

SDP PHASE 1 SCREENING WORKSHEET FOR IE, MS, and B CORNERSTONES

Reference/Title (LER #, Inspection Report #, etc):

Factual Description of Identified Condition (statement of facts known about the finding, without hypothetical failures included):

System(s) degraded by identified condition:

2 EOCs Trains low S3 BWSI  
Both in 1005 in Fire Area

Train(s) degraded by identified condition:

Licensing Basis Function of System(s) or Train(s) (as applicable):

Appendix R Fire

Other Safety Function of System(s) or Train(s) (as applicable):

None

Maintenance Rule category (check one):

risk-significant

non-risk-significant

Time that identified condition existed or is assumed to have existed:

D/60  
W

Functions and Cornerstones degraded as a result of this identified condition (check ✓)

INITIATING EVENT CORNERSTONE

Transient initiator contributor (e.g., reactor/turbine trip, loss offsite power)

Primary or Secondary system LOCA initiator contributor (e.g., RCS or main steam/feedwater pipe degradations and leaks)

MITIGATION SYSTEMS CORNERSTONE

Core Decay Heat Removal Degraded  
Degraded

Initial Injection Heat Removal Degraded

Primary (e.g., Safety Inj)

Degraded

Low Pressure

Bypass

High Pressure

Hydrogen or

Secondary - PWR only (e.g., AFW)

Degraded

Long Term Heat Removal Degraded (e.g., ECCS sump recirculation, suppression pool cooling)

Spent

Reactivity Control Degraded

Fire/Flood/Seismic/Weather Protection Degraded

BARRIERS CORNERSTONE

RCS LOCA Mitigation Boundary

(e.g., PORV block valve, PTS issue)

Containment Barrier Degraded

Reactor Containment

Actual Breach or

Heat Removal,

Pressure Control

Control Room, Aux Bldg, or

Fuel Bldg Barrier Degraded

Fuel Cladding Barrier Degraded

Check the appropriate boxes ✓

If the finding is assumed to degrade:

1. fire protection defense in depth (DID), detection, suppression, barriers, fire brigade, use IMC 0609 Appendix F
2. the safety of a shutdown reactor, use IMC 0609 Appendix G
3. the safety of an operating reactor, identify the degraded areas:
  - Initiating Event
  - Mitigation Systems
  - RCS Barrier
  - Fuel Barrier
  - Containment Barriers
4. Two or more of the above areas degraded → Go to Phase 2
5. If only one of the above areas is degraded, continue only in the appropriate column below.

Initiating Event	Mitigation Systems	RCS Barrier or Fuel Barrier	Containment Barriers
<p>1. Does the finding contribute to the likelihood of a Primary or Secondary system LOCA initiator?  <input type="checkbox"/> If YES → Go to Phase 2  <input type="checkbox"/> If NO, continue</p> <p>2. Does the finding contribute to both the likelihood of a reactor trip AND the likelihood that mitigation equipment or functions will not be available?  <input type="checkbox"/> If YES → Go to Phase 2  <input type="checkbox"/> If NO, continue</p> <p>3. Does the finding increase the likelihood of a fire or internal/external flood?  <input type="checkbox"/> If YES → Use the IPEEE or other existing plant-specific analyses to identify core damage scenarios of concern and factors that increase the frequency. Provide this input for Phase 3 analysis.  <input type="checkbox"/> If NO, screen as Green</p>	<p>1. Is the finding a design or qualification deficiency confirmed not result in loss of function per GL 91-18 (rev 1)?  <input type="checkbox"/> If YES → screen as Green  <input type="checkbox"/> If NO, continue</p> <p>2. Does the finding represent an actual loss of safety function of a System?  <input type="checkbox"/> If YES → Go to Phase 2  <input type="checkbox"/> If NO, continue</p> <p>3. Does the finding represent an actual loss of safety function of a single Train, for &gt; its Tech Spec Allowed Outage Time?  <input type="checkbox"/> If YES → Go To Phase 2  <input type="checkbox"/> If NO, continue</p> <p>4. Does the finding represent an actual loss of safety function of one or more non-Tech Spec Trains of equipment designated as risk-significant per 10CFR50.65, for &gt;24 hrs?  <input type="checkbox"/> If YES → Go To Phase 2  <input type="checkbox"/> If NO, continue</p> <p>5. Does the finding screen as potentially risk significant due to a seismic, fire, flooding, or severe weather initiating event, using the criteria on page 3 of this Worksheet?  <input type="checkbox"/> If YES → Use the IPEEE or other existing plant-specific analyses to identify core damage scenarios of concern and provide this input for Phase 3 analysis.  <input type="checkbox"/> If NO, screen as Green</p>	<p>1. RCS Barrier Go to Phase 2</p> <p>2. Fuel Barrier screen as Green</p>	<p>1. Does the finding <u>only</u> represent a degradation of the radiological barrier function provided for the control room, or auxiliary building, or spent fuel pool, or SBT system (BWR)?  <input type="checkbox"/> If YES → screen as Green  <input type="checkbox"/> If NO, continue</p> <p>2. Does the finding represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere?  <input type="checkbox"/> If YES → Go to Phase 3  <input type="checkbox"/> If NO, continue</p> <p>3. Does the finding represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment?  <input type="checkbox"/> If YES → Go to Phase 2 in Appendix H of IMC 0609  <input type="checkbox"/> If NO, screen as Green</p>

**Seismic, Fire, Flooding, and Severe Weather Screening Criteria**

1. Does the finding involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors)? (Equipment and functions for the mitigation or suppression of fire initiating events, such as thermal wrap or sprinkler systems, should be evaluated using IMC 0609 Appendix F and are not evaluated here)
  - If YES → continue to question 2
  - If NO → skip to question 3
  
2. If the equipment or safety function is assumed to be completely failed or unavailable, are ANY of the following three statements TRUE? The loss of this equipment or function by itself, during the external initiating event it was intended to mitigate
  - a) would cause a plant trip or any of the Initiating Events used by Phase 2 for the plant in question;
  - b) would degrade two or more Trains of a multi-train safety system or function;
  - c) would degrade one or more Trains of a system that supports a safety system or function.
  - If YES → the finding is potentially risk significant due to external initiating event core damage sequences - return to page 2 of this Worksheet
  - If NO, screen as Green
  
3. Does the finding involve the loss of any safety function, identified by the licensee through a PRA, IPEEE, or similar analysis, that contributes to external event initiated core damage accident sequences (i.e., initiated by a seismic, fire, flooding, or severe weather event)?
  - If YES → the finding is potentially risk significant due to external initiating event core damage sequences - return to page 2 of this Worksheet
  - If NO, screen as Green

**Result of Phase 1 screening process:**  screen as Green  go to Phase 2  input to Phase 3

**Important Assumptions (as applicable):**

135  
65  
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200