

DEC 14 1992

MEMORANDUM FOR: Brian K. Grimes, Director  
Division of Operating Reactor Support

FROM: Alfred E. Chaffee, Chief  
Events Assessment Branch  
Division of Operating Reactor Support

SUBJECT: OPERATING REACTORS EVENTS BRIEFING  
DECEMBER 9, 1992 - BRIEFING 92-20

On December 9, 1992, we conducted an Operating Reactors Events Briefing (92-20) to inform senior managers from offices of the Commission, AEOD, OE, OI, NRR, and regional offices of selected events that occurred since our last briefing on November 1, 1992. Attachment 1 lists the attendees. Attachment 2 presents the significant elements of the discussed event.

Attachment 3 contains reactor scram statistics for the weeks ending 11/22/92, 11/29/92 and 12/06/92. No significant events were identified for input into the NRC performance indicator program.

Original signed by

Alfred E. Chaffee, Chief  
Events Assessment Branch  
Division of Operating  
Reactor Support

Attachments: As stated

cc w/attachments:  
See next page

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cc:

T. Murley, NRR (12G18)  
F. Miraglia, NRR (12G18)  
F. Gillespie, NRR (12G18)  
J. Partlow, NRR (12G18)  
S. Varga, NRR (14E4)  
J. Calvo, NRR (14A4)  
G. Lainas, NRR (14H3)  
J. Roe, NRR (13E4)  
J. Zwolinski, NRR (13H24)  
M. Virgilio, NRR (13E4)  
W. Russell, NRR (12G18)  
J. Richardson, NRR (7D26)  
A. Thadani, NRR (8E2)  
S. Rosenberg, NRR (10E4)  
C. Rossi, NRR (9A2)  
B. Boger, NRR (10H3)  
F. Congel, NRR (10E2)  
D. Crutchfield, NRR (11H21)  
W. Travers, NRR (11B19)  
D. Coe, ACRS (P-315)  
E. Jordan, AEOD (MN-3701)  
T. Novak, AEOD (MN-9112)  
L. Spessard, AEOD (MN-3701)  
K. Brockman, AEOD (MN-2206)  
S. Rubin, AEOD (MN-5219)  
M. Harper, AEOD (MN-9112)  
J. Grant, EDO (17G21)  
R. Newlin, GPA (2G5)  
E. Beckjord, RES (NLS-007)  
A. Bates, SECY (16G15)  
G. Rammling, OCM (16G15)  
T. Martin, Region I  
W. Kane, Region I  
C. Hehl, Region I  
S. Ebnetter, Region II  
E. Merschhoff, Region II  
B. Davis, Region III  
E. Greenman, Region III  
J. Milhoan, Region IV  
B. Beach, Region IV  
J.B. Martin, Region V  
K. Perkins, Region V

B. Siegel, (PDIII-2)  
J. Dyer (PDIII-2)

bcc: INPO

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

ATTACHMENT 1

LIST OF ATTENDEES

OPERATING REACTORS EVENTS FULL BRIEFING (92-20)

DECEMBER 9, 1992

| <u>NAME</u> | <u>OFFICE</u> | <u>NAME</u>   | <u>OFFICE</u> |
|-------------|---------------|---------------|---------------|
| A. CHAFFEE  | NRR           | C. ROSSI      | NRR           |
| R. DENNIG   | NRR           | B. SIEGEL     | NRR           |
| T. GREENE   | NRR           | B. GRIMES     | NRR           |
| K. GRAY     | NRR           | T. MURLEY     | NRR           |
| T. KOSHY    | NRR           | C. THOMAS     | NRR           |
| E. GOODWIN  | NRR           | S. VARGA      | NRR           |
| P. ENG      | NRR           | V. BENAROYA   | AEOD          |
| J. HANNON   | NRR           | T. SHEDLOSKEY | OCM/IS        |
| G. MARCUS   | NRR           | J. JANG       | REGION I      |
| S. BAJWA    | NRR           | R. FORTUNA    | OI            |
| W. SCOTT    | NRR           | W. TROKOSKI   | OE            |
| J. BELL     | NRR           |               |               |
| T. ULSES    | NRR           |               |               |
| J. MUNRO    | NRR           |               |               |

TELEPHONE ATTENDANCE  
(AT ROLL CALL)

Regions

Region I  
Region II  
Region III  
Region IV

Resident Inspectors

AIT Team Leaders

Misc.

P. Hiland

OPERATING REACTORS EVENTS BRIEFING 92-20  
EVENTS ASSESSMENT BRANCH

LOCATION: 10 B11, WHITE FLINT  
WEDNESDAY, DECEMBER 9, 1992, 11:00 A.M.

DRESDEN 2

FAILURE TO REPORT AND DOCUMENT  
CONTROL ROD MOVEMENT ERROR

DRESDEN, UNIT 2  
FAILURE TO REPORT AND DOCUMENT  
CONTROL ROD MOVEMENT ERROR  
SEPTEMBER 18, 1992

PROBLEM

WHILE PERFORMING CONTROL ROD MOVEMENTS TO LOWER THE FLOW CONTROL LINE, THE REACTOR OPERATOR MISPOSITIONED A CONTROL ROD. THE PROBLEM WAS COMPOUNDED BY SUBSEQUENT ROD MOVEMENT WITHOUT FOLLOWING PROCEDURES OR AUTHORIZATION. THE FIVE INDIVIDUALS INVOLVED APPARENTLY DECIDED NOT TO REPORT, LOG, OR DISCUSS THIS INCIDENT WITH ANYONE.

CAUSE

THE CAUSE OF THE MISPOSITIONED CONTROL ROD WAS OPERATOR ERROR. SUBSEQUENT ERRORS WERE THE RESULT OF THE INDIVIDUALS INVOLVED NOT FOLLOWING DRESDEN OPERATING ABNORMAL PROCEDURES FOR MISPOSITIONED CONTROL RODS. THIS RESULTED IN NUMEROUS PROCEDURAL DEVIATIONS.

SAFETY SIGNIFICANCE

THE SAFETY SIGNIFICANCE OF THE MISPOSITIONED CONTROL ROD IS MINIMAL. HOWEVER, THE SAFETY SIGNIFICANCE OF THE EVENT AS A WHOLE, REVOLVES AROUND ISSUES OF HONESTY AND INTEGRITY ON THE PART OF THE OPERATIONAL STAFF.

CONTACTS: P. HILAND, RIII  
T. GREENE, NRR/DORS  
REFERENCES: PN39262 & PN39262A

AIT: NO  
SIGEVENT: TBD



DISCUSSION

- 0 ON SEPTEMBER 18, 1992, AN OPERATOR WAS MOVING CONTROL RODS TO LOWER THE FLOW CONTROL LINE IN ACCORDANCE WITH APPROVED ROD INSERTION INSTRUCTIONS. POWER LEVEL WAS APPROXIMATELY 85%.
- 0 THE OPERATOR MISTAKENLY INSERTED A PERIPHERAL CONTROL ROD NOT AUTHORIZED IN THE ROD INSERTION INSTRUCTION FROM POSITION 48 (FULL OUT) TO POSITION 36. THE ROD WAS MOVED WITHOUT OBTAINING A SECOND INDEPENDENT VERIFICATION PRIOR TO MOVEMENT.
- 0 THE QUALIFIED NUCLEAR ENGINEER (QNE) AND REACTOR OPERATOR RECOGNIZED THE MISPOSITIONED ROD. HOWEVER, THE QNE DIRECTED THE OPERATOR TO INSERT ADDITIONAL CONTROL RODS CONTRARY TO DRESDEN OPERATING ABNORMAL PROCEDURES.
- 0 THE QNE WROTE SPECIAL INSTRUCTIONS TO INSERT ADDITIONAL RODS INCLUDING THE MISPOSITIONED ROD. THESE NEW INSTRUCTIONS INCLUDED RODS NOT IN THE ORIGINAL ROD INSERTION INSTRUCTIONS.
- 0 THE ADDITIONAL ROD MOVEMENTS WERE PERFORMED WITHOUT THE KNOWLEDGE OR CONCURRENCE OF THE SHIFT CONTROL ROOM ENGINEER (SCRE). THE SCRE CONCURRED ON THE SPECIAL INSTRUCTION AFTER THE FACT.
- 0 THE FIVE INDIVIDUALS INVOLVED - THE SCRE, THE REACTOR OPERATOR, THE QNE, AND TWO NUCLEAR ENGINEERS IN TRAINING - APPARENTLY DECIDED NOT TO REPORT, LOG, OR DISCUSS THIS INCIDENT WITH ANYONE.

- 0 MANAGEMENT BECAME AWARE OF THE INCIDENT ON NOVEMBER 23 AND INITIATED AN INVESTIGATION ON NOVEMBER 24.

FOLLOWUP

- 0 NRC SENT A SPECIAL INVESTIGATION/INSPECTION TEAM WITH A CHARTER TO THE SITE ON NOVEMBER 30, 1992.
- 0 THERE WERE ABOUT 10 TO 12 PROCEDURES VIOLATIONS.
- 0 THIS INCIDENT IS NOT A REPORTABLE EVENT.
- 0 FOUR OUT OF THE FIVE INDIVIDUALS INVOLVED IN THE INCIDENT WERE TERMINATED FROM EMPLOYMENT WITH COMMONWEALTH EDISON.

REACTOR SCRAM SUMMARY  
WEEK ENDING 11/22/92

1. PLANT SPECIFIC DATA (1)

| DATE     | SITE      | UNIT | POWER | SIGNAL | CAUSE     | COMPLI- (3)<br>CATIONS | YTD<br>ABOVE<br>15% | YTD<br>BELOW<br>15% | YTD<br>TOTAL |
|----------|-----------|------|-------|--------|-----------|------------------------|---------------------|---------------------|--------------|
| 11/16/92 | LASALLE   | 2    | 100   | A      | PERSONNEL | NO                     | 2                   | 0                   | 2            |
| 11/18/92 | FERMI     | 2    | 98    | M      | PERSONNEL | NO                     | 2                   | 1                   | 3            |
| 11/20/92 | MILLSTONE | 3    | 100   | A      | EQUIPMENT | NO                     | 3                   | 0                   | 3            |
| 11/22/92 | CLINTON   | 1    | 75    | M      | EQUIPMENT | NO                     | 3                   | 0                   | 3            |

REACTOR SCRAM SUMMARY  
WEEK ENDING 11/29/92

1. PLANT SPECIFIC DATA (1)

| DATE     | SITE           | UNIT | POWER | SIGNAL | CAUSE     | COMPLI- (3)<br>CATIONS | YTD<br>ABOVE<br>15% | YTD<br>BELOW<br>15% | YTD<br>TOTAL |
|----------|----------------|------|-------|--------|-----------|------------------------|---------------------|---------------------|--------------|
| 11/24/92 | RIVER BEND     | 1    | 95    | A      | EQUIPMENT | NO                     | 4                   | 0                   | 4            |
| 11/24/92 | CALVERT CLIFFS | 1    | 100   | A      | EQUIPMENT | NO                     | 1                   | 0                   | 1            |
| 11/27/92 | HATCH          | 2    | 70    | A      | EQUIPMENT | NO                     | 3                   | 0                   | 3            |
| 11/27/92 | SEABROOK       | 1    | 100   | A      | EQUIPMENT | NO                     | 1                   | 1                   | 2            |



## II. COMPARISON OF WEEKLY STATISTICS WITH INDUSTRY AVERAGES

### SCRAMS FOR WEEK ENDING 11/22/92

| SCRAM CAUSE            | NUMBER<br>OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------------|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| POWER GREATER THAN 15% |                        |                           |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 2                      | 2.0                       | 2.8                       | 3.4                       | 3.1                       | 3.0                       |
| PERSONNEL RELATED (2)  | 2                      | 0.8                       | 0.6                       | 0.5                       | 1.0                       | 1.0                       |
| OTHER (4)              | 0                      | 0.0                       | 0.0                       | 0.0                       | 0.1                       | 0.4                       |
| Subtotal               | 4                      | 3.4                       | 3.5                       | 3.9                       | 4.2                       | 4.4                       |
| POWER LESS THAN 15%    |                        |                           |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 0                      | 0.5                       | 0.3                       | 0.4                       | 0.3                       | 0.6                       |
| PERSONNEL RELATED (2)  | 0                      | 0.2                       | 0.2                       | 0.1                       | 0.3                       | 0.4                       |
| OTHER (4)              | 0                      | 0.0                       | 0.0                       | 0.0                       | 0.0                       | 0.2                       |
| Subtotal               | 0                      | 0.7                       | 0.5                       | 0.5                       | 0.6                       | 1.2                       |
| TOTAL                  | 4                      | 4.1                       | 4.0                       | 4.4                       | 4.8                       | 5.6                       |

### MANUAL VS AUTO SCRAMS

| TYPE             | NO. OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE<br>(YTD) | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------|------------------|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| MANUAL SCRAMS    | 2                | 1.0                                | 0.7                       | 1.2                       | 0.9                       | 1.1                       |
| AUTOMATIC SCRAMS | 2                | 3.1                                | 3.3                       | 3.2                       | 3.9                       | 4.5                       |

## II. COMPARISON OF WEEKLY STATISTICS WITH INDUSTRY AVERAGES

### SCRAMS FOR WEEK ENDING 11/29/92

| SCRAM CAUSE            | NUMBER<br>OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE<br>(YTD) | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------------|------------------------|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| POWER GREATER THAN 15% |                        |                                    |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 4                      | 2.6                                | 2.9                       | 3.4                       | 3.1                       | 3.0                       |
| PERSONNEL RELATED (2)  | 0                      | 0.8                                | 0.6                       | 0.5                       | 1.0                       | 1.0                       |
| OTHER (4)              | 0                      | 0.0                                | 0.0                       | 0.0                       | 0.1                       | 0.4                       |
| Subtotal               | 4                      | 3.4                                | 3.5                       | 3.9                       | 4.2                       | 4.4                       |
| POWER LESS THAN 15%    |                        |                                    |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 0                      | 0.5                                | 0.3                       | 0.4                       | 0.3                       | 0.6                       |
| PERSONNEL RELATED (2)  | 0                      | 0.2                                | 0.2                       | 0.1                       | 0.3                       | 0.4                       |
| OTHER (4)              | 0                      | 0.0                                | 0.0                       | 0.0                       | 0.0                       | 0.2                       |
| Subtotal               | 0                      | 0.7                                | 0.5                       | 0.5                       | 0.6                       | 1.2                       |
| TOTAL                  | 4                      | 4.1                                | 4.0                       | 4.4                       | 4.8                       | 5.6                       |

### MANUAL VS AUTO SCRAMS

| TYPE             | NO. OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE<br>(YTD) | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------|------------------|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| MANUAL SCRAMS    | 0                | 1.0                                | 0.7                       | 1.2                       | 0.9                       | 1.1                       |
| AUTOMATIC SCRAMS | 4                | 3.1                                | 3.3                       | 3.2                       | 3.9                       | 4.5                       |

REACTOR SCRAM SUMMARY  
WEEK ENDING 12/06/92

1. PLANT SPECIFIC DATA<sup>(1)</sup>

| DATE     | SITE       | UNIT | POWER | SIGNAL | CAUSE     | COMPLI- <sup>(3)</sup><br>CATIONS | YTD<br>ABOVE<br>15% | YTD<br>BELOW<br>15% | YTD<br>TOTAL |
|----------|------------|------|-------|--------|-----------|-----------------------------------|---------------------|---------------------|--------------|
| 12/03/92 | MILLSTONE  | 1    | 100   | A      | PERSONNEL | NO                                | 1                   | 0                   | 1            |
| 12/03/92 | HOPE CREEK | 1    | 100   | M      | PERSONNEL | NO                                | 1                   | 0                   | 1            |
| 12/04/92 | LIMERICK   | 2    | 77    | M      | PERSONNEL | NO                                | 1                   | 0                   | 1            |

## II. COMPARISON OF WEEKLY STATISTICS WITH INDUSTRY AVERAGES

### SCRAMS FOR WEEK ENDING 12/06/92

| SCRAM CAUSE            | NUMBER<br>OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE<br>(YTD) | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------------|------------------------|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| POWER GREATER THAN 15% |                        |                                    |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 0                      | 2.6                                | 2.9                       | 3.4                       | 3.1                       | 3.0                       |
| PERSONNEL RELATED (2)  | 3                      | 0.8                                | 0.6                       | 0.5                       | 1.0                       | 1.0                       |
| OTHER (4)              | 0                      | 0.0                                | 0.0                       | 0.0                       | 0.1                       | 0.4                       |
| Subtotal               | 3                      | 3.4                                | 3.5                       | 3.9                       | 4.2                       | 4.4                       |
| POWER LESS THAN 15%    |                        |                                    |                           |                           |                           |                           |
| EQUIPMENT RELATED      | 0                      | 0.5                                | 0.3                       | 0.4                       | 0.3                       | 0.6                       |
| PERSONNEL RELATED (2)  | 0                      | 0.2                                | 0.2                       | 0.1                       | 0.3                       | 0.4                       |
| OTHER (4)              | 0                      | 0.0                                | 0.0                       | 0.0                       | 0.0                       | 0.2                       |
| Subtotal               | 0                      | 0.7                                | 0.5                       | 0.5                       | 0.6                       | 1.2                       |
| TOTAL                  | 3                      | 4.1                                | 4.0                       | 4.4                       | 4.8                       | 5.6                       |

### MANUAL VS AUTO SCRAMS

| TYPE             | NO. OF<br>SCRAMS | 1992<br>WEEKLY<br>AVERAGE<br>(YTD) | 1991<br>WEEKLY<br>AVERAGE | 1990<br>WEEKLY<br>AVERAGE | 1989<br>WEEKLY<br>AVERAGE | 1988<br>WEEKLY<br>AVERAGE |
|------------------|------------------|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| MANUAL SCRAMS    | 2                | 1.0                                | 0.7                       | 1.2                       | 0.9                       | 1.1                       |
| AUTOMATIC SCRAMS | 1                | 3.1                                | 3.3                       | 3.2                       | 3.9                       | 4.5                       |

## 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 | -----              | 206 |
| Manual and Automatic Scrams for 1992 | --(YTD 12/06/92)-- | 201 |