



NUCLEAR ENERGY INSTITUTE

April 22, 1994

Mr. William T. Russell, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Russell:

The industry shares with the NRC staff the goal of effective use of PRA to support operations for advanced reactors. The NRC staff has obviously given careful thought to the role of PRA beyond design certification as indicated by SECY-93-087 and the draft Commission paper, "10 CFR Part 52 Combined License (COL) Review Process and COL Form and Content."

As you know, the industry has also been considering the role of PRA for both existing and future plants through the efforts of the Regulatory Threshold Working Group and the ALWR Regulation Working Group. We agree that, to be fully useful, a PRA must be updated at key times and maintained current throughout the life of a plant.

Nevertheless, we continue to disagree with the NRC staff that requirements for maintenance and use of PRA by licensees are appropriate to establish through the design certification process. Design and design verification issues are appropriate for resolution with vendors during design certification. Operational requirements are more appropriately dealt with in conjunction with COL form and content finalization where the participants will have more experience and knowledge of operational matters.

We would be happy to interact with the NRC staff to develop industry guidance for the maintenance and use of PRA for advanced reactors. The NRC could then endorse or supplement this guidance as appropriate, much as we did with the Maintenance Rule implementation guidance. Our conceptual thoughts for such guidance are included in the enclosure for your consideration.

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PDR COMMS NRCC  
CORRESPONDENCE PDR

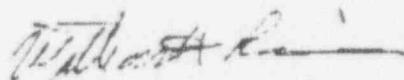
Mr. William T. Russell, Director

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We hope we can conclude our discussion on this important issue at our meeting with you on April 25, 1994

Sincerely,



William H. Rasin  
Vice President and Director  
Technical

WHR/RJB/acm

Enclosure

c: D. Crutchfield

A. Thadani

## Enclosure to NRC letter (Rasin to Russell) dated April 22, 1994

This enclosure describes the industry's vision for the treatment of PRA at distinct licensing phases under Part 52 and for its fundamental role in support of ALWR operations.

### Capture of PRA Insights in Design Certification

Key severe accident insights from the design PRA are captured in each DCD and, as a result, in respective design certification rules. This approach highlights these insights for consideration by future COL applicants/holders with regard to their preservation during plant operations.

The design PRA itself would remain part of the Standard Safety Analysis Report (SSAR) or other docketed information of the design certification applicant on which the NRC staff's Final Safety Evaluation Report (FSER) and Final Design Approval are based. As such, the design PRA will be part of the rulemaking record but does not become part of the design certification rule.

### Design PRA at COL

A COL applicant referencing a certified design will review and, if necessary, update the design PRA to ensure that it bounds the site specific design (e.g., the ultimate heat sink) and that interface requirements of the standard design are satisfied. In addition, site characteristics such as river flooding, wind loadings, etc., will be compared to those assumed in the design PRA to ensure it is bounding. Consistent with the February 15, 1991, Commission SRM on SECY-93-087, the COL applicant will perform site specific PRA evaluations to address any site-specific characteristics not enveloped by the design PRA. These evaluations would be submitted as part of a COL application.

Consistent with the approach taken for design certification, significant insights stemming from the site-specific design information added to the PRA will be incorporated into the Final Safety Analysis Report (FSAR) to supplement those contained in Chapter 19 of the DCD. The plant-specific PRA itself will not be part of the FSAR. However, it would be separately provided to the NRC on the docket in a consistent time frame.

### COL Holder Update, Use and Maintenance of the PRA

It is expected that ORAP will be established as a performance-based approach for monitoring performance and identifying, evaluating and correcting plant deficiencies. These reliability assurance activities would essentially constitute an expanded implementation of the Maintenance Rule because they would address not just maintenance preventable functional failures, but also failures due to causes such as

design, personnel training or procedural deficiencies. The industry envisions that a plant-specific PRA will be used to support ORAI<sup>2</sup>.

The extensive efforts by the industry and NRC staff surrounding implementation of the Maintenance Rule should provide a sound platform for development of an industry guideline document analogous to NUMARC 93-01<sup>1</sup> for implementing reliability assurance activities. As with the Maintenance Rule, the goal would be NRC endorsement of the industry-developed guidance.

Consistent with 10 CFR 50.65(a)(3), the effectiveness of reliability assurance activities (including maintenance) will be periodically evaluated, including consideration of industry operating experience. In considering operating experience, emphasis will be placed on feedback from the specific plant in question and from plants of like (standard) design. Similarly, periodic evaluation and, as necessary, update of the plant-specific PRA will ensure that significant design changes and operating experience are appropriately reflected.

Consistent with growing experience at current plants, the PRA is also expected to be a valuable tool in the economic and safety evaluation of proposed plant changes. As previously noted, key PRA insights identified in the DCD or FSAR, as applicable, will be considered as part of the safety evaluations of plant changes.

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<sup>1</sup>NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"

Received 5-11-94  
Bonchardt

# ACTION

## EDO Principal Correspondence Control

DM: DUE: 05/24/94

EDO CONTROL: 0010049  
DOC DT: 05/10/94  
FINAL REPLY:

nm. Remick

James Taylor

R SIGNATURE OF : \*\* PRI \*\*

CRC NO:

Executive Director

SC:

ROUTING:

Q'S RE SECY 94-084 - POLICY AND TECHNICAL ISSUES  
ASSOCIATED WITH THE REGULATORY TREATMENT OF NON-  
SAFETY SYSTEMS IN PASSIVE PLANT DESIGNS

Taylor  
Milhoan  
Thompson  
Blaha  
MTaylor  
Beckjord

TE: 05/10/94

SIGNED TO: CONTACT:

NRR Russell

SPECIAL INSTRUCTIONS OR REMARKS:

NRR ROUTING: Russell  
Miraglia  
Reyes  
Thadani  
Crutchfield  
Gillespie  
Mail Room

NRR RECEIVED: May 11, 1994

NRR ACTION: D. Crutchfield

**ACTION**

DUE TO NRR DIRECTOR'S OFFICE

BY June 8, 1994

*May 19*