal Rad Levels/Radiological Effluent ICs.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

1. ONOP-RHR-1, Rev. 7, LOSS OF RESIDUAL HEAT REMOVAL FLOW
2. Tech Specs, para. 3.1.A.1.d
3. Tech Specs, para. 3.10.1.1

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SA4

Unplanned loss of most or all safety system annunciation or indication in control room with either (1) a significant transient in progress, or (2) compensatory non-alarming indicators are unavailable.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SA4.1

The following conditions exist:

a. ~~Loss of most or all (site specific) safety system annunciators or indicators on Control Room Panels SA, SBF-1, SBF-2, C, D, E, E, G, H, J, K, L, M, N, O, FAF, FBF, FCF, FDF, associated with safety systems for greater than 15 minutes.~~

AND

b. In the opinion of the Shift Supervisor, the loss of the annunciators or indicators requires increased surveillance to safely operate the unit(s).

AND

c. Annunciator or indicator loss does not result from planned action.

AND

d. Either of the following:

• A significant plant transient is in progress

OR

• ~~Compensatory non-alarming indications~~ CFMS, QSPDS, are is unavailable.

Plant Specific EAL Helpline (A,H,S)

Indian Point Units

Bases

This IC and its associated EAL are intended to recognize the difficulty associated with monitoring changing plant conditions without the use of a major portion of the annunciation or indication equipment during a transient. Recognition of the availability of computer based indication equipment is considered (SPDS, plant computer, etc.).

"Planned" loss of annunciators or indicators included scheduled maintenance and testing activities.

~~Quantification of "Most" is arbitrary, however, it is estimated that if approximately 75% of the safety system annunciators or indicators are lost there is an increased risk that a degraded plant condition could go undetected.~~ It is not intended that plant personnel perform a detailed count of instrumentation lost but the use of the value as a judgement by the Shift Supervisor as the threshold for determining the severity of the plant conditions. This judgement is supported by the specific opinion of the Shift Supervisor that additional operating personnel will be required to provide increased monitoring of system operation to safely operate the unit(s).

It is further recognized that most plant designs provide redundant safety system indication powered from separate uninterruptable power supplies. While failure of a large portion of annunciators is more likely than a failure of a large portion of indications, the concern is included in this EAL due to difficulty associated with assessment of plant conditions. The loss of specific, or several, safety system indicators should remain a function of that specific system or component operability status. This will be addressed by the specific Technical Specification. The initiation of a Technical Specification imposed plant shutdown related to the instrument loss will be reported via 10CFR50.72. If the shutdown is not in compliance with the Technical Specification action, the Unusual Event is based on SU2 "Inability to Reach Required Shutdown Within Technical Specification Limits."

~~(Site specific)~~ ~~Annunciators or indicators~~ for this EAL must include those identified in the ~~Abnormal~~ Off-normal Operating Procedures, in the Emergency Operating Procedures, and in other EALs (e. g., area, process, and/or effluent rad monitors, etc.).

"Significant Transient" includes response to automatic or manually initiated functions such as scrams, runbacks involving greater than 25% thermal power change, ECCS injections, or thermal power oscillations of 10% or greater.

"Compensatory non-alarming indications" in this context includes computer based information such as SPDS. This should include all computer systems available for this use depending on specific plant design and subsequent retrofits. If both a major portion of the annunciation system and all computer monitoring are unavailable to the extent that the additional operating personnel are required to monitor indications, the Alert is required.

Due to the limited number of safety systems in operation during cold shutdown, refueling and defueled modes. No IC is indicated during these modes of operation. This Alert will be escalated to a Site Area Emergency if the operating crew cannot monitor the transient in progress.

Plant Specific EAL Helpline (A,H,S)

Indian Point Unit 3

IC#: SA5 AC power capability to essential busses reduced to a single power source for greater than 15 minutes such that any additional single failure would result in station blackout.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SA5.1

The following conditions exist:

a. ~~Loss of power to (site-specific) Available safeguard bus AC power reduced to only one of the following sources for > 15 min.:~~

~~for greater than 15 minutes.~~

~~—AND~~

b. ~~Onsite power capability has been degraded to one (train of) emergency bus(ess) powered from a single onsite power source due to the loss of:~~
~~(site-specific list):~~

~~• 480V EDG 31~~

~~• 480V EDG 32~~

~~• 480V EDG 33~~

~~• Appendix R Diesel~~

~~• Unit Auxiliary transformer~~

~~• Station Auxiliary transformer~~

~~• 13W92 and 13W93 feeders~~

Plant Specific EAL Helpline (A,H,S)

Indian Point Units 3

Bases

This IC and the associated EALs are intended to provide an escalation from IC SU1 "Loss of All Offsite Power to Essential Busses for Greater than 15 Minutes." The condition indicated by this IC is the degradation of the offsite power with a concurrent failure of one emergency generator to supply power to its emergency busses. Another related condition could be the loss of all offsite power and loss of onsite emergency diesels with only one train of emergency busses being backed from the unit main generator, or the loss of onsite emergency diesels with only one train of emergency busses being backed from offsite power. The subsequent loss of this single power source would escalate the event to a Site Area Emergency in accordance with IC SS1 "Loss of All Offsite and Loss of All Onsite AC Power to Essential Busses."

Example EAL #SA5.1b should be expanded to identify the control room indication of the status of offsite-specific power sources and distribution busses that, if unavailable, establish a single failure vulnerability.

~~At multi-unit stations, the EALs should allow credit for operation of installed design features, such as cross-tie or swing diesels, provided that abnormal or emergency operating procedures address their use. However, these stations must also consider the impact of this condition on other shared safety functions in developing the site-specific EAL.~~

Reference:

1. System Description No. 27.1, Electrical Systems
2. ONOP EL-4, Loss Of Offsite Power

Plant Specific EAL Helpline (A,H,S)
Indian Point Unit 3

IC#: SS1 Loss of all offsite power and loss of all onsite AC power to essential busses.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS1.1

Loss of all offsite and onsite AC power as indicated by:

a. Loss of power to ~~(site-specific)~~ :

Station Service Transformers 5, 2, 3 and 6 feeding 480V buses 5A, 2A, 3A, and 6A respectively

AND

b. Failure of ~~(site-specific)~~ all emergency diesel generators [and the Appendix "R" Diesel] to supply power to any vital bus (2A/3A, 5A or 6A) emergency generators are supplying power to emergency buses.

AND

c. Failure to restore power to any of buses 2A/3A, 5A or 6A at least one emergency bus within 15 minutes from the time of loss of both offsite and onsite AC power.

Plant Specific EAL Helpline (A,H,S)

Indian Point Unit 3

Bases

Loss of all AC power compromises all plant safety systems requiring electric power including ~~RHR, ECCS, Containment Heat Removal and the Ultimate Heat Sink~~. Prolonged loss of all AC power will cause core uncovering and loss of containment integrity, thus this event can escalate to a General Emergency. The ~~(site-specific)~~ time duration should be selected to exclude transient or momentary power losses, but should not exceed 15 minutes.

Reference:

1. System Description No. 27.1, "ELECTRICAL SYSTEMS." Rev. 0
2. ONOP EL-4, Loss Of Offsite Power

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SS2 Failure of Reactor Protection system instrumentation to complete or initiate an automatic reactor ~~scram trip~~ once a Reactor Protection system setpoint has been exceeded and/or manual ~~scram trip~~ was not successful, and there is power generation.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS2.1

~~(Site specific) indication(s) exist that indicate that Reactor Protection system setpoint was exceeded and automatic scram did not occur, and manual scram was not successful.~~

RED path in F-0.1 SUBCRITICALITY

AND

Emergency boration is required

Plant Specific EAL Baseline (A,H,S)

Indian Point Units

Bases

Automatic and manual scram are not considered successful if action away from the reactor control console was required to scram the reactor.

CSFST Subcriticality - RED path is entered based on failure of power range indication to decrease below 5% following a reactor trip. This portion of the EAL addresses any manual trip or automatic trip signal followed by a manual trip which fails to shut down the reactor to an extent that the reactor is producing more heat load for which the safety systems were designed. A manual trip is any set of actions by the reactor operator(s) at the reactor control console which causes "control rods to be rapidly inserted into the core and brings power below that percent power associated with the ability of the safety systems to remove heat and continue to decrease."

This condition indicates failure of both the automatic and manual protection systems to trip the reactor in conjunction to an extent that emergency boration is required. The combination of failure of both front line and backup protection systems to function in response to a plant transient, along with the continued production of heat poses a direct threat to fuel clad and RCS integrity and thus warrants declaration of a Site Area Emergency.

Under these conditions, the reactor is producing more heat than the maximum decay heat load for which the safety systems are designed. A Site Area Emergency is indicated because conditions exist that lead to imminent loss or potential loss of both fuel clad and RCS. Although this IC may be viewed as redundant to the Fission Product Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response. Escalation of this event to a General Emergency would be via Fission Product Barrier Degradation or Emergency Director Judgement ICs.

Reference:

1. CSFST F-0.1. Subcriticality
2. FR-S.1. Rev. 4. RESPONSE TO NUCLEAR GENERATION/ATWS
3. "Methodology for Development of Emergency Action Levels NUMARC/NESP-007 Revision 2 - Questions and Answers", June 1993

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SS3 Loss of all vital DC power.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS3.1

Loss of all vital DC power based on (site specific) Lack of normal voltage indication on DC buses 31, 32, 33 and 34 as observed on the switchable DC Voltage meter on panel FBR for greater than 15 minutes.

Plant Specific EAL ~~Line~~ (A,H,S) Indian Point Unit 3

Bases

Loss of all DC power compromises ability to monitor and control plant safety functions. Prolonged loss of all DC power will cause core uncovering and loss of containment integrity when there is significant decay heat and sensible heat in the reactor system. Escalation to a General Emergency would occur by Abnormal Rad Levels/Radiological Effluent, Fission Product Barrier Degradation, or Emergency Director Judgement ICs. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

1. ONOP-EL-5, Rev. 2, LOSS OF A DC BUS
2. System Description No. 27.1, Electrical Systems

Plant Specific EAL ~~●●●●●~~eline (A,H,S)
Indian Point Unit 3

IC#: SS4 Complete loss of function needed to achieve or maintain hot shutdown.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS4.1

Complete loss of any ~~(site-specific)~~ function required for hot shutdown as indicated by RED path on E-0.3. HEAT SINK and heat sink is required

Plant Specific EAL ~~Outline~~ (A,H,S) Indian Point Unit 3

Bases

This EAL addresses complete loss of functions, including ultimate heat sink and reactivity control, required for hot shutdown with the reactor at pressure and temperature. Under these conditions, there is an actual major failure of a system intended for protection of the public. Thus, declaration of a Site Area Emergency is warranted. Escalation to a General Emergency would occur by Abnormal Rad Levels/Radiological Effluent, Fission Product Barrier Degradation, or Emergency Director Judgement ICs.

Loss of subcriticality is covered at the Site Area Emergency level by EAL SS2. Loss of system functions required to maintain hot shutdown would result in a RED path on the HEAT SINK CSEST.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference: Tech Specs. para. 3.1

Plant Specific EAL ~~Baseline~~ (A,H,S)
Indian Point Unit 3

IC#: SS5 Loss of RPV water level ~~in the reactor vessel~~ that has or will uncover fuel in the RPV ~~reactor vessel~~.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS5.1

Loss of Reactor Vessel water level as indicated by:

a. ~~Loss of all decay heat removal cooling as determined by (site-specific) procedure~~

b. ~~(Site-specific) indicators that the core is or will be uncovered. With the RCS intact, RVLIS indication cannot be maintained above (full range) 39%~~

OR:

With the Reactor Vessel head removed, it is reported that water level in the Reactor Vessel is dropping in an uncontrolled manner and core uncover is likely.

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Units 3

Bases

Under the conditions specified by this IC, severe core damage can occur and reactor coolant system pressure boundary integrity may not be assured. ~~For BWRs, it is intended to address concerns raised by NRC Office for Analysis and Evaluation of Operational Data (AEOD) Report AEOD/EG09, "BWR Operating Experience Involving Inadvertent Draining of the Reactor Vessel," dated August 8, 1986. This report states:~~

~~In broadest terms, the dominant causes of inadvertent reactor vessel draining are related to the operational and design problems associated with the residual heat removal system when it is entering into or exiting from the shutdown cooling mode. During this transitional period, water is drawn from the reactor vessel, cooled by the residual heat removal system heat exchangers (from the cooling provided by the service water system), and returned to the reactor vessel. First, there are piping and valves in the residual heat removal system which are common to both the shutdown cooling mode and other modes of cooling. These valves, when improperly positioned, provide a drain path for reactor coolant to flow from the reactor vessel to the suppression pool or the radwaste system. Second, establishing or making such evolutions vulnerable to personnel and procedural errors, the residual heat removal system valves that could be activated during shutdown cooling. Collectively, these factors have contributed to the inadvertent draining of the reactor vessel.~~

For PWRs, this IC covers sequences such as prolonged boiling following loss of decay heat removal.

Thus, declaration of a Site Area Emergency is warranted under the conditions specified by the IC. Escalation to a General Emergency is via radiological effluence IC AG1.

Uncovery of the fuel irrespective of the event that causes such fuel uncovery is justification alone for declaring a SAE. Since other events could lead to fuel uncovery in cold shutdown or refuel modes other than a loss of decay heat removal capability, it is inappropriate to base the EAL on this one event. For other operating modes, fuel uncovery is a loss of the RCS and fuel clad barriers which requires declaration of a SAE.

RVLIS dynamic range indications are not utilized in this EAL since the RCPs would not be running under conditions where vessel level is approaching TAF.

Reference:

1. ONOP-RHR-1, Rev. 7, LOSS OF RESIDUAL HEAT REMOVAL FLOW
2. ONOP-RHR-2, Rev. 4, LOSS OF RESIDUAL HEAT REMOVAL WITH THE RCS DRAINED OR AT MIDLOOP

Plant Specific EAL ~~Outline~~ (A,H,S)
Indian Point Unit 3

IC#: SS6 Inability to monitor a significant transient in progress.

Op. Mode

Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SS6.1

All of the following conditions exist:

a. ~~Loss of most (site-specific) safety system annunciators or indicators on any Control Room Panels SAF, SBF-1, SBF-2, C, D, E, F, G, H, J, K, L, M, N, O, FAF, FBF, FCF, FDF, associated with safety systems.~~

AND

b. ~~Compensatory non-alarming indications CFMS and QSPDS are is unavailable.~~

AND

c. ~~Indications needed to monitor (site-specific) any of the following plant parameters safety functions are unavailable:~~

~~Reactor Power, Intermediate range SUR, Source Range counts, Source Range SUR, Core Exit TCs, indication of RCPs running, RVLIS Full Range and Dynamic Range, RCS Pressure, RCS Hot/Cold Leg Temperature, SG Narrow Range level, FW Flow, SG Pressure, Containment Pressure, Containment Level, Containment Radiation, PZR Level~~

AND

d. Transient in progress.

Plant Specific EAL Helpline (A,H,S)

Indian Point Units 3

Bases

This IC and its associate EAL are intended to recognize the inability of the control room staff to monitor the plant response to a transient. A Site Area Emergency is considered to exist if the control room staff cannot monitor safety functions needed for protection of the public.

~~(Site specific)~~ Annunciators and indicators for this EAL should be limited to include those identified in the Abnormal Operating Procedures, in the Emergency Operating Procedures, and in other EALs (e. g., rad monitors, etc.).

"Compensatory non-alarming indications" in this context includes computer based information such as SPDS. This should include all computer systems available for this use depending on specific plant design and subsequent retrofits.

"Significant Transient" includes response to automatic or manually initiated functions such as scrams, runbacks involving greater than 25% thermal power change, ECCS injections, or thermal power oscillations of 10% or greater.

~~(Site specific)~~ Indications needed to monitor safety functions necessary for protection of the public must include control room indications, computer generated indications and dedicated annunciation capability. The specific indications should be those used to determine such functions as the ability to shut down the reactor, maintain the core cooled and in a coolable geometry, to remove heat from the core, to maintain the reactor coolant system intact, and to maintain containment intact.

"Planned" actions are excluded from this EAL since the loss of instrumentation of this magnitude is of such significance during a transient that the cause of the loss is not an ameliorating factor.

Reference:

1. F-0.1, Rev. 0, SUBCRITICALITY
2. F-0.2, Rev. 3, CORE COOLING
3. F-0.3, Rev. 3, HEAT SINK
4. F-0.4, Rev. 3, INTEGRITY
5. F-0.5, Rev. 2, CONTAINMENT
6. F-0.6, Rev. 1, INVENTORY

Plant Specific EAL ~~Line~~ (A,H,S)
Indian Point Unit 3

IC#: SG1 Prolonged loss of all offsite power and prolonged loss of all onsite AC power.

Op. Mode
Applicability 1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SG1.1

Prolonged loss of all offsite and onsite AC power as indicated by:

a. Loss of power to ~~(site-specific)~~ :

Station Service Transformers 5, 2, 3 and 6 feeding 480V buses 5A, 2A, 3A, and 6A respectively.

AND

b. Failure of ~~(site-specific)~~ 480 V Diesel Generators 31, 32, 33, and the Appendix "R" Diesel emergency generators supplying to supply power to emergency buses.

AND

c. At least one of the following conditions exist:

• Restoration of power to at least one emergency bus within ~~(site-specific)~~ 1 hour is NOT likely

OR

• (Site-specific) indication of continuing degradation of core cooling based on Fission-Product Barrier monitoring Actual or imminent entry into ORANGE or RED path exists on E-0.2, "CORE COOLING."

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Units 3

Bases

Loss of all AC power compromises all plant safety systems requiring electric power including RHR, ECCS, Containment Heat Removal and the Ultimate Heat Sink. Prolonged loss of all AC power will lead to loss of fuel clad, RCS, and containment. The ~~(site specific)~~ hours to restore AC power can be based on site blackout coping analysis performed in conformance with 10CFR50.63 and Regulatory Guide 1.155, "Station Blackout", as available, with appropriate allowance for offsite emergency response. Although this IC may be viewed as redundant to the Fission Product Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response.

This IC is specified to assure that in the unlikely event of prolonged station blackout, timely recognition of the seriousness of the event occurs and that declaration of a General Emergency occurs as early as is appropriate, based on a reasonable assessment of the event trajectory.

The likelihood of restoring at least one emergency bus should be based on a realistic appraisal of the situation since a delay in an upgrade decision based on only a chance of mitigating the event could result in a loss of valuable time in preparing and implementing public protective actions.

In addition, under these conditions, fission product barrier monitoring capability may be degraded. Although it may be difficult to predict when power can be restored, it is necessary to give the Emergency Director a reasonable idea of how quickly (s)he may need to declare a General Emergency based on two major considerations:

1. Are there any present indications that core cooling is already degraded to the point that Loss or Potential Loss of fission product barriers is imminent? ~~(Refer to Tables 3 and 4 for more information.)~~
2. If there are no present indications of such core cooling degradation, how likely is it that power can be restored in time to assure that a loss of two barriers with a potential loss of the third barrier can be prevented?

Thus, indication of continuing core cooling degradation must be based on fission product barrier monitoring with particular emphasis on Emergency Director judgement as it relates to imminent loss or potential loss of fission product barriers and degraded ability to monitor fission product barriers.

~~Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.~~

Reference:

1. E-0.2, "CORE COOLING," Rev. 3
2. Letter IPN-92-006 of 1/29/92, Beedle to NRC, subject IP-3 Station Blackout Rule, Response to Safety Evaluation Recommendations.
3. System Description No. 27.1, "ELECTRICAL SYSTEMS," Rev. 0
4. ECA-0.0, REV. 7, LOSS OF ALL AC POWER

Plant Specific EAL ~~Baseline~~ (A,H,S)
Indian Point Unit 3

IC#: SG2 Failure of the Reactor Protection System to complete an automatic ~~scram~~ trip and manual ~~scram~~ trip was not successful and there is indication of an extreme challenge to the ability to cool the core.

Op. Mode
Applicability

1 (Pwr Ops) 2 (HSB) 3 (HSD) 4 (CSD) 5 (Refuel) 6 (Defuel) All

SG2.1

1. RED path in F-0.1 SUBCRITICALITY ~~(Site-specific) indications exist that automatic and manual scram were not successful.~~

AND

2. ~~Either of the following Actual or imminent entry into either:~~

a. ~~(Site-specific) indications exist that the core cooling is extremely challenged.~~

RED path on the CSFST F-0.2. "CORE COOLING"

OR

b. ~~(Site-specific) indication exists that heat removal is extremely challenged.~~

RED path on the CSFST of F-0.3. HEAT SINK

AND

Heat sink is required

Plant Specific EAL ~~Baseline~~ (A,H,S) Indian Point Units 3

Bases

Automatic and manual scram are not considered successful if action away from the reactor control console is required to scram the reactor.

Under the conditions of this IC and its associated EALs, the efforts to bring the reactor subcritical have been unsuccessful and, as a result, the reactor is producing more heat than the maximum decay heat load for which the safety systems were designed. Although there are capabilities away from the reactor control console, such as emergency boration in PWRs, or ~~Standby Liquid Control in BWRs~~, the continuing temperature rise indicates that these capabilities are not effective. This sequence could be a precursor for a core melt sequence. CSFST Subcriticality - RED path is entered based on failure of power range indication to decrease below 5% following a reactor trip. This portion of the EAL addresses any manual trip or automatic trip signal followed by a manual trip which fails to shut down the reactor to an extent that the reactor is producing more heat load for which the safety systems were designed (as indicated by emergency boration required).

For PWRs, the extreme challenge to the ability to cool the core is intended to mean that the core exit temperatures are at or approaching 1200°F or that the reactor vessel water level is below the top of active fuel. For plants using CSFSTs, this EAL equates to a Core Cooling RED condition. ~~For BWRs, the extreme challenge to the ability to cool the core is intended to mean that the reactor vessel water level is below 2/3 coverage of active fuel.~~

Another consideration is the inability to initially remove heat during the early stages of this sequence. For PWRs, if emergency feedwater flow is insufficient to remove the amount of heat required by design from at least one steam generator, an extreme challenge should be considered to exist. For plants using CSFSTs, this EAL equates to a Heat Sink RED condition. ~~For BWRs, (site specific) considerations include inability to remove heat via the main condenser, or via the suppression pool or torus (e.g., due to high pool water temperature.)~~

In the event either of these challenges exist at a time that the reactor has not been brought below the power associated with the safety system design (typically 3 to 5% power) a core melt sequence exits. In this situation, core degradation can occur rapidly. For this reason, the General Emergency declaration is intended to be anticipatory of the fission product barrier matrix declaration to permit maximum offsite intervention time.

Reference:

1. FR-S.1. Response to Reactor Restart/ATWS
3. FR-S.2. Response to Loss of Core Shutdown

Plant Specific EAS Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC1

Barrier: Fuel Cladding

Type: Potential Loss

Description: Critical Safety Function Status

FC1.2 ~~Core cooling~~ - ORANGE or RED path in F-0.2. CORE COOLING

FC1.3 Heat Sink - RED path in F-0.3. HEAT SINK and heat sink is required

Bases:

Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur. Heat Sink - RED indicates the ultimate heat sink function is under extreme challenge and thus these two items indicate potential loss of the fuel clad barrier.

Reference:

1. F-0.2, Rev. 3. CORE COOLING
2. F-0.3, Rev. 3. HEAT SINK

Plant Specific EAL Guideline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC2

Barrier: Fuel Cladding

Type: Loss

Description: Primary Coolant Activity Level

FC2.1 Coolant activity greater than ~~(site-specific) value~~ 300 μ Ci/cc of I-131

Bases:

This (site-specific) value corresponds to 300 μ Ci/cc I-131 equivalent. Assessment by the NUMARC EAL Task Force indicates that this amount of coolant activity is ~~well above that expected for iodine spikes~~ and corresponds to about 2% to 5% fuel clad damage. This amount of clad damage indicates significant clad heating and thus the fuel clad barrier is considered lost. At IP-3, I-131 is directly analyzed.

A site specific evaluation of coolant activity associated with 5% clad failures was performed. The calculation was based upon WOG core damage assessment source terms and made the conservative assumption that the I-131 equivalent activity is 2 x I-131 source term (2 x 2.4E5 Ci). Based on a 90,000 gal. RCS volume @ 579 °F, the resulting coolant concentration was calculated as 102.3 μ Ci/cc. Since the assumptions and source of the NUMARC number is unknown, there is no way to know how these two numbers compare. It has been decided to use the value provided by NUMARC.

There is no equivalent "Potential Loss" EAL for this item.

Reference:

Letter from D. Gaynor to R. Ferraro 7/27/93 "EAL Technical Basis 2.1.2"

Plant Specific EAL ~~Guideline~~ (FPB)

Indian Point Unit 3

PWR FPB IC#: FC3

Barrier:

Type:

Description: Core Exit Thermocouple Readings

FC3.1 Greater than ~~(site-specific)~~ 1200 °F

Bases:

The "Loss" EAL ~~(site-specific)~~ reading should correspond to significant superheating of the coolant. This value typically corresponds to the temperature reading that indicates core cooling - RED in fuel clad barrier EAL #1 which is usually about 1200 °F.

Reference: F-0.2, Rev. 3, CORE COOLING

Plant Specific EAL Guideline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC3

Barrier: Fuel Cladding

Type: Potential Loss

Description: Core Exit Thermocouple Readings

FC3.2 Greater than ~~(site-specific)~~ 700 °E

Bases:

The "Potential Loss" EAL ~~(site-specific)~~ reading should correspond to loss of subcooling. This value typically corresponds to the temperature reading that indicates core cooling - ORANGE in fuel clad barrier EAL #1 which is usually about 700 to 900 °F. Note: This condition is a subset of CSFST F-0.2 CORE COOLING

Reference:

F-0.2, Rev. 3, CORE COOLING

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC4

Barrier: Fuel Cladding

Type: Potential Loss

Description: Reactor Vessel Water Level

FC4.1 RVLIS Full Range less than 39% with no RCPs running

Bases:

There is no "Loss" EAL corresponding to this item because it is better covered by the other fuel clad barrier "Loss" EALs.

The ~~(site-specific)~~ value for the "Potential Loss" EAL corresponds to the top of the active fuel. For sites using CSFSTs, the "Potential Loss" EAL is defined by the Core Cooling - ORANGE path. The ~~(site-specific)~~ value in this EAL should be consistent with the CSFST value.

Note: This condition is a subset of CSFST E-0.2 CORE COOLING

Reference:

1. FR-C.1 "Response to Inadequate Core Cooling
2. E-0.2, Rev. 3

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC5

Barrier: Fuel Cladding

Type: Loss

Description: Containment Radiation Monitor Reading

FC5.1 Containment rad monitor reading greater than ~~(site specific)~~ 17 R/hr as indicated on R-25 or R-26

Bases:

The ~~(site specific)~~ reading is a value which indicates the release of reactor coolant, with elevated activity indicative of fuel damage, into the containment. The reading should be calculated assuming the instantaneous release and dispersal of the reactor coolant noble gas and iodine inventory associated with a concentration of 300 $\mu\text{Ci/gm}$ dose equivalent I-131 into the containment atmosphere. Reactor coolant concentrations of this magnitude are several times larger than the maximum concentrations ~~(including iodine spiking)~~ allowed within technical specifications and are therefore indicative of fuel damage (approximately 2-5 % clad failure depending on core inventory and RCS volume). This value is higher than that specified for RCS barrier loss EAL #4. Thus, this EAL indicates a loss of both the fuel clad barrier and a loss of RCS barrier.

The value of 17 R/hr is based on taking the more conservative of the calculated values between IP2 (21 R/hr) and IP3 (17 R/hr) using the MICROSHEILD code. The monitor response is based upon 5% of the WOG gap source terms and the assumption of having a steam/air mixture in containment with iodines included. It is further assumed that no decay has occurred and the release of coolant to the containment atmosphere is instantaneous with no removal.

There is no "Potential Loss" EAL associated with this item.

1. Calculation described in letter from DA Smith to R. Burns 8/6/93

Plant Specific EAL Model (FPB)

Indian Point Unit 3

PWR FPB IC#: FC6

Barrier: Fuel Cladding

Type: Loss

Description: Other (site specific) indications

FC6.1 ~~(Site-specific)~~ as applicable None.

Bases:

This EAL is to cover other ~~(site-specific)~~ indications that may indicate loss or potential loss of the fuel clad barrier, including indications from containment air monitors or any other ~~(site-specific)~~ instrumentation. A Gross Failed Fuel Detector (GFFD) Monitor alarm or high reading would not be used by itself as a failed fuel indication, but must be confirmed by coolant sample analysis to indicate increasing levels of fuel failure. Therefore GFFD is not used as an indicator.

Reference:

System Description No. 12.0

Plant Specific EAL Guideline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC6

Barrier: Fuel Cladding

Type: Potential Loss

Description: Other ~~(site-specific)~~ Indications

FC6.2 ~~(Site-specific) as applicable. None.~~

Bases:

This EAL is to cover other ~~(site-specific)~~ indications that may indicate loss or potential loss of the fuel clad barrier, including indications from containment air monitors or any other ~~(site-specific)~~ instrumentation.

Reference: Onsite discussions with Emergency Planning Supervisor Dave Bell, Senior Radiation Protection Engineer Don Mayer, and chemistry specialist Matt Kerns.

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC7

Barrier: Fuel Cladding

Type: Loss/Pot. Loss

Description: Emergency Director Judgement

FC7.1 Any condition in the opinion of the Emergency Director that indicates loss or potential loss of the fuel clad barrier

Bases:

This EAL addresses any other factors that are to be used by the Emergency Director in determining whether the fuel clad barrier is lost or potentially lost. In addition, the inability to monitor the barrier should also be incorporated in this EAL as a factor in Emergency Director judgement that the barrier may be considered lost or potentially lost. (See also IC SG1, "Prolonged Loss of All Offsite Power and Prolonged Loss of All Onsite AC Power", for additional information.)

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS1

Barrier: RCS

Type: Potential Loss

Description: Critical Safety Function Status

RCS1.1 ~~RCS integrity~~ - Red path on F-0.4. INTEGRITY

RCS1.2 ~~Heat Sink~~ - Red path on F-0.3. HEAT SINK and heat sink is required

Bases:

This EAL is for PWRs using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. ~~For more information, please refer to Section 3.9 of this report.~~ RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings, and these CSFs indicate a potential loss of RCS barrier.

There is no "Loss" EAL associated with this item.

Reference:

1. F-0.3, Rev. 3, HEAT SINK
2. F-0.4, Rev. 4, INTEGRITY

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS2

Barrier:

Type:

Description: RCS Leak Rate

RCS2.1 Greater than available makeup capacity as indicated by a loss of RCS subcooling exceeding the subcooling criterion for actuation of SI per EP E-0: Less than 20°F subcooling. OR For adverse containment:

<u>RCS PRESSURE (PSIG):</u>	<u>RCS SUBCOOLING °F</u>
>1900 psig	<43°F
>1000 psig	<59°F
<1000 psig	<88°F

Bases:

The "Loss" EAL addresses conditions where leakage from the RCS is greater than available inventory control capacity such that a loss of subcooling has occurred. The loss of subcooling is the fundamental indication that the inventory control systems are inadequate in maintaining RCS pressure and inventory against the mass loss through the leak.

Reference:

E-0, Rev. 16, REACTOR TRIP OR SAFETY INJECTION

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS2

Barrier:

Type:

Description: RCS Leak Rate

RCS2.2 ~~Unisolable RCS leak exceeding the capacity of one charging pump in the normal charging mode~~ Primary system leakage \geq 75 GPM.

Bases:

The "Potential Loss" EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one ~~centrifugal~~ charging pump discharging to the charging header. In conjunction with the SG Tube Rupture "Potential Loss" EAL this assures that any event that results in significant RCS inventory shrinkage or loss (e. g., events leading to reactor scram and ECCS actuation) will result in no lower than an "Alert" emergency classification.

Reference:

System Description No. 3, Rev. 0, CVCS
IP2 PT-Q33

Plant Specific EAL ~~Model~~ (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS3

Barrier:

Type:

Description: SG Tube Rupture

RCS3.1 ~~(site-specific) indication that a SG is ruptured and has an unisolable secondary line break.~~ Unisolable secondary side line break with SG tube rupture as identified in E-3 "Steam Generator Tube Rupture"

Bases:

This EAL is intended to address the full spectrum of Steam Generator (SG) tube rupture events in conjunction with containment barrier "Loss" EAL #4 and fuel clad barrier EALs. The "Loss" EAL addresses ruptured SG(s) with an unisolable secondary line break corresponding to the loss of 2 of 3 fission product barriers (RCS barrier and containment barrier - this EAL will always result in containment barrier "Loss" EAL #4). This allows the direct release of radioactive fission and activation products to the environment. Resultant offsite dose rates are a function of many variables. Examples include: coolant activity, actual leak rate, SG carry over, iodine partitioning, and meteorology. Therefore, dose assessment in accordance with IC AG1, "Site Boundary Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity that Exceeds 1000 mR Whole Body or 5000 mR Child Thyroid for the Actual or Projected Duration of the Release Using Actual Meteorology", is required when there is indication that the fuel matrix/clad is potentially lost.

~~(Site-specific)~~ indication should be consistent with the diagnostic activities of the emergency operating procedures (EOPs), ~~if available~~. This should include indication of reduction in primary coolant inventory, increased secondary radiation levels, and an uncontrolled or complete depressurization of the ruptured SG. Secondary radiation increases should be observed via radiation monitoring of condenser air ejector discharge, SG blowdown, mains steam, and/or SG sampling system. Determination of the "uncontrolled" depressurization of the ruptured SG should be based on indication that the pressure decrease in the ruptured steam generator is not a function of operator action. This should prevent declaration based on a depressurization that results from an EOP induced cooldown of the RCS that does not involve the prolonged release of contaminated secondary coolant from the affected SG to the environment. This EAL should encompass steam breaks, feed breaks, and stuck open safety or relief valves.

References:

1. ONOP SG-1, Rev. 8, STEAM GENERATOR TUBE LEAK
2. E-0, Rev. 7, REACTOR TRIP OR SAFETY INJECTION
3. E-3 "Steam Generator Tube Rupture"

Plant Specific EAL Guideline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS3

Barrier: RCS

Type: Potential Loss

Description: SG Tube Rupture

RCS3.2 ~~(site-specific) indication that a SG is ruptured and the primary-to-secondary leak rate exceeds the capacity of one charging pump in the normal charging mode. SG tube rupture as identified in E-3 "Steam Generator Tube Rupture" AND RCS leakage exceeds 75 GPM.~~

Bases:

The "Potential Loss" EAL is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control system which is considered as one ~~centrifugal~~ charging pump discharging to the charging header. In conjunction with the RCS leak rate "Potential Loss" EAL this assures that any event that results in significant RCS inventory shrinkage or loss (e. g., events leading to reactor scram and ECCS actuation) will result in no lower than an "Alert" emergency classification.

References:

1. ONOP SG-1, Rev. 8, STEAM GENERATOR TUBE LEAK
2. E-0, Rev. 7, REACTOR TRIP OR SAFETY INJECTION
3. E-3 "Steam Generator Tube Rupture"

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS4

Barrier: RCS

Type: Loss

Description: Containment Radiation Monitoring

RCS4.1 Containment radiation monitor reading greater than ~~(site-specific) R/hr~~ 0.06 μ Ci/cc on R-11 and R-12 due to RCS leakage

Bases:

The ~~(site-specific)~~ reading is a value which indicates the release of reactor coolant to the containment. The reading should be calculated assuming the instantaneous release and dispersal of the reactor coolant noble gas and iodine inventory associated with normal operating concentrations (i. e., within T/S) into the containment atmosphere. This reading will be less than that specified for fuel clad barrier EAL #5. Thus, this EAL would be indicative of a RCS leak only. If the radiation monitor reading increased to that specified by fuel clad barrier EAL #3, fuel damage would also be indicated.

However, if the site-specific physical location of the containment radiation monitor is such that radiation from a cloud of released RCS gases could not be distinguished from radiation from nearby piping and components containing elevated reactor coolant activity, this EAL should be omitted and other site-specific indications of RCS leakage substituted.

There is no "Potential Loss" EAL associated with this item.

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS5

Barrier:

Type:

Description: Other ~~(Site-specific)~~ indications

RCS5.1 ~~(Site-specific)~~ as available None.

Bases:

This EAL is to cover other ~~(site-specific)~~ indications that may indicate loss or potential loss of the RCS barrier, including indications from containment air monitors or any other ~~(site-specific)~~ instrumentation.

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS5

Barrier:

Type:

Description: Other ~~(site-specific)~~ indications

RCS5.2 ~~(Site-specific) as applicable. None.~~

Bases:

This EAL is to cover other ~~(site-specific)~~ indications that may indicate loss or potential loss of the RCS barrier, including indications from containment air monitors or any other ~~(site-specific)~~ instrumentation.

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: RCS6

Barrier:

Type:

Description: Emergency Director

RCS6.1 Any condition in the judgment of the Emergency Director that indicates loss or potential loss of the RCS barrier.

Bases:

This EAL addresses any other factors that are to be used by the Emergency Director in determining whether the RCS barrier is lost or potentially lost. In addition, the inability to monitor the barrier should also be incorporated in this EAL as a factor in Emergency Director judgement that the barrier may be considered lost or potentially lost. (See also IC SG1, "Prolonged Loss of All Offsite Power and Prolonged Loss of All Onsite AC Power", for additional information.)

Plant Specific EAL (FPB)

Indian Point Unit 3

PWR FPB IC#: PC1

Barrier:

Type:

Description: Critical Safety Function Status

PC1.1 ~~Containment~~ - Red path on F-0.5. CONTAINMENT resulting from loss of coolant

Bases:

This EAL is for PWRs using Critical Safety Function Status Tree (CSFST) monitoring and functional recovery procedures. ~~For more information, please refer to Section 3.9 of this report.~~ RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or fuel clad barrier loss. Thus, this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.

There is no "Loss" EAL associated with this item.

Reference: F-0.5, Rev. 2, CONTAINMENT

Plant Specific EA Guideline (FPB)

Indian Point Unit 3

PWR FPB IC#: PC2

Barrier:

Type:

Description: Containment Pressure

PC2.1 Rapid ~~unexplained~~ uncontrolled decrease in Containment Pressure following initial increase

PC2.2 Loss of primary coolant inside containment with containment pressure or sump level response not consistent with LOCA conditions, i.e. unexpected changes occur in these parameters that are not explainable due to operator actions or automatic system actions.

Bases:

Rapid unexplained loss of pressure (i. e., not attributable to containment spray or Fan Cooling Units or condensation effects) following an initial pressure increase indicates a loss of containment integrity. Containment pressure and sump levels should increase as a result of the mass and energy release into containment from a LOCA. Thus, sump level or pressure not increasing indicates containment bypass (V-sequence) and a loss of containment integrity.

Plant Specific EAL ~~Model~~ (FPB)

Indian Point Unit 3

PWR FPB IC#: PC2

Barrier: Primary Containment

Type: Potential Loss

Description: Containment Pressure

PC2.3 ~~(site-specific)~~ 47 psig and increasing

PC2.4 ~~Explosive mixture exists~~ ≥4% hydrogen concentration in containment

PC2.5 ~~Containment pressure greater than containment depressurization system setpoint/depressurization equipment operating~~ Confirmed Phase B isolation signal with less than the minimum containment cooling safeguards equipment operating

Bases:

The ~~(site-specific)~~ 47 psig for potential loss of containment is based on the containment design pressure. Existence of an explosive mixture (4% hydrogen) means a hydrogen and oxygen concentration of at least the lower deflagration limit curve exists. The indications of potential loss under this EAL corresponds to some of those leading to the RED path in EAL #1 above and may be declared by those sites using CSFSTs. As described above, this EAL is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.

The second potential loss EAL represents a potential loss of containment in that the containment heat removal/depressurization system (~~e.g.,~~ containment sprays, Fan Cooler Units, ice condenser fans, etc., but not including containment venting strategies) are either lost or performing in a degraded manner, as indicated by containment pressure greater than the setpoint at which the equipment was supposed to have actuated.

Reference:

1. SOP CB-7, HYDROGEN RECOMBINER OPERATION, Rev. 10, para. 2.1
2. Tech Specs para. 5.2
3. FSAB Appendix 5A
4. System Description No. 10.3, Rev. 0, CONTAINMENT AIR RECIRCULATION COOLING AND FILTRATION SYSTEM
5. System Description No. 10.2, Rev. 1, CONTAINMENT SPRAY SYSTEM
6. EOP E-0, Reactor Trip or Safety Injection, for Phase "A" and "B"
7. Technical Specification 3.6.B-2
8. ECA 1.1, Loss of Emergency Coolant Recirculation

Plant Specific EAL (FPB)
Indian Point Unit 3

PWR FPB IC#: PC3

Barrier:

Type:

Description: Containment Isolation Valve Status After Containment Isolation

PC3.1

Either:

One or more Phase "A" or Phase "B" or CVI Valve(s) not closed when required following confirmed LOCA

OR

Inability to isolate any primary system discharging outside containment

AND

downstream radiological release pathway to the environment exists as a result

Bases:

This EAL is intended to address incomplete containment isolation that allows direct release to the environment. It represents a loss of the containment barrier.

The criterion "Inability to isolate any primary system discharging outside containment" addresses any breach of the RCS and containment which is not protected by the Phase "A", Phase "B" or CVI systems or which results from an interfacing system LOCA (not addressed by NUMARC). No leakage threshold is specified since leaks outside containment, particularly under dynamic conditions, are difficult to quantify and may manifest themselves with diverse symptoms. Symptoms of a primary system discharging outside containment may be indicated via mass balance, decreasing RCS inventory without corresponding containment response, or area temperatures and radiation levels outside containment. It is for this reason that Senior Watch Supervisor/Emergency Director judgment is intended to be used in evaluating this criteria. However, it is intended that the magnitude of the leak associated with this EAL be consistent with the RCS barrier loss threshold of 75 gpm or greater.

There is no "Potential Loss" EAL associated with this item.

Reference:

Technical Specification 3.6.A.1.A and 3.6.A.1.B

Plant Specific EAL (FPB)

Indian Point Unit 3

PWR FPB IC#: PC4

Barrier:

Type:

Description: SG Secondary Side Release with Primary to Secondary Leakage

PC4.1 Unisolable release of secondary side to atmosphere from the effected steam generator(s) with primary to secondary leakage greater than tech spec allowable of 0.3 GPM in any steam generator

Bases:

This EAL addresses SG tube ruptures. ~~Secondary side releases to atmosphere include those from the condenser air ejector, atmospheric dump valves, and mainsteam safety valves.~~ Unisolable secondary side releases to atmosphere include feed line or steam line breaks as well as stuck open safety or atmospheric relief valves that cannot be isolated once isolation has been directed by the EOPs. A steam generator which is required to be used for plant cooldown would also be covered under this EAL. For smaller breaks, not exceeding the normal charging capacity threshold in RCS barrier "Potential Loss" EAL #2 (RCS leak rate) or EAL #3 (SG tube rupture), this EAL results in an Unusual Event. For larger breaks, RCS barrier "Loss" or "Potential Loss" EAL #2 would result in an Alert. For SG tube ruptures which may involve multiple steam generators or unisolable secondary line breaks, this EAL would exist in conjunction with RCS barrier "Loss" EAL #3 and would result in a Site Area Emergency. Escalation to General Emergency would be based on "Potential Loss" of the fuel clad barrier.

Reference:

1. Tech Specs. Amendment No. 121, paragraph 3.1.F.8, page 3.1-31
2. E-3 "Steam Generator Tube Rupture"
3. Response #3 to PWR FPB Q&A's to NUMARC/NESP-007 dated June 1993

Plant Specific EAL ~~Model~~ (FPB)

Indian Point Unit 3

PWR FPB IC#: PC5

Barrier: Primary Containment

Type: Potential Loss

Description: Significant Radioactive Inventory in Containment

PC5.1 Containment radiation monitor reading greater than ~~(site-specific)~~ 68 R/hr on R-25 or R-26.

Bases:

The (site-specific) reading is a value which indicates significant fuel damage well in excess of the EALs associated with both loss of fuel clad and loss of RCS barriers. As stated in Section 3.8, a major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant. Regardless of whether containment is challenged, this amount of activity in containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of containment, such that a General Emergency declaration is warranted. NUREG-1228 "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents," indicates that such conditions do not exist when the amount of clad damage is less than 20%. Unless there is a (site-specific) analysis justifying a higher value, it is recommended that a radiation monitor reading corresponding to 20% fuel clad damage be specified here.

The value of 68 R/hr is based on taking the more conservative of the calculated values between IP2 (84 R/hr) and IP3 (68 R/hr) using the MICROSHEILD code. The monitor response is based upon 20% of the WOG gap source terms and the assumption of having a steam/air mixture in containment with iodines included. It is further assumed that no decay has occurred and the release of coolant to the containment atmosphere is instantaneous with no removal.

There is no "Potential Loss" EAL associated with this item.

1. Calculation described in letter from DA Smith to R. Burns 8/6/93

Plant Specific EAL ~~_____~~ (FPB)

Indian Point Unit 3

PWR FPB IC#: PC6

Barrier: Primary Containment

Type: Potential Loss

Description:

PC6.1 Core exit thermocouples in excess of 1200 °F and restoration procedures (FR-C.1. "RESPONSE TO INADEQUATE CORE COOLING." FR-C.2. "RESPONSE TO DEGRADED CORE COOLING." FR-C.3. "RESPONSE TO SATURATED CORE COOLING." not effective within 15 minutes

PC6.2 Core exit thermocouples in excess of 700 °F with ~~reactor vessel level~~ RVLIS Full Range <39% with no RCPs running, OR Dynamic Head Range 44% with 4 RCPs running, 30% with 3 RCPs running, 20% with 2 RCPs running, or 13% with 1 RCP running and restoration procedures (FR-C.1. "RESPONSE TO INADEQUATE CORE COOLING." FR-C.2. "RESPONSE TO DEGRADED CORE COOLING." FR-C.3. "RESPONSE TO SATURATED CORE COOLING.") not effective within 15 minutes

Bases:

In this EAL, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety functions. The procedure is considered effective if the temperature is decreasing or if the vessel water level is increasing.

The conditions in this potential loss EAL represent imminent melt sequence which, if not corrected, could lead to vessel failure and an increased potential for containment failure. In conjunction with the core exit thermocouple EALs in the fuel and RCS barrier columns, this EAL would result in the declaration of a General Emergency -- loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is not "success" path.

Severe accident analyses (e. g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of containment failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not procedures will be effective should be apparent within 15 minutes. The Emergency Director should make the declaration as soon as it is determined that the procedures have been, or will be effective. The reactor vessel level chosen should be consistent with the emergency response guides applicable to the facility.

There is no "Loss" EAL associated with this item.

Reference: EOP F-0.2. "CORE COOLING."

Plant Specific EAL (FPB)

Indian Point Unit 3

PWR FPB IC#: PC7

Barrier:

Type:

Description: Other (site-specific) indications

PC7.1

~~(Site-specific) as applicable~~ Both doors open on a VC airlock for ≥ 4 hrs.

OR

Inability to close containment pressure relief or purge valves which results in a radiological release pathway to the environment for ≥ 4 hrs.

OR

Any Phase "A" or Phase "B" or containment ventilation isolation valve(s) not closed when required which results in a radiological release pathway to the environment

Bases:

~~This EAL should cover other (site-specific) indications that may unambiguously indicate loss or potential loss of the containment barrier, including indications from area or ventilation monitors in containment annulus or other contiguous buildings. If site emergency operating procedures provide for venting of the containment during an emergency as a means of preventing catastrophic failure, a loss EAL should be included for the containment barrier. This EAL should be declared as soon as such venting is imminent. Containment venting as part of recovery actions is classified in accordance with the radiological effluent ICs.~~

It is important to note however, that loss of containment due to both airlock doors being open is event dependent. Upon recognition, shift personnel would rapidly respond in an attempt to reestablish containment integrity. If the doors cannot be reclosed, any loss of the RCS barrier that occurs with the doors open would appear as an inconsistent LOCA response. Therefore, this event is not used as a definitive indicator of loss of the primary containment barrier for purposes of defining higher classification EALs. Rather it is left to the Emergency Director's judgment whether such a loss has occurred.

The condition "Inability to close containment pressure relief or purge valves which results in a radiological release pathway to the environment" was added to address loss of containment boundary as a result of failure to isolate the containment vent path following routine containment venting. The condition "Any Phase "A" or Phase "B" or containment ventilation isolation valve(s) not closed when required which results in a radiological release pathway to the environment" was added to address CIS isolation failures which are not initiated as a result of RCS boundary breach. This EAL is only considered for the purpose of declaration of an Unusual Event. For declaration of either SAE or General Emergencies, this EAL is subsumed into PC8.1 - Emergency Coordinator Judgment. If this condition occurs in conjunction with a loss of RCS, declaration will be made based on PC2.1, 2.2 or 3.1.

Reference:

1. ONOP-CB-2, Rev. 3, LOSS OF WCCPPS or IVSWS
2. Tech Spec 3.6.A.1.D and 3.6.A.3"

Plant Specific EAL (FPB)

Indian Point Unit 3

PWR FPB IC#: PC7

Barrier:

Type:

Description: Other (site-specific) indications

PC7.2 ~~(Site-specific) as applicable. None.~~

Bases:

This EAL should cover other (site-specific) indications that may unambiguously indicate loss or potential loss of the containment barrier, including indications from area or ventilation monitors in containment annulus or other contiguous buildings. ~~If site emergency operating procedures provide for venting of the containment during an emergency as a means of preventing catastrophic failure, a loss EAL should be included for the containment barrier. This EAL should be declared as soon as such venting is imminent. Containment venting as part of recovery actions is classified in accordance with the radiological effluent ICs.~~

Reference: ONOP-CB-2, Rev. 3, LOSS OF WCCPPS or IVSWS

Plant Specific EAL **[REDACTED]** deline (FPB)

Indian Point Unit 3

PWR FPB IC#: PC8

Barrier:

Type:

Description: Emergency Director Judgement

PC8.1 Any condition in the judgment of the Emergency Director that indicates loss or potential loss of the containment barrier

Bases:

This EAL addresses any other factors that are to be used by the Emergency Director in determining whether the containment barrier is lost or potentially lost. In addition, the inability to monitor the barrier should also be incorporated in this EAL as a factor in Emergency Director judgement that the barrier may be considered lost or potentially lost. (See also IC SG1, "Prolonged Loss of All Offsite Power and Prolonged Loss of All Onsite AC Power", for additional information.)

Plant Specific EAL Modeline (FPB)

Indian Point Unit 3

PWR FPB IC#: FC1

Barrier: Fuel Cladding

Type: Loss

Description: Critical Safety Function Status

FC1.1 Core Cooling - RED path in F-0.2, CORE COOLING

Bases:

Core Cooling - RED indicates significant superheating and core uncover and is considered to indicate loss of the Fuel Clad Barrier.

Reference:

1. F-0.2, Rev. 3, CORE COOLING