March 28, 2011

MEMORANDUM TO: Charles E. Ader, Director
Division of Safety Systems and Risk Assessment
Office of New Reactors

FROM: Donald A. Dube, Senior Technical Advisor /**RA**/
Division of Safety Systems and Risk Assessment
Office of New Reactors

SUBJECT: SUMMARY OF PUBLIC MEETING ON THE STATUS OF RISK- INFORMED REGULATORY GUIDANCE FOR NEW REACTORS HELD ON MARCH 24, 2011

On March 24, 2011, a public meeting was held at the Two White Flint North Building, Room 2B3, to discuss staff's proposed approach to address the Commission's Staff Requirements Memorandum (SRM) of March 2, 2011 on SECY-10-0121 regarding risk-informed regulatory guidance for new reactors, and to discuss the next steps for implementing the direction from the Commission. The agenda is provided as Enclosure 1, and a list of attendees is provided as Enclosure 2. Presentation materials prepared by the staff are available in the Agencywide Documents Access and Management System with Accession No. ML110840422. Handouts presented by industry representatives are provided as Enclosure 3.

The meeting served as a kick-off for the effort in response to the Commission SRM to perform tabletop exercises that "test various realistic performance deficiencies, events, modifications, and licensing bases changes against current U. S. Nuclear Regulatory Commission policy, regulations, guidance and all other requirements (e.g., Technical Specifications, license conditions, code requirements) that are or will be relevant to the licensing bases of new reactors."

Participants at the meeting recognized that given the time and resource constraints on the part of the NRC staff and other stakeholders, it would not be possible to test each and every risk-informed process including the Reactor Oversight Process (ROP), regulatory guides, and other guidance documents. Rather, the scope of the effort should be to verify (or not) the existing risk-informed framework, with emphasis on the major programs and processes likely to be implemented for new reactors, including those specifically called-out in the SRM (risk-managed technical specifications and 50.69). For the purposes of the tabletop exercises, three or four logical groups of processes seem appropriate:

CONTACT: Donald A. Dube, NRO/DSRA
301-415-1483

C. Ader

- Prioritization: specifically, risk-informed inservice inspection (RI-ISI) of piping and 50.69 (categorization of structures, systems, and components)

- Configuration control: specifically, Maintenance Rule 50.65 (a)(4), Risk-informed technical specification initiative (RITS) 4b (completion times) and 5b (surveillance test intervals)

- Inspection/testing: for example, risk-informed inservice testing and integrated leak rate testing

- ROP: specifically, MD 8.3 Incident Investigation, Significance Determination Process, and Mitigating Systems Performance Index

Staff discussed that while it would be desirable to have participation in these exercises from all five design centers with combined license applications (AP1000, ESBWR, U.S. EPR. US-APWR, ABWR), this may be an unrealistic expectation. Thus, as a minimum, participation in the tabletops of one new reactor design center with active systems (e.g., U.S. EPR) and one advanced passive design center (e.g., AP1000) is needed. Staff discussed the possibility of augmenting the exercises using one or more SPAR models (ABWR, AP1000, and US-APWR) that will be available in the time frame.

Representatives from the Electric Power Research Institute and its contractors discussed efforts underway on RI-ISI and how this could be one of the first activities to undergo tabletop testing. Enclosure 3 describes some of the insights that would be useful for this effort.

Based on the above discussion, a tentative schedule for the first few rounds of tabletop exercises was developed as follows:

1) Early May 2011: a 1-day exercise on RI-ISI
2) Late May: RITS 4b (completion times) and 50.65 (a) (4)
3) Mid June: some aspects of 50.69
4) Late June: RITS 5b
5) Late July: full exercise of 50.69

Using lessons learned from these exercises, tabletops on some of the remaining licensing-type processes and the ROP would follow. Completion of the exercises by early November, 2011, is planned.

Enclosures:
As stated

- Prioritization: specifically, risk-informed inservice inspection (RI-ISI) of piping and 50.69 (categorization of structures, systems, and components)

- Configuration control: specifically, Maintenance Rule 50.65 (a)(4), Risk-informed technical specification initiative (RITS) 4b (completion times) and 5b (surveillance test intervals)

- Inspection/testing: for example, risk-informed inservice testing and integrated leak rate testing

- ROP: specifically, MD 8.3 Incident Investigation, Significance Determination Process, and Mitigating Systems Performance Index

Staff discussed that while it would be desirable to have participation in these exercises from all 5 design centers with combined license applications (AP1000, ESBWR, U.S. EPR. US-APWR, ABWR), this may be an unrealistic expectation. Thus, as a minimum, participation in the tabletops of one new reactor design center with active systems (e.g., U.S. EPR) and one advanced passive design center (e.g., AP1000) is needed. Staff discussed the possibility of augmenting the exercises using one or more SPAR models (ABWR, AP1000, and US-APWR) that will be available in the time frame.

Representatives from the Electric Power Research Institute and its contractors discussed efforts underway on RI-ISI and how this could be one of the first activities to undergo tabletop testing. Enclosure 3 describes some of the insights that would be useful for this effort.

Based on the above discussion, a tentative schedule for the first few rounds of tabletop exercises was developed as follows:

1) Early May 2011: a 1-day exercise on RI-ISI
2) Late May: RITS 4b (completion times) and 50.65 (a) (4)
3) Mid June: some aspects of 50.69
4) Late June: RITS 5b
5) Late July: full exercise of 50.69

Using lessons learned from these exercises, tabletops on some of the remaining licensing-type processes and the ROP would follow. Completion of the exercises by early November, 2011, is planned.

Enclosures:
As stated
Distribution:

PUBLIC	RidsRgn1MailCenter
RidsNroDsra Resource	RidsRgn2MailCenter
LMrowca, NRO	RidsRgn3MailCenter
DDube,NRO	RidsRgn4MailCenter
TClark, NRO	RidsRgn3Drs
RFrahm, NRR	RCroteau, RII
RidsNroOd Resource	
RidsNrrDirs Resource	
RidsNrrDra Resource	
RidsResDra Resource	

ADAMS Accession Number: ML110840598 **NRC-001**

OFFICE	NRO/DSRA
NAME	DDube
DATE	3/28/2011

OFFICIAL RECORD COPY