

PWR Owners Group



PWROG Perspective on LBLOCA Rule Change (10 CFR 50.46a)

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PWR Owners Group LBLOCA Rule Change

Introduction

- PWROG supports a rule that meets the objectives stated in SECY 98-0300:
 - Enhance safety by focusing NRC and licensee resources in areas commensurate with their importance to health and safety.
 - Provide NRC with the framework to use risk information to take action in reactor regulatory matters.
 - Allow use of risk information to provide flexibility in plant operation and design, which can result in burden reduction without compromising safety
- The current draft rule does not fully meet these objectives

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KEY GAPS AND RECOMMENDATIONS

OBJECTIVE	GAP	RECOMMENDATION
<ul style="list-style-type: none">Enhance safety by focusing NRC and licensee resources in areas commensurate with their importance to health and safety.	Imposes a change control program focuses resources on non-risk-significant changes	Use existing change control process, such as 10CFR50.59.
<ul style="list-style-type: none">Provide NRC with the framework to use risk information to take action in reactor regulatory matters.	Rule is not written so that it can clearly be applied to GSI-191 with respect to debris generation and transport.	Clarify rule language or guidance that the reactor coolant system model may include debris generation and transport.
<ul style="list-style-type: none">Allow use of risk information to provide flexibility in plant operation and design, which can result in burden reduction without compromising safety	<ul style="list-style-type: none">Rule has the potential to provide flexibility in operation and design.Change control program has potential to impose burden not commensurate with risk.	Use existing change control process.

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Alternate Transition Break Size

For example, a frequency of 1 occurrence in 100,000 reactor years is an appropriate mean value for the LOCA frequency guideline for selecting the maximum design-basis LOCA since it is complemented by the requirement that appropriate mitigation capabilities, including effective severe accident mitigation strategies, must be retained for the beyond design-basis LOCA category. [SECY dated July 1, 2004]

- Transition Break Size (TBS) has a mean frequency smaller than the SECY direction.
- PWROG performed evaluation for members that supports smaller TBS
- Revise wording for TBS to allow licensee to propose TBS.

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New design basis is not commensurate with the risk

- Implementation for PWROG members will be burdensome and guidance is still largely undefined
 - At least 3 new analyses
 - New change control program
 - New monitoring programs
 - New restrictions
 - Others yet to be identified
- New programs require more focus on non-risk-significant issues
 - Defeats part of the purpose of the rule
- PWROG believes the rule can be simplified

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Recommended Next Steps

- Changes to the rule and/or implementation guidance:
 - Provision for licensee to propose the Transition Break Size
 - Clarification or simplification of analyses required for “beyond design basis”
 - Clarification of model definition to allow for debris generation and transport
- NRC and industry conduct transparent, public dialogue to define implementation requirements that are commensurate with risk from break larger than the TBS.