



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 27, 1993

MEMORANDUM FOR: Ashok C. Thadani, Director  
 Division of Systems Safety and Analysis  
 Office of Nuclear Reactor Regulation

FROM: Conrad E. McCracken, Chief  
 Plant Systems Branch  
 Division of Systems Safety and Analysis

SUBJECT: SUMMARY OF DECEMBER 21, 1993, SENIOR MANAGEMENT MEETING  
 BETWEEN NRC AND NUMARC AND ADDITIONAL INFORMATION RELEVANT  
 TO THE INDUSTRY THERMO-LAG FIRE BARRIER TEST PROGRAM

Senior managers of the Office of Nuclear Reactor Regulation (NRR) met with senior representatives of the Nuclear Management and Resources Council (NUMARC) on December 21, 1993, to discuss NUMARC Thermo-Lag test program. This was the first NRC/NUMARC senior management meeting to monitor the progress of NUMARC Thermo-Lag test program. Enclosure 1 is the list of attendees.

During this meeting, NRR reiterated its concerns regarding the plant-specific applicability of NUMARC fire test results and summarized the content of the 50.54(f) letter to be sent to licensees. The letter asks each licensee who is using Thermo-Lag barriers to submit information regarding: the location and amounts of Thermo-Lag installed in the plant; how the results of NUMARC test program will be applied; how configurations particular to the plant will be addressed; what alternatives are available for configurations that may not demonstrate satisfactory performance by test or cannot be upgraded; and plans and schedules for resolving the technical issues identified in GL 92-08. As discussed during a previous meeting with NUMARC on November 19, 1993, the NRC expects the licensees to resolve the Thermo-Lag fire barrier issues identified in GL 92-08 or to propose alternative fire protection measures by March 31, 1994. The NRC also expects licensees to assess information and data for test configurations that can be applied to the plant design as they become available and begin corrective actions as the assessments are completed, rather than wait for NUMARC to complete its program. For example, some test data indicates that it may be possible for licensees to begin considering various upgrades for some conduit barrier configurations at this time. Therefore, the staff believes that plant modifications needed to correct fire barrier deficiencies or alternative fire protection measures should begin, at the latest, during refueling outages after March 1994, with the expectation that barriers would be upgraded and other needed modifications completed by March 1996.

Mr. Colvin of NUMARC noted that the industry had only 45 days to respond to the 50.54(f) letter instead of the 60 days originally discussed and that some of the information requested would involve a considerable amount of work on the part of the industry. Mr. Rasin raised questions about the difficulties licensees may encounter in answering the 50.54(f) letter and stated that

9401100240 931227  
 PDR REVQP ERGNUMRC  
 PDR

002081

Df03'

NUMARC FILE CENTER COPY

070011

OTM-7 NUMARC

x MH+S-3-1B

December 27, 1993

NUMARC will provide guidance to the licensees on the applicability of their test results to ensure consistency in the responses. He indicated that NUMARC plans to clarify the scope of the application guide in a letter to the industry. He also stated that NUMARC will use the responses in planning NUMARC's future activities and to identify licensees that can work together to resolve common issues.

NUMARC confirmed that it will install a bare copper conductor with thermocouples under the cable tray rungs for each NUMARC cable tray test specimen.

The executive level working group created by NUMARC was mentioned and the expertise of its members in licensing, fire protection, executive and policy matters was highlighted. While the short-term focus of the group is Thermo-Lag issue resolution, the long-term focus of the group will be fire protection and fire barriers other than Thermo-Lag. Mr. Miraglia stated that the staff was reviewing NUMARC's December 10, 1993 letter to J. Taylor regarding the working group and would respond shortly.

NRR expressed the need to be informed on a regular basis of the construction and testing schedule. NUMARC stated that it is currently finalizing Phase 2 test plan and that it would submit the plan to the staff in the near future.

NRR and NUMARC agreed to schedule additional senior management meetings over the next six months as needed. The next meeting will be held shortly after the phase 2 tests are completed. These periodic meetings at the senior management level are held in addition to the staff working meetings.

**Original signed by**

Conrad E. McCracken, Chief  
Plant Systems Branch  
Division of Systems Safety and Analysis

Enclosure:  
As stated

DISTRIBUTION

Central File	WDean	FMiraglia	RJenkins
SPLB TSI File	DOudinot	WRussell	Regional Administrators
NRC PDR	GMulley, OIG	LJCallan	
OPA	EPawlik, RIII/OI	MCallahan, OCA	
MVirgilio	MGamberoni	JRoe	
CMcCracken	JHolmes	SVarga	
SWest	ASingh	CBerlinger	
PMadden	TMurley	A(Paul)Gill	
SPLB:DSSA	SPLB:DSSA	SPLB:DSSA <i>C.M.</i>	
DOudinot*	SWest*	CMcCracken	
12/22/93	12/23/93	12/27/93	

[G:\THERMOLA\ZDEC21.DO]

\*SEE PREVIOUS CONCURRENCE

December 27, 1993

guidance NUMARC will provide to licensees for consistency in the responses. He indicated that NUMARC plans to clarify the scope of the application guide in a letter to the industry.

He also confirmed the addition of a bare copper conductor wire under the cable tray rungs for each NUMARC cable tray test specimen.

The executive level working group created by NUMARC was mentioned and the expertise of its members in licensing, fire protection, executive and policy matters was highlighted. While the short-term focus of the group is Thermo-Lag issue resolution, the long-term focus of the group will be fire protection and fire barriers other than Thermo-Lag. Mr. Miraglia stated that the staff was reviewing the December 10, 1993 letter to J. Taylor regarding the working group and would respond shortly.

NRR expressed the need to be informed on a regular basis of the construction and testing schedule. NUMARC stated that it is currently finalizing Phase 2 test plan and that it would submit the plan to the staff in the near future.

NRR and NUMARC agreed to schedule additional periodic senior management meetings over the next six months as needed. The next meeting will be held shortly after the responses to the 50.54(f) letter are received. These periodic meetings at the senior management level are held in addition to the staff working meetings and the Commission meetings.

*Original signed by*

Conrad E. McCracken, Chief  
Plant Systems Branch  
Division of Systems Safety and Analysis

Enclosure:  
As stated

DISTRIBUTION

Central File	WDean	FMiraglia	RJenkins
SPLB TSI File	DOudinot	WRussell	Regional Administrators
NRC PDR	GMulle, IG	LJCallan	
OPA	EPawlik, RII/OI	MCallahan, OCA	
MVirgilio	MGamberoni	JRoe	
CMcCracken	JHolmes	SVarga	
SWest	ASingh	CBerlinger	
PMadden	TMurley	A(Paul)Gill	

SPLB:DSSA	SPLB:DSSA	SPLB:DSSA
DOudinot	SWest	CMcCracken
12/22/93	12/ /93	12/ /93

[G:\THERMOLA\ZDEC21.DO]

NUMARC will provide to the licensees to ensure consistency in the responses. He indicated that NUMARC plans to clarify the scope of the application guide in a letter to the industry. He also stated that NUMARC will use the responses in planning NUMARC's future activities and to identify licensees that can work together to resolve common issues.

NUMARC confirmed that it will install a bare copper conductor with thermocouples under the cable tray rungs for each NUMARC cable tray test specimen.

The executive level working group created by NUMARC was mentioned and the expertise of its members in licensing, fire protection, executive and policy matters was highlighted. While the short-term focus of the group is Thermo-Lag issue resolution, the long-term focus of the group will be fire protection and fire barriers other than Thermo-Lag. Mr. Miraglia stated that the staff was reviewing NUMARC's December 10, 1993 letter to J. Taylor regarding the working group and would respond shortly.

NRR expressed the need to be informed on a regular basis of the construction and testing schedule. NUMARC stated that it is currently finalizing Phase 2 test plan and that it would submit the plan to the staff in the near future.

NRR and NUMARC agreed to schedule additional senior management meetings over the next six months as needed. The next meeting will be held shortly after the responses to the 50.54(f) letter are received. These periodic meetings at the senior management level are held in addition to the staff working meetings and the Commission meetings.

Conrad E. McCracken, Chief  
Plant Systems Branch  
Division of Systems Safety and Analysis

Enclosure:  
As stated

DISTRIBUTION

Central File	WDean	FMiraglia	RJenkins
PLB TSI File	DOudinot	WRussell	<i>Regional Administrators</i>
PDR	GMulley, OIG	LJCallan	
OPA	EPawlik, RIII/OI	MCallahan, OCA	
MVirgilio	MGamberoni	JRoe	
CMcCracken	JHolmes	SVarga	
SWest	ASingh	CBerlinger	
PMadden	TMurley	A(Paul)Gill	

SPLB:DSSA	SPLB:DSSA	SPLB:DSSA
DOudinot*	SWest <i>SW</i>	CMcCracken
12/22/93	12/23/93	12/ /93

[G:\THERMOLA\ZDEC21.DO]

\*SEE PREVIOUS CONCURRENCE

MEETING ATTENDEES

<u>Name</u>	<u>Affiliation</u>
Marsha Gamberoni	NRC/DRPW
A. Randolph Blough	NRC/DRPW
Bill Dean	NRC/OEDO
Harold Fossett	NRC/OIG
Patrick Madden	NRC/SPLB
Daniele Oudinot	NRC/SPLB
Amarjit Singh	NRC/SPLB
Tom Murley	NRC/NRR
Frank Miraglia	NRC/NRR
Ashok Thadani	NRC/DSSA
Conrad McCracken	NRC/SPLB
Steve West	NRC/SPLB
Joe Colvin	NUMARC
Bill Rasin	NUMARC
Alex Marion	NUMARC
Dave Stellfox	McGraw Hill