MEMORANDUM FOR:

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FROM:

Moni Dey, Senior Task Manager Engineering Issues Branch

Division of Safety Issue Resolution Office of Nuclear Regulatory Research

SUBJECT:

MINUTES OF NRC/NUMARC MEETING ON PERFORMANCE-BASED

CONTAINMENT LEAK TESTING REGULATION

The agenda for the meeting is attached; the minutes are keyed to the numbered items therein.

1. Data

- Numarc plans to provide NRC containment testing performance and a. cost data on 1/20/94. Thirteen utilities (up to 50 units), were chosen to provide a broad representation. Among other things, Numarc will present trends, identify equipment bad actors, nature of failures, and identify when more testing may be needed. Numarc does not plan to correlate leakage found to maintenance performed.
- Performance data being gathered include:

test results of ILRTs since pre-ops; explanation of causes(s) of failure; all ILRT data since 1988 and the methodology used to establish administrative leakage limits for penetrations and valves.

for valves, Numarc will provide type, size, and services, 0

- currently, no data can be provided on characterizing leakage which exceeds the instrument ranges. Numarc understands the concern (i.e., risk is dependent in part on these values) and will examine the issue.
- Cost data being gathered include:

labor hours to conduct ILRT and LLRT.

critical path replacement hours (i.e., actual power replacement costs for the period); regarding-the question of planning outages when the power wasn't needed, industry responded it is difficult to predict what shape the power system might be in a year in advance, thus, you can't count on the savings.

Exposure data being gathered include:

An estimate or an allocation of exposures during type B/C and A tests; data are not gathered in a way that would allow more accuracy.

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2. Performance-Based Rule

- a. Numarc stated that the Entergy (Grand Gulf) proposal finds that Type B penetrations rarely, if ever, fail; 70-90 percent of the Type C penetrations never fail; based on these-facts, statistical sampling of Type C valves seems appropriate.
- b. Numarc sees a strong link between Appendix J and the new Maintenance Rule. By changing out many of its Type C valves, GPUN has turned in much better Appendix J test performance.

3. Numarc Guidance Document

- a. Industry is looking for guidance from NRC on its technical expectations, e.g., what is the appropriate level of detail required in a Type C Sampling Scheme? Is ANSI 56.8 acceptable to the NRC? It was agreed that Numarc would make proposals and NRC would review these proposals.
- b. Because answers to (a) are evolving, there is a need for Numarc and NRC to meet periodically. Another meeting is planned for early January.

4. Pilot Validation & Verification Program

- a. Numarc does not see the need for a V&V program given that NRC would have all the data. NRC clarified that it meant V&V of the Guidance Document to see whether the guidance is implementable. Numarc thought a NRC inspection program might suffice.
- b. The basic industry issue is to avoid holding up the rule while waiting for V&V program results.

It was agreed that the V&V issue would be revisited and decided upon when the composition of the guidance document is more clear.

- Comments on Prior Rule Elements
 a. No substantive discussion on this topic.
- 6. Performance Basis for ILRTs
 a. No substantive discussion on this topic.

7. On-Line Containment Testing

- a. NRR staff clarified its concern that with fewer ILRTs, there may be a need to satisfy oneself that the containment is indeed sealed properly after a significant work session. NRC is looking for some assurance that after containment integrity has been broken for any reason, the utility has assurance integrity has been restored. Human performance, not equipment concerns, is the cause for the concern.
- b. Numarc's initial reaction was that such a "blunder" test is not needed. Numarc believes that the earlier problems (e.g., locked open valves, etc.) may have been solved. Numarc will review LERs

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to assure itself that these problems have been solved administratively and that assurance of containment integrity is available.

Generic Deferral of ILRTs 8.

There was general agreement on the importance of facilitating the Appendix J rule. However, during rule preparation Numarc suggests that ILRT test intervals be revised under a generic exemption. NRC did not encourage any effort along the lines proposed noting that any requests would be a resource burden and have a lower priority than the rule.

9. NRC Status

- Numarc is looking for guidance in the preparation of its Guidance Document, i.e., some insight into the elements of the new rule. With such information early in 1994 from NRC, Numarc will plan to produce a Guidance Document by 9/94.
- NRC agreed it would place its draft Technical Supporting Document into the public document room.

Schedule 10.

- Numarc suggested that NRC consider issuing an Interim Rule (immediately effective) rather than a Proposed Rule.
- NRC and Numarc agreed to coordinate their schedules and assess activities which could be done in parallel in an effort to expedite this process.
- C. Near-term schedule:
 - 1/7/94 Numarc/NRC working meeting to review data;
 - 1/10-11/94 Numarc AHAC meeting;
 - 1/19/94 Numarc Working Group meeting to gain approval to release data;
 - 1/20/94 NRC/Numarc Steering Committee meeting and release of 0 data to NRC:
 - Early February NRC/Numarc status meeting.

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NRC/NUMARC Meeting December 14, 1993 Containment Integrity Testing

Agenda

- ° Introduction
- Industry discussion of the approach for gathering and evaluating performance and cost data regarding LLRT.
- Industry approach for establishing guidance for a performance based ILRT/LLRT program.
- The industry will develop a stand-alone guideline document that can be endorsed by the NRC as one way in which to meet the rule requirements for containment leakage testing (ANSI 56.8 requirements included as appropriate). Industry expects the developed guideline will also include the currently allowable BN-TOP.
- Is a pilot and V&V program required since industry will provide the basis for the performance based rule.
- Industry comments on the elements to be included in the rule as previously identified by the staff.
 - Definitions are the same as previously proposed (e.g., containment isolation valve).
- Performance basis for ILRT frequency that excludes penalties for B&C leakage when cause and corrective action have been effectively established.
- Basis for frequent on-line containment gross leak rate testing.
- Need for a generic performance based deferral of ILRTs scheduled to be conducted while the performance based rule and guidance are under development.
- NRC status of rule elements to be included in the NRC's final rule and NRC management review.
- Actions needed by the industry and NRC for schedule acceleration.

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PDR (w/draft NUREG-1493)

- J. Heltemes
- W. Minners
- J. Murphy
- C. Serpan
- F. Cherny
- M. Dey
- A. Thadani
- M. Virgilio
- R. Barrett
- R. Lobel
- J. Pulsipher
- P. O'Connor
- G. Mizuno
- R. Zimmerman
- M. Bowling, Virginia Power (w/draft NUREG-1493)
- M. Meisner, Grand Gulf (w/draft NUREG-1493)
 W. Smith, NUMARC (w/draft NUREG-1493)
- S. Treby