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July 18, 2001

NOTE TO COMMISSIONER ASSISTANTS

OCM/RM

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- Linda Lewis
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- Brian McCabe
- John Thoma
- Heather Astwood
- Lorna Kipfer
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FROM: John W. Craig /RA/
Assistant for Operations, OEDO

SUBJECT: SUMMARY TABLE OF RISK INFORMED INITIATIVES

Attached for your information is a table summarizing risk-informed initiatives which summaries specific initiatives, and recent, current, and future activities.

Attachment: As stated

- cc: W. Travers, EDO (w/attachment)
- C. Paperiello, DEDMRS (w/o attachment)
- W. Kane, DEDR (w/attachment)
- P. Norry, DEDM (w/attachment)
- S. Reiter, CIO (w/o attachment)
- J. Craig, AO (w/attachment)
- J. Shea, OEDO (w/attachment)
- S. Collins, NRR (w/attachment)
- D. Matthews, NRR (w/attachment)
- SECY (w/attachment)
- OGC (w/attachment)
- OCA (w/attachment)
- OPA (w/attachment)
- OIP (w/o attachment)
- CFO (w/o attachment)
- EDO R/F (w/attachment)

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RISK-INFORMED INITIATIVES

INITIATIVE	RECENT ACTIVITIES	CURRENT ACTIVITIES	FUTURE ACTIVITIES
<p>1. Revised Oversight Process</p> <ul style="list-style-type: none"> - Performance indicators (PIs) - Plant & system reliability studies - Significance determination process (SDP) 	<ul style="list-style-type: none"> - analysis of PIs - developed databases to track LERs and common-cause failures (CCFs) - developed SDP - ROP action matrix 	<ul style="list-style-type: none"> - development of risk-based PIs - analysis/trending of PIs - analyzing data on reliability and CCFs - implementing/improving SDP 	<ul style="list-style-type: none"> - continue development and possible implementation of risk-based PIs - work with industry to develop consistent approach for safety system unavailability reporting - issue plant specific SDP notebooks - revise ALARA, physical protection, SDP - evaluate fire protection, shutdown, external events, concurrent deficiencies
<p>2. Risk-informed Licensing Actions</p>	<p>Developed guidance documents</p> <ul style="list-style-type: none"> - general guidance (RG 1.174 and SRP chapter 19) - IST (RG 1.175 and SRP section 3.9.7) - GQA (RG 1.176 and GQA inspection guidance) - TS (RG 1.177 and SRP section 16.1) - ISI (RG 1.178 and SRP section 3.9.8) <p>Issued hundreds of risk-informed amendments over last few years</p>	<p>Updating guidance documents</p> <p>Reviewing increasing number of risk-informed amendments</p>	<p>Publish revisions to guidance documents</p> <p>Evaluate additional industry proposals (e.g., eliminate PASS requirements, extend ILRT interval)</p>

INITIATIVE	RECENT ACTIVITIES	CURRENT ACTIVITIES	FUTURE ACTIVITIES
3. Risk-informed technical specifications	<ul style="list-style-type: none"> - Working with NSSS owners groups and NEI to coordinate submittals - Goal is to reflect safety significance of the condition or requirement - Eight industry initiatives <ol style="list-style-type: none"> 1. modified end states 2. missed surveillance 3. flexible mode restraints 4. risk-informed AOTs with a backstop 5. optimize surveillance frequencies 6. modify LCO 3 0.3 to about 24 hours 7. define actions to be taken when equipment is not operable but functional 8. risk-inform the scope of the TS rule 	Reviewing submittals for initiatives 1-3	Continue reviews of initiatives
4 Maintenance Rule	<ul style="list-style-type: none"> - New section (a)(4) effective 11/28/00 - RG 1.182 endorses industry guidance document for managing risk during maintenance activities 	Coordinating implementation with risk-informed technical specifications	Effectiveness review

INITIATIVE	RECENT ACTIVITIES	CURRENT ACTIVITIES	FUTURE ACTIVITIES
5. Fire protection	<ul style="list-style-type: none"> - NFPA-805 issued in April 2001 - alternative performance-based risk-informed fire protection standard for nuclear power plants. - Circuit Analysis Resolution Program 	<ul style="list-style-type: none"> - staff working on proposed rulemaking that would endorse NFPA 805 as a voluntary alternative to NRC existing fire protection regulations - staff working with industry to develop risk-informed post-fire safe shutdown methodology document 	
6 Safeguards	<ul style="list-style-type: none"> - Proposed revisions to 10 CFR 73.55 sent to Commission 6/4/01 - Requires that licensees' security programs be based on risk-informed target sets of equipment necessary to prevent core damage and/or spent fuel sabotage 		
7. Reporting Rules	<ul style="list-style-type: none"> - Revised 10 CFR 50.72 and 50.73 effective 1/23/01 - Focuses on reporting only events that are risk-significant 	<ul style="list-style-type: none"> - Evaluating reports to determine effectiveness of new rules 	
8. Alternate source term	<ul style="list-style-type: none"> - New rule (10 CFR 50.67) published 12/23/99 - Allows for application of improved knowledge of fission product releases and plant performance 	<ul style="list-style-type: none"> - Evaluating license amendments that take advantage of new rule 	

INITIATIVE	RECENT ACTIVITIES	CURRENT ACTIVITIES	FUTURE ACTIVITIES
9. RIP50/Option 2 (risk-informing scope of special treatment requirements)	<ul style="list-style-type: none"> - Published ANPR 3/00 - STPNOC exemptions reviewed 	<ul style="list-style-type: none"> - Reviewing industry guidance documents - Pilot plants starting process 	<ul style="list-style-type: none"> - Complete review of industry guidance documents - Review pilot plants results - Publish proposed and final rules (10 CFR 50.69)
10. RIP50/Option 3 (risk-informing technical requirements)	<ul style="list-style-type: none"> - Developed framework document to guide future efforts - Completed detailed technical review and proposed changes to 10 CFR 50.44 - Completed feasibility study of risk-informed changes to 10 CFR 50.46 	<ul style="list-style-type: none"> - Developing proposed rule changes for 50.44 - Developing technical basis for proposed changes to 50.46 and associated rules - Developing technical basis for risk-informed changes to 10 CFR 50.61 	<ul style="list-style-type: none"> - Publish final revisions to 50.44 - Publish proposed and final rule changes to 50.46 - Publish proposed and final rule changes to 50.61
11. PRA standards	<ul style="list-style-type: none"> - Working with ASME on internal events standard - Working with ANS on low power and shutdown standard - Industry developing guidance on peer reviews 	<ul style="list-style-type: none"> - Continuing work with ASME and ANS - Reviewing industry guidance on peer reviews 	<ul style="list-style-type: none"> - Endorse industry standards generically or for specific applications (e.g., Option 2)
12. Creating a risk-informed environment	<ul style="list-style-type: none"> - Began effort within NRR to create environment in which risk-informed methods are fully integrated into staff activities 	<ul style="list-style-type: none"> - Evaluating current environment 	<ul style="list-style-type: none"> - Establish target environment - Implement target environment - Assess effectiveness

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13. New regulatory licensing approach	- Exelon submitted risk-informed, top-down approach for licensing pebble bed modular reactors (PBMR) similar to General Atomics MHTGR approach in early 1990's	- RES/NRR working group evaluating Exelon proposal - Ongoing meetings with Exelon	- NEI working with Exelon and developing a more generic approach for any new plant (framework modeled on ROP) -Commission paper planned in November on Exelon's approach
14. Construction Inspection Program reactivation	- Use of risk insights in the Construction Inspection Program are being proposed by NEI.	- Ongoing meetings with NEI	