

December 31, 1991

MEMORANDUM FOR: Charles E. Rossi, Director
 Division of Operational Events Assessment

FROM: Alfred E. Chaffee, Chief
 Events Assessment Branch
 Division of Operational Events Assessment

SUBJECT: OPERATING REACTORS EVENTS MEETING
 DECEMBER 24, 1991 - MEETING 91-24

On December 24, 1991, we conducted an Operating Reactors Events meeting (91-24) to inform senior managers from the Commission staff, SECY, EDO, NRR, and regional offices of selected events that occurred since our last briefing on December 18, 1991. Enclosure 1 lists the attendees. Enclosure 2 presents the significant elements of the discussed events.

Enclosure 3 contains reactor scram statistics for the week ending 12/22/91. No significant events were identified for input into the NRC performance indicator program.

original signed by David C. Fischer
 for

Alfred E. Chaffee, Chief
 Events Assessment Branch
 Division of Operational
 Events Assessment

Enclosures: As stated

cc w/enclosures:
 See next page

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 KBaumann

DOCUMENT NAME: ORTRANS.RPT (WP/KAB)

<i>KAB</i> EAB/DOEA KBaumann:kab 12/30/91	<i>R.W. for</i> EAB/DOEA RDennig 12/31/91	<i>JF</i> EAB/DOEA DFischer 12/31/91	<i>D.C. for AEC</i> EAB/DOEA AChaffee 12/31/91
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cc:

T. Murley, NRR (12G18)
F. Miraglia, NRR (12G18)
W. Russell, NRR (12G18)
F. Gillespie, NRR (12G18)
J. Partlow, NRR (12G18)
S. Varga, NRR (14E4)
J. Calvo, NRR (14A4)
G. Lainas, NRR (14H3)
B. Boger, NRR (14A2)
J. Zwolinski, NRR (13H24)
M. Virgilio, NRR (13E4)
D. Crutchfield, NRR (11H21)
W. Travers, NRR (11B19)
J. Richardson, NRR (7D26)
A. Thadani, NRR (8E2)
B. Grimes, NRR (9A2)
F. Congel, NRR (10E2)
J. Roe, NRR (10H5)
M. Pohida, NRR (10E4)
T. Martin, RI
W. Kane, RI
C. Hehl, RI
S. Ebnetter, RII
L. Reyes, RII
B. Davis, RIII
E. Greenman, RIII
R.D. Martin, RIV
B. Beach, RJV
J.B. Martin, RV
R. Zimmerman, RV
P. Boehnert, ACRS (P-315)
E. Jordan, AEOD (MN-3701)
T. Novak, AEOD (MN-3701)
L. Spessard, AEOD (MN-3701)
E. Weiss, AEOD (MN-3206)
S. Rubin, AEOD (MN-4106)
M. Harper, AEOD (MN-9112)
W. Bateman, EDO (17G21)
R. Newlin, GPA (2G5)
E. Beckjord, RES (NLS-007)
A. Bates, SECY (16G15)
G. Rammling, OCM (16H3)

J. Hopkins (PDIII-3)
J. Hannon (PDIII-3)

bcc: INPO

ATTN: J. Cowan
1100 Circle 75, Suite 1500
Atlanta, GA 30339

ENCLOSURE 1

LIST OF ATTENDEES

OPERATING REACTORS EVENTS FULL BRIEFING (91-24)

DECEMBER 24, 1991

<u>NAME</u>	<u>OFFICE</u>	<u>NAME</u>	<u>OFFICE</u>
R. DENNIG	NRR/DOEA	K. BROCKMAN	OCM/IS
K. BAUMANN	NRR/DOEA	J. HOPKINS	NRR/DRPW
J. CARTER	NRR/DOEA	G. HUBBARD	NRR/DST
D. FISCHER	NRR/DOEA	W. LEFAVE	NRR/DST
E. ROSSI	NRR/DOEA	A. DUMMER	NRR/DST
J. RAMSEY	EDO	F. IMBRO	NRR/DRIS
W. HAASS	NRR/DRIS	J. ZWOLINSKI	NRR/DRPW
W. SCOTT	NRR/DLPQ	K. HART	SECY

OPERATING REACTORS EVENTS BRIEFING 91-24

EVENTS ASSESSMENT BRANCH

LOCATION: 10 B11, WHITE FLINT

TUESDAY, DECEMBER 24, 1991, 11:00 A.M.

PERRY, UNIT 1

FLOODING DUE TO CIRCULATION
WATER LINE BREAK (AIT)

PERRY, UNIT 1
FLOODING DUE TO CIRCULATION
WATER LINE BREAK
DECEMBER 22, 1991

PROBLEM:

TURBINE AND AUXILIARY BUILDINGS WERE FLOODED.

CAUSE:

ROOT CAUSE OF PIPING FAILURE NOT KNOWN.

SAFETY SIGNIFICANCE:

SAFETY RELATED EQUIPMENT COULD BE IMPACTED BY AN ON-SITE FLOODING SCENARIO NOT PREVIOUSLY CONSIDERED.

EVENT DESCRIPTION:

- O REACTOR WAS BEING OPERATED AT 100% POWER.
- O AT 0150 HRS A 36" CIRCULATING WATER LINE SUPPLYING THE MAIN FEEDWATER PUMP TURBINE CONDENSERS FAILED.
 - RUPTURE WAS ABOUT 3 FT. LONG AT TOP OF ELBOW.
 - MATERIAL IS FIBERGLASS.
 - NOT SAFETY RELATED LINE.
 - LOCATED BETWEEN AUX BLDG AND TURBINE BLDG ADJACENT TO HEATER BAY
- O REACTOR HAS TWO 80% TURBINE DRIVEN FEED PUMPS AND ONE SMALL MOTOR DRIVEN FEED PUMP.
- O WATER RAN INTO AUXILIARY BUILDING AND TURBINE BUILDING THRU ELECTRICAL AND MECHANICAL PENETRATIONS.
- O WATER WENT INTO FLOOR DRAINS AND BACKFLOWED FROM RAD WASTE SYSTEM.
- O FLOODED ELECTRICAL CABLE RACEWAY.
- O 1 NON-SAFETY RELATED BUS TRIPPED.
- O OPERATORS MANUALLY SCRAMMED THE REACTOR AT 0200 HRS AND ISOLATED THE CIRCULATION WATER SYSTEM.

CONTACT: J. CARTER, NRR/DOEA
REFERENCES: 10 CFR 50.72 #22509

AIT: YES
SIGEVENT: TBD

DISCUSSION:

- 0 REACTOR COLD SHUTDOWN - 1 RHR LOOP OPERATING.
- 0 SPURIOUS ALARMS WERE RECEIVED.

FOLLOW-UP:

- 0 AIT SENT TO SITE DECEMBER 22, 1991.

REACTOR SCRAM SUMMARY
WEEK ENDING 12/22/91

1. PLANT SPECIFIC DATA⁽¹⁾

DATE	SITE	UNIT	POWER	SIGNAL	CAUSE	COMPLI- ⁽³⁾ CATIONS	YTD	YTD	YTD
							ABOVE	BELOW	TOTAL
							15%	15%	
12/17/91	BRUNSWICK	2	5	A	EQUIPMENT	NO	1	1	2
12/17/91	POINT BEACH	2	100	A	PERSONNEL	NO	1	0	1
12/17/91	SURRY	2	30	A	EQUIPMENT	NO	2	0	2
12/22/91	PERRY	1	100	M	EQUIPMENT	NO	1	0	1
12/22/91	CLINTON	1	63	M	EQUIPMENT	NO	2	0	2

II. COMPARISON OF WEEKLY STATISTICS WITH INDUSTRY AVERAGES

SCRAMS FOR WEEK ENDING
12/22/91

SCRAM CAUSE	NUMBER OF SCRAMS	1991 WEEKLY AVERAGE (YTD)	1990 WEEKLY AVERAGE	1989 WEEKLY AVERAGE	1988 WEEKLY AVERAGE	1987 WEEKLY AVERAGE
POWER GREATER THAN 15%						
EQUIPMENT RELATED	3	2.9	3.4	3.1	3.0	3.9
PERSONNEL RELATED (2)	1	0.6	0.5	1.0	1.0	1.3
OTHER (4)	0	0.0	0.0	0.1	0.4	1.1
Subtotal	4	3.5	3.9	4.2	4.4	6.3
POWER LESS THAN 15%						
EQUIPMENT RELATED	1	0.3	0.4	0.3	0.6	1.2
PERSONNEL RELATED (2)	0	0.2	0.1	0.3	0.4	0.6
OTHER (4)	0	0.0	0.0	0.0	0.2	0.3
Subtotal	1	0.5	0.5	0.6	1.2	2.1
TOTAL	5	4.0	4.4	4.8	5.6	8.4

MANUAL VS AUTO SCRAMS

TYPE	NO. OF SCRAMS	1991 WEEKLY AVERAGE (YTD)	1990 WEEKLY AVERAGE	1989 WEEKLY AVERAGE	1988 WEEKLY AVERAGE	1987 WEEKLY AVERAGE
MANUAL SCRAMS	2	0.7	1.2	0.9	1.1	1.4
AUTOMATIC SCRAMS	3	3.3	3.2	3.9	4.5	7.0

NOTES

1. PLANT SPECIFIC DATA BASED ON INITIAL REVIEW OF 50.72 REPORTS FOR THE WEEK OF INTEREST. PERIOD IS MIDNIGHT SUNDAY THROUGH MIDNIGHT SUNDAY. SCRAMS ARE DEFINED AS REACTOR PROTECTIVE ACTUATIONS WHICH RESULT IN ROD MOTION, AND EXCLUDE PLANNED TESTS OR SCRAMS AS PART OF PLANNED SHUTDOWN IN ACCORDANCE WITH A PLANT PROCEDURE. THERE ARE 111 REACTORS HOLDING AN OPERATING LICENSE.
2. PERSONNEL RELATED PROBLEMS INCLUDE HUMAN ERROR, PROCEDURAL DEFICIENCIES, AND MANUAL STEAM GENERATOR LEVEL CONTROL PROBLEMS.
3. COMPLICATIONS: RECOVERY COMPLICATED BY EQUIPMENT FAILURES OR PERSONNEL ERRORS UNRELATED TO CAUSE OF SCRAM.
4. "OTHER" INCLUDES AUTOMATIC SCRAMS ATTRIBUTED TO ENVIRONMENTAL CAUSES (LIGHTNING), SYSTEM DESIGN, OR UNKNOWN CAUSE.

OEAB SCRAM DATA

Manual and Automatic Scrams for 1987	-----	435
Manual and Automatic Scrams for 1988	-----	291
Manual and Automatic Scrams for 1989	-----	252
Manual and Automatic Scrams for 1990	-----	226
Manual and Automatic Scrams for 1991	--(YTD 12/22/91)--	205