



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

OCT 21 1976

Docket Nos. 50-358, 50-387, 50-352/353,  
50-367, 50-373/374, 50-388,  
50-410 and 50-322

MEMORANDUM TO: Olan D. Parr, Chief, Light Water Reactors Branch No. 3, DPM  
FROM: Sydney Miner, Project Manager, Light Water Reactors Branch No. 3, DPM  
SUBJECT: FORTHCOMING MEETING WITH MARK II OWNERS GROUP AND GENERAL  
ELECTRIC COMPANY ON MARK II CONTAINMENTS

TIME: 8:30 A.M.  
DATE: October 27 and 28, 1976  
LOCATION: San Jose, California  
PURPOSE: To discuss the Mark II  
Containment Pool Dynamic  
Load Program

PARTICIPANTS:

NRC

G. Lainas, C. Anderson,  
J. Kudrick, S. Miner

Mark II Owners

Brent Shelton, et al.

GE

L. Fruenholz, et al.

  
Sydney Miner, Project Manager  
Light Water Reactors Branch No. 3  
Division of Project Management

Enclosure:  
Meeting Agenda



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ENCLOSURE  
MEETING AGENDA

WEDNESDAY, OCTOBER 27, 1976

I Mark II (LOCA) Pool Dynamic Load Reports

A. Pool Swell Model (NEDO-21061, Rev. 2, NEDO-21297)

Discussion of NRC Questions:

5, 20.38\* Model improvements  
5, 20.24 Model/test comparison  
20.28, 1 Plant unique calculations  
20.45 Pool swell in reactor pedestal  
20.27 Drywell pressure calculations

B. Downcomer Thrust Load (NEDO-21061, Rev. 2)

Discussion of NRC Questions:

20.30, 6 Thrust load evaluation

C. Load Combinations (NEDO-21061, Rev. 2)

Discussion of NRC Questions:

20.46, 4, 20.31 Pool swell waves and seismic slosh  
20.22 Large break + 1 SRV

D. Impact Loads (NEDO-21061, Rev. 2, NEDC-20989-2P, NEDE-12426P)

Discussion of NRC Questions:

20.44, 9 Application of PSTF data

E. Miscellaneous

Discussion of NRC Questions:

20.23 Assymmetric loads  
20.13 Submerged structure drag loads  
20.33 Jet load - velocity attenuation  
20.9 Load mitigating devices

\*Single digit - NRC consultant question list  
20.X - NRC question list



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in all financial dealings.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It highlights the importance of using reliable sources and ensuring the accuracy of the information gathered.

3. The third part of the document provides a detailed overview of the current market conditions and trends. It discusses the impact of various factors on the economy and the potential risks and opportunities for investors.

4. The fourth part of the document offers a comprehensive analysis of the company's performance over the past year. It compares the company's results against its targets and industry benchmarks, highlighting areas of strength and areas for improvement.

5. The fifth part of the document presents a series of recommendations and suggestions for future actions. It provides a clear roadmap for the company's strategic direction and outlines the key priorities for the upcoming period.

6. The sixth part of the document concludes with a summary of the main findings and a final statement of intent. It reiterates the company's commitment to excellence and its goal of achieving long-term success through innovation and hard work.

II Mark II (LOCA) Pool Dynamic Load Test Programs

A. EPRI - Mark II 3D Tests

1. MK II Owner Group Presentation (EPRI)

test objectives, test description, scaling, error analysis, test matrix, preliminary observations, future tests, film, documentation

2. Discussion of NRC Questions:

20.32, 4 3D tests

B. 4T Tests - Pool Swell Phenomena (NEDE-13442P-01, NEDO-21297, 6/14 applications memorandum)

1. MK II Owner Presentation (new information\*\*)

2. Discuss NRC Questions:

20.25 Air tests  
20.29 4T tests - separate submergence/backpressure effects  
20.7, 8 Error and scaling analysis, raw data  
20.36, 3 Downcomer supports  
20.34 Diaphragm upward load

C. Steam Loads (lateral & boundary)(NEDE-13442P-01, NEDE-21297, NEDE-21078-P, 6/14 applications memo)

1. MK II Owner Presentation (new 4T and foreign licensee information) single/multi vent lateral loads, single/multi vent boundary loads

2. Discuss NRC Questions:

20.37, 20.36d lateral load- load/structure interaction  
20.42 boundary load - controlling parameters  
20.41 boundary load - plant unique underpressure  
20.39 boundary load - load/structure interaction  
20.43 boundary load - multi vent tests  
20.40 boundary load - statistics of multi vent chugs  
20.35, 2 lateral and boundary load - high vent flow loads

\*\*Current update on test results - information not already presented in NEDE-13442P-01, NEDO-21297, 6/14 application memo and NEDE-21078-P



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THURSDAY, OCTOBER 28, 1976

III Inadvertent Spray Actuation

- A. Analytical model assumptions
- B. Instantaneous vaporization vs rate dependance
- C. Temperature-humidity relationship

IV Mark II Scaling Laws

- A. PSTF out-of-scale parameter
- B. Impact on scalability
- C. Transition impact data

V PSTF Testing Schedule

- A. Impact due to 4T tests
- B. Subscale test results
- C. Schedule forecast

THURSDAY, OCTOBER 28, 1976

VI Mark II (LOCA) Pool Dynamic Loads (Carryover from 10/27 meeting)

VII Status of Mark II Safety/Relief Valve Pool Dynamic Loads

A. Ramshead

MK II Owners - update of the generic ramshead model (update since the September 1976 NRC/GE SRV meeting). Provide current schedule for MK II ramshead model development and documentation.

B. Quencher

MK II Owners - update on the CAORSO test schedule. Provide current schedule for MK II quencher model development and documentation.



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MEMORANDUM FOR THE DIRECTOR, FBI

FROM: SAC, NEW YORK (100-100000)

SUBJECT: [Illegible]

RE: [Illegible]

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C. Plant Unique SRV Status

MK II Owners - provide summary of plant unique SRV configuration (i.e., provide table with current information indicating plants using ramshead and quencher design).

VIII Tour of EPRI/SRI Test Facility (if time allows)



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MEETING NOTICE DISTRIBUTION

Docket File

NRC PDR

Local PDR

TIC

LWR-3 File

NRR Reading

ACRS (16)

IE (3)

SD (7)

OELD

Receptionist

B. Rusche

E. Case

J. Miller

R. Boyd

R. DeYoung

V. Stello

D. Skovholt

F. Williams

J. Stolz

K. Kniel

O. Parr

D. Vassallo

R. Clark

T. Speis

P. Collins

C. Heltemes

R. Houston

R. Heineman

H. Denton

S. Varga

H. Berkow

B. Faulkenberry, IE

W. Butler

D. Ross

R. Tedesco

J. Knight

S. Pawlicki

I. Sihweil

P. Check

T. Noyak

Z. Rósztoczy

V. Benaroya

G. Lainas

T. Ippolito

V. Moore

R. Vollmer

M. Ernst

W. Gaimmill

G. Knighton

B. Youngblood

W. Regan

D. Bunch

J. Collins

W. Kreger

R. Ballard

M. Spangler

J. Stepp

L. Hulman

H. Smith

M. Rushbrook (3)

Project Manager - S. Miner

NRC Participants

OPA

C. Anderson

J. Kudrick

G. Lainas

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