

From: John R. White (JRW1) R-1
To: CMB Margo Bridgers, EDO
Date: Thursday, May 5, 1994 4:36 pm
Subject: JRW1

RELATIVE TO YOUR QUESTIONS FOR MONDAY COMMISSION MTG. OR SALEM
RESTART:

1. LICENSEE PERSONNEL WHO WILL SPEAK AT THE TABLE:

JAMES FERLAND, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, PSE&G
STEVE MILTENBERGER, SENIOR VICE PRESIDENT, NUCLEAR OPERATIONS, PSE&G

OTHER SUPPORTING PERSONEL:

JOSEPH HAGAN, VICE PRESIDENT- OPERATIONS; AND SALEM MANAGER-
OPERATIONS, PSE&G

ROBERT DOUGHERTY, EXECUTIVE VICE PRESIDENT-ELECTRIC PRODUCTION,
PSE&G

FRANK THOMSON, MANAGER, NUCLEAR LICENSING, PSE&G

2. REGION I PERSONNEL WHO WILL SPEAK:

THOMAS T. MARTIN, REGIONAL ADMINISTRATOR, REGION I
CHARLES MARSHALL, SENIOR RESIDENT INSPECTOR, SALEM/HOPE CREEK
ROBERT SUMMERS, PROJECT ENGINEER; AIT TEAM LEADER

3. LICENSEE WILL BE BRING DISCUSSION SLIDES, PHOTOGRAPHS, AND OTHER
DOUMENTATION.

4. THE LICENSEE DOES NOT EXPECT TO SEND ANY DOCUMENTATION AHEAD OF
TIME. REGION I WILL DEVELOP 4 OR 5 SLIDES FOR PRESENTATION AND WILL E-
MAIL WHEN COMPLETED.

5. TIME FOR EACH GROUP:

LICENSEE PRESENTATION IS EXPECTED TO RUN 1 TO 1.5 HOURS, DEPENDING ON
QUESTIONS. REGION I PRESENTATION IS EXPECTED TO RUN 15 TO 30 MINUTES.

CC: JTW1, MWH, TTM, WDL, JPD, RJS, CSM



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

May 6, 1994

2605
Cys: Taylor
Milhoan
Thompson
Blaha
Russell, NRR
Martin, RI
EDO R/F
Lieberman, OE
EDO 7629

The Honorable Joseph Biden
United States Senate
Washington, D.C. 20510

Dear Senator Biden:

The recent alert at the Salem Nuclear Power Plant led the staff to dispatch an Augmented Inspection Team (AIT) to that site so that the events leading up to, during, and after the reactor trip of April 7, 1994, would be thoroughly understood. Our staff has briefed your staff concerning that inspection.

I want you to know that the Commission and the staff are concerned about recent operations and performance at Salem. The staff is holding a public meeting today, on site, with the licensee in order to thoroughly discuss their activities subsequent to the April 7 event and to address deficiencies as part of an overall improvement effort. The Commission has scheduled a meeting with the licensee and the NRC staff on Monday, May 9, 1994, so that we can fully understand the actions that the licensee has taken to prepare for restart of Salem Unit 1.

We will keep you informed of our ongoing activities at Salem. Our activities will be geared to ensuring that licensee efforts to improve performance are effective and sustained.

Sincerely,

Ivan Selin

K/25

9405200072 14p.

COMMISSION MEETING
SALEM ~~UNIT 1~~ 4/7/94 EVENT



K/26

May 9, 1994
Presented By: Thomas T. Martin

SLIDE
1

→ TIME EVENT BEGAN ABOUT 10:16 AM ON 4/7/84 WHEN
PLANT OPERATORS BEGAN TO REDUCE POWER TO COMPENSATE
FOR SEA GRASS ~~LOGGING~~ ^{OF} CIRCULATING WATER PUMP
SCREENS. AT 10:47 AM THE REACTOR SCRAMMED, ~~THE TURBINES~~
~~TRIPPED~~, AND THE PLANT EXPERIENCED A SAFETY INJECTION INITIATION
WITH UNEXPECTED

RESIDENT STAFF RESPONSE

~~SAFETY~~
SAFEGUARDS
EQUIPMENT
RESPONSE.

- ^{The} Licensee informed the NRC
PSE&G informs ^{the} resident staff of unit
trip w/ 15 minutes

- ^{The} SRI responds to control room and subsequently
notifies Region I

The SRI ^{was} SUPPORTED BY 2 RI i 1 EP SPECIALISTS
WHO HA USED • USED TO MONITOR & ASSESS ACT.

He would ^{be} SUBMIT DISPATCH TO RI TO TSC ONCE MAINT
SET UP ~~THE~~ RSM COUNTERPART LINK ONC
NRC ~~MAINT~~

The RI staff
provided

- Continuous resident staff coverage
and communication maintained until
Augmented Inspection Team arrival
the next day.

MAINTAINED
OUR
IRC

REGIONAL RESPONSE TO EVENT

- ^{The License} PSE&G declared Unusual Event at 11:00 a.m.; and Alert at 1:16 p.m.
 (would be reported to NRC at 11:51)
- ^{Both} Region I and HQ ^{IRC were activated} ~~activate response center~~ for event monitoring from ≈1:00 p.m. until 9:00 p.m. ←
- PSE&G terminates Alert at 8:20 p.m.

SRI INFORMS BC
 • BC INFORMS DRA
 The assessment @ that time was
 TRIP w/ complications
 that was not
 a danger to the public
 but req monitoring & likely
 • DRA i JORDAN
 MONITOR MODE
 • DRA i JORDAN
 No SIBY
 NOTIFY EDO OFFICE
 DRA NRR ATTEND
 ATT
 MADE EDO OFFICE
 • LIC REQUESTS EIS D
 TIME TO HOT S/D
 DUE SI BLOCKED
 NO CONSIDERATION
 DRA INFORMS LIC
 REPAIRS FOR ATT
 AFTER S/D PERIOD
 EXHAUSTION
 TO BE LATER
 RECONSIDERED
 IN CASE

AUGMENTED INSPECTION TEAM

The DRA

- ~~Region 4~~, with NRR and AEOD approval, decided ^{the event warranted an} to dispatch AIT

during ^{the} afternoon of event.

- ^{was} AIT initiated due to event complexity and unexpected system responses

Subsequently

- EDO OFFICE INFORMED
- DRA INFORMS LIC
 - PLANS FOR AIT AFTER S/O 3 STABLE
- EXPECTATIONS OF LIC TO BE LATER DOCUMENTED IN CR

- MANAGEMENT LOAD ASSIGNED TO DIR, DRS

~~The~~ Bob SUMMERS, PE, REGION I
WAS ASSIGNED TO LEAD THE SITE TEAM.

AUGMENTED INSPECTION TEAM (continued)

- AIT Team members selected

- Region I Lead - MR. BOB SUMMERS, PE

→ - ^{Team} Members, ^{were selected} from Region, ^I NRR, ^{AEOD} staff ^①
personnel selected relative to based on their
technical expertise

- ^{We had 2} State observers
of New Jersey, Dept. of ENVIRONMENTAL RESOURCES

^{The} AIT CHARTER ^{WLS}

- Developed and issued on 4/8/94,
including ^{the} requirements to
 - Review ^{the} plant trip and response of
management, operators, and
systems
 - ^{to} Development ~~ment of~~ sequence of
events ~~and associated causal~~
~~factors~~

- ^{To perform} ^{of adequacy} Assessment of personnel, procedures, and equipment performance
- ^{To} ~~Identification of~~ root causes, and
- ^{To} Prepare ^a report

The CONFIRMATORY ACTION LETTER

On 4/8/94
The

WAS SUBSEQUENTLY ISSUED THAT DAY, CONFIRMING

- (CAL) 1-94-005 issued on 4/8/94, including:

THE LICENSEE'S

- Commitment to remain in cold shutdown
- ~~Commitment~~ to cooperate and support AIT activities
- ~~Commitment~~ AND to gain agreement of Regional Administrator prior to restart

ADMINISTRATES THE CAL
• DRA DISMISSES 4/ LIC
AND ASSURES LIC
COMFORTABLE W/
STARTING AIT
AT THIS POINT
IN TIME

CHRONOLOGY OF AIT ACTIVITIES

- ^{The WYJSP ear} AIT arrived on site ^{on} 4/8/94 and would complete on-site inspection activities on 4/26/94

- ^{The Team Leader held conference call} ~~AIT~~ maintained daily ~~contact~~ with Region and Headquarters managers

- ^{The TL provided an} EVENTS BRIEFING ON ^{4/13/94} ~~4/13/94~~ (NRR, MEDD & Regional ^{had} ~~managers~~ ^{and} ~~managers~~)
- Gas pocket, forms in reactor vessel head and identified by SRI ~~on 4/13/94~~ ~~on 4/13/94~~, which ~~was~~ ^{was} NOT RECOGNIZED BY THE LICENSEE. THIS RESULTED IN ^{to keep them informed of the status and findings of WSP team} ~~COMMISSIONER ASSISTANCE BRIEF~~

EARLY THE NEXT WEEK, THE SRI IDENTIFIED THE FACT THAT A

- ^{The} Licensee describes ^{d their} corrective action plans in letters dated 4/25/94 and 4/29/94

^{also} ^{more} The TL ^{also} CONDUCTED BRIEFING OF REPRESENTATIVES OF Sen. BROWN STAFF, the Senate Sub Comm on Cities and Housing Sub Comm ~~ON~~ ON 4/25/94 AND NACLAIR RESOLUTION 1 on Energy and Resources

- ^{the} AIT preliminary findings ^{were} presented at public exit on 4/26/94 at Salem

- ^{The Team} ~~AIT~~ ^{has} ~~currently~~ ^{SINCE BEEN} involved in assessment of findings and report preparation

- ^{While the} Resident staff ^{remains} involved in inspecting and verifying licensee actions for restart readiness

- ^{On 5/5/94, the} Region I staff ^{again} briefed Senator Biden's staff on ~~5/5/94~~ in their Wilmington Delaware office
- ^{On 5/6/94, we held} Public management meeting with PSE&G on ~~5/6/94~~ at the Salem facility to discuss their status and plans for restart and longer term CA.

↳ AS A RESULT OF THE AIT
we have concluded that,

SIGNIFICANT AIT FINDINGS

- ^{There were} No abnormal releases of radiation to the environment ^{as a result of} ~~occurred~~ during the event
- ^{The} Event ^{and operator to} challenged RCS pressure boundary through multiple ^{the} operations ^{is} ^{the} ~~operations~~ ^{activations} of ^{the} pressurizer ^{is} ~~is~~ ^{operated} PORVs
- ^{MULTIPLE} Operator errors occurred which complicated the event

- Management ^{and concerns} ^{had} allowed equipment problems to ~~exist~~ ^{persist} that made ^{responding to this event} ~~operations~~ difficult for plant operators
- Some equipment was degraded by the event, but overall, the plant performed as designed
- Operator use of emergency operating procedures was good
- Licensee investigations and troubleshooting efforts were good

→ WITH REGARD TO

→ REMAINING ACTIVITIES →

The licensee
Owes 2 letters
① eval of PORVs
and flow calibration
drift &
why not prob
② Confirm
Readiness for restart
Request for
agreement

- ~~Licensee confirms restart readiness~~

In add, now,
Region I

- ~~NRC releases from CAL~~

- ~~NRC augmented start up coverage~~

- ~~Issue ^{the} AIT inspection report~~

- Determine and direct followup activities

including

- Long Term ~~Site~~ Specific CA verification
- Generic Issues handoff to NRR w/ TIA's
- ~~Revisions to Inspection Plan~~
- Revisions to ~~Site~~ Specific Inspection Plan

13 - Consider need for enf. action