

November 23, 1999

MEMORANDUM TO: Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

FROM: /s/ Joseph L. Birmingham, Project Manager
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

On October 21, 1999, representatives of Winston and Strawn (W&S), the Nuclear Energy Institute (NEI), and licensees met with the staff of the Nuclear Regulatory Commission (NRC) at the NRC's offices in Rockville, Maryland. The meeting was held at the request of Winston and Strawn representing the industry Maintenance Rule Inspection Clearinghouse. Several public meetings with Winston and Strawn were held previously to discuss maintenance rule issues. A summary of industry and public generated questions and the corresponding NRC responses related to these areas is provided in Attachment 1. A list of those attending the meeting is provided in Attachment 2.

In conclusion, the meeting discussions were open and were considered beneficial in helping to ensure that licensees implement effective maintenance rule programs.

Project No. 689

Attachments:

1. Summary of discussion questions and responses
2. Attendance List

cc w/atts: See next page

DISTRIBUTION: See attached page
G:\RGEB\nei\msum1021.wpd

OFFICE	IQMB <i>MB</i>	RGEB <i>JLB</i>	SC:RGEB <i>AK</i>
NAME	PBalmain <i>PAB</i>	JBirmingham	FAkstulewicz
DATE	11/17/99	11/17/99	11/22/99

PROHIBITED INFORMATION

DFO3

-202

PD12 ORG NRR

Distribution: Summary of Mtg. w/NEI

Hard Copy

~~Central file~~

IQMB R/F

RGEB R/F

OGC

ACRS

EMail

SCollins/RZimmerman

BSheron

NOlsen

BBoger/FGillespie

TEssig

PBalmain

PBoehnert, ACRS

MTschiltz, EDO

DMatthews/SNewberry

CCarpenter

FAkstulewicz

JBirmingham

PWen



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 23, 1999

MEMORANDUM TO: Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

FROM: Joseph L. Birmingham, Project Manager *JL Birmingham*
Generic Issues, Environmental, Financial
and Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF MEETING BETWEEN THE NUCLEAR REGULATORY
AGENCY AND WINSTON AND STRAWN ON MAINTENANCE RULE
IMPLEMENTATION

On October 21, 1999, representatives of Winston and Strawn (W&S), the Nuclear Energy Institute (NEI), and licensees met with the staff of the Nuclear Regulatory Commission (NRC) at the NRC's offices in Rockville, Maryland. The meeting was held at the request of Winston and Strawn representing the industry Maintenance Rule Inspection Clearinghouse. Several public meetings with Winston and Strawn were held previously to discuss maintenance rule issues. A summary of industry and public generated questions and the corresponding NRC responses related to these areas is provided in Attachment 1. A list of those attending the meeting is provided in Attachment 2.

In conclusion, the meeting discussions were open and were considered beneficial in helping to ensure that licensees implement effective maintenance rule programs.

Attachments:

1. Summary of discussion questions and responses
2. Attendance List

Project No. 689

cc w/atts: See next page

cc: Mr. Ralph Beedle
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Ms. Lynnette Hendricks, Director
Plant Support
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Alex Marion, Director
Programs
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Charles B. Brinkman, Director
Washington Operations
ABB-Combustion Engineering, Inc.
12300 Twinbrook Parkway, Suite 330
Rockville, Maryland 20852

Mr. David Modeen, Director
Engineering
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Robert R. Campbell, President
Nuclear HVAC Utilities Group
Tennessee Valley Authority
1101 Market Street, LP4J-C
Chattanooga, TN 37402-2801

Mr. Anthony Pietrangelo, Director
Licensing
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Dennis Adams
Nuclear HVAC Utilities Group
ComEd
1400 Opus Place
Downers Grove, IL 60515

Mr. Jim Davis, Director
Operations
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. H. A. Sepp, Manager
Regulatory and Licensing Engineering
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Summary of Discussion Questions and Responses from the
October 21, 1999, NRC/Winston & Strawn public meeting

As part of the discussions of recent maintenance rule implementation issues covered in this meeting, the meeting participants including Winston & Strawn, NEI, licensee representatives and members of the public presented experiences, comments and questions relating to monitoring the effectiveness of maintenance at nuclear power plants. These issues and NRC responses based on information provided at the meeting are summarized below.

Question 1 :

Has the NRC been able to determine the effectiveness of the maintenance rule based on experience since the rule's implementation?

Response:

The Commission directed the NRC staff to evaluate the efficacy of the rule by July 2002. The NRC staff believes that it will be difficult to directly assess maintenance rule effectiveness until more experience is gained. The NRC is developing several possible indicators that may be useful for this purpose and also plans to utilize information emerging from the NRC oversight pilot program after this program is completed.

During this discussion, licensee participants commented that information regarding how effectively licensees are managing risk may provide a better measure of maintenance rule efficacy than results of equipment performance monitoring. The meeting participants also suggested incorporating resident inspector feedback into developing measures for determining the effectiveness of the maintenance rule and referred to a recent NRC analysis of the station blackout rule as a good example where the effectiveness of a regulation was evaluated.

Question 2 :

Are the two methods for evaluating failures provided in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline" acceptable approaches for evaluating failures under the maintenance rule? Specifically, the NEI 99-02 philosophies where; (1.) "malfunctions that can be corrected within 10 minutes are not considered failures" and (2.) "a system is found to be failed while not required to be operable" are not considered failures.

Response:

In general, the maintenance rule is concerned with the evaluation of whether a malfunction results in a maintenance preventable functional failure rather than the duration of a particular problem. If a failure occurs when the function is not required then the failure is generally not considered a functional failure. However, when performing these evaluations, the NRC stressed that the licensee's failure evaluation must determine definitely when the actual failure occurred or if the equipment in question would have failed upon demand prior to discovery of the malfunction. During this discussion an NEI representative commented that NEI, NRC, and INPO are working

to standardize definitions for failures and availability so the licensee burden of collecting and evaluating data for various performance indicator and monitoring programs is minimized.

Question 3 :

There is no concern with the NRC's "one operator, one action" definition of availability, however the requirement to have specific written procedures defining each of the activities where a single operator action is credited for maintaining availability seems to increase burden rather than decrease burden.

Response :

There must be a extremely high probability of success in performing an operator action if licensees intend to take credit for the action when considering an SSC available to perform its intended function. The NRC definition of availability is intended to prevent the use of complex or improvised actions being credited for availability. The reference to having a procedure for these situations was not meant to cause licensees to create new or unique station approved procedures for each instance where a manual action was credited for availability but instead was referring to actions that may already be covered in existing operating procedures that operators have been trained and qualified on and use frequently.

This concept was approved by the Commission in the Statements of Consideration for 50.65(a)(4). The definition provided in NEI 99-02, (Draft Rev C) enhances this position with regard to availability during testing by stating that a function is available if the function can be immediately restored, either by an operator in the control room or by a dedicated operator stationed locally for that purpose. Restoration actions must be contained in a written procedure, must be uncomplicated (generally, a single action) and must not require diagnosis or repair. Credit for a dedicated operator can be taken only if he/she is positioned at the proper location throughout the duration of the test for the purpose of restoration of the train should a valid demand occur. The intent of this paragraph is to allow licensees to take credit for restoration actions that are virtually certain to be successful (i.e., probability nearly equal to 1) during accident conditions.

Question 4 :

For monitoring availability/unavailability during maintenance activities, is it acceptable to assume equipment is available after maintenance is completed for the period between the time when maintenance clearance restoration is completed and the time when post maintenance testing is completed, provided the post maintenance test is then passed successfully? For example there can be several hours from the time when a diesel generator is restored from maintenance to the time when an operations test surveillance used as a combined surveillance and post maintenance test is performed successfully. There is no reason to believe that the diesel generator would not have been able to perform its intended function if needed between clearance restoration and the combined surveillance/ post maintenance test.

Response:

If the equipment is in its fully functional condition at the point when clearance restoration is completed with the exception of performing the post maintenance test then this approach is acceptable. Considering this equipment functional/available during this time does not imply that it is operable from a technical specification perspective. Generally, if the test fails for reasons directly related to the maintenance activity performed then only additional unavailability will accrue. If the test fails as a result of problems unrelated to the maintenance performed then the failure may also need to be evaluated to determine if a maintenance preventable functional failure occurred.

Question 5 :

Is the NRC planning to publish a lessons learned document pertaining to maintenance rule baseline inspection experience as discussed in our previous meetings?

Response:

Yes, after October 29, 1999, NUREG-1648, Lessons Learned From Maintenance Rule Baseline Inspections, will be available to the public and it will also be posted on the maintenance rule home page (<http://www.nrc.gov/NRR/mrule/mrhome.htm>).

Question 6 :

Will any revisions to the pilot oversight inspection procedures be available to licensees to review before they are issued? The licensee representative also commented that the NRC maintenance effectiveness training efforts for resident inspectors and the use of the maintenance effectiveness field work flow chart used for maintenance inspections was effective in focusing inspections on performance issues of risk significant SSCs.

Response:

Draft inspection procedures will be available through the Agency Document and Access Management System (ADAMS) in the early January 2000 time frame. Inspection procedures will also be a topic of discussion at a public "lessons learned" meeting to be held in Washington, D.C. during the week of January 10, 2000, to review experience with implementing the NRC pilot oversight program.

Question 7 :

What will guidance for the 50.65(a)(4) assessment process require for the frequency for performing PRA updates?

Response:

The NRC suggests (not requires) evaluating the need for updating the PRA at the same frequency as the 50.65(a)(3) periodic evaluation frequency.

Question 8 :

What was the basis for the Vermont Yankee maintenance rule violation concerning monitoring during refueling outage shutdown conditions?

Response:

Vermont Yankee did not appropriately capture certain SSC unavailabilities that occurred during refueling outages.

Question 9 :

What is the preferred method for categorizing risk significance of SSCs for shutdown conditions?

Response :

There is no specific methodology recommended for risk ranking SSCs for shutdown conditions. The NRC considers that using a reasonable approach using information such as risk insights, operating experience etc., to categorize the risk significance of the SSCs and obtaining review and approval of the expert panel would be acceptable.

Question 10 :

Is the NRC satisfied that existing quantitative and qualitative risk assessment processes are appropriate based on maintenance rule implementation experience?

Response:

The NRC considers well thought out approaches to managing risk that use tools such as matrices, risk monitors, etc., to be acceptable. Implementation experience has shown that the majority of licensees have implemented successful risk management processes.

Question 11 :

The draft NEI guidance for 50.65(a)(4) assessments uses the word "should" in many places in the document. When "should" is used in other industry standards this word has a specific meaning. Activities described using "should" in these standards are recommendations and not requirements. What does "should" mean in the NEI 50.65(a)(4) assessment guidance?

Response:

Should as used in the regulatory guidance for 50.65(a)(4) assessments refers to the recommended approach that constitutes an acceptable method for meeting the requirements of 50.65(a)(4). As with all regulatory guidance there may be other acceptable approaches which can satisfy the intent of the regulation.

Question 12 :

What is the status of NRC's effort to risk-inform the maintenance rule?

Response:

The NRC has developed a proposed rulemaking plan for risk-informing selected Part 50 rules, including the maintenance rule. The draft rulemaking plan along with a draft advance notice of proposed rulemaking are available on the NRC homepage. The advance notice of proposed rulemaking will be published pending a Commission negative consent decision to issue the notice.

Question 13 :

Is the method of aggregating maintenance rule performance criteria for at power and shutdown modes into a one performance criteria that covers all applicable modes acceptable?

Response:

Yes.

Question 14 :

Is a separate SSC risk ranking process required for licensees that have a shutdown PRA?

Response:

Consideration of shutdown conditions should be managed under existing programs. Licensees with shutdown PRAs may want to take advantage of any risk insights the shutdown PRA provides to strengthen their maintenance rule programs.

Question 15 :

Can low safety significant SSCs be excluded from the scope of 50.65(a)(4) assessments based on their risk ranking?

Response:

The NRC's position is outlined in DG-1082, Assessing and Managing Risk Before Maintenance At Nuclear Power Plants.

Name	Organization	Phone	email
Donnie Ashley	NRC/NRR	(301) 415-3191	dja1@nrc.gov
Peter Balmain	NRC/NRR	(301) 415-3697	pab1@nrc.gov
Denise Boyle	PSEG Nuclear Co.	(856) 339-2170	dboyle2@pseg.com
Biff Bradley	NEI	(202) 739-8083	reb@nei.com
Richard Correia	NRC/NRR	(301) 415-1009	rpc@nrc.gov
Kent Engelmann	Niagara Mohawk	(315) 349-7856	engelmannk@nimo.com
Donald Ferraro	Winston&Strawn	(202) 371-5838	jferraro@winston.com
Keith Fry	Southern Nuclear	(205) 952-7435	kafry@southernco.com
Frank Gregor	LCM TECH. LC	(727) 944-4400	lcmgregor@aol.com
Michael Knapik	McGraw-Hill	(202) 383-2167	mknap@mh.com
L. C. Martin	Virginia Power	(804) 556-3227	jack_martin@vapower.com
Robert McMahon	Rochester Gas&Elec.	(716) 771-3338	robert_mcmahon@rge.com
Bob Monk	Southern Nuclear	(334) 814-4544	rlmonk@southernco.com
Deann Raleigh	SERCH, Bechtel Power	(301) 417-4868	deraeigh@betchel.com
Wayne Scott	NRC/NRR	(301) 415-1020	wes@nrc.gov
Janet Simmons	Southern Nuclear	(334) 814-4606	jesimmon@southernco.com
Frank Talbot	NRC/NRR	(301) 415-3146	fxt@nrc.gov
Sheldon Trubatch	Winston & Strawn	(202) 371-5785	strubatc@winston.com