October 28, 2008

- MEMORANDUM TO: Kamal Manoly, Chief Mechanical and Civil Engineering Branch Division of Engineering Office of Nuclear Reactor Regulation
- FROM: George Thomas, Structural Engineer /RA/ Mechanical and Civil Engineering Branch Division of Engineering Office of Nuclear Reactor Regulation
- SUBJECT: SUMMARY OF SEPTEMBER 3, 2008 PUBLIC MEETING WITH NEI TO DISCUSS DRAFT REGULATORY ISSUE SUMMARY (RIS) ON CONTAINMENT INTEGRATED LEAK RATE TEST INTERVAL EXTENSIONS BEYOND 15 YEARS

On September 3, 2008, a Category 2 public meeting was held with NEI to discuss the draft RIS 2008-XX, "Staff Position on Extension of Containment Type A Test Interval Beyond 15 Years Under Option B of Appendix J to 10 CFR Part 50." The meeting was noticed as a Category 2 Public Meeting and the meeting agenda is available in the NRC Agency-wide Documents Access and Management System (ADAMS) under accession number ML082270257.

The NRC staff presented a summary description of the draft RIS. NEI and Industry members presented their comments on the draft RIS that were discussed during the meeting. The NRC staff indicated that the RIS would be finalized after staff's internal assessment of proposed NEI comments. The NEI/Industry comments and the NRC staff responses are included as Enclosure 1.

CONTACT: George Thomas, NRR/DE/EMCB (301) 415-6181

K. Manoly

The following NRC and external stakeholders, including members of NEI and industry representatives, participated in the meeting. No members of the general public were present.

NRC		NEI/INDUSTRY/OTHERS	
NAME	ORGANIZATION	NAME	ORGANIZATION
Michael Case	NRR/DPR	Julie Keys	NEI
Sher Bahadur	NRR/DE	Mike Schoppman	NEI
Kamal Manoly	NRR/DE/EMCB	Craig Sly	Dominion Resources Services
Hansraj Ashar	NRR/DE/EMCB	Deann Raleigh	LIS Scientech
George Thomas	NRR/DE/EMCB	Nancy Chapman	Bechtel/SERCH (by telecon)
Farhad Farzam	NRR/DE/EMCB		
Brett Titus	NRR/DE/EMCB		
Juan Uribe	NRR/DE/EMCB		
John Burke	RES/DE/MEEB		
Bruce Lin	RES/DE/MEEB		

Enclosure: Industry Comments and NRC responses

cc. w/encl (by email): See next page

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Michael Case	NRR/DPR	Julie Keys	NEI
Sher Bahadur	NRR/DE	Mike Schoppman	NEI
Kamal Manoly	NRR/DE/EMCB	Craig Sly	Dominion Resources Services
Hansraj Ashar	NRR/DE/EMCB	Deann Raleigh	LIS Scientech
George Thomas	NRR/DE/EMCB	Nancy Chapman	Bechtel/SERCH (by telecon)
Farhad Farzam	NRR/DE/EMCB		
Brett Titus	NRR/DE/EMCB		
Juan Uribe	NRR/DE/EMCB		
John Burke	RES/DE/MEEB		
Bruce Lin	RES/DE/MEEB		

Enclosure: Industry Comments and NRC responses

RES/DE/MEEB

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Industry Comments and NRC Responses Regarding NRC Draft RIS 2008-xxx

The following industry comments are provided related to NRC Draft Regulatory Issue Summary 2008-xxx, "Staff Position on Extension of the Containment Type A Test Interval Beyond 15 Years Under Option B of Appendix J to 10 CFR 50."

Comments:

1. The draft RIS could result in licensees performing Type A tests during a mid-cycle refueling outage, which is typically not a good risk-based decision. The draft RIS creates the possibility that, due to unforeseen circumstances, a plant may be required to perform a mid-cycle forced outage to perform a Type A test. The inherent risk (although small) of placing a plant in a shutdown condition (considering the increase in human error and the thermal cycle applied to the plant) would likely be larger than the risk of deferring the Type A test to the next refueling outage.

NRC response:

The NRC staff notes that the Containment Leak Rate Testing Program under Option B of Appendix J to 10 CFR 50 is not a "risk-based" program as alluded to in the comment but a "performance-based" program. The associated risk analysis is part of the performancebased program. Under this option, the Type A test frequency has been reduced from three tests in 10 years to at least one test in 10 years and now to at least one test in 15 years. Since the containment is the final barrier against radioactive release in the event of an accident, the NRC staff emphasizes the importance of performing the periodic verification of the structural and leakage integrity of the containment within the specified interval. Except under special circumstances, the 15-year interval (both one-time and permanent) realistically provides a very reasonable time and the flexibility to plan and conduct the test during a routine refueling outage within the interval. As such, a situation where a plant may have to perform a Type A test in a forced mid-cycle plant shutdown would typically arise from the licensee's poor planning or errors in scheduling Type A tests within the required interval. The NRC has received several requests for extensions of Type A tests beyond 15 years without proper rationale. The purpose of the RIS is to emphasize the discipline licensees should follow in conducting the Type A tests within the required interval. The NEI comment suggests that the regulations and staff position should be flexible to accommodate factors such as convenience, poor planning, errors, or negligence on the part of the licensees, which the staff does not agree with.

2. The draft RIS provides too little flexibility to licensees. The draft RIS states, "Licensees know the due date for the next Type A test years in advance and also know the due date is not likely to coincide with a routine refueling outage." This statement is an assumption that does not account for "unforeseen circumstances" that may arise at plants. As the term implies, "unforeseen circumstances" cannot be predicted and can occur for a variety of reasons. Some examples might include: transposition of numbers in a computer database or lack of clarity of design basis documents. Human errors occur for a variety of reasons and are rarely willful. The RIS does not provide any flexibility for licensees when unforeseen circumstances arise. The net consequence of this lack of flexibility could be a forced mid-cycle shutdown to perform a Type A test. This is a very harsh and unwarranted penalty for

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what may amount to a scheduling error, an error in judgment, or lack of knowledge of applicable requirements.

NRC response:

The staff does not agree with the comment. The definition of the Type A test interval is clearly provided in Section 9.2.2 of NEI 94-01 (Revision 0 and Revision 2), which by virtue of endorsement in RG 1.163 is the implementing document used by licensees in the Technical Specifications (TS) for the Appendix J, Option B program. Therefore, the due date for the next Type A test is known on the day the previous test is completed and this is not an assumption. A required interval of up to 15 years provides all the flexibility to plan and conduct the test within the interval. The NRC has received several requests for extensions of Type A tests beyond 15 years without proper rationale. The RIS points out that scheduling errors, errors in judgement, or lack of knowledge of applicable requirements are not valid reasons for extending the test interval.

3. The draft RIS could inflict substantial costs to licensees that are not commensurate with the safety benefit or risk reduction. It is estimated that a forced outage of approximately 7 to 14 days in length would be required to perform a mid-cycle Type A test. An outage of this length would be very costly to the affected licensee and not commensurate with the "imperceptible" increase in risk that would be avoided by deferring the Type A test to the next scheduled refueling outage.

NRC response:

See response to Comment 1. The staff notes that the Appendix J, Option B, program is not "risk-based" but "performance-based", that has resulted in a consensus upper-bound Type A test interval of up to15 years. The staff recognizes that the 15-year due date may not necessarily coincide with a refueling outage. With a 15-year interval, it is a reasonable staff position that licensees should conduct the Type A test in the scheduled refueling outage immediately before the due date, at the latest, rather than making an argument for deferring it to the outage after the due date. This would avoid any forced mid-cycle outage. It is a misconception that the RIS would force licensees into a mid-cycle plant shutdown to conduct a Type A test which could result from inadequate planning or negligence. The RIS is clear that the NRC would consider a request for extension of the interval beyond 15 years if there is a special circumstance or compelling reason.

4. The draft RIS effectively eliminates the final option available to licensees (license amendment request) to adjust Type A test schedules. Based on developments over the past several years, the scheduling requirements for performing Type A testing have changed at many plants. Most plants originally had reasonable grace periods applicable to their Type A test frequency allowing the flexibility to handle scheduling issues without NRC review and approval. However, as plants increased Type A test intervals to once per ten years and subsequently to once per 15 years, NRC essentially eliminated the available grace period. There is now essentially a very limited grace period for licensees who have gained approval of the once per 15 year test interval (one month or less per the draft RIS). Elimination of the grace period has placed licensees who desire to increase their Type A test interval in a

position where submittal and approval of a license amendment is necessary. The draft RIS would effectively eliminate this option in all but a very few special cases. <u>NRC response</u>:

The NRC has received several requests for extensions of Type A tests beyond 15 years without proper rationale. The purpose of the RIS is to emphasize the discipline licensees should follow in conducting the Type A tests within the required interval. As indicated in the RIS, the staff considers the 15-year Type A test interval as a consensus upper-bound performance-based interval. The 15-year interval provides a significant and adequate period of time between tests and the flexibility for licensees to plan and conduct the next test within the required interval. Since the containment is the final barrier against radioactive release in the event of an accident, the NRC staff emphasizes the importance of performing the periodic verification of the structural and leakage integrity of the containment within the specified interval. It is the staff's position that, except for special circumstances, there is no need for an extension or grace period beyond the 15 years.

5. The draft RIS inappropriately cites positions in a June 25, 2008 SER as a basis for limiting the grace period of currently approved one-time extensions. The June 25, 2008 SER is applicable to NEI 94-01, Revision 2, and future license submittals for permanently extending Type A test frequencies to 15 years. However, the one-time extensions to 15 years that are currently active in the industry were obtained under the guidance of NEI 94-01, Revision 0. Citing the positions contained in the June 25, 2008 SER as applicable to previously approved one-time extensions is not appropriate and could constitute an inappropriate backfit for some licensees, depending on the wording of their current TS.

NRC response:

The RIS is applicable to approved one-time 15-year Type A test intervals as well as to permanent 15-year Type A test intervals based on NEI 94-01, Revision 2. There is no difference between the one-time 15-year Type A test interval and the permanent 15-year Type A test interval. However, based on this comment, a provision has been added in the RIS to the effect that: "If the current wording in the Technical Specifications (TS) differs from the staff position in this RIS for the approved one-time 15-year Type A test interval, then the requirement in the TS will govern for the one-time15-year test interval." This will preclude any unintended backfit because of the wording of the current TS.

The staff also incorporated most of the suggested editorial changes in the RIS mark-up provided by NEI by email from Julie Keys dated 9/25/2008 to address industry comments 1 thru 5.

6. The draft RIS should consider clarifying "inspect the uninspectable areas". The June 25, 2008 SER states an NRC requirement to inspect the uninspectable areas. Dialog with NRC during the SER review process determined that NRC expects licensees to use readily available technology to inspect areas and if technologies become readily available that would allow licensee's to inspect areas that are currently uninspectable they would be expected to use them. Therefore, we suggest that the following being added to the RIS to clarify that licensee's will inspect "inaccessible areas to the extent practical using readily available methods."

NRC response:

The staff notes that the June 25, 2008 SER Section 3.1.3 has language in it that licensees should explore/consider inaccessible degradation-susceptible areas in plant-specific inspections using viable, commercially available NDE methods (and NOT "inspect the uninspectable areas" as characterized in the comment). The subject of this comment is outside the scope of the subject matter of the RIS, which is solely focused on extension of Type A test intervals beyond 15 years. However, the staff will appropriately consider this comment in the proposed Revision 1 to RG 1.163.

7. The draft RIS should consider clarifying the requirements for RG 1.200 compliance. The June 25, 2008 SER requires adherence to RG 1.200. A simple statement added to the RIS that acknowledges RG 1.200 compliance is demonstrated once a licensee has successfully completed a peer review would clarify for the licensee how to demonstrate compliance.

NRC response:

The subject of this comment relates to risk assessment and is outside the scope of the subject matter of the RIS, which is solely focused on extension of Type A test intervals beyond 15 years. However, the staff will appropriately consider this comment in the proposed Revision 1 to RG 1.163.