



United States Nuclear Regulatory Commission

REGULATORY STRUCTURE OF DRAFT RULE

Risk-Informed 10 CFR 50.46

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Draft Rule Structure

- Existing § 50.46 essentially unchanged
 -
- Voluntary alternative rule added (§ 50.46a)
 - Conforming changes in GDC 35, etc.
- § 50.46a addresses LOCA redefinition only; not LOCA/LOOP



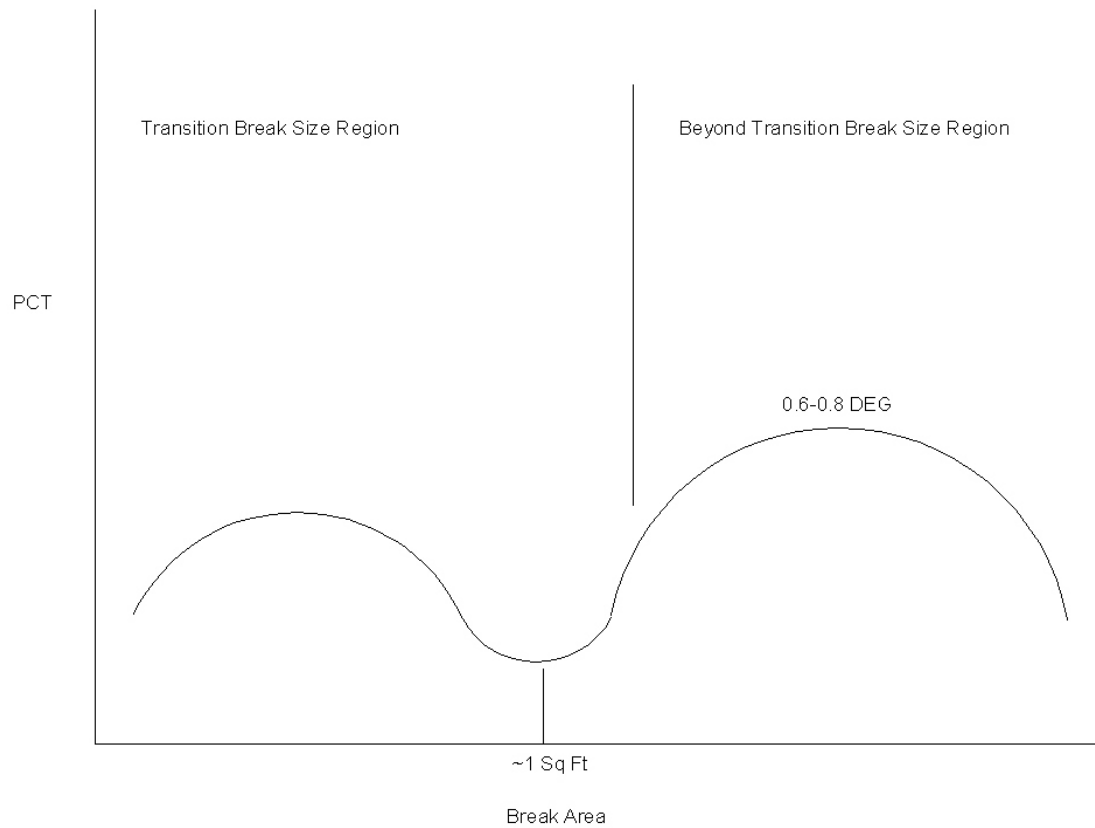
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•Reporting Requirements

Typical PWR PCT Response



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Typical

B



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WR PCT Response



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- **Evaluation Models Allowed Today**

- ▶ **Realistic Model with Assessment of uncertainty**
- ▶ **Appendix K deterministic without assessment of uncertainty**



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- **Evaluation Models — Proposed Rule**

- ▶ **Up to and Including TBS Region — Current requirements for realistic or Appendix K compliant models acceptable to the staff**
- ▶ **Beyond TBS Region — Model acceptable to the staff**



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•Single Failure Criteria

- ▶Up to and Including TBS Region — Current requirements for worst single failure
- ▶Beyond TBS Region — Credit for systems and components according to availability data, including non-safety grade equipment



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- **Acceptance Criteria — Up to and Including TBS Region**
 - **Retain PCT limit of 2200° F**
 - **Retain MLO limit of 17%**
- **Retain hydrogen generation equivalent to 1% clad reacted**
 - **Retain coolable geometry and long-term cooling requirements**
 - **PCT and MLO evaluated for spectrum of breaks**



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- **Acceptance Criteria — Beyond TBS Region**
 - **Maintain coolable geometry**
 - **Provide long-term cooling**



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- **Reporting Requirements — Up to and Including TBS Region**

- **Analysis of Record**

- **Retain current reporting requirement on PCT; sum of the absolute values of changes greater than or equal to 50°F**
 - **Add reporting requirement on oxidation; sum of the absolute values of changes greater than or equal to 4%**