

**From:** Sikhindra Mitra  
**To:**  
**Date:** 5/9/03 9:33AM  
**Subject:** Clarification of RAI response

SK

Roger,

Following are the additional response items. Please let me know if you can arrange a conference call before the meeting of May 20-21, 2003.

**F.** I need to discuss further with the applicant RAI 2.3.2.5-1. Specifically, as I discussed the last time, when I compare the applicant's response to the rule, I am unable to conclude that the hydrogen control function is not within the scope of license renewal. Although the applicant has clearly provided enough information to demonstrate that 54.4(a)(1) and (a)(3) do not pertain, it is not apparent why (a)(2) does not apply, based on the language in the rule. Although I don't disagree that the applicant has ample time to effect hydrogen control, the rule does not explicitly consider time, only necessity.

In addition, I have a question concerning the applicant's RAI response in light of UFSAR section 6.2.5.2.2. The RAI response states that "There is sufficient time to assure that all components of the recombiner system are operable before the system is required to be placed in operation." However, the UFSAR says that "the majority of the lines cannot be repaired due to the high radiation rates present during post accident conditions." The obvious question then, is what value is having enough time to assure system operability if the dose rates on the majority of these lines would prevent their repair if they are inoperable?

**G.** I need clarification of the following to write my SE.  
"(4) RNP will submit, for review and approval, the inspection plan for the Nickel-Alloy Nozzles and Penetration Program, since.....  
implemented from the applicant's participation in industry initiatives prior to July 31, 2009."

Please clarify what follows after the word since....in the above statement.

Please clarify if the UFSAR will be updated again to reflect our RAI prior to our issuance of final SER.

**H.** In response to RAI 2.5.2-1 the applicant stated that the original RNP electrical AMR already includes an evaluation of phenolic materials. This evaluation shows that for the worst-case environmental service conditions encountered at RNP, the base of the fuse holder will be able to maintain its intended function throughout the period of extended operation. No additional evaluation of phenolic is warranted. This is not consistent with the requirements of ISG-5. Per ISG-5, the insulating material for the fuse holder shall be managed by GALL XI.E1 "Electrical Cables and Connections Not Subject to 10 CFR 50.49 EQ Requirements."

2. In response to RAI 4.4-2, the applicant provided RNP EQ Program. The Corrective Actions of this program is not consistent GALL element. The corrective action should be in accordance with the requirements of 10 CFR 50, Appendix B.

3. In response to RAI B4.6-1, the applicant stated that as discussed in LRA Subsection 3.6.2.1, the components subject to aging in the electrical penetration assemblies are the materials for the electrical conductors and connections. Since the electrical conductors and connections will be managed by three programs( Non-EQ Insulated Cables and Connections Program, aging Management program for Non-EQ Electrical cables Used in Instrumentation Circuits, and Aging Management Program for Neutron Flux Instrumentation Circuits), the Non-EQ Electrical Penetration assemblies should be managed by all three Programs.

4. In response to RAI B.4.6-2, the applicant stated that the scope of this program includes plant cables of various insulation material types that may be located in adverse localized environment. The Scope of the program should include cables and connections including fuse holders.

5. In response to RAI 4.4.1-2 a), the applicant stated that RNP completed an Appendix K power uprate in 2002 that resulted in an approximately 1.7% increase in power level. However, the response failed to address the effect of power uprate on temperature and radiation values used in EQ calculation.

#### I. Response to RAI 4.3-2.3.

If operating procedures are changed to the extent that the fatigue usage associated with a particular operation is increased beyond that assumed in the most recent fatigue analysis for the component, the affected fatigue **analyses would be revised to account for the more severe thermal stress.** (Therefore, allowable cycles will be less than previously calculated) The acceptance limit would remain that the CUF must be less than 1.0. **If the number of design cycles remains unchanged** ( change to " If there is no need to reduce cycles for the design transient") (i.e., the increase in fatigue usage from the previous analysis does not result in CUF > 1.0), then no change would be required to the Fatigue Monitoring Program limits. If the number of **cycles** (add "for the design transient") had to be reduced ( add "due to lower allowable cycles) to obtain a CUF value less than 1.0, this reduced number of cycles would become the new Fatigue Monitoring Program cycle limit.

S. K Mitra