

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 MARSCHALL, 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

K/29



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

May 6, 1994

2603
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

THE EVENT BEGAN ABOUT 10:16 AM ON 4/7/84 WHEN PLANT OPERATORS BEGAN TO REDUCE POWER TO COMPENSATE FOR SEA GRASS CLOGGING OF CIRCULATING WATER PUMP SCREENS. AT 10:47 AM THE REACTOR SCRAPPED, ~~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 | EP SPECIMIS who he used • USED TO MONITOR & ASSESS ACT. He would subst 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.

MAINT
OUR
IRC

(SLIDE 2)

REGIONAL RESPONSE TO EVENT

- ^{The License} PSE&G declared Unusual Event at 11:00 a.m.; and Alert at 1:16 p.m.
- ^{Both} Region I and HQ ~~activate response center~~ ^{IRC were activated} 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~~
~~MONITOR MODE~~
 • LIC REQUESTS EXT D TIME TO HOT S/D
 DUE SI BLOCKED NO CAPACITOR AT
~~DRA INFORMS LIC~~
~~Perms for ATT~~
~~After S/D~~
~~EXTRACTIONS TO BE LATER~~
~~ACCOMMODATED~~
~~IN SAZ~~

AUGMENTED INSPECTION TEAM

The DRA

- ~~Region 1~~, with NRR and AEOD approval, decided ^{the event warranted an} to dispatch AIT

during ^{the} ~~a~~ ^{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 5/0 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 requirements to
 - Review ^{the} plant trip and response of management, operators, and systems
 - ^{to} Development ~~of~~ sequence of events and associated causal ~~factors~~

- ^{To perform} Assessment of personnel, procedures, and equipment performance ^{- of adequacy}
- ^{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

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

SLIDE 8

CHRONOLOGY OF AIT ACTIVITIES

- ^{The NY, NJ, and PA} AIT arrived on site ^{on} 4/8/94 and would complete on-site inspection activities on 4/26/94

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

- ^{The TL provided an} EVENTS BRIEFING ON ^{4/13/94} ~~4/13/94~~ (NRR, MEDD & Region's ^{and} ~~staff~~ ^{CD}), ^{to keep informed of then the status and findings of WSP team} Gas pocket, forms in reactor vessel head and identified by SRI ~~on 4/13/94~~, WHICH ~~was~~ ^{was} NOT RECOGNIZED BY THE LICENSEE. THIS RESULTED IN A 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} TL CONDUCTED BRIEFING OF REPRESENTATIVES OF Sen. BROWN STAFF, the Senate SubComm on Clean Air & House SubComm ~~on~~ on 4/25/94 and NUCLEAR REGULATION 1 on Energy SM 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 ^{activations} of ^{the} pressurizer ^{is} ~~PORVs~~ ^{operated}
- *MULTIPLE* Operator errors occurred which complicated the event

- Management ^{and concerns} allowed equipment ^{had} 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~~

~~MUST~~

~~INDEPENDENTLY CONCLUDE READY TO RESTART AND COORDINATE W/ NRR & EDO, BEFORE RECEIVING FROM~~

● ~~NRC augmented start up coverage~~

~~WE PLAN ROUND THE CLOCK, UNTIL STABLE MODE 1 OPERATIONS, ACHIEVED, USING RESIDENT'S REGION BASED~~

We still must

● ~~Issue AIT inspection report~~

~~WHICH IS DUE BEFORE END OF MONTH~~

● Determine and direct followup activities

Finally we must

including

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

13 - CONSIDER NEED FOR ENF. ACTION