



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-338/85-18 and 50-339/85-18

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 Conducted: July 8 - August 4, 1985

Inspectors: Gregory A. Pick for
M. W. Branch, Senior Resident Inspector

August 19, 1985
Date Signed

Gregory A. Pick for
J. G. Luehman, Resident Inspector

August 19, 1985
Date Signed

Approved by: S. A. Elrod
S. A. Elrod, Section Chief
Division of Reactor Projects

August 20, 1985
Date Signed

SUMMARY

Scope: This routine inspection by the resident inspectors involved 205 inspector-hours on site in the areas of licensee event reports (LERs), previously identified items, licensee action on previous inspection findings, engineered safety features (ESF) walkdown, operational safety verification, monthly maintenance, monthly surveillance and inspection of spent fuel pool (SFP) reracking.

Results: One violation was identified: failure to properly perform surveillance requirements, paragraph 9. Additional examples of previous violation 338, 339/85-16-02, failure to follow procedures, were identified; paragraphs 5, 6, 11, 13, and 17.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *E. W. Harrell, Station Manager
- A. G. Hogg, Jr., Quality Control (QC) Manager
- *G. E. Kane, Assistant Station Manager
- *E. R. Smith, Assistant Station Manager
- R. O. Enfinger, Superintendent, Operations
- *J. R. Harper, Superintendent, Maintenance
- *D. E. Hickman, Jr., Supervisor, Health Physics (HP)
- *L. L. Edmonds, Superintendent, Nuclear Training
- J. A. Stall, Superintendent, Technical Services
- J. R. Hayes, Operations Coordinator
- *J. P. Smith, Engineering Supervisor
- D. E. Thomas, Mechanical Maintenance Supervisor
- E. C. Tuttle, Electrical Supervisor
- R. A. Bergquist, Instrument Supervisor
- *F. T. Terminella, Quality Assurance (QA) Supervisor
- R. C. Sturgill, Supervisor, Engineering
- G. H. Flowers, Nuclear Specialist
- *J. H. Leberstein, Licensing Coordinator

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 August 2, 1985, with those persons indicated in paragraph 1. The licensee acknowledged the inspectors findings. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation 338,339/84-41-03: Failure to Include Containment Purge Test Valves in Independent Verification Checklist. The inspectors reviewed the licensee's response, serial number 85-034, dated February 12, 1985, and determined that the specified corrective action appeared to be prudent and proper. Additionally, the inspectors reviewed 1(2)-PT-61.3.1 dated March 14, 1985, and verified the revision was completed as specified in the licensee's response.

(Closed) Infraction 339/80-31-01: Failure of Station Nuclear Safety and Operating Committee (SNSOC) to Review a Temporary Modification Prior to Implementation. The inspectors reviewed the licensee's response dated January 12, 1981, and based on the licensee response and current licensee practice, contained in Station Administrative Procedure (ADM) 14.1 dated May 9, 1985, find the corrective action acceptable.

(Closed) Infraction 338/80-26-01 and 339/80-31-05: Failure of SNSOC to Review Vendor Manuals When Referenced as Part of a Station Procedure. In a letter dated February 19, 1981, Mr. R. C. Lewis of the NRC withdrew the infraction stating that, although it was not a requirement to include vendor manuals in the procedure approval process, it was the NRC's position that vendor manuals must be controlled. Control of vendor manuals continues to be of concern to the NRC. Generic Letter 83-28, which addressed the anticipated transient without scram event at Salem, includes a section on control of vendor manuals and VEPCO has committed to improvements in this area.

(Closed) Violation (339/80-39-05): Failure to Implement Fire Protection Modification Requirements of Operating License. This item is closed since it was mistakenly closed in Inspection Reports 50-338/81-18 and 50-339/81-15 as Item 339/80-39-03. Item 339/80-39-03 was legitimately closed in report 339/84-19.

4. Unresolved Items

An unresolved item (UNR) is a matter about which more information is required to determine whether it is acceptable or may involve a violation or deviation.

One unresolved item was identified during this inspection and is discussed in paragraph 14. Additional information concerning previous unresolved item 338, 339/85-16-03 is discussed in paragraph 13.

5. Plant Status

Unit 1

Unit 1 operated at or near 100 percent power during the majority of the inspection period; however, on August 3, 1985, the unit was shut down to inspect and repair tube leakage in the 1A steam generator.

Earlier in the month on July 22, 1985, the plant developed a primary leak that placed it in the action statement for high unidentified leakage. The leak was subsequently found to be in a primary sample line which was isolated, satisfying the action statement and preventing plant shutdown. During this event the licensee discovered that a sample system trip valve 1-TV-SS-109B had been left open. The mispositioning of this valve allowed the licensee to identify the leak, since, if the valve had been shut there would have been no path from the primary to the sample line failure. This

is a further example of failure to follow procedure, see Inspection Report Nos. 50-338, 339/85-16-02.

Unit 2

Unit 2 operated at or near 100 percent power during most of the inspection period. However, on July 25, 1985, with the unit at full power, the unit operator noted an increase in containment gaseous activity and requested a containment entry be made to determine the source. At 6:50 a.m., the inspection team reported that the leak was coming from the A loop room and at 7:00 a.m., a primary leak rate calculation determined the unidentified primary leak rate to be 5.25 gallons per minute (gpm). A power reduction was initiated at 7:39 a.m., and at 4:48 p.m. the unit was placed in mode 3 after attempts to repair the leak failed. The leak was determined to be coming from the packing area of valve 2-RC-6 which is a two-inch manual isolation valve in the bypass line around the A cold leg stop valve. Previous repairs were accomplished using furmanite injections, because the valve was non-isolable from the reactor vessel, and replacement of the packing would require going to cold shutdown and draining the loop. Valve repairs were completed on July 28, 1985 by reinjection with furmanite and the unit was returned to power on July 29, 1985.

During evaluation of the above event, the inspectors determined that the reporting requirements of 10 CFR 50.72(b)(1)(A) as clarified on page 33 of NUREG-1022, Supplement No. 1 were not met. Specifically, the licensee did not make the one hour notification to the NRC Operations Center upon the initiation of a Technical Specification (TS) required plant shutdown. The licensee had previously determined that the initiation of plant shutdown meant the point at which the determination is made to actually shut down the reactor and not the point when power reduction is initiated to allow maintenance. The determination to actually shut down the plant did not occur until 4:40 p.m. on July 25, 1985; however, power reduction was initiated at 7:39 a.m., with the notification being made at 1:00 p.m. of the same day. The inspectors discussed the current interpretation of what constitutes initiation of plant shutdown with the licensee; consequently, the licensee agreed to apply this criteria to future events.

Additionally, during evaluation of reporting requirements for the above event, the inspectors reviewed the station Emergency Plan (EP) and questioned the basis of the EP and Emergency Plan Implementing Procedures (EPIP) that ties Notification of Unusual Events (NOUE) to the moment of plant shutdown and not to the initiating event that requires the shutdown. Specifically, NUREG-0654, revision 1, gives examples of initiating conditions of an unusual event (UE), one example being exceeding primary leak rates specified in TS, another being other plant conditions requiring shutdown per TS. However, the North Anna EP and EPIP 1.01, revision 6, makes the declaration of UE for several events upon entering mode 3 (i.e., plant is shutdown), and not the onset of the condition that requires the shutdown. This item requires further review and is identified as Inspector Followup Item (IFI) 338,339/85-18-01.

6. Licensee Event Report (LER) Followup

The following LERs 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 an 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 TS conditions had been identified.

*338/81-42, Failure of One Volume Control Tank (VCT) Level Transmitter Could Cause Loss of Suction to Charging Pumps

*339/83-16, Containment Isolation Valves Indicating Both Open and Closed

*338/84-03, Turbine Trip-Reactor Trip From Spurious Electrohydraulic Control Reservoir Low Level Signal

*338/80-08, Control Panel for Control Room Air Conditioning Chiller Units Not Qualified to Seismic Category I Requirements

338/85-01, Motor Driven Fire Pump Out of Service for Greater Than Seven Days

*338/83-42, Momentary Loss of Power to Inverter 1-I Causes Turbine/Reactor Trip

*338/83-58, Incorrect Alignment of High Head Safety Injection Pump Breakers and Control Switches Due to Inadequate Procedural Guidance

*338/84-02, Inadvertent Single Train Emergency Core Cooling System (ECCS) Actuation in Mode 5

(Open) LER 338/84-13, revisions 0 and 1, Liquid Waste Discharge Without Demineralizer Treatment. This report documented the discharge of liquid radwaste without treatment, with projected doses to the unrestricted areas being in excess of the limits specified in TS 3.11.1.3. Two specific time intervals were discussed in the report, July 11, 1984, to September 10, 1984, and September 10, 1984, to September 25, 1984. During the first period, the liquid waste mixed bed clarifier demineralizers were not in service as required and, during the second period, a demineralizer was placed in service, however, it did not contain any resin. On June 1, 1985, with projected doses to the unrestricted areas within TS limits and, with a health physics recommendation to use the demineralizers, liquid radwaste was again discharged without treatment. In this case, an improper valve lineup allowed much of the liquid clarifier flow to bypass the operational demineralizer. As a result of the first two problems, the licensee committed to instructing operations personnel on the importance of verifying clarifier demineralizer status and reviewing operating procedures for adequacy. The third incident, though not a violation of TS, reinforced the

need to complete these actions. The inspectors informed the licensee at the monthly exit meeting that the implementation of the corrective actions will be carefully reviewed. This is a further example of failure to follow procedure as identified in Inspection Reports 50-338, 339/85-16-02.

(Closed) LER 338/81-42, Failure of One VCT Level Transmitter Could Cause Loss of Suction to the Charging Pumps. The scheduled corrective action indicated in the report has been taken and resulted in design change (DCP) 82-S21, VCT Level Circuitry Modifications, which has been completed.

(Closed) LER 339/83-16, Containment Isolation Valves Indicating Both Open and Closed. In addition to making the required repairs to the valves and conducting inspections of other containment isolation valves, the licensee has implemented a preventative maintenance inspection program to detect any further problems of the kind discussed in the report. The inspection program will be performed every refueling outage.

(Closed) LER 338/84-03, Turbine Trip-Reactor Trip From Spurious EHC Reservoir Low Level Signal. The licensee conducted a flush of the EHC system and replaced various components such as filters. The condition of the system fluid as well as the condition of the removed filters supported the licensee's conclusion that the unloader malfunction was a result of EHC fluid particulate contamination. The licensee's inspection of the system also resulted in some suggestions for the long-term improvement of system condition; however, none of these suggestions were felt to need immediate implementation.

(Closed) LER 338/80-08, Control Panel for the Control Room Air Conditioning Chiller Units Was Not Qualified to Seismic Category I Requirements. In a letter dated January 31, 1980, Stone and Webster Engineering Corporation informed the licensee of the actions that needed to be taken to qualify these control panels. These recommendations were the basis for DCP 80-S04, Control Room Chiller-Seismic Modification, which has been completed by the licensee.

(Closed) LER 338/83-42, Momentary Loss of Power to Inverter 1-I Causes Turbine/Reactor Trip. The licensee committed to an revising the Abnormal Procedure associated with loss of power to an inverter; however, after more evaluation, it was felt that it would be more effective to revise the Operating Procedure (OP). The inspectors have reviewed 1 and 2-OP-26.5 and verified that a note has been added to alert the operator of the consequences of removing an inverter power supply from service.

(Closed) LER 338/83-58, Incorrect Alignment of High Head Safety Injection Pump Breakers and Control Switches Due to Inadequate Procedural Guidance. The inspectors have verified that the licensee has revised the OP associated with the alignment of breakers and control switches with these pumps (1 and 2-OP-8.1). Additionally, the licensee has revised the associated Maintenance Operating Procedures.

(Closed) LER 338/84-02, Inadvertent Single Train ECCS Actuation in Mode 5. The licensee has developed a procedure for the removal of the Solid State Protection System (SSPS) output fuses, IMP-P-SSPS-01, SSPS Fuse Removal and Replacement, and has implemented the procedure by specifically referencing the removal of the fuses in the appropriate OP. Replacement of the fuses is verified by performance of SSPS performance tests.

7. Followup of Previously Identified Items

(Open) IFI 338/81-05-05: Installation of Larger Cable for Pressurizer Heater Power Supply. The licensee has formulated an engineering work request (EWR) to accomplish the work. Presently, EWR 81-348B is scheduled to be implemented during the upcoming Unit 1 refueling outage.

(Closed) IFI 338/80-30-01 and 339/80-29-05: Lamp Testing of Safety-Related Displays. The inspectors reviewed this issue and are satisfied that lamp testing presently being performed by the licensee is consistent with existing equipment or will be modified as part of the detailed control room design review specified in Supplement 1 to NUREG 0737.

(Closed) IFI 338/80-30-02 and 339/80-29-06: Need for QA Review of Construction Work Accomplished During the Operational Phase. During routine design change and plant maintenance reviews, the inspectors verified that adequate QC inspection requirements for the verification of construction activities were specified.

(Closed) IFI 339/80-31-02: Completion of Design Change 80-S49. The inspectors verified through review of QA records that the design change was completed and forwarded to station records on February 26, 1982. Additionally, the condition that the design change was to correct no longer existed after the modification.

(Closed) IFI 339/80-31-03: Control of Setpoint Changes. The inspectors reviewed the current practice of requesting and implementing changes to the North Anna Setpoint Document as specified in ADM 6.8 dated August 31, 1983, and found it met current industry and regulatory requirements.

(Closed) IFI 339/80-31-04: Scheduling of 18 Month Surveillance Tests. The inspectors, during the monthly surveillance review, verified that the requirements of TS were met. Additionally, during 1984, VEPCO contracted an independent consultant to accomplish a review of the surveillance program to ensure the requirements of TS are being met.

(Closed) IFI 338/80-26-02 and 339/80-31-06: Followup Licensee Action on Unqualified Level Transmitter for Containment Sump - LER 338/80-71. Through a review of QA records, the inspectors verified that equipment specified as being not qualified for a harsh environment was relocated by design change DC 80-S64 to the rack rooms which are outside the accident envelope.

(Closed) IFI 50-338/80-21-20 and 50-339/80-22-20: Determination of Sample Hood Face Velocities. After evaluating this item in the Regional Office and utilizing the results of the latest region based inspection, this item was determined to require no additional specific NRC followup.

8. Monthly Maintenance

Several station maintenance activities affecting safety-related systems and components were observed/reviewed to ascertain that the activities were conducted in accordance with approved procedures, regulatory guides and industry codes or standards, and in conformance with TS. Maintenance activities observed included: transferring spent fuel pool filters to casks, corrective maintenance of system radiation monitors, repair of the packing in valve 2-RC-6, and mechanical cleaning of service water piping.

No violations or deviations were identified in this area.

9. Monthly Surveillance

The inspectors observed/reviewed TS required testing and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation (LCO) were met and that any deficiencies identified were properly reviewed and resolved. The inspectors observed the performance of 1-PT-36.1A, Reactor Protection and Engineered Safeguards Function Logic Test (Train A), and had two comments: First, the procedure has recently been revised and the rough draft of the newly approved procedure is presently being used by the technicians to perform the test. The inspectors understood the need to use the draft procedure while a final is being typed; however, the SNSOC needs to be sensitive to the quality of the draft procedures they approve for temporary use. In this case, there were numerous lineouts and steps added with arrows directing where new steps should be added to the procedure-making the procedure very hard to follow. The second comment concerns the required values for the undervoltage coil voltage meter reading. In the notes following steps 4.3 and 4.9, it is specified as 40 plus or minus two Vdc; while in step 4.5.2, it is required to be 42 plus or minus two Vdc. The voltage, 40 Vdc, required by this procedure is a target voltage which is not that critical. However, the licensee agreed to alter the procedure to reflect the 40 plus or minus two Vdc.

On July 9, 1985, licensee personnel performed 1 and 2-PT-85, DC Distribution System. These performance tests are required to be performed every seven days to meet the surveillance requirements of TS 4.8.1.1.3.a. Due to a scheduling error, these tests were not performed again until July 19, 1985. The time elapsed exceeds that allowed under Units 1 and 2 TS 4.0.2 which requires, in part, that each surveillance requirement be performed within the specified interval with the maximum extension not to exceed 25 percent of the interval. The failure to perform the surveillance requirements in the allowed time interval is identified as Violation 338,339/85-18-02.

10. ESF System Walkdown

The following selected ESF systems were verified operable by performing a walkdown of the accessible and essential portions of the systems on August 1, 1985.

Unit 1

RWST (1-OP-7.7A dated May 3, 1985) and NAOH Chemical Addition (1-OP-7.8A dated June 11, 1985)

Unit 2

RWST (2-OP-7.7A dated May 3, 1985) and NAOH Chemical Addition (2-OP-7.8A dated June 11, 1985)

No violations or deviations were identified in this area.

11. 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 inspectors verified compliance with selected TS and LCO.

During the course of the inspection, observations relative to Protected and Vital Area security were made, including access controls, boundary integrity, search, escort and badging.

On a regular basis, radiation work permits (RWP) were reviewed, and the specific work activity was monitored to assure the activities were being conducted per the RWP. Selected radiation protection instruments were periodically checked, and equipment operability and calibration frequency were verified.

The inspectors kept informed, on a daily basis, of overall status of both units and of any significant safety matter 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 inspectors 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 recorder readings, annunciator alarms, and housekeeping.

During a routine inspection of the plant, the inspectors found a piece of measuring equipment marked NQC-PSE 2676. The calibration sticker indicated the equipment had been due for calibration March 7, 1985. This resulted from a failure to follow ADM 12.0 (August 23, 1983) and is a further example of failure to follow procedure as identified in Inspection Reports 50-338, 339/85-16-02.

No violations or deviations were identified in this area.

12. Nuclear Instrumentation System Flux Rate Trip Setpoints

A potential problem with compliance to the guidance of Westinghouse Technical Bulletin NSID-85-13, dated May 28, 1985, was identified by the licensee. This bulletin informed Westinghouse plants with positive and negative flux rate reactor trips that there appeared to be a problem with the way licensees were setting these trips. The licensee has requested further information from Westinghouse concerning this bulletin. The licensee's present position is that they are conforming with the TS dealing with the flux rate trip setpoints. However, as a precautionary measure, the present core loads were re-analyzed and it was determined that adequate safety margins exist despite the fact that the flux rate trip setpoints are not set in accordance with this new vendor guidance. This issue is being evaluated on a generic basis by both NRC Region II and NRC Headquarters.

No violations or deviations were identified in this area.

13. Administrative Procedures

During this inspection period, selected Station Administrative Procedures were reviewed. Based on the review, the inspectors had the following comments:

- a. ADM 2.19, ISI [Inservice Inspection] Personnel Certification and Training for Visual Examinations VT-2, VT-3, and VT-4 (September 27, 1984), in part requires that the station maintain the qualification records of the visual inspectors and those of the ISI supervisor. A review of selected training records revealed that some inspection qualification records were missing or incomplete. The subject of training records is discussed further in paragraph 14.
- b. ADM 19.27, Control and Use of Operator Aids (August 8, 1983), requires quarterly audits of the operator aid log and prescribes the required documentation of these audits. The audits are not being documented as required, making it impossible to determine if the audits are being done.
- c. ADM 20.32, 10 CFR 19 Posting Requirements. In addition to the required posting locations of this procedure, NRC Form 3s are posted in other areas of the plant including the training building and records building. In the case of the records building, the posted form was

found to be outdated, subsequently, licensee management committed to removing or updating the form.

- d. ADM 19.17, Incore Moveable Detector Background Characterization (October 31, 1983), specifies a required use of the axial power distribution monitoring system (APDMS). By Technical Specifications the APDMS is utilized only when reactor power is above Pm (defined in TS as "surveillance power level" - it is used in a mathematical formula) because of problems with the APDMS. Core reloads are designed to ensure Pm > 100 percent power, thus, eliminating the need for the monitoring system. In order to maintain the number of ADM at a minimum, the inspectors have recommended to the licensee that this procedure be cancelled or placed in reserve until needed.
- e. ADM 6.28, Control of Vendor Manuals, Vendor Files and Interface (October 25, 1984), and the referenced Document Control Procedure (DCM-41), cover the updating of vendor manuals and imply the requirement to update drawings as part of the manual. This item will be looked at further as part of Unresolved Item 338,339/85-16-03.

Items a. and b. are further examples of the violation for failure to follow procedure identified in Inspection Reports 50-338, 339/85-16-02.

14. Training Records

The inspectors, in reviewing completed copies of 1-PT-79.1, Hydraulic Snubber Accessible for Visual Inspection During Reactor Operations, and 1-PT-79.2, Snubber Not Accessible for Visual Inspection, checked the training records of selected visual inspection personnel. The inspectors found that some visual inspection qualification records were satisfactory while others were incomplete or missing. Based on these findings, the inspectors reviewed the licensee's commitments in the area of collection and storage of records. The licensee is committed to ANSI N45.2.9-1974 as endorsed by Regulatory Guide 1.88 (Rev. 2, 10/76) and as clarified by Virginia Electric and Power Company Topical Report, Quality Assurance Program Operations Phase (VEP-1-4A) Amendment Four, October 1982. ANSI N45.2.9-1974 requires that the current individual plant staff member qualifications, experience, training and retraining records be maintained as lifetime records. The standard further requires, in Section 5.3, the method of storage to have a specified filing system and a method of verifying records received and removed. Section 5.7 of the standard specifies the records should be audited periodically.

- a. A review of North Anna Power Station Training Administrative Guideline 6.2.14, dated December 30, 1985, Records Management for Nuclear Training Records, found that this procedure does not appear to be prescriptive enough in setting guidelines for the maintenance of individual training records. Review of additional training records found that training instructors in individual disciplines maintain

their own filing system. For example, in the area of General Employee Training, it appears that all records are placed in the individual's file. In the chemistry area some records are kept in the individual's file, while others are kept in the Chemistry Department retraining records. Neither method is incorrect; however, in order to comply with the standard and make training records auditable, one documented and approved method should be used.

- b. The Training Department has a formal system for documenting the records placed in an individual's training records. Interviews conducted by the inspectors revealed that though this receipt system exists, formal and timely transmittal of training documentation from individual station departments is not always occurring. By Administrative Procedures the Training Department is tasked with maintaining individual training records, but the records will only be useful if individuals and their supervision forward all required documentation for proper storage. A major problem area in this regard appears to be the documentation of training received by licensee personnel at vendor and other offsite training facilities. The prevalent practice in these types of training is that the individual receives his or her training completion certificate, a copy of which may or may not be forwarded to the Training Department. Further, if a copy of such a record is forwarded to the Training Department, the established formal transmittal system used by the station for other quality records is frequently not used. Finding no. two of the licensee's Quality Assurance Audit 83-16 touched on this subject but did not examine it closely. In that instance, it was found that various records were missing from individual training records. The resolution was to obtain copies of the missing records and bring the training records up to date. This resolution solved the individual problems; however, it did not address the larger question of formal overall records accountability which is needed to ensure such instances are not repeated.

Overall accountability is currently being addressed by some individual training instructors and, based on the inspector's comments, the licensee's Training Department intends to make this a comprehensive program.

- c. Both VEP-1-4A and the North Anna Power Station Updated Final Safety Analysis Report, Appendix 3A, need to be revised to include the training building records storage area as an approved storage area for quality records. Presently, only the station records building inside the Protected Area is addressed.

The above items are of concern to the inspector and is identified as Unresolved Item 338, 339/85-18-05 pending further information to be provided by the licensee and investigation by the inspectors.

15. Station Emergency Plan

North Anna EP, Table 4.1A, no. 12 and EPIP 1.01, Tab E, specify 2.4 E5 counts per minute (cpm) as the Notification of Unusual Event initiating condition for the clarifier effluent and 6.8 E4 cpm as the same initiating condition for the condenser air ejector monitor. The present radiation monitor alarm settings for the clarifier effluent monitor place the initiating condition level between the high and high-high alarm setpoints. In the case of the air ejector radiation monitor, the initiating condition value is below both the high and high-high alarm setpoints. The air ejector alignment could create a situation where the plant reaches the threshold for NOUE without even an alarming radiation monitor. It should be noted that at the time the present air ejector alarm setpoint values were input, the recorded monitor value was 9.0 E4 cpm, which was above the EP initiating condition for NOUE and below the alarm setpoints.

In a related matter, the North Anna TS states that radioactive liquid effluent monitoring instrumentation channel alarm/trip setpoints shall be determined and adjusted in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM). Using the methodology in the ODCM, the inspectors calculated the maximum alarm/trip setpoint for the clarifier effluent radiation monitor and compared that value with the setpoint presently in use. The setpoint presently being used is about two orders of magnitude higher than that allowed by the ODCM method. Licensee HP personnel explained to the inspectors that high background radiation levels in the area of the detector were the reason the present setpoint did not agree with the calculated value. The inspectors then explained to the licensee that the approved methodology of the ODCM was what Technical Specifications required and, if it was found to be incorrect or unusable, it should be formally changed. Correction of these problems associated with radiation monitor setpoints is identified as Inspector Followup Item 338,339/85-18-03.

North Anna EP, Table 4.1A, no. 4, and EPIP 1.01, Tab A, state in part that placing a unit in mode 3 or a lower mode as a result of meteorological monitoring instrumentation less than minimum required to perform offsite dose calculations per Unit 1 TS 3.3.3.4 is an initiation condition of NOUE. Unit 1 TS 3.3.3.4 does not require plant shutdown on loss of meteorological monitoring capability, nor does any other plant TS. Based on that fact, the inspectors asked the licensee how the plant could ever get into the condition outlined above. Additionally, the inspectors pointed out to the licensee that NUREG 0654, revision 1 guidance calls for the Notification of Unusual Event based solely on loss of all meteorological instrumentation (page 1-5 no. 11). Revision of the procedures concerning NOUE of loss meteorological monitoring instrumentation is identified as Inspector Followup Item 338,339/85-18-04.

No violations or deviations were identified in this area.

16. Spent Fuel Storage Racks (50095)

During this inspection period the inspectors observed some of the work done as part of DCP 82-19. The activities witnessed included: preliminary SFP diving operations, removal of existing racks from the SFP, decontamination of the removed racks and transfer of those racks to shipping containers. In addition, the inspectors observed licensee inspection of the vehicles used to ship the racks (including radiation surveys), reviewed selected shipping documentation and observed preliminary cleaning of some of the new spent fuel storage racks.

At present, 11 racks have been removed from the SFP (10 have been shipped offsite). One additional rack remains in the SFP in an area being worked and cannot be removed at this time due to an obstruction along the SFP wall. Four new spent fuel storage racks have been transferred into the fuel building with others being readied for transfer from the storage area to the fuel building staging area.

No violations or deviations were identified in this area.

17. Compliance with Station Procedures

On July 19, 1985, NRC Region II issued a Notice of Violation for failure to follow procedures against North Anna 1 and 2 (338,339/85-16-02). This report contains further examples of that violation. The failure to close the sample trip valve discussed in paragraph 5 is failure to follow 1-OP-12.1. In paragraph 6, the discussion of a followup problem similar to those discussed in LER 338/84-13 is another example of failure to follow an Operating Procedure. The out-of-calibration NQC device referenced in paragraph 11 is an example of failure to follow ADM 12.0 (August 23, 1983). Finally, paragraph 13 discusses failures to follow the requirements of both ADM 2.19 and ADM 19.27. The inspectors discussed with the licensee the above failures to follow plant procedures and requested the licensee address these items when specifying corrective action for the violations discussed above.