

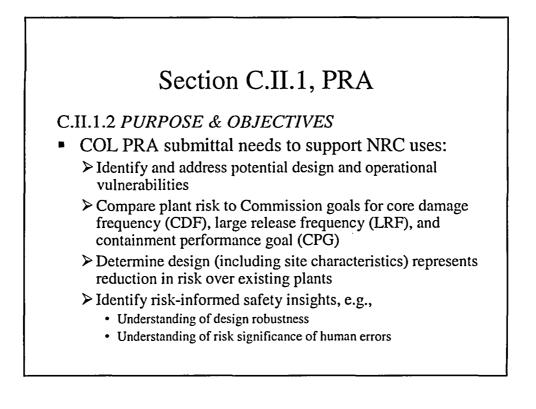
Proposed 10 CFR 52 (71 FR 12782)

Subpart B – Design Certification
52.47(a): Application – Contents of FSAR
52.47(b)(1): Application include design-specific PRA
Subpart C – Combined Licenses
52.79: Application – Contents of FSAR
52.80(a): Application include plant-specific PRA

Section C.II.1, PRA ■ DG-1145: PRA >II.1 – Overall PRA for COL application >I.19 – PRA information included in FSAR >III.1 & III.2 – portions of PRA addressed by Certified Design and/or Early Site Permit

C.II.1.1 REGULATORY BASIS

- 10 CFR 52.47 requires application contain designspecific PRA
- Proposed 10 CFR 50.80(a) requires plant-specific PRA
- COL application <u>without</u> certified design needs to provide information equivalent to that needed to support certified design reviews
- COL application <u>with</u> a certified design builds off certified design reviews with focus on site-specific information, design and operational changes/level of detail information, and resolution of COL issues



C.II.1.2 PURPOSE & OBJECTIVES (continued)

COL PRA submittal needs to support NRC uses

Identify/Support design and operational requirements and programs, e.g.,

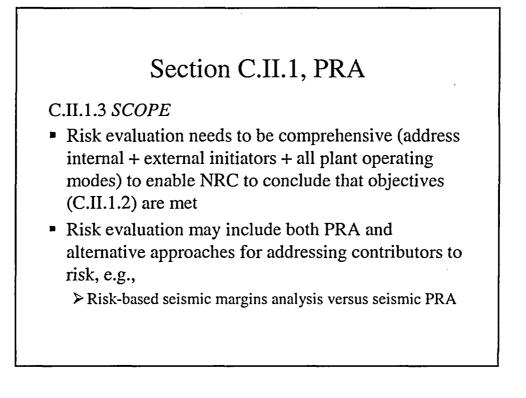
• ITAACs (Inspection, Tests, Analyses, and Acceptance Criteria)

• D-RAP (design reliability assurance program)

• COL and interface requirements (e.g., COL Action Items)

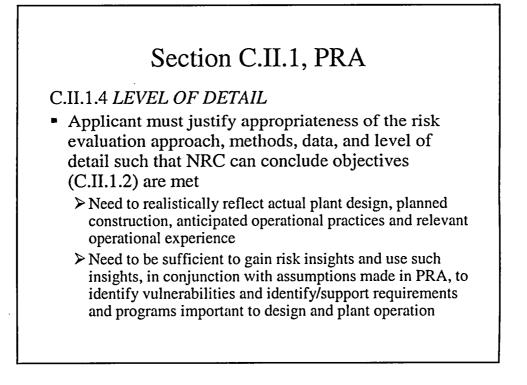
• TS (technical specifications)

- Human Factors
- Maintenance Rule
- Support RTNSS (regulatory treatment of non-safety systems) process
- > Assess balance of preventive and mitigative features



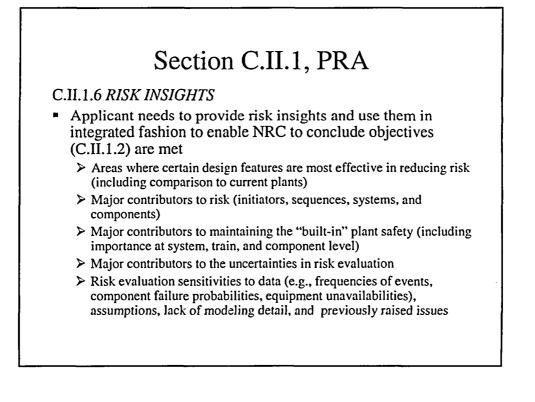
C.II.1.3 SCOPE (continued)

- Risk evaluation scope, level of detail, and technical adequacy may need to be expanded to support other risk-informed applications, e.g.,
 - ≻NFPA-805
 - ≻ 10 CFR 50.69
- All 4 certified designs have addressed full scope:
 - \triangleright Internal and external initiators
 - > All operating modes
 - ➤ Addressing
 - core damage
 - containment performance
 - offsite consequences



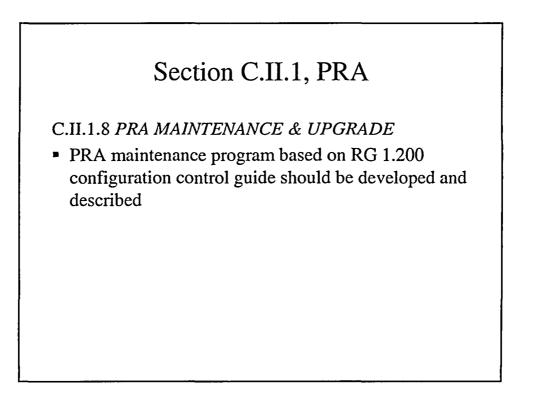
C.II.1.5 TECHNICAL ADEQUACY

- Quality of applicant's methodologies, processes, analyses, and personnel associated with risk evaluation need to be sufficient for NRC to conclude objectives (C.II.1.2) are met
 - Comply with provisions of nuclear plant quality assurance (10 CFR 50 Appendix B)
 - Meet ASME and ANS Standards as endorsed by RG 1.200 and RG 1.174 pertaining to quality and technical adequacy
 - Justify alternative measures or scope areas for which there is no Standard
 - > Special emphasis on novel and passive features



C.II.1.7 FORMAT & CONTENT

- PRA documentation submitted should be sufficient for NRC to conclude objectives (C.II.1.2) are met
 - Risk evaluation process including provisions to ensure technical adequacy
 - Modeling aspects (initiating events, simplified drawings/diagrams, fault and event trees, success criteria, data, important assumptions/ calculations)
 - Results (minimal cut sets and importance, sensitivity, and uncertainty analyses)
- Appendix B to C.II.1 provides standard format
- Applicant does <u>not</u> need to provide all plant-specific, sitespecific PRA information, but it must be maintained and available for NRC review



Public Questions & Comments