

APR 14 1981

Docket Nos.: 50-361/362

APPLICANTS: SOUTHERN CALIFORNIA EDISON COMPANY (SCE)
SAN DIEGO GAS ELECTRIC COMPANY (SDG&E)

FACILITY: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

SUBJECT: SUMMARY OF GENERIC MEETING ON EMERGENCY PROCEDURE GUIDELINES

On January 30, 1981, a meeting was held in Bethesda with the Combustion Engineering Owners Group to discuss emergency procedure guidelines for CE plants. At the meeting it was agreed that the San Onofre 2 and 3 inadequate core cooling procedure would be reviewed by the NRC staff Reactor Systems Branch in lieu of CE guidelines. A summary of the meeting is enclosed.

Harry Rood, Project Manager
Licensing Branch #3
Division of Licensing

Enclosure:
As stated

cc: See next page.



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OFFICE	DL:LB#3	DL:LB#3					
SURNAME	HRood/wt	FM:Galia					
DATE	4/13/81	4/13/81					

APR 14 1981

MEETING SUMMARY DISTRIBUTION

Docket File
NRC PDR
Local PDR
TIC/NSIC/Tera

LB#3 Reading

E. Case
D. Eisenhut
R. Purple
B. J. Youngblood
A. Schwencer
F. Miraglia
J. Miller
G. Lainas
R. Vollmer
J. P. Knight
R. Bosnak
F. Schauer
R. E. Jackson
Project Manager Harry Rood
Attorney, OELD
J. Lee
OIE (3)
ACRS (16)
R. Tedesco

NRC Participants:

G. Lear
V. Noonan
S. Pawlicki
V. Benaroya
Z. Rosztoczy
W. Haass
D. Muller
R. Ballard
W. Regan
D. Ross
P. Check
R. Satterfield
O. Parr
F. Rosa
W. Butler
W. Kreger
R. Houston
T. Murphy
L. Rubenstein
T. Speis
W. Johnston
J. Stolz
S. Hanauer
W. Gammill
T. Murley
F. Schroeder
D. Skovholt
M. Ernst
R. Baer
C. Berlinger
K. Kniel
G. Knighton
A. Thadani
D. Tondi
J. Kramer
D. Vassallo
P. Collins
D. Ziemann

bcc: Applicant & Service List



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

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A handwritten signature in black ink, reading "Harry Rood". The signature is written in a cursive, flowing style.

Harry Rood, Project Manager
Licensing Branch #3
Division of Licensing

Enclosure:
As stated

cc: See next page.



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

FEB 1 1981

MEMORANDUM FOR: T. P. Speis, Chief, Reactor Systems Branch, DSI

FROM: Mark P. Rubin, Reactor Systems Branch, DSI

THRU: *Plus* B. Sheron, Section A Leader, Reactor Systems Branch, DSI

SUBJECT: SUMMARY OF JANUARY 30 MEETING WITH COMBUSTION ENGINEERING
TO DISCUSS EMERGENCY PROCEDURE GUIDELINES

On January 30, 1981, representatives of the NRC staff met with representatives of Combustion Engineering and the Combustion Engineering Owners Group to discuss the content and schedule for submittal of emergency procedure guidelines per the requirements of I.C.1 in NUREG-0737. In summary, the CE Owners Group stated that they plan to submit their emergency guidelines in June, 1981. The meeting attendees are listed in Enclosure (1) and the summary of the meeting is presented in Enclosure (2).

A handwritten signature in cursive script, reading "Mark P. Rubin", is positioned above the typed name and title.

Mark P. Rubin, Section A
Reactor Systems Branch
Division of Systems Integration

Enclosures:
As stated

cc: J. Guttmann D. Ross
B. Sheron P. Check
M. Rubin G. Mazetis
M. Goodman V. Panciera
R. Urban W. Johnston
W. Kennedy L. Phillips
J. Clifford H. Rood ✓
S. Hanauer
J. Kramer
J. Engelschall
D. Beckham
D. Ziemann

JANUARY 30, 1981
ATTENDANCE LIST
(CE GUIDELINES)

Jack Guttman	NRC/RSB
Brian Sheron	NRC/RSB
Mark Rubin	NRC/RSB
Mike Goodman	NRC/PTRB
Rick Urban	NRC/PTRB
W. G. Kennedy	NRC/PTRB
J. W. Clifford	NRC/PTRB
K. R. Iyengar	MSS/LP&L
Joe Gasper	Omaha Public Power District
Bill Burchill	CE
Vince Callaghan	CE
Chuck Kling	CE
Dan Williams	AP&L
James Westhoven	CE
Steve Hanauer	NRC/DHFS
Joel Kramer	NRC/DHFS
Julia Ann Engelschall	Xzyx (NRC)
Don Beckham	NRC/PTRB
Dennis Ziemann	NRC/PTRB

I.C.1 RESPONSE SCHEDULE

6/1/81	CEOG SUBMITS TO NRC REVISED EPGs
12/1/81	NRC COMPLETES REVIEW OF REVISED EPGs
AFTER 6/1/82	PLANT PROCEDURES REVISED AT FIRST REFUELING OUTAGE
10/82	WATERFORD (LP&L) FUEL LOAD
11/82	PALO VERDE 1 (APS) FUEL LOAD
11/82	ST. LUCIE 2 (FP&L) FUEL LOAD

MEETING SUMMARY

On January 30, 1981, representatives of the NRC staff met with Combustion Engineering personnel and members of their owners group to discuss the technical scope and submittal schedule of emergency procedure guidelines required by TMI Action Plan Item 1.C.1, and originally scheduled for submittal on or before January 1981. Combustion Engineering stated they could not meet this schedule, and requested the meeting to provide the staff with their proposed submittal schedule, as well as some details of the methodology they are using in the program.

The detailed accident and transient guidelines called for in TMI action item 1.C.1 are to consider multiple and consequential failures of equipment as well as possible operator errors. CE explained that the guidelines presently being developed were derived from interim guidelines previously submitted to the staff in CEN 128 in response to NUREG-0578 requirements.

The representatives from CE began the meeting with a chronology and background on the CEN 128 work, indicating that they felt it has resulted in a significant improvement over earlier procedures, and is currently being utilized in plant training programs. However, significant modifications to the current guidelines are still considered by CE as necessary to; enhance diagnostic capability, assist operator response, and cover contingencies.

CE discussed their approach to develop the new guidelines. They are currently performing a systematic evaluation of a limited set of event initiators, in an attempt to identify limiting or bounding initiator events which can be used to generate the symptom-activated lead-in for the new guidelines. There was some concern among the staff that this limited set of events would not be comprehensive enough. Currently the only event initiators being addressed by the CE study are:

- loss of normal feedwater;

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- excess feedwater
- loss of normal AC power
- steamline break, outside containment
- steam generator tube rupture
- small RCS pipe break, inside containment.

The staff informed CE that they would review the selected events when submitted, and would determine if all credible initiator events had been considered.

The basic methodology for conducting the event analysis was also discussed. It includes fault tree analyses, definition of sets of failures which threaten safety functions and evaluation of probability for each set. Event tree analyses are being used to evaluate probabilities of event failure combinations, and assess consequences of failure combinations that fall within probability cutoffs. Sequence of events diagrams are also being used to identify safety functions required, identify manual and automatic actions, and identify alternative success paths. CE indicated that workshop sessions are being held with personnel from utilities with CE designed reactors to help identify credible event sequences and potential equipment failures.

Combustion presented a draft schedule for submittal of guidelines (Attachment #3). Dr. Hanauer of the staff expressed concern over this schedule, indicating that it might result in difficulties meeting the review schedule for the next CE plants coming up for operating license review. Discussion did not resolve these concerns, and the issue remains open. The staff will take the proposed CE schedule for meeting the requirements of TMI action item 1.C.1 under consideration.

At the conclusion of the meeting, discussions were held regarding the interim emergency procedure guidelines being reviewed in support of the San Onofre operating license review. Problems with the ICC guideline were discussed and CE indicated modifications could not be accomplished in time to accommodate the San Onofre review. It was proposed by the staff that the San Onofre plant-specific ICC procedure be reviewed by the Reactor Systems Branch in lieu of vendor guidelines. The staff and Combustion have both agreed to this approach. CE also submitted final responses to staff questions on the interim guidelines for Loss of Feedwater and steam generator tube rupture events. This material will be reviewed by the staff as part of the San Onofre review.

The meeting was adjourned at approximately 4:00PM.

APR 14 1981

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Mr. Robert Dietch
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Mr. Robert Dietch
Mr. D. W. Gilman

- 3 -

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