

23-12

From: Jack Strosnider *NRH*
To: ejs, elm, tar *E. Sullivan, E. Murphy, NRH*
Date: 1/7/99 7:49pm
Subject: NEI RESPONSES TO OUR COMMENTS ON 97-06

Attached are my "gut reactions" to the NEI responses to our comments on 97-06. I think they have effectively addressed many of the easier issues. However, a few big issues remain i.e., defining specific confidence levels, where the performance criteria need to be placed i.e., tech specs vs FSAR. Hopefully, we can reduce the number of issues to a few critical ones which we can provide a good technical and regulatory bases for. Let me know when your ready to discuss. Brian has requested that we brief him in the near future.

Jack

CC: ejs

J/204

COMMENTS ON 12/17/98 NEI RESPONSE TO SG ISSUES

1. STRUCTURAL PERFORMANCE CRITERIA

Referencing Section XI verses Section III seems OK to me. Addition of the specific quantitative margins of 3.0 and 1.4 in the assessment guidelines will make the desired margins clear, and makes the code reference moot, except perhaps when debating what the CLB is.

General language like "maintain adequate margin" might be OK in the higher tiered 97-06 document, but without some **quantification** in the assessment guidelines of what is meant by "adequate" or "conservative assessment", we are leaving ourselves open to debates as to whether or not the performance criteria have been met.

We'll need to carefully consider the level of conservatism we want to put on top of the explicit factors of safety.

2. DEFINITION OF TUBE RUPTURE AND BURST

I don't remember exactly why we were making the distinction. We'll have to discuss.

3 & 4. ARC Reveiws and utilization of Risk Guidance in 1.174

The proposed guidance stating that ARCs must be reviewed by NRC should resolve our issue, but the statement should indicate that the need for NRC is required by 50.55a not Section XI.

5. PROBABILISTIC STRUCTURAL PERFORMANCE CRITERIA

The arguement that the guidance of 97-06 could have avoided most if not all of the SG ruptures that have occurred is circular, since any worthwhile, up-to-date guidelines will factor in past operating experience. The point is that we are not smart enough to accomdate all possible tube failure mechanisms and some margin should be provided for this uncertainty.

The probabilistic criteria should also have the desired confidence level clearly quantified so as to avoid any possble debates as to whether or not the criteria are satisfied.

6. ACCIDENT LEAKAGE PERFORMANCE CRITERIA

The NEI response looks acceptable to me.

7. ACCIDENT LEAKAGE PERFORMANCE CRITERIA

Have we discussed this issue i.e., what consitutes the licensing basis with OGC? We should get their position. Also, notwithstanding the licensing basis issue, given that arriving at a value based on risk could take some time, I would suggest that we stick with the LCO leakage for the time being (particularly if OGC supports our position regarding the licensing basis). However, in order for this to be practical, we will have to modify the probability and confidence levels at which the leakage is to be calculated. If we requested that meeting the accident leakage performance criteria be demonstrated on a best estimate basis, could the industry show it? Or could we set some other limit (less than full part 100 limits)? Seems to me we were kicking around the idea of the normal make-up capacity or about 100 gpm at one point.

Jack agrees w/ Section XI

8. TUBE INSPECTIONS

i'm not sure what all the concerns might be regarding the prescriptive approach in the guidelines, we'll have to discuss.

9. GUIDELINES FOR DEVIATING FROM 97-06 GUIDANCE

NEI reponse appears acceptable.

10. NDE VALIDATION

Have we reviewed the most recent revisions of the guidelines? They say they have addressed many of the issues in DG 1074. Have they?

11. DEFINITION OF ACTIVE DEFECT TYPES

Their response seems credible. Is their a problem with it?

12. DIRECTIVE vs NON-DIRECTIVE GUIDELINES

Their response seems reasonable.

13. PROVIDING NEI GUIDELINE DOCUMENTS TO THE STAFF

This is a tough one. If there were sufficient, specific guidance regarding the performance criteria and what is necessary to demonstrate satifying them in 97-06 e.g., a quantitative statement of the performance criteria and the confidence level with which they need to be demonstrated and the need for comparable NDE reliability, we could possibly accept the 97-06 without seeing the lower tiered documents. In this approach, it would be the licensees responsibility to develop adequate procedures per their Appendix B program (the lower tiered documents would be guidance for developing or perhaps referenced in plant procedures). However, if the critical parts of the performance based approach are not sufficiently detailed in 97-06, we'd be hard pressed to buy into the approach without first seeing the sub-tiered documents. As I've stated before, I'd prefer not to be co-opted into approving the subtiered documents if possible.

14. TREATEMENT OF UNCERTAINTIES AND VARIABILITY

The proposed guidance to consider uncertainties appears acceptable, and it is encouraging that they say they will give specific levels of conservatism in the sub-tiered documents. However, as discussed above, it would be better to have an overall level of conservatism stated in 97-06.

15. NDE VALIDATION

Per item 10, above, are the most recent EPRI guidelines acceptable?

16. CONDITION MONITORING AND OP ASSESSMENT FOR EACH DEFECT TYPE

The NEI response appears acceptable.

17. NEED TO ADDRESS CORRECTIVE ACTIONS

The NEI response appears acceptable.

18. REGULATORY TREATMENT OF TUBE REPAIR CRITERIA

The NEI response could have merit. It could be argued that NRC approval of first of a kind repair criteria would cover our concerns and that we rely on 50.59 to govern (limit) changes to many other safety related plant activities. However, the definition of first of a kind could be problematic. NRC reviewed topical reports included by reference in the FSAR could provide a process that would meet their proposal and could possibly put limits on the range of things that could be changed under 50.59. We need to think about this one.

19. PLUG ON DETECTION FOR NON-VALIDATED NDE SYSTEMS

The NEI response appears acceptable.

20. REVIEW OF ARCs

The NEI response appears acceptable, except that I think the need for NRC review should be tied to 50.55a and its incorporation of the code by reference.

21. TUBE REPAIR METHODS

Again this approach could have merit. See the discussion under number 18, above.