



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30303

Report Nos.: 50-338/84-09 and 50-339/84-09

Licensee: Virginia Electric and Power Company
 Richmond, VA 23261

Docket Nos.: 50-338 and 50-339

License Nos.: NPF-4 and NPF-7

Facility Name: North Anna 1 and 2

Inspection Dates: April 6 - May 5, 1984

Inspection at North Anna site near Mineral, Virginia

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|--------------|---|---------------|
| Inspectors: | <u>S. Elrod for</u> | <u>6/8/84</u> |
| | M. W. Branch, Senior Resident Inspector | Date Signed |
| | <u>J. G. Luehman for</u> | <u>6/8/84</u> |
| | J. G. Luehman, Resident Inspector | Date Signed |
| Approved by: | <u>S. Elrod</u> | <u>6/8/84</u> |
| | S. Elrod, Chief, Section 2C | Date Signed |
| | Division of Reactor Projects | |

SUMMARY

Areas Inspected

This routine inspection by the resident inspectors involved 156 inspector hours onsite in the areas of Surveillance and maintenance activities, followup of previously identified items, followup of I/E Bulletins, safety system walkdowns, followup of licensee event reports (LER), annual calibration, annual maintenance, and TMI action plan items.

Results

Of the 9 areas inspected, no violations or deviations were identified in 8 areas. One apparent violation was identified in one area (failure to establish acceptance criteria in periodic time response test, paragraph 12).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *E. W. Harrell, Station Manager
- G. E. Kane, Assistant Station Manager
- *L. Johnson, Superintendent, Technical Services
- J. R. Harper, Superintendent, Maintenance
- *R. O. Enfinger, Superintendent, Operations
- G. Paxton, Superintendent, Administrative Services
- *A. L. Hogg, Jr., QC Manager
- *S. B. Eisenhart, Licensing Coordinator
- *J. P. Smith, Engineering Supervisor
- F. Terminella, Engineering Supervisor
- M. G. Pinion, Engineering Supervisor
- A. H. Stafford, Health Physics Supervisor
- E. C. Tuttle, Electrical Supervisor
- R. A. Bergquist, Instrument Supervisor
- D. E. Thomas, Mechanical Maintenance Supervisor
- *F. P. Miller, QC Supervisor

Other licensee employees contacted included technicians, operators, mechanics, security force members, and office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on May 7, 1984, with those persons indicated in Paragraph 1 above. The licensee acknowledged the inspector's comments.

3. Licensee Action on Previous Inspection Findings

Not Inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Plant Status

Unit 1

During this inspection period, the unit operated near capacity load except during the period of May 1 - 2, 1984. On May 1, 1984 at 0635, while performing control rod operability checks, Shutdown Bank A, Group 2, operated erratically. A unit rampdown was commenced at 0955 and terminated at 1135, when the problem was determined to be overheating in the room

housing the rod control equipment. Heating to the room was secured and the unit was returned to 100% power with the rod control system operating normally.

Unit 2

The unit started the inspection period undergoing a scheduled maintenance outage. On April 9, 1984, the reactor was taken critical and the unit was on line at 1148. 100% power was reached at 0651 April 13, 1984, and with the exception of some night time load following operated at or near capacity until May 4, 1984. On that day at 2041 a rampdown was commenced in order to shutdown for reactor trip breaker maintenance. The unit was taken off the line on May 5, 1984. at 0121. At 0126, the main turbine tripped on a high feedheater water level and the reactor was manually tripped. Following the reactor trip, rod H-14 Individual Rod Position Indication (IRPI) indicated the rod was not fully inserted and the reactor was emergency borated for 7 minutes. Subsequently, the problem was determined to be improper indication and the rod was verified to be fully inserted.

6. Licensee Event Report (LER) Followup

The following LER's were reviewed and closed. The inspector verified that reporting requirements had been met, causes had been identified, corrective actions appeared appropriate, generic applicability had been considered, and the LER forms were complete. Additionally, for those reports identified by asterisk, a more detailed review was performed to verify that the licensee had reviewed the event, corrective action had been taken, no unreviewed safety questions were involved, and violations of regulations or technical specification (TS) conditions had been identified. In order to perform a more effective review many of the LER's were grouped by subject and identified by lettered paragraphs. These paragraphs are provided at the conclusion of the listed LER's.

- a. 338/80-98 Flux deviation exceeded target flux.
- 338/80-88 50% power exceeded while limited to <50%.
- 338/80-38 Delta flux outside target band.
- 338/80-79 $FJ(z) > FJ(z)$ by 0.8%.
- 338/80-74 Flux tilt > 1.02%.
- b. 338/80-04 Equipment hatch inner door seal leaking.
- 338/80-62 Emergency personnel hatch (outside) seals leak.
- c. 338/80-69 'B' accumulator sample > 2100 ppm.
- 338/80-75 Accumulator 1B out of specification high.

- 338/80-99 1-SI-TK-1C boron concentration high out of specification.
- 338/80-105 1-SI-TK-1C accumulator low level - 9% below minimum.
- d. 338/80-07 Containment temperature > 85 degrees.
- 338/80-49 Containment temperature > 105 degrees.
- 338/80-64 Containment temperature > 105 degrees.
- 338/80-66 Containment temperature > 105 degrees.
- 338/80-72 Containment temperature > 105 degrees.
- e. 338/80-57 Rod G-9 > 12 steps
- f. 338/80-10 Hangers SW-H-160A and 162A overstressed.
- 338/80-12 TV-MS-101A exceeds allowable closing time.
- 338/80-14 1-FW-P-2 Wiped bearing.
- 338/80-26 MOV-RS-100B failed to open for 1-PT-131.
- 338/80-29 Carbon steel elbow on QC recirculation cooler corroded and leaking.
- 338/80-36 CR air bottles depressurized.
- 338/80-39 MS Comparator 1-PC-475-2 failed non safe.
- 338/80-40 LQ-RS-103A defective card.
- 338/80-43 SSPS Train AP-11 permissive tests bad.
- 338/80-45 LI-1461 bad indication/RC 129 packing leak.
- 338/80-46 LI-1474 > 5% from other S/G levels.
- 338/80-50 LI-1476 out of calibration.
- 338/80-51 1-EG-P-1JB suction valve closed.
- 338/80-53 RHR secured > 1 hour.
- 338/80-54 Exceeded containment partial air pressure.
- 338/80-56 T-1422 process card failed.
- 338/80-58 H2 analyzer failed.

- 338/80-60 1-HV-FL-3A heater breaker will not reset.
- 338/80-68 Jumper not initiated for cable hook-up to air compressor.
- 338/80-76 1-BS-P-3A-P out of tolerance.
- 338/80-80 Vital bus 4 inverter tripped.
- 338/80-83 PZR level 461 reading > 3.5% from average.
- 338/80-85 Level indication LT-1461 swinging approximately 20%.
- 338/80-86 Excessive chatter of RV-FW-100 during PT-71.1.
- 338/80-87 Steam governor valve tripped on starting 1-FW-P-2.
- 338/80-90 1-RM-159 motor burned up.
- 338/80-92 Leak at weld on 1-CH-P-1A suction line at drain valve.
- 338/80-95 Fire door S-71-7 inoperable.
- 338/80-97 Steam generator level L1-1474 > 5% from other two channels.
- 338/80-101 PI-LM-100B containment HI-HI press alarm Channel (CH) II in with gauge reading 10" HG.
- 338/80-106 Fire door not operating properly-hole in door S-94-6.
- 338/79-109 Failure to meet T.S.3.4.8.A (dose equivalent I-131 limit).
- 338/79-156 1-RC-HSS-873 failed PT.
- 338/78-118 Containment mat vertical seismic sensors alarmed.
- 338/78-133 FI-1474 HI due to steam leak on 1-MS-4.
- g. 338/80-48 MOV-QS-102A isolated for maintenance on QS-33.
- 338/80-73 MOV-1863A de-energized to perform welding on 1-SI-171.
- h. 338/78-53 1-FP-P-1 (motor driven fire pump) inoperable due to a starter problem.
- a. 339/80-102 D Flux out of target band a total of five minutes.
- 339/80-87 Flux outside target band.

- 339/80-83 FQ limit exceeded.
- 339/80-79 NIs indicated > 2% difference between actual plant power.
- 339/80-69 FQ limit exceeded.
- 339/80-67 Flux out of target band.
- 339/80-66 Out of flux target band.
- 339/80-64 Flux outside target by nine minutes.
- 339/80-44 TAVE < 541 F. for two minutes in mode 2.
- 339/80-28 Identification of positive temperature coefficient.
- b. 339/80-11 Containment door seals failed 2-PT-62.4.
- 339/80-15 Containment personnel air lock door would not close.
- 339/80-17 Containment hatch door failed 2-PT-62.4.
- 339/80-20 Containment hatch limit switch problem exceeded 73 hours for 2-PT-62.4.
- 339/80-60 Outer door leakage failed PT-62.4.
- c. 339/80-56 Boric acid concentration high - out of specification.
- 339/80-71 2-SI-TK-1A out of specification high
- d. 339/80-40 Containment temperature exceeded 105°F.
- e. 339/80-98 Rod K9 drifted > 12 steps from group demand.
- 339/80-95 Rod G-13 > 12 steps from demand position.
- 339/80-91 Rods > 12 steps from group.
- 339/80-84 Rod J3 reading > 12 steps from bank.
- 339/80-81 Control Rods J03 and D10 IRPIs > 235 steps.
- 339/80-57 Rod G-9 > 12 steps from bank.
- 339/80-46 Control rod G-9 IRPI > 12 steps.
- 339/80-45 Rod N-9 IRPI > 12 steps.

339/80-41 Rod G-13 IRPI > 12 steps.

339/80-42 Rod E-5 > 12 steps.

339/80-35 Rod E-5 > 12 steps.

339/80-33 Rod N-7 > 12 steps.

339/80-32 Rod J-13 > 12 steps.

339/80-12 Rod position indicator channel drifted 19 steps low.

339/80-30 IRPIs G-13, J-13 and L-5 > 12 steps from demand.

339/80-01 MCV-270 closed - lost operable operable RHR loop.

339/80-03 2H diesel inoperable.

339/80-04 LT-2475 drifting low - 9%.

339/80-06 LT-2486 steam generator B NR level Ch 1 below ch II and III.

339/80-09 PT-2485 Failed.

339/80-13 C boric acid storage tank boron concentration out of specification.

339/80-18 Lost C RSS transformer.

339/80-19 RMS-259 sample pump bad.

339/80-22 FTO-DA-200 integrator faulty.

339/80-25 RPI-F-12 signal conditioning module failed.

339/80-26 Steam flow/feed flow trip out of tolerance.

339/80-27 FT-2494 out of tolerance.

339/80-34 Excessive primary system leakage.

339/80-36 All three auxiliary feedwater pumps tied together to a common header.

339/80-37 2A accumulator boron concentration high.

339/80-38 Leak rate > 1 unidentified.

339/80-39 Transmitter press protection ch III reading +3.45% high (+27.6 psi).

339/80-45 Bypass feedwater regulator valve failed open.

339/80-47 Channel III steam flow square root converter reads high.

339/80-49 Flow transmitter out of specification high (FT-2475).

339/80-52 TV-MS-201C not fully closing.

339/80-53 FT-2495 failed low.

339/80-55 2-SI-70 has excessive leakage.

339/80-58 FI-2494 reading high with little or no flow.

339/80-63 During 2-SV-30 delta T/TAVG Channel III found low.

339/80-68 PM-447B out of tolerance.

339/80-72 1-CH-TK-1C out of specification - low boron concentration.

339/80-73 PC-456C failed during 2-PT-31.5.2.

339/80-74 2HA fuel oil pump failed to start.

339/80-75 EI-2415 flow transmitter out of cal.-high.

339/80-76 LT-486 transmitter reading high out of tolerance.

339/80-77 Lost auto start 2-CH-P-1B.

339/80-78 FPH-WAPD-4161 seismic pipe hanger missing.

339/80-80 TI-2412B failed low.

339/80-82 Breaker 24J1-2 failed to function during 2-PT.36.9.1.

339/80-85 Greater than allowable difference between FI-2485 and FI-2484.

339/80-86 FTD-DA-215 inoperable.

339/80-88 PI-LM-200C Containment pressure channel III failed high.

339/80-93 2H D/G fire door inoperable.

339/80-96 PQ-475 non-isolated power supply reading low.

- 339/80-97 Breaker 2B1-2A3 containment penetration for polar crane energized in mode 3.
- 339/80-99 Pump trip on overspeed while performing 2-PT-71.1.
- 339/80-100 RC loop A TAVE protection channel 1A LO LO TAVE annunciator locked in with actual TAVE 547°F and protection channel 1A 544°F.
- 339/80-103 LI-QS-200C transmitter inoperable.
- 339/80-104 2-CH-185 weld leak on drain line 2-CH-P-1B.
- g. 339/80-14 2J emergency diesel generator removed for replacement of a transformer.
- 339/80-16 2-FW-P-2 isolated to repair 2-MS-117.
- 339/80-21 RM-RMS-259 and 260 sample pump secured to replace valve.
- 339/80-23 2-SI-P-1A inoperable for repair.
- h. 339/78-18 AFP orificies not code material.
- 339/80-61 2-SI-P-1B tagged out for repair - relief valve lifted at 190 psia.
- *339/82-50 "2A" Residual Heat Removal (RMR) pump out of service.
- *339/84-01 Reactor trip on Feed Flow - Steam Flow mismatch coincident with steam generator low level.
- a. The listed LER's address events in which reactor parameters such as power level, axial Flux Difference (AFD), and temperature deviated from required values. In each case the inspectors reviewed the description of the event and the corrective action taken. For each event the corrective action taken and the content of the submitted report appeared adequate and the LERs are now considered closed.
- b. The listed LER's have been reviewed by the inspectors and the actions taken or planned by the licensee were considered satisfactory. At present, the problem of reoccurring minor leakage on the containment accesses is under evaluation but these specific instances have been adequately addressed and are considered closed.
- c. Uncirculated tanks containing borated water are always susceptible to stratification. The inspectors have reviewed the listed LERs and have found that the licensee's corrective actions were timely and correct. Similar events still do occur but far less frequently because of the periodic recirculation done on the tanks.

- d. The containment temperature dropping below or rising above acceptable limits is very likely when operator control of containment temperature is lost or is not closely monitored during periods of very cold or hot weather. The listed events were such cases and have been reviewed by the inspectors. It appears all the appropriate actions required by TS were taken and the LERs are considered closed.
- e. Deviation of Individual Rod Position Indication (IRPI) from the group demand position is a problem generic to Westinghouse analog IRPI systems. The inspectors have reviewed the listed LERs and have verified that they addressed the corrective actions. Additionally, it was verified the LERs commented on the generic implications by mentioning it as either the Westinghouse or a temperature related indication problem. The listed LERs are considered closed.
- f. The listed LERs have been reviewed by the inspectors and the corrective actions appear to have been adequate in resolving the problems. The LERs are considered closed.
- g. The inspectors reviewed the listed group of LERs pertaining to inoperable equipment resulting from planned maintenance. The inspectors ensured that TS action statements were addressed and after corrective actions were taken that the equipment was returned to service. The LERs were considered closed.
- h. The inspectors reviewed the listed general group of LERs pertaining to equipment failures that resulted in the entering of a TS action. The inspectors ensured that the requirements of the action statements were addressed and corrective actions taken. The LERs are considered closed.

(Closed) LER 339/82-50 "2A" Residual Heat Removal (RHR) Pump - was removed from service to replace a mechanical seal primary "o" ring. An engineering study was done to determine the cause of the seal failure. This review found no design or material problems. The seal damage was attributed to pump operation without a sufficient Reactor Coolant system (RCS) level. The loss of pump suction because of low RCS level was also the subject of LER 339/82-49 and the response includes the corrective action.

7. Followup of Previously Identified Items

(Closed) 339/83-24-03 Updating of Safety Injection (SI) Termination Requirements - The licensee has instituted new emergency procedures which provide the operator with criteria for terminating safety injection that are applicable under a much wider set of plant conditions than the old procedures. The inspectors have reviewed the procedures and have no outstanding concerns in this area.

(Closed) 339/83-05-01 Both Source Range Nuclear Instruments inoperable - This item is the same subject that was covered in LER 339/83-13 which was closed in inspection report 339/83-08.

8. IE Bulletin

(Closed) 338, 339/79-BU-18 "Audibility Problems Encountered on Evacuation of Personnel from High-Noise Areas." In a letter dated September 24, 1979 the licensee responded to this bulletin. It was reported one change had been made to the station alarm system and another (visual evaluation signal in the diesel generator rooms) was to be made by design change. A clarified supplemental response was submitted, dated August 21, 1980, and the licensee reported completion of the design change in a letter dated October 10, 1980.

9. Receipt of New Fuel (60705)

The inspectors reviewed procedure 1.OP-4.2 (Receipt and storage of new fuel) for technical adequacy and verified proper approval was obtained.

The inspectors witnessed receipt, inspection and storage of the following new fuel assemblies: G-01, G-07, G-11, G-15, G-28, G-37 and G-38. During inspection of the above assemblies, a minor deficiency (unstaked locking cup) was noted on assembly G-11 and this deficiency was evaluated and corrected in accordance with VEPCO procedures.

No violations or deviations were identified.

10. Maintenance (62700)

The inspectors reviewed the following maintenance procedures for technical content and verified that adequate measures were established in the areas of fire protection, inspection hold points, adherence to TS, material control, retesting and return to service:

- ° MMP-C-RC-4.2 (Mechanical Maintenance Procedure for Reactor Loop Isolation Valves), accomplished 6-3-82 per Maintenance Report (MR) NI-82-0524 1413.
- ° MMP-C-SW-5 (Mechanical Maintenance Procedure for the Permanent Repair of the Service Water Reservoir Spray Header Piping) accomplished per MRs NI-83-08041121 through NI-83-08041130 and NI-83-08041454 through NI-83-08041459.
- ° MMP-P-EG-1 (Mechanical Maintenance Procedure for Emergency Diesel Generator Engines) accomplished per MR NI-83-04282504, dated June 4, 1983.
- ° EMP-C-SOV-1 (Electrical Maintenance Procedure for Repair and Installation of Solenoid Operated Valve Coils, SOV 1460A) accomplished per MR NI-82-11040544, dated November 4, 1982.

- EMP-C-HS-1 (Electrical Maintenance Procedure for Pressurizer Heaters) accomplished per MR N2-83-01271457, completed April 17, 1984 for heaters No. 50 and 74.
- MMP-C-GV-1 (Mechanical Maintenance Procedure for Power Operated and Automatic Valves in General, Valve Mark No. 1-RS-MOV-155B) accomplished per MR NI-83-02071442 dated February 8, 1983
- 2-MOP-7.01 (Maintenance Operating Procedure for the Low Head Safety Injection Pump) Performed May 16, 1983

Additionally, the inspectors reviewed the outstanding maintenance work request and determined that the licensee is performing essential maintenance in a timely manner. However, the open work order list is very large and a concerted licensee effort will be necessary to reduce this backlog.

The performance of MMP-C-HV-1 "Removal of HEPA and Channel Filter Trays" and MMP-C-HV-2 "Repacking the Charcoal Filter Trays" was observed on April 18, 1984. The second procedure called for the personnel performing it to repack and weigh the trays however, the present practice is to install pre-packed trays rather than to repack on the job site. Instead of deviating the procedure to reflect this new practice the steps were marked "NA" based on verbal approval from the engineer observing the evolution. This practice is not in conformance with station administrative guidelines. Update of the procedure to reflect the current maintenance practice is identified as Inspector Followup 338/84-09-03.

No violations or deviations were identified.

11. Fire dampers securing ventilation flow from ESF equipment areas

During a followup review of LER 83-077, for Unit 2, the inspectors determined that the reported failure of a single fire damper may represent a single failure of a component which resulted in loss of function for a safety related support system. Section 9.4.6 of the North Anna updated Final Safety Analysis Report (UFSAR) describes the ESF Area ventilation system and implies that the single failure analysis was directed at active components as the system was designed utilizing a single vent duct from the safeguards building to the auxiliary building.

The function of the exhaust system described in the UFSAR is to exhaust radioactive contaminated air, from pump gland leakage, from the Safeguards area through fans and filters then out the elevated vent stack.

The inspectors review revealed that the UFSAR does not mention the use or location of fire dampers in the safeguards ventilation system. Additionally, the drawings provided in the UFSAR do not show the existence or location of any fire dampers. The inspector can only assume that the single ventilation duct was viewed as a passive component and the presence of a fire damper may constitute an unreviewed safety question. This item is considered IFI 338, 339/84-09-01 and requires further investigation by NRC

Region II and the licensee. Additionally, the location and existence of all ventilation fire dampers should be addressed during the followup.

12. Calibration

During this inspection period the inspectors continued to review the station calibration program.

Response times test procedures were examined using the guidance of NUREG/CR-1369 Revision 1. Additionally, numerous completed response time tests were reviewed for completeness and accuracy. Procedure and completed tests that were reviewed included:

- 1-2-PT-36.3 Reactor Protection System (RPS) and Engineered Safeguard Features (ESF) Response Time Testing - Sensors
- 1-2-PT-36.3.1 RPS and ESF Response Time Testing - RTD's.
- 1-PT-36.4 RPS and ESF Response Time Testing - Circuitry
- 2-PT-36.4.1 RPS and ESF Response Time Testing - Circuitry (for Cycles 1A, 4B, 7A, 10B)
- 2-PT-36.4.1 RPS and ESF Response Time Testing - Circuitry (for Cycles 2B, 5A, 8B, 11A)
- 2-PT-36.4.3 RPS and ESF Response Time Testing - Circuitry (for Cycles 3A, 6B, 9A, 12B)
- 1-2-PT-36.6 RPS Response Time Testing - U.V. Coil, Breakers and Gripper Coil
- 1-2-PT-36.7.1 ESF and Containment Isolation Valve Response Time
- 1-2-PT-36.7.2 Reactor Trip from Turbine Trip Response Time Test
- 1-2-PT-36.7.3 Response Time Testing of Auxiliary Feedwater Pumps During Station Blackout
- 1-2-PT-36.7.4 Response Time Testing of Auxiliary Feedwater Pumps from Main Feedwater Pump Trip
- 1-2-PT-36.7.5 ESF Pump Response Time
- 1-2-PT-36.8 RPS and ESF, Total Response Time Calculation

Review of 1-PT-36.8 completed July 13, 1983 revealed that much of the data was taken from 1-PT-36.7.1 which was completed February 1, 1983 and that data was taken from 1-PT-36.7.5 which was completed November 17, 1982.

The recorded response time for "A" Low Head Safety Injection Pump on 1-PT-36.7.1 was 22.8 seconds. When this value was used to complete 1-PT-36.8 it was realized that total response time for the train was outside the TS acceptance criteria. Another test was run on the pump to verify the response time. On this second test the time recorded was 12.2 seconds and the test was determined to be satisfactory. The 22.8 second time response was a problem when it was determined because added to the expected diesel response time (ignoring the system time delays) the train's time response was unsatisfactory. Action to resolve this apparent problem (unsatisfactory ESF train time response) was not taken when the 1-PT-36.7.5 was run because the acceptance criteria for the test only required data gathering with no evaluation. This is a violation and is identified as 338, 339/84-09-02.

The problem remained undetected because of inadequate acceptance criteria when the second test 1-PT-36.7.1 was performed. Finally, when 1-PT-36.8 was performed eight months after the recording of the unsatisfactory value, the problem was recognized.

In addition to the response time procedures mentioned above, the inspectors identified numerous other tests that had unacceptable acceptance criteria.

Another problem noted with the present time response test performance method is the large amount of lag time between the initial data taking and the final response time verification. Data gathering for a single channel has taken as long as eight months and could take longer under the present system. It is desirable to test a system as a whole as much as possible. This would eliminate the timeliness problem but the present procedure structure does not attempt to follow this guideline. The piece by piece approach is acceptable however, as presently performed, other weaknesses are evident. Some of the data is taken in conjunction with monthly tests that are performed a number of months before the final acceptance test. In the meantime, the monthly tests are reperformed numerous times resulting in the final acceptance test not containing the most current data. Also, the system as presently administered, does not account for response time testing that may be required because of maintenance that has been done in the time between data collection and the final response time calculation.

Finally, the signature blocks on pages of numerous response time performance tests are missing, resulting in full pages of completed tests containing no apparent verification that the steps were performed. It is recognized that in some cases that, although no signature/initials are present on the specific steps in the procedure body, verification can be made by looking at the data collection sheet required by the step. The procedures need to be modified to make sign off requirements consistent throughout.

13. TMI Action Plan Items (25542B)

(Closed, Units 1 and 2) II.B.1.3: (Implement procedures for RCS vents). The inspectors verified that use of the reactor coolant system (RCS) vent has been included in the integrated Emergency Operating Procedures.

However, it should be noted that the RCS vent for Unit 1 remains mechanically isolated as allowed by the 10 CFR 50.44(c)(3)(iii) exemption.

(Closed, Units 1 and 2) II.F.1.6: (Containment H2 Monitor). The inspector verified that the integrated emergency operating procedures, implemented on April 15, 1984, includes instructions for the use of the containment H2 monitors. Heat tracing continues to be a problem, however, this problem is being resolved on a priority basis and system operability is controlled by TS 3.6.4.1 for Unit 1 and 3.6.4.2 for Unit 2.

(Open, Units 1 and 2) 1.C.1.2.B: (Inadequate core cooling procedure implementation). The inspector verified that plant procedures to combat inadequate core cooling were developed in accordance with Revision "0" of the Westinghouse guidelines and implemented prior to the April 15, 1984, commitment date. NRC approval of W owner group technical guidelines was issued in Generic letter 83-22 (Safety Evaluation of "Emergency Response Guidelines"). Post implementation review of the Emergency Operating Procedures will be performed in accordance with Generic Letter 82-33.

No violations or deviations were identified.

14. ESF System Walkdown

The following selected Engineered Safety Features (ESF) systems were verified operable by performing a walkdown of the accessible portions of the systems:

Unit 1 - April 20, 1984, NaOH Chemical Addition (1-OP-7.8A) and RWST (1-OP-7.7A)

Unit 2 - April 20, 1984, NaOH Chemical Addition (2-OP-7.8A) and RWST (2-OP-7.7A)

No violations or deviations were identified.

15. Surveillance

The performance of 2-PT-17.1 "Control Rod Operability" was observed on April 17, 1984. The procedure was being performed by a trainee under the supervision of a licensed operator. The steps of the procedure were accomplished in the prescribed sequence however the licensed operator waited until the end of the procedure to sign the action steps as complete. This practice was brought to the attention of the Operations Superintendent who counseled the personnel involved concerning the correct procedure completion methods.

16. Routine Inspection

By observations during the inspection period, the inspectors verified that the control room manning requirements were being met. In addition, the inspectors observed shift turnover to verify that continuity of system

status was maintained. The inspectors periodically questioned shift personnel relative to their awareness of plant conditions.

Through log review and plant tours, the inspector verified compliance with selected TS and Limiting Conditions for Operations.

During the course of the inspection, observation relative to protected and vital area security were made, including access controls, boundary integrity, search, escort, and badging.

On a regular basis, radiation work procedures (RWPs) were reviewed and the specific work activity was monitored to assure the activities were being conducted per the RWPs. Radiation protection instruments were verified operable and calibration/check frequencies were reviewed for completeness.

The inspector kept informed, on a daily basis, of the overall status of both units and of any significant safety matters related to plant operations. Discussions were held with plant management and various members of the Operations staff on a regular basis. Selected portions of operating logs and data sheets were reviewed daily.

The inspector conducted various plant tours and made frequent visits to the control room. Observations included: witnessing work activities in progress, verifying the status of operating and standby safety systems and equipment, confirming valve positions, instrument and recording readings, annunciator alarms, housekeeping and vital area controls.

No violations or deviations were identified.