

August 31, 2004

MEMORANDUM TO: Stuart Richards, NRR/DIPM
Patrick Baranowsky, RES/DRAA
Nilesh Chokshi, RES/DET
Jack Rosenthal, RES/DSARE
David Lew, RES/DRAA
Catherine Haney, NRR/DRIP
William Beckner, NRR/DRIP
Thomas Boyce, NRR/DIPM
Gene Imbro, NRR/DE
Anthony McMurtray, NRR/DLPM

FROM: Michael D. Tschiltz, Branch Chief */RA/*
Probabilistic Safety Assessment Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

SUBJECT: PLAN TO IMPLEMENT THE COMMISSION'S PHASED APPROACH TO
PROBABILISTIC RISK ASSESSMENT (PRA) QUALITY:
IDENTIFICATION OF RISK-INFORMED APPLICATIONS

The plan to implement the Commission's phased approach to PRA quality was issued to the Commission as SECY-04-0118 on July 13, 2004. The first task scheduled to be completed, on August 31, 2004, is an identification of current risk-informed application types. The table included as an attachment to this memorandum identifies those risk-informed application types that are currently used and also identifies some that are under development. We request your review of this table to identify if there are applications that should be added or revised. Furthermore, we request that a representative of your branch/section attend a meeting on September 22 at 10:00am in O8B4, to discuss this table and to initiate task 1.2 of the implementation plan.

The task description is as follows:

"Task 1.2: Specification of Quality Requirements for each Application Type

The objective of this task is, for each application type, to specify, based on the role of PRA results in decision-making for the application type, the scope and level of detail of the base PRA needed to support that role. Because of the way the decision-making criteria are constructed, some decisions may not require all the contributors to risk to be addressed. Additionally, since the need for detail, realism, and plant-specificity in the PRA results differs between applications, the capability of PRA in terms of these factors will also differ."

CONTACT: Gareth Parry, NRR/DSSA
415-1464

To achieve the objectives of the task, the following information is needed for each application type:

- identification of what PRA results are used and how they are used, based on the decision criteria
- the scope of PRA (in terms of contributors to risk at the level of initiating event types (internal or external), and modes of plant operation) necessary to support the application based on the nature of the application (primarily the impact of the application on the plant) and the decision criteria
- identification of whether the application requires a specific level of detail in certain areas of the PRA

This information will define the minimum PRA scope and level of detail required for each application type. By this letter I am soliciting your assistance by requesting that the staff member in your branch/section most familiar with the application provide the above information. To meet the completion date for this task, we request this input no later than October 31, 2004.

At the meeting, we will discuss the information requested in more detail.

Attachment: Table of risk-informed applications

cc: Mark Rubin, NRR/DSSA/SPSB
Mary Drouin, RES/DRAA/OERAB
Donald Harrison, NRR/DSSA/SPSB
Hossein Hamzehee, RES/DRAA/PRAB
Gareth Parry, NRR/DSSA

To achieve the objectives of the task, the following information is needed for each application type:

- identification of what PRA results are used and how they are used, based on the decision criteria
- the scope of PRA (in terms of contributors to risk at the level of initiating event types (internal or external), and modes of plant operation) necessary to support the application based on the nature of the application (primarily the impact of the application on the plant) and the decision criteria
- identification of whether the application requires a specific level of detail in certain areas of the PRA

This information will define the minimum PRA scope and level of detail required for each application type. By this letter I am soliciting your assistance by requesting that the staff member in your branch/section most familiar with the application provide the above information. To meet the completion date for this task, we request this input no later than October 31, 2004.

At the meeting, we will discuss the information requested in more detail.

Attachment: Table of risk-informed applications

cc: Mark Rubin, NRR/DSSA/SPSB
 Mary Drouin, RES/DRAA/OERAB
 Donald Harrison, NRR/DSSA/SPSB
 Hossein Hamzehee, RES/DRAA/PRAB
 Gareth Parry, NRR/DSSA

DISTRIBUTION: SPSB: r/f, Stuart Richards Patrick Baranowsky David Lew
 Catherine Haney William Beckner Thomas Boyce
 Gene Imbro Anthony McMurtray

ADAMS Accession #
 Task1.2.rev.wpd

NRR-102

OFFICE	NRR:DSSA	NRR:DSSA:SPSB
NAME	GParry	MTschiltz
DATE	08/ 31 /04	08/ 31 /04

OFFICIAL RECORD COPY

Attachment 1

Task 1.1: Risk-informed Applications

Application Category	Application	Notes
Operational Uses	Maintenance rule (50.65)	
Oversight (industry-wide)	Accident Sequence Precursor program	Use of SPAR models and licensee models
	Events assessment	
	Generic Issue resolution	
Oversight (licensee)	Significance Determination Process (Phase 2)	Note: plant specific PRA information used to generate notebook, but generic values for unavailabilities, etc.
	Significance Determination Process (Phase 3)	Increased use of plant-specific information
	Event assessment (MD 8.3)	SPAR models?
	Notice of Enforcement Discretion (NOEDs)	
	MSPI	Task group formed to identify PRA requirements
Licensing	Changes to the licensing basis (RG 1.174)	
	Risk-informed Inservice testing (RG 1.175)	
	Graded Quality Assurance (RG 1.176)	
	Risk-informed Technical Specifications (RG 1.177)/Exigent tech specs.	Similar risk analyses are performed for both applications
	Risk-informed Inservice Inspection (RG 1.178)	
	10CFR 50.69 SSC Categorization	

Application Category	Application	Notes
	Technical specification initiatives (especially 4b)	
	10 CFR 50.46 (future)	
	Guidance on response to emergent conditions	This is an activity relating to the GAO item in the Davis Besse report criticizing NRC's decision-making process.
	License renewal/SAMA	
	Advanced reactor design (10CFR Part 52)	
	10CFR50.36(c)(2)(ii)(D) criterion 4 (SSCs found by a PRA to be significant to public health and safety)	
	Standard review plan 18.0/NUREG-1764 Review of changes to human actions	Probably a special case of RG 1.174
Rulemaking	50.69	
	50.44	
	50.46	
	Manual actions (Appendix R related)	