

Calvert Cliffs GSI-191 Program

Use of Risk Metrics for Containment Sump
Tech Spec Operability Determination

June 21, 2018



Exelon Generation®

Future Licensing Basis

- After the Risk-Informed GSI-191 license amendment is approved, Calvert Cliffs licensing basis for operability of emergency recirculation sump will be risk-based.
 - The risk of LOCA events that could threaten strainer performance is Very Low, which is consistent with RG 1.174 acceptance guidelines
- Proposed Technical Specification for the Containment Sump

3.6 CONTAINMENT SYSTEMS

3.6.9 Containment Sump

LCO 3.6.9 The containment sump shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Containment sump inoperable due to potential containment accident generated and transported debris exceeding the analyzed limits.	A.1 Initiate action to mitigate containment accident generated and transported debris.	Immediately
	<u>AND</u>	
	A.2 Perform SR 3.4.13.1.	Once per 24 hours
	<u>AND</u>	
	A.3 Restore the containment sump to OPERABLE status	90 days

Debris Acceptance Guidelines

- The following is the proposed risk metric to be added to the UFSAR.

RISK INCREASE LIMITS DUE TO CONTAINMENT DEBRIS

- The Δ CDF or Δ LERF values due solely to the effects of debris on the emergency recirculation strainer may not exceed the following limits.
- Maximum Δ CDF limit = $3.0E-07$ - Maximum Δ LERF limit = $3.0E-08$
- Current preliminary results from GSI-191 risk analysis

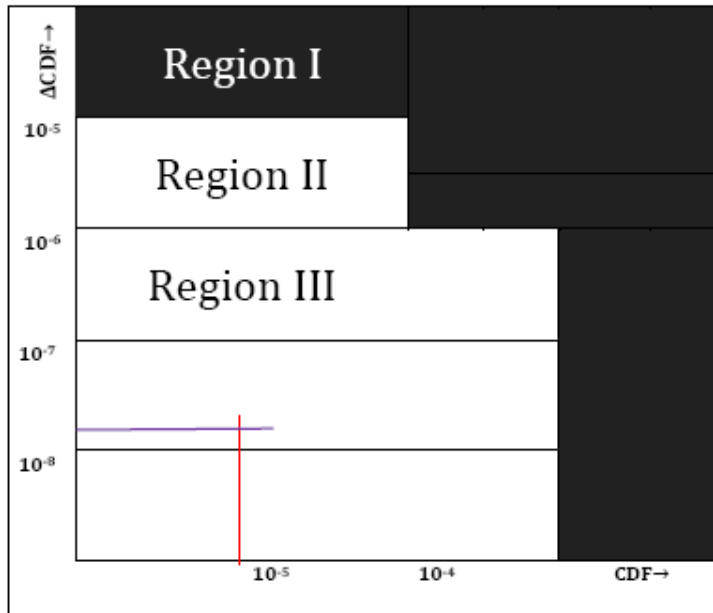


Figure 4: Regulatory Guide 1.174 Acceptance Criteria for CDF

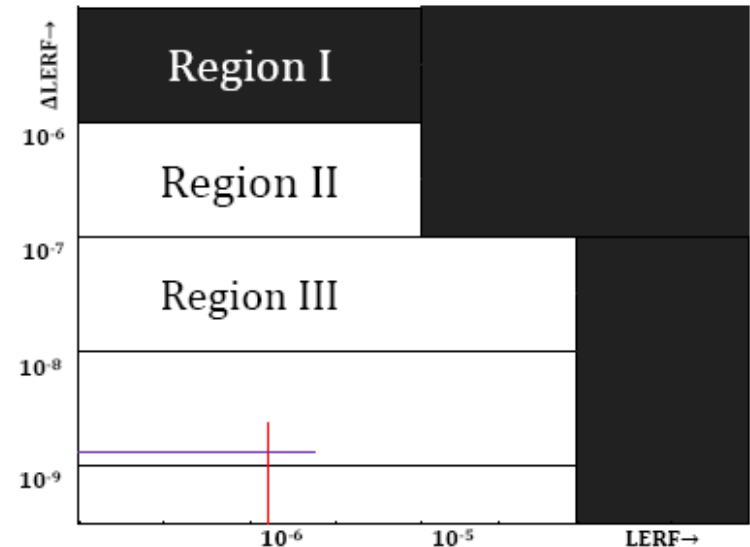


Figure 5: Regulatory Guide 1.174 Acceptance Criteria for LERF

Questions/Concerns

- Jointly Review Issues, Questions, and Concerns