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January 6, 1984

MEMORANDUM FOR: Those on Attached List

FROM: Robert M. Bernero, Director
Accident Source Term Program Office
Office of Nuclear Regulatory Research

SUBJECT: NRC/IDCOR TECHNICAL EXCHANGE MEETING ON FISSION PRODUCT
RELEASE AND TRANSPORT

The subject meeting is now set for February 7-8, 1984 in the Washington, D.C. area. The meeting will be held at the Marriott Hunt Valley Inn at Shawan Road and I-83 just north of the Baltimore, Maryland, Beltway (I-695). Information regarding reservations and directions will be forthcoming. Attached to this memorandum are the tentative agenda, a table of the technical issues with the names of the associated NRC contractors and others with responsibilities for them, and a copy of the memorandum from the NRC Executive Director for Operations which sets certain ground rules for the NRC/IDCOR interaction, especially in this technical area.

The agenda has allocated exactly the same time to each of the six technical issues by each party. As presentation plans are made firm please notify me of any desire to shorten or lengthen your presentations so that I can refine the schedule before the meeting. The presentations are expected to focus on the pertinent phenomena and the way they are modelled. The NRC contractor presentations should explicitly cover the review of the IDCOR reports and comparison between the IDCOR work and NRC-sponsored work. The pertinent IDCOR reports that are the subject of this meeting have been distributed to NRC participants, they are:

<u>Report Task No.</u>	<u>Title</u>	<u>Author</u>
11.1, 11.4, 11.5	Estimation of Fission Product and Core Material Source Characteristics	EPRI
11.2	Identify Pathways on Fission Product Transport	INPELL
11.3	Fission Product Transport in Degraded Core Accidents	INPELL

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The presentations should use the technical issue papers as a context rather than an explicit format. The draft technical issue papers will be exchanged by NRC and IDCOR 2-3 weeks before the meeting. Approximately 3 weeks after the meeting, I expect NRC and IDCOR to exchange any revisions of those papers which are then warranted, for discussion in an NRC/IDCOR management meeting. Please remember that the principal purpose of these NRC/IDCOR technical exchange meetings are to:

- o Identify areas of technical consensus
- o Identify areas of technical uncertainty or controversy that are not important to useful severe accident analysis
- o Identify areas of technical uncertainty or controversy which are important and require further attention.

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Robert M. Bernero, Director
Accident Source Term Program Office
Office of Nuclear Regulatory Research

Attachment: As stated

Distribution:
RES Central File
CIRC/CHRON
ASTPO Subject/Reading
RBernero Reading

RES/ASTPO/D

RBernero:psb

1/5/84

HRC

M. Silberberg
M. Jankowski
W. Paserlag
R. Meyer
C. Ryder
G. Marino
R. Curtis
T. Walker
J. Larkins
L. Chan
D. Ross
O. Bassett
R. Mattson
T. Speis
R. Vollmer
E. Jordan
R. W. Houston
D. Muller
A. Thadani
W. Butler
J. Rosenthal
R. Barnett
J. Read
S. Acharya
F. Akstulewicz
L. G. Hulman
P. Easely

ACRS

A. Wang

ORNL

T. Kress
R. Wichner
A. Wright
R. Lorenz

SNL

D. Powers
K. Bergeron
J. Brockmann
G. Weigand

BCL

J. Gieseke
M. Kuhlman
K. Lee
P. Cybulskis
R. Denning

PNL

K. Winegardner
P. Owczarski

EG&G

P. MacDonald
R. Hobbins

APS

R. Wilson

Consultants

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W. Castleman
A. Reynolds
W. Kastenbergl
J. Cobble
L. Zumwalt

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AGENDA--NRC/IDCOR
TECHNICAL EXCHANGE MEETING
ON FISSION PRODUCT RELEASE AND TRANSPORT

FEBRUARY 7-8, 1984

Tuesday, February 7

8:30 a.m.	Opening Remarks and Agenda	R. Bernero, NRC M. Fontana, TEC
8:45 a.m.	Issue 1.4.1, IDCOR Presentation	R. Seghal, EPRI
9:30 a.m.	Issue 1.4.1, NRC Contractor Presentation	R. Lorenz, ORNL
10:15 a.m.	Discussion of Technical Issue 1.4.1	
10:30 a.m.	BREAK	
10:45 a.m.	Issue 1.4.2, IDCOR Presentation	R. Burns, IMPELL
11:30 a.m.	Issue 1.4.2, NRC Contractor Presentation	M. Kuhlman, BCL
12:15 p.m.	Discussion of Technical Issue 1.4.2	
12:30 p.m.	LUNCH	
1:30 p.m.	Issue 1.4.3, IDCOR Presentation	R. Henry, FAI
2:15 p.m.	Issue 1.4.3, NRC Contractor Presentation	D. Powers, SNL
3:00 p.m.	Discussion of Technical Issue 1.4.3	
3:15 p.m.	BREAK	
3:30 p.m.	Issue 1.4.4, IDCOR Presentation	R. Burns, IMPELL
4:15 p.m.	Issue 1.4.4, NRC Contractor Presentation	J. Gieseke, BCL
5:00 p.m.	Discussion of Technical Issue 1.4.4	
5:30 p.m.	ADJOURN	

Wednesday, February 8

8:15 a.m.	Issue 1.4.5, IDCOR Presentation	R. Burns, IMPELL/GE
9:00 a.m.	Issue 1.4.5, NRC Contractor Presentation	P. Owczarski, PNL
9:45 a.m.	Discussion of Technical Issue 1.4.5	
10:00 a.m.	BREAK	
10:15 a.m.	Issue 1.4.6, IDCOR Presentation	R. Henry, FAI
11:00 a.m.	Issue 1.4.6, NRC Contractor Presentation	J. Gieseke, BCL
11:55 a.m.	Discussion of Technical Issue 1.4.6	
12:00 noon	LUNCH	
1:30 p.m.	Summaries of Technical Issues Status	
1:30	Issue 1.4.1	IDCOR
1:40	Issue 1.4.1	NRC Contractor
1:50	Issue 1.4.2	IDCOR
2:00	Issue 1.4.2	NRC Contractor
2:10	Issue 1.4.3	IDCOR
2:20	Issue 1.4.3	NRC Contractor
2:30	Issue 1.4.4	IDCOR
2:40	Issue 1.4.4	NRC Contractor
2:50	Issue 1.4.5	IDCOR
3:00	Issue 1.4.5	NRC Contractor
3:10	Issue 1.4.6	IDCOR
3:20	Issue 1.4.6	NRC Contractor
3:30 p.m.	Concluding Remarks	R. Bernero, NRC M. Fontana, TEC
4:00 p.m.	ADJOURN	

TABLE 1

TECHNICAL ISSUES 1.4 FISSION PRODUCT RELEASE AND TRANSPORT

1.4.1 Rate and Magnitude of Fission Products from Fuel (in vessel)

Principal Spokesperson: R. Lorenz (ORNL)

Supporting Contributors: R. Kress (ORNL)
 R. Hobbins (EG&G)

Others: L. Chan (NRC)
 R. Meyer (NRC)
 S. Levy (NRC Consultant)
 J. Cobble (NRC Consultant)
 L. Zumwalt (NRC Consultant)

1.4.2 Deposition of Fission Products During Primary System Transport

Principal Spokesperson: M. Kuhlman (BCL)

Supporting Contributors: T. Kress (ORNL)
 A. Wright (ORNL)

Others: M. Jankowski (NRC)
 A. Reynolds (NRC Consultant)
 S. Levy (NRC Consultant)
 W. Kastenber (NRC Consultant)

1.4.3 Rate and Magnitude of Release of Radionuclides and Aerosols
 from Fuel (ex-vessel)

Principal Spokesperson: D. Powers (SNL)

Supporting Contributors: R. Wichner (ORNL)
 J. Brockmann (SNL)

Others: T. Walker (NRC)
 J. Cobble (NRC Consultant)
 L. Zumwalt (NRC Consultant)

1.4.4 Deposition of Fission Product in Containment Due to Natural
 Processes

Principal Spokesperson: J. Gieseke (BCL)

Supporting Contributors: K. Lee (BCL)
 K. Bergeron (SNL)

Others: W. Pasedag (NRC)
 W. Castleman (NRC Consultant)

1.4.5 Effect of ESF on Fission Product Retention

Principal Spokesperson: P. Owczarski (PNL)

Supporting Contributors: K. Winegardner
M. Kuhlman (BCL)
A. Postma (NRC Consultant)
A. Reynolds (NRC Consultant)
M. Jankowski (NRC)
F. Akstulewicz (NRC)

1.4.6 Deposition of Fission Products in Other Plant Buildings

Principal Spokesperson: J. Gieseke (BCL)

Supporting Contributors: K. Lee (BCL)
K. Bergeron (SNL)

Others: W. Pasedag (NRC)
P. Easley (NRC)
W. Castleman (NRC Consultant)