

June 12, 1997

Mr. Alan Hackerott, Chairman
CEOG PSA Working Group
Omaha Public Power District
Ft. Calhoun Nuclear Station
P.O. Box 399
Ft. Calhoun, NE 68023-0399

Dear Mr. Hackerott:

The purpose of this letter is to transmit a summary of the Combustion Engineering Owners Group Probabilistic Safety Assessment Working Group meeting, which took place at the San Onofre Nuclear Generating Station in San Onofre, California, on April 2-3, 1997.

Sincerely,

Original Signed By

F. Mark Reinhart, Acting Chief
Technical Specifications Branch
Office of Nuclear Reactor Regulation

- Enclosures: 1. CEOG PSAWG Meeting Summary
2. Attendance List
3. CEOG Draft RAI Response
4. CEOG Presentation on Risk-Informed TS Projects

cc: See attached list

Project No. 692

Change: PDR 1 LTR ENCL 1 152 only 1 152 only

DISTRIBUTION:

w/enclosures:

File Center
PUBLIC

w/Enclosures 1 & 2 only:

RZimmerman

TMartin

GHolahan

JRoe

SVarga

MCunningham

JFlack

MWohl

JSHyslop

FMReinhart

OChopra

TSB Staff

AEI-Bassioni, RES

MDrouin, RES

BHardin, RES

DR03

DOCUMENT NAME: G:\NVG\MTG_CEOG.497

*See previous concurrence

OFFICE	NRR/ADPR/TSB	NRR/DSSA/SPSB	NRR/DSSA/SPSB	NRR/ADPR/TSB	NRR/ADPR/TSB
NAME	NVGilles*	MLWohl*	JHFlack*	JGLuehman*	FMReinhart*
DATE	05/13/97	05/30/97	05/30/97	06/09/97	06/12/97

OFFICIAL RECORD COPY

Proj - 692

9706190003 970612
PDR TOPRP EMVC-E
C PDR

TOPRP

97-119
NRC FILE CENTER COPY

June 12, 1997

Mr. Alan Hackerott, Chairman
CEOG PSA Working Group
Omaha Public Power District
Ft. Calhoun Nuclear Station
P.O. Box 399
Ft. Calhoun, NE 68023-0399

Dear Mr. Hackerott:

The purpose of this letter is to transmit a summary of the Combustion Engineering Owners Group Probabilistic Safety Assessment Working Group meeting, which took place at the San Onofre Nuclear Generating Station in San Onofre, California, on April 2-3, 1997.

Sincerely,

Original Signed By

F. Mark Reinhart, Acting Chief
Technical Specifications Branch
Office of Nuclear Reactor Regulation

Enclosures: 1. CEOG PSAWG Meeting Summary
2. Attendance List
3. CEOG Draft RAI Response
4. CEOG Presentation on Risk-Informed TS Projects

cc: R. Schneider, ABB-CE
P. Hijeck, ABB-CE
P. Samanta, BNL

DISTRIBUTION:

w/enclosures:

File Center
PUBLIC

w/o enclosures:

RZimmerman
TMartin
GHolahan
JRoe
SVarga

MCunningham
JFlack
MWohl
JSHyslop
FMReinhart

OChopra
TSB Staff
AEI-Bassioni, RES
MDrouin, RES
BHardin, RES

DOCUMENT NAME: G:\NVG\MTG_CEOG.497

*See previous concurrence

OFFICE	NRR/ADPR/TSB	NRR/DSSA/SPSB	NRR/DSSA/SPSB	NRR/ADPR/TSB	NRR/ADPR/TSB
NAME	NVGilles*	MLWohl*	JHFlack*	JGLuehman <i>JL</i>	FMReinhart <i>FM</i>
DATE	05/13/97	05/30/97	05/30/97	06/9/97	06/12/97

OFFICIAL RECORD COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 12, 1997

Mr. Alan Hackerott, Chairman
CEOG PSA Working Group
Omaha Public Power District
Ft. Calhoun Nuclear Station
P.O. Box 399
Ft. Calhoun, NE 68023-0399

Dear Mr. Hackerott:

The purpose of this letter is to transmit a summary of the Combustion Engineering Owners Group Probabilistic Safety Assessment Working Group meeting, which took place at the San Onofre Nuclear Generating Station in San Onofre, California, on April 2-3, 1997.

Sincerely,

A handwritten signature in cursive script, reading "F. Mark Reinhart", is positioned below the word "Sincerely,".

F. Mark Reinhart, Acting Chief
Technical Specifications Branch
Office of Nuclear Reactor Regulation

Enclosures: 1. CEOG PSAWG Meeting Summary
2. Attendance List
3. CEOG Draft RAI Response
4. CEOG Presentation on Risk-Informed TS Projects

cc: See attached list

June 12, 1997

cc w/Enclosures 1 & 2 only:

Mr. Gordon C. Bischoff
CEOG Project Manager
ABB Combustion Engineering
M.S. 9615-1932
2000 Day Hill Road
Windsor, CT 06095

Mr. David Pilmer, Chairman
CE Owners Group
Southern California Edison
Irvine Operations Center
Room 109C
23 Parker Street
Irvine, California 92718

Mr. Charles B. Brinkman, Director
Nuclear Systems Licensing
ABB-Combustion Engineering, Inc.
Post Office Box 500
2000 Day Hill Road
Windsor, CT 06095

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

Mr. Ray Schneider
ABB Combustion Engineering Nuclear Power
1000 Prospect Hill Road
P.O. Box 500
Windsor, CN 06095-0500

Mr. Paul Hijeck
ABB Combustion Engineering Nuclear Power
1000 Prospect Hill Road
P.O. Box 500
Windsor, CN 06095-0500

Dr. Pranab Samanta
Brookhaven National Laboratory
Building 130, P.O. Box 5000
Upton, NY 11973-5000

COMBUSTION ENGINEERING OWNERS GROUP (CEOG)
PROBABILISTIC SAFETY ASSESSMENT WORKING GROUP (PSAWG)
MEETING SUMMARY
April 2-3, 1997

A meeting between the CEOG PSAWG and NRC staff was held on April 2-3, 1997, at the San Onofre Nuclear Generating Station (SONGS). The attendees are listed in Attachment 1.

Dave Pilmer, chairman of the CEOG, made some introductory remarks. He praised the CEOG PSAWG for their leading industry work but expressed disappointment in the delay in the staff's issuance of the pilot risk-informed technical specification (TS) allowed outage time (AOT) extensions based on CEOG Joint Application Reports.

Alan Hackerott, chairman of the CEOG PSAWG, led a discussion of the issues related to the staff's development of draft Regulatory Guides (RGs) and Standard Review Plans (SRPs) for risk-informed regulation. The staff explained that the guidance documents had been forwarded to the Commission with a staff recommendation to issue them for public comment. The staff stated that it did not believe the TS guidance documents contained any information that had not already been discussed with the CEOG in the context of the pilot applications.

The group discussed the status of the review for the lead pilot plant, Arkansas Nuclear One, Unit 2. The staff explained that the safety evaluation approving the changes was complete and was being forwarded to the Commission in the form of a negative consent Commission paper. The group discussed the one remaining open issue with respect to completion of the lead plant amendment package, which is to resolve the form of the licensee's commitment to a configuration risk management program (CRMP). Such a commitment is necessary because the staff is relying on the licensee's implementation of a CRMP in approving the TS changes. During earlier discussions between the staff and the CEOG, the staff had proposed the addition of an administrative control TS describing the CRMP. The staff had provided the CEOG with a draft administrative control CRMP description for consideration. The draft program description was also provided to the Nuclear Energy Institute's Technical Specification Task Force (TSTF) for preliminary review. The TSTF provided comments on the draft to the CEOG PSAWG, which were discussed with the staff at the April meeting, along with the PSAWG's own comments. Resolution was reached on the majority of the comments.

The group discussed the possibility of the need for some guidance to the industry and the staff on the content and implementation of a CRMP, perhaps in the form of inspection guidance or as an expansion of the existing discussion in draft Regulatory Guide DG-1065, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications." The CEOG expressed an interest in providing their thoughts to the staff for consideration during development of such guidance. The group concluded that the best way to achieve this was through the public comment process for DG-1065, which the staff estimated would be published for comment in May 1997.

The group discussed the need to establish the licensees' commitments to a CRMP before

issuing any amendments for the changes to the AOTs for the safety injection tanks (SITs) and the low pressure safety injection (LPSI) system. The CEOG expressed their view that, because the SITs and LPSI system are primarily associated with large break loss-of-coolant accidents, the impact of the unavailability of SIT and LPSI equipment in combination with other equipment unavailabilities is minimal. The staff agreed that, in general, removal of one SIT or one LPSI system from service is self-limiting and does not introduce synergistic risk increases as a result of joint outages with other systems or equipment. However, because the SIT and LPSI AOT extensions are the pilot for risk-informed TS and because the review and approval process for these amendments will be used as a model for all future risk-informed TS changes, the staff believes it is necessary to ensure that licensees are committed to configuration risk management before granting these amendments. Once licensees have established an acceptable CRMP, it can be used as part of the justification for all future risk-informed TS, provided the scope is broad enough.

The group discussed the staff's request for additional information (RAI) related to the "CEOG Joint Applications Report for Emergency Diesel Generators AOT Extension." The CEOG provided the staff with a draft response to the RAI to aid the discussions during the meeting (Enclosure 3). Several issues related to the draft RAI response were discussed. The staff asked the PSAWG representatives from SONGS to discuss how the EDG cross-tie between Units 2 and 3 was modeled in the SONGS probabilistic risk assessment (PRA). The representatives stated that the cross-tie was modeled in the analysis used to generate the results that will be included in their submittal for a 10-day EDG AOT. They stated that the change in the PRA results is mainly due to a change in the human reliability analysis associated with the cross-tie process because some of the manual actions can now be done "semi-automatically." The licensee has requested NRC review and approval of the use of this new cross-tie procedure in accordance with 10 CFR 50.59 as a possible unreviewed safety question. Staff members present at the meeting indicated that they would discuss the issue with those members of the staff that are reviewing the licensee's submittal on the cross-tie procedure.

The group discussed the types of EDG maintenance that might be done on-line with an extended AOT, including full EDG tear-downs. The staff also asked how weather-related concerns were factored into the maintenance process at plants where there was a potential for severe weather (hurricanes, tornados, etc.) The group discussed some EDG unavailability data provided in the draft RAI response and the relationship between the TS AOT extension requests and the maintenance rule. The CEOG stated that the maintenance rule unavailability targets will drive the actual duration of the on-line maintenance outages.

The representative from Millstone Unit 2 informed the staff that, at this time, they would not be submitting a request for a 10-day EDG AOT along with the majority of the CE licensees. Because of the numerous activities currently underway at the Millstone site, the licensee will delay their submittal until higher priority issues can be addressed.

The group discussed NUREG-1560, "Individual Plant Examination Program: Perspectives on Reactor Safety and Plant Performance," published in October 1996. The CEOG asked if there was any relationship between NUREG-1560 and draft NUREG-1602, "Use of PRA in Risk-Informed Applications," which the staff had told the CEOG would likely be issued with the risk-informed RGs and SRPs for public comment. The staff told the CEOG that there

was no direct relationship between the two documents. Subsequent to the meeting, the staff clarified that some of the information contained in NUREG-1560 was used as a starting point for the development of draft NUREG-1602.

On April 3, 1997, the staff met jointly with the CEOG PSAWG and the CEOG Licensing Subcommittee. The group again discussed the open issue with respect to resolving the form of licensees' commitments to a CRMP. Several members of the Licensing Subcommittee expressed concerns related to the commitment to a CRMP. One of the concerns related to how much time would be allowed to perform an assessment required under the program. Another concern was the need to perform additional, new actions under the extended AOT and whether those actions would be required each time the AOT was entered or only when the licensee entered the "extended" portion of the AOT. In other words, they wanted to ensure that no new actions were required for being in the AOT for an amount of time that was less than or equal to the current AOT. The staff said that, while the concept sounded reasonable, implementation of the concept did not seem straightforward.

Perhaps the biggest concern expressed by the CEOG was that there was no official NRC documentation describing what the expected content of an acceptable CRMP is. The CEOG representatives expressed concern as to how they might be inspected against a general program description contained in the administrative control chapter of their TS.

Finally, the group discussed whether it would be wise for licensees to submit their proposed CRMPs to the NRC for review and approval prior to amending the TS to include the administrative control program description. In addition, the group discussed the possibility of putting a more detailed description of a CRMP in DG-1065 and allowing individual licensees to reference the specific Regulatory Guide, by revision, in their TS once it was approved. This process would be one mechanism for the industry to provide comments on the CRMP program description to the staff through the public comment process for DG-1065. The group discussed some of the potential drawbacks to this process, namely, that DG-1065 is not expected to be published in its final form before December 1997.

The CEOG concluded that they would pursue a task to define what they believe an acceptable CRMP should contain and will provide this information to the staff either in the form of comments on DG-1065 or in some other form. Once agreement can be reached as to the content of the CRMP, the staff and the CEOG will have further discussions as to whether to provide such guidance in DG-1065 or to provide it directly in the TS as an administrative controls program.

The final topic of the meeting was a CEOG overview of their risk-informed TS efforts, including a discussion of future planned submittals and lessons learned from the first submittals (Enclosure 4). The group agreed to hold further discussions once the draft RGs and SRPs are published for public comment and the CEOG has developed their own guidance for content of an acceptable CRMP.

Meeting Attendees
April 2-3, 1997

Name	Affiliation
David Finnigan	Yankee Atomic
Mike Whitney	Maine Yankee
Alan Hackerott	Omaha Public Power District
Thomas Matthews	Omaha Public Power District
Paul Hijeck	ABB-CE
Bob Jaquith	ABB-CE
Sue Jaquith	ABB-CE
Ray Schneider	ABB-CE
Jan Richard	ABB-CE
Mike Lloyd	Entergy/ANO
Dennis Boyd	Entergy/ANO
Mike Brandan	Entergy/Waterford 3
La Monte Reynolds	Consumers Energy
Robert Vincent	Consumers Energy
Gerry Sowers	Arizona Public Service
Bob Lindquist	Arizona Public Service
Joanne Stahler	Arizona Public Service
Joseph Provasoli	Arizona Public Service
Jim Powers	Northeast Utilities
Mario Robles, Jr.	Northeast Utilities
Roger Lee	Southern California Edison
Tom Hook	Southern California Edison
Gary Chung	Southern California Edison
Michelle Carr	Southern California Edison
Tom McLeod	Southern California Edison
Ching Guey	Florida Power & Light
Edward Weinkam	Florida Power & Light
John Osborne	Baltimore Gas & Electric
Millard Wohl	NRC/NRR/SPSB
Nanette Gilles	NRC/NRR/TSB
Pranab Samanta	Brookhaven National Laboratory (NRC)