



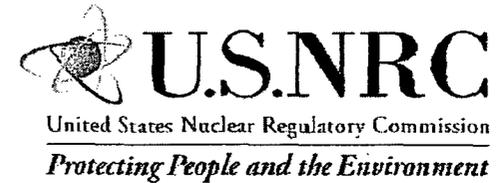
Chapter 4: Review Status Public Presentation

U.S. EPR Design Certification Application Review

Chapter 4: REACTOR

December 9, 2009

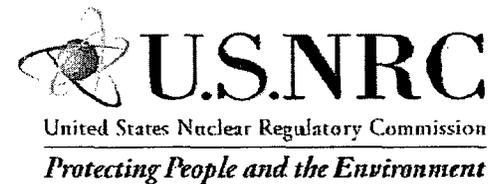
Overview of Chapter 4 Content and Open Items



SRP Section/Application Section		Open Item Information	Number of SE Open Items
4.2	Fuel Systems Design	RAI 339, Question 04.02-17 RAI 318, Question 04.02-16	2
4.3	Nuclear Design	RAI 344, Question 04.03-27 RAI 344, Question 04.03-28	2*
4.4	Thermal-Hydraulic Design	RAI 325, Question 04.04-61 RAI 308, Question 04.04-59 RAI 308, Question 04.04-60	3*
4.5	Reactor Materials	Open items in Section 4.5 will be covered at a later date due to staff availability	TBD
4.6	Functional Design of Reactivity Control Systems		0

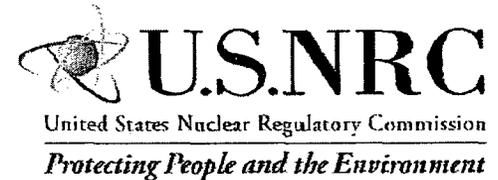
*Excepting dependencies on topical reports referenced in other sections

Description of SE Open Items for DC Section 4.2



- **RAI 339, Question 04.02-17 (ML093400005):** The review of ANP-10285, “U.S. EPR Fuel Assembly Mechanical Design Topical Report,” has not been completed by the staff. This RAI was created to track the ongoing review of ANP-10285. This open item also affects Sections 4.3 and 4.4 of the U.S. EPR FSAR.
- **RAI 318 Question 04.02-16 (ML092950108):** Relates to the need for additional information regarding SSE-LOCA loads.

Description of Open Items for ANP-10285



- **RAIs and 46*, 47*, 48*, 49*:** Follow-ups to RAI 25 and 38 on ANP-10285. Relate to the staff's concern regarding M5™ guide tube growth and the data used to support the RAI responses. NRC staff is currently evaluating the responses to these RAIs. Technical details contained in these responses will be discussed during the closed (proprietary) portion of this meeting.
- **RAI 51*:** Follow-up to RAI 40 on ANP-10285. The staff has requested a hydride limit on M5™ supported by data and is currently evaluating the response.
- **RAI-52 (ML092080469):** The staff is expecting RAI response from AREVA on December 16, 2009 regarding COPERNIC's handling of strain uncertainty and the consideration of additional data.

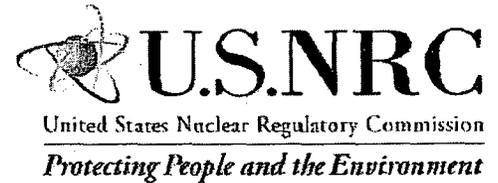
*current non-proprietary response is contained in ML092310532

Description of SE Open Items for DC Section 4.3



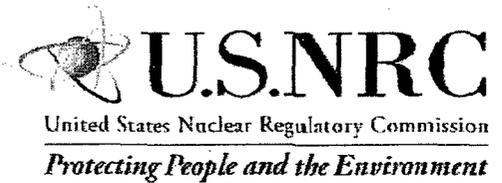
- **RAI 344 Question 04.03-27:** The staff requests a COL item for the collection of data for a plant specific data-base to benchmark BAW-2241PA for the U.S.EPR fluence calculations.
- **RAI 344 Question 04.03-28:** The review of ANP-10286P, “U.S. EPR Rod Ejection Accident Methodology Topical Report,” is not complete. This open item was created to track the review of ANP-10286 until the staff’s review is complete and issued to the applicant.
- **Note:** The open review of ANP-10285P, which is tracked in **RAI 339, Question 04.02-17**, also affects this Section.

Description of SE Open Items for DC Section 4.4



- **RAI 308, Question 04.04-59 (ML092940796):** Provide a testing plan to verify the accuracy of the correction algorithms that are applied to the raw AMS activation measurements.
- **RAI 308, Question 04.04-60 (ML092940796):** Provide the methodology to remove the ^{60}Co background from SPND measurements and how this background will be treated by the Protection system and the AMS PowerTrax calculations.
- **RAI 325, Question 04.04-61 (ML093030626):** Provide hydraulic loads analysis for the U.S. EPR fuel and vessel components for normal operating and DBA conditions including an explanation that “the hold-down springs provide sufficient force to prevent hydraulic lift of the assemblies”.
- **Note:** The open review of ANP-10285P, which is tracked in **RAI 339, Question 04.02-17**, also affects this Section.

Description of SE Open Items for DC Section 4.6



- There are no Open Items for Section 4.6.