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

Report Nos.: 50-280/90-24 and 50-281/90-24

Licensee: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

Docket Nos.: 50-280 and 50-281 License Nos.: DPR-32 and DPR-37

Facility Name: Surry 1 and 2

Inspection Conducted: July 1 through 28, 1990

Inspectors: _____ 8/23/90
W. E. Holland, Senior Resident Inspector Date Signed

_____ 8/23/90
J. W. York, Resident Inspector Date Signed

_____ 8/23/90
S. G. Tingen, Resident Inspector Date Signed

Approved by: _____ 8/23/90
P. E. Fredrickson, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

Scope:

This routine resident inspection was conducted on site in the areas of plant operations, plant maintenance, plant surveillance, licensee event report review, action on previous inspection findings, and licensee self assessment. During the performance of this inspection, the resident inspectors conducted review of the licensee's backshift or weekend operations on July 1, 2, 8, 14, 15, and 28.

Results:

In the area of plant operations, the operators performance during the reactor trip on July 1 was considered good; however, distractions that challenge operator expertise should be minimized or eliminated. These distractions involve recurring problems in the instrument air system, individual rod position indication, and the operation of main steam dump valves and indicated that additional corrective actions were warranted in these areas (paragraph 3.f.(1)).

In the area of maintenance, a weakness was identified in the program for planning and accomplishing of work in a timely manner. The issue involved isolation of safety related equipment for a longer period of time than was required to perform the maintenance activity (paragraph 4.a).

In the area of safety assessment/quality verification, the preparation and conduct of safety committee meetings that were reviewed during this inspection period has improved over past committee meetings that were monitored earlier this year (paragraph 8).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

W. Benthall, Supervisor, Licensing
*R. Bilyeu, Licensing Engineer
*R. Campbell, Electrical Foreman
*D. Christian, Assistant Station Manager
J. Downs, Superintendent of Outage and Planning
*D. Erickson, Superintendent of Health Physics
W. Gross, Supervisor, Shift Operations
*R. Gwaltney, Superintendent of Maintenance
*D. Hart, Supervisor, Quality Assurance
M. Kansler, Station Manager
T. Kendzia, Supervisor, Safety Engineering
*J. McCarthy, Superintendent of Operations
*A. Price, Assistant Station Manager
*E. Smith, Site Quality Assurance Manager
*T. Sowers, Superintendent of Engineering
*J. Williams, Mechanical Foreman

NRC Personnel

*A. Ruff, Project Engineer, Region II

*Attended exit interview.

Other licensee employees contacted included control room operators, shift technical advisors, shift supervisors and other plant personnel.

Acronyms and initialisms used throughout this report are listed in the last paragraph.

2. Plant Status

Unit 1 began the reporting period at power. On July 1 the unit experienced a reactor trip from 90% power. The trip is further discussed in paragraph 3.f.(1). The unit returned to power operation on July 3 and operated at power for the remainder of the inspection period.

Unit 2 began the reporting period at power and maintained this condition throughout the inspection period.

3. Operational Safety Verification (71707 & 42700)

a. Daily Inspections

The inspectors conducted daily inspections in the following areas: control room staffing, access, and operator behavior; operator adherence to approved procedures, TS, and LCOs; examination of panels

containing instrumentation and other reactor protection system elements to determine that required channels are operable; and review of control room operator logs, operating orders, plant deviation reports, tagout logs, temporary modification logs, and tags on components to verify compliance with approved procedures. The inspectors also routinely accompanied station management on plant tours and observed the effectiveness of their influence on activities being performed by plant personnel.

b. Weekly Inspections

The inspectors conducted weekly inspections in the following areas: operability verification of selected ESF systems by valve alignment, breaker positions, condition of equipment or component, and operability of instrumentation and support items essential to system actuation or performance. Plant tours were conducted which included observation of general plant/equipment conditions, fire protection and preventative measures, control of activities in progress, radiation protection controls, plant housekeeping conditions/ cleanliness, and missile hazards. The inspectors routinely noted the temperature of the AFW pump discharge piping to ensure increases in temperature were being properly monitored and evaluated by the licensee.

c. Biweekly Inspections

The inspectors conducted biweekly inspections in the following areas: verification review and walkdown of safety-related tagouts in effect; review of sampling program (e.g., primary and secondary coolant samples, boric acid tank samples, plant liquid and gaseous samples); observation of control room shift turnover; review of implementation of the plant problem identification system; verification of selected portions of containment isolation lineups; and verification that notices to workers are posted as required by 10 CFR 19.

d. Other Inspection Activities

Inspections included areas in the Units 1 and 2 cable vaults, vital battery rooms, steam safeguards areas, emergency switchgear rooms, diesel generator rooms, control room, auxiliary building, cable penetration areas, independent spent fuel storage facility, low level intake structure, and the safeguards valve pit and pump pit areas. RCS leak rates were reviewed to ensure that detected or suspected leakage from the system was recorded, investigated, and evaluated; and that appropriate actions were taken, if required. The inspectors routinely independently calculated RCS leak rates using the NRC Independent Measurements Leak Rate Program (RCSLK9). On a regular basis, RWPs were reviewed, and specific work activities were monitored to assure they were being conducted per the RWPs. Selected radiation protection instruments were periodically checked, and equipment operability and calibration frequency were verified.

On July 1, following the Unit 1 reactor trip, which is discussed paragraph 3.f.(1), 2 of 8 main steam dump valves stuck partially open. After unit restart, the inspectors examined the Units 1 and 2 main steam dump valves. Results of this examination revealed that the licensee had utilized a rubberized compound in the packing area of several main steam dump valves to prevent air leakage into the condenser. This condition was brought to the attention of licensee management. The licensee stated this would not affect valve operation; however, the inspectors did not consider this type of repair to be normal. The licensee was investigating a better type of packing repair to resolve this issue which would be implemented during upcoming outages. The inspectors will monitor future licensee actions in this area as part of their routine outage inspection activities.

During this inspection period, the inspectors observed operator requalification program training. The training included a scenario on the simulator performed by the C operations team in which two non-licensed operators were used as emergency communicators for performing certain steps in the emergency plan implementing procedure. The scenario involved a steam generator tube rupture with other complications, such as a failed air ejector radiation monitor, and the inability to manually initiate safety injection. The inspectors noted that the team detected the problems and properly handled the scenario satisfactorily and in a reasonable period of time. The inspectors noted that the team detected the problem and properly handled the scenario satisfactorily and in a reasonable period of time.

During the latter part of the inspection period, several events occurred which were brought to the inspectors attention by station management. These events included operational errors associated with alignment of systems (CVCS and chilled water) and unexpected detection of gaseous releases through the monitored release path. Although no TS LCOs or limits were reached, these multiple events occurring over the last week warrant further review and evaluation and will be discussed in next month's inspection report.

e. Physical Security Program Inspections

In the course of monthly activities, the inspectors included a review of the licensee's physical security program. The performance of various shifts of the security force was observed in the conduct of daily activities to include: protected and vital areas access controls; searching of personnel, packages and vehicles; badge issuance and retrieval; escorting of visitors; and patrols and compensatory posts. No discrepancies were noted.

f. Licensee 10 CFR 50.72 Reports

(1) On July 1, 1990 the licensee made a report in accordance with 10 CFR 50.72 concerning a Unit 1 reactor trip. At approximately 1802 hours, on July 1, the A RSST input and output breakers opened on a sudden pressure lockout signal. The transformer was

supplying normal power to the Unit 1J emergency 4160 volt bus. The No. 3 EDG automatically started and the Unit 1J bus loaded on the EDG as designed. During the period of time that the Unit 1J bus was deenergized, IRPI failed low and resulted in a turbine runback from 100% power. After IRPI was reenergized and rod indication returned to normal, the runback signal cleared at approximately 95% power. At this time, operators noticed that Unit 1 instrument air pressure was decreasing and dispatched an operator to the air dryer location to investigate. The operator, upon arriving at the dryer location, noticed that the Unit 1 air dryer was continually blowing down in an abnormal manner. The operator began to manually isolate the dryer from the instrument air flowpath. However, before the evolution could be completed, Unit 1 was manually tripped when the control room operator observed the C MSTV beginning to close. The MSTV closure was due to the instrument air pressure reaching a point where the valve began to drift shut. After the reactor trip, all three MSTVs went shut and the unit was stabilized in hot shutdown with feedwater being supplied from the B MFP and C SG PORV being used for decay heat removal. The A RCP and the A MFP lost power due to the A RSST not being available after the trip. All safety systems operated as designed. The B SG PORV did not respond to demand and 3 of the 8 steam dump valves indicated intermediate position after the unit was stabilized. Two of the steam dump valves that indicated intermediate position were later found to be stuck partially open.

Prior to the Unit 1 restart, corrective action was implemented for each of the problems identified above. The A RSST problem was corrected. The packing was loosened on the two steam dump valves that had stuck partially open. The position indication limit switch was adjusted on the third steam dump valve and the valves were then satisfactorily stroke tested. The B SG PORV controller was adjusted and the valve was satisfactorily stroked. The licensee was not able to immediately identify the cause of the instrument air dryer problem. However, prior to restart, interim corrective action was to have an operator stationed at the IA area to bypass the dryers if they began to blowdown and depressurize the instrument air system.

The inspectors monitored licensee immediate and corrective actions prior to unit restart, reviewed the licensees post trip review report, and observed selected restart evolutions. The operator's trip response was considered good; however, several recurring equipment problems including instrument air dryer problems, erratic individual rod position indication due to momentary loss of power, and the operation of main steam dump valves indicated that additional corrective actions were warranted to minimize or eliminate these problems. Licensee management also recognized these recurring problems and was planning corrective actions for each area. On July 3, the unit returned to power operation.

(2) On May 12, 1990 the licensee made a report in accordance with 10 CFR 50.72 concerning a diesel oil spill of less than 10 gallons. The spill occurred when a contractor's truck ran over a board in the construction area causing a 3/8 inch fitting on the truck's fuel tank to break. Approximately eight gallons of diesel oil, which was not able to be recovered, leaked onto the dirt road in the construction area in the form of a small trail. Approximately two gallons of diesel oil leaked from the truck at the ISFSI pad. The dirt where the two gallons of oil leaked was removed and disposed of. Diesel oil did not enter the waterway.

Within the areas inspected, no violations were identified.

4. Maintenance Inspections (62703 & 42700)

During the reporting period, the inspectors reviewed maintenance activities to assure compliance with the appropriate procedures. Inspection areas included the following:

a. Replacement of the Unit 1 TDAFW Pump Steam Supply SOVs

On July 10, the licensee replaced the ASCO SOVs to the Unit 1 TDAFW pump main steam supply trip valves. These SOVs were replaced because their EQ life had expired. Work orders 3800096886 and 3800096887 and upgraded procedure 0-EPM-2102-02, ASCO Solenoid Valve Replacement, dated May 24, 1990, were utilized to accomplish this maintenance. After replacement, the SOVs were tested in accordance with procedure 1-PT-15.1C, Turbine Driven Auxiliary Feedwater Pump, dated May 10, 1990.

The inspectors monitored the licensee's activities associated with the replacement of the SOVs, including review of the maintenance area isolation, work package, test results, and TS LCOs that were created as a result of this maintenance. The inspectors visited the job site and observed the craft plan the job using the upgraded 0-EPM-2/02-02 procedure. However, prior to performing the procedure, the craft made several changes to it that involved torque values and replacement of electrical connectors. Since this procedure was recently up-graded, the inspector specifically reviewed and examined it in detail and after further investigation with regard to the changes, the inspectors concluded that they were not necessary. The up-graded procedure could have been performed as it was written. The inspectors considered that the changes, which were made at the craft's request, were the results of poor and inadequate preplanning for the job.

The job preplanning involved procedure review, changes and processing of changes, staging of tools and parts that resulted in safety related equipment being inoperable for approximately one shift longer than necessary, however no LCO time constraints were exceeded. The isolation to accomplish this maintenance was established at 0539, however, replacement of the SOVs did not commence until approximately 1545 hours on the same day. The inspectors consider that activities

accomplished between 0539 and 1545 involving the above discrepancies should have been identified during the prejob review. The inspectors reviewed administrative procedure VPAP-2002, Work Requests and Work Orders, dated July 1, 1990, and concluded that specific guidance on minimizing out of service time on safety related components was not addressed. The inspectors discussed the delay in the start of work on the subject components with station management. Management agreed that the subject maintenance activity experienced excessive delay in the commencement of work after tagout of the safety related component and were reviewing corrective actions when the inspection period ended. The inspectors consider that the excessive time involved in commencing maintenance on safety related components after establishment of isolation for the work is a weakness in the licensee's program for planning and accomplishment of work.

b. Repair of No. 2 Emergency Diesel Generator

On July 11, 1990, the licensee performed the quarterly exercise test (2-PT-22.3M) on No. 2 EDG. During this test a high temperature alarm was received on the lubricating oil system for the diesel. The cooling water alarm is set at 200 degrees Fahrenheit maximum and the actual water temperature reached 202 degrees. Failure of the periodic test placed the unit in a seven day LCO.

The licensee processed a work order to correct the high temperature condition. The corrective actions included replacement of the oil cooler, cleaning of the radiator, repair of a small leak in the cooling water to radiator piping, and replacement of the two cooling water pumps. The work was performed on work order no. 3800097762. The inspectors reviewed applicable parts of the following procedures which were used to perform the repairs:

- Procedure No. EE-EDG-M/A1, Emergency Diesel Generator Engine One Year Service and Inspection, dated October 31, 1989

- Procedure No. EE-EDG-M/N3, Emergency Diesel Generator Engine Six Year Service and Inspection, dated October 30, 1989

- Procedure No. MCM-1801-01, Piping/Components Repair/Replacement, dated February 27,1990

The inspectors observed work in progress over a three day period of time and observed the performing of the appropriate periodic test used for returning the diesel to service. No discrepancies were noted.

Within the areas inspected, no violations were identified.

5. Surveillance Inspections (61726 & 42700)

During the reporting period, the inspectors reviewed various surveillance activities to assure compliance with the appropriate procedures as follows:

- Test prerequisites were met.
- Tests were performed in accordance with approved procedures.
- Test procedures appeared to perform their intended function.
- Adequate coordination existed among personnel involved in the test.
- Test data was properly collected and recorded.

Inspection areas included the following:

a. Testing No. 2 Emergency Diesel Generator

On July 14, 1990, the inspectors witnessed the performance of periodic test 2-PT-22.3M, Diesel Generator No. 2 Quarterly Exercise Test, dated December 12, 1990. During the previous performance of this test, the diesel failed to satisfy the test requirements because of a high temperature in the lube oil system. This condition resulted in the repair to the cooling system which is discussed in paragraph 4.b. This test was being conducted after corrective maintenance in order to return the diesel to service. The inspectors observed testing in the diesel room including preparation for starting, checking air starting system check valves and solenoids (ISI requirements), locally starting the diesel, performing diesel oscilloscope test analysis, and recording of some of the test data. The PT recorded a normal temperature for the lube oil cooling system indicating that the maintenance activity had corrected the problem. No discrepancies were identified.

b. Testing of Unit 2 Inside Recirculation Spray Pumps

On July 20, the inspectors witnessed the performance of periodic test 2-PT-17.2, Inside Recirculation Spray Pumps Test, dated October 25, 1989. The purpose of this test was to verify operability of the pumps as required by TS 4.5.B.1. The inspectors witnessed this test from the Unit 2 swithgear room and reviewed the completed test procedure. 2-PT-17.2 requires that the inside recirculation pump vibration alarm be monitored during the test and if the alarm persists, the pump is required to be immediately stopped. The inspectors asked what the alarm setpoint value was and if the pump's vibration sensors were routinely calibrated. The licensee responded that there were no procedures that routinely calibrated the vibration instrumentation and that the alarm setpoint value was not immediately available. The inspectors reviewed the vibration detectors' technical manual which specifies that the alarm setpoint value could be adjusted to a range of values and also contains instructions to calibrate the detector. The inspectors noted that the licensee's inservice test program states that the inside recirculation spray pumps are equipped with a vibration detector and a high vibration alarm in the control room and that this alarm would be observed during each pump test. The inspectors consider that since the inside recirculation pumps are safety related equipment and the inservice

test program takes credit for this alarm during pump testing, the vibration detector should be calibrated and the alarm setpoint be set at a conservative value. The licensee was evaluating the inspectors' concerns in this area. This will be followed up during subsequent inspections

c. Testing of Unit 1, A Inside Recirculation Spray Pump

The inspectors noticed that on July 25, 1990, a 72 hour hot shutdown LCO was entered pending amperage reading evaluations on Unit 1 inside recirculation spray pump A. The pump was run for a period of 30 seconds maximum and the amperage on each of the three phases was measured. The three readings are required to have a minimum average value of 109 amps. When the above test was performed the average amperage value was approximately 0.3 amp below 109 amps. The licensee recalibrated the meters used in the test and found one of the meters was reading ten percent lower than the actual value and another meter was reading approximately three percent lower. These meters were recalibrated and were used to re-perform the periodic test. The inspectors witnessed the re-performance of this test, which also was performed on July 25th, and observed that the amperages were in the proper range. Procedure 1-PT-17.2, Inside Recirculation Spray Pump Test, dated October 25, 1989 was used for these tests. No discrepancies were noted.

Within the areas inspected, no violations were identified.

6. Licensee Event Report Review (92700)

The inspector reviewed the LER's listed below to ascertain whether NRC reporting requirements were being met and to evaluate initial adequacy of the corrective actions. The inspector's review also included followup on implementation of corrective action and review of licensee documentation that all required corrective actions were complete.

(Closed) LER 281/89-05, Unplanned ESF Component Actuation, Closure of 'A' and 'C' Condenser Waterbox Circulating Water Inlet Valves. The issue involved unexpected closure of valves during testing of the turbine building flood control circuitry. Immediate response included operator actions to maintain intake canal level within the normal operating band. The event was caused by the actuation of a relay that was recently replaced. The licensee's review of the event determined that the new relay, which was different from the old relay, required on electrical circuit modification for proper system operation. A subsequent modification was made to the electrical circuit for the new relay and verified proper operation by testing. In addition, an evaluation was conducted to determine how the new relay was initially installed without the required circuit modifications. This evaluation determined that a substitute part had been provided by the vendor which did not have the exact electrical characteristics of the old part. Therefore, use of the new replacement part on this non-safety related maintenance activity was not challenged. Since this occurrence, the procurement process has been changed to assure that adequate reviews are accomplished for all parts.

The inspector reviewed the licensee's actions associated with this event and held several discussions with station supervision and engineering personnel in reviewing this area.

7. Action on Previous Inspection findings (92701, 92702)

   a. (Closed) Violation 280, 281/87-06-01, Failure to Follow Procedure. This issue involved maintenance activities that were not properly completed or documented. The licensee responded to this violation in a letter dated July 17, 1987. In that letter, the licensee stated that corrective action involved correction of the deficiencies identified, meetings between mintenance personnel and station management where the importance of procedural adherence and proper documentation were discussed, and the formation of teams that reviewed completed work packages for completion. The inspectors verified that the corrective actions were implemented.

   b. (Closed) Violation 280/89-21-01, Failure to Provide Adequate Procedure and/or Instructions for the Calibration of Instrumentation. The violation was identified in Inspection Report 280, 281/89-21. In that report, the cause of the Unit 1 reactor trip that occurred on July 9, 1989 was attributed to the I&C technicians' improper use of an ungrounded volt meter during recalibration of the NI flux setpoints. The licensee responded to this violation in a letter dated October 2, 1989. In that letter, the licensee stated that in-house and operations experience review reports involving the misuse of test equipment were reviewed and incorporated into lesson plans taught to the technicians and that the instrument technician development training program was revised to include instruction on the used of grounded/ungrounded test equipment. The inspectors reviewed these revised training plans and consider that the licensee's corrective action was adequate.

   c. (Closed) URI 280, 281/89-21-05, Review of Licensee's Program for Implementing TS Requirements. The issue was discussed in inspection report 280, 281/89-21. In that report a potential problem was identified with regards to the normal implementation and review/audit functions for implementation of TS requirements due to changes. Since identification of this issue, the licensee has completed a review of the TS and did not discover any additional discrepancies with regards to TS requirements. However, in order to assure that the process of changing the TS would be adequately controlled, the licensee implemented administrative requirements to provide guidance so that changes to TS are processed in an orderly and expedient manner and that adequate documentation is maintained. These requirements are addressed in SUADM-LR-05, Technical Specification Changes. The inspector reviewed administrative procedure SUADM-LR-05, Revision 2 dated June 7, 1990 and considers that adequate administrative controls are in place to assure that TS requirements are implemented at the station.

8. Review of Licensee Self Assessment Capability (40500)

During this inspection period, the inspectors attended several onsite safety committee (SNSOC) meetings and evaluated the licensee's onsite program for continuing review of the operational and safety aspects of the nuclear facility as required by TS 6.1.C. The inspectors attended SNSOC meetings on July 17, 19, and 24 and made the following observations:

- The inspectors reviewed the TS requirements and verified that the meeting was in compliance with respect to composition, quorum, meeting frequency, and review responsibilities.

- On July 17, the committee reviewed proposed administrative procedures, procedure revisions, deviation report closeouts, and one root cause evaluation associated with ESW pump 1-SW-P-1B failure to start.

- On July 19, the committee reviewed several engineering work requests and design change packages which are scheduled to be implemented during the upcoming Unit 1 outage, two security training plan changes, several deviation report packages for closeout, one root cause evaluation associated with reactor trips of both units on May 22, 1990, and several operations and maintenance completed procedures or procedure changes.

- On July 24, the committee reviewed a design change package for control room modifications. In addition, the station QA supervisor for audits presented the results of a corporate QA audit in the area of fitness for duty.

The inspectors specifically noted that control of the committee review process was well coordinated by the chairman. Only one issue or item was focused on by all committee members at one time, and members appeared to be familiar with most of the items discussed due to advance routing of the review packages. The inspectors discussed review of agenda items that were distributed prior to the meeting with several committee members. The members considered that the agenda packages were distributed in a timely manner and that there was adequate time available to review the information prior to the meetings. The inspectors consider that the preparation and conduct of SNSOC committee meetings, which were reviewed during this inspection period, are an improvement over past committee meetings which were monitored earlier this calendar year.

On July 17, 1990 the inspectors attended a meeting of the licensee's MSRC which was being held at the Surry Power Station. The MSRC has been identified in a pending TS change as the offsite review committee which will replace the current IOER group currently required by TS 6.2. The MSRC is comprised of senior corporate and station management as well as several industry consultants. Areas of discussion included 10 CFR 50.59 training, proposed TS changes, summaries on nuclear safety, IOER reports, and QA audits, and other special reports associated with requested action items. The inspector noted that the committee appeared to be fully functional and capable of accomplishing the required independent reviews.

9. Exit Interview

The inspection scope and results were summarized on August 1, 1990 with those individuals identified by an asterisk in paragraph 1. The following summary of inspection activity was discussed by the inspectors during this exit.

In the area of plant operations, the operators performance during the reactor trip on July 1 was considered good; however, recurring operator distractions including instrument air problems, individual rod position indication, and the operation of main steam dump valves indicated that additional corrective actions were warranted in these areas.

In the area of maintenance, a weakness was identified in the program for planning and accomplishing of work in a timely manner. The issue involved isolation of safety related equipment for a period of time longer than was required to perform the maintenance activity.

In the area of safety assessment/quality verification, the preparation and conduct of SNSOC committee meetings reviewed during this inspection period were improved over past committee meetings that were monitored earlier this year.

Licensee management was informed of the items closed in paragraphs 6 and 7.

The licensee acknowledged the inspection conclusions with no dissenting comments. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

10. Index of Acronyms amd Initialisms

AFW	-	AUXILIARY FEEDWATER
ASCO	-	AUTOMATIC SWITCH COMPANY
TDAFW	-	TURBINE DRIVEN AUXILIARY FEEDWATER
CFR	-	CODE OF FEDERAL REGULATIONS
CVCS	-	CHEMICAL VOLUME AND CONTROL SYSTEM
EDG	-	EMERGENCY DIESEL GENERATOR
EPM	-	ELECTRICAL PREVENTATIVE MAINTENANCE
EQ	-	ENVIRONMENTALLY QUALIFIED
ESF	-	ENGINEERED SAFETY FEATURE
ESW	-	EMERGENCY SERVICE WATER
IA	-	INSTRUMENT AIR
I&C	-	INSTRUMENTATION AND CONTROL
IOER	-	INDEPENDENT OFFSITE EVALUATION AND REVIEW
IRPI	-	INDIVIDUAL ROD POSITION INDICATOR
ISFSI	-	INDEPENDENT SPENT FUEL STORAGE INSTALLATION
ISI	-	INSERVICE INSPECTION
LCO	-	LIMITING CONDITIONS OF OPERATION
LER	-	LICENSEE EVENT REPORT
MFP	-	MAIN FEED PUMP

MSRC	-	MANAGEMENT SAFETY REVIEW COMMITTEE
MSTV	-	MAIN STEAM TRIP VALVE
NCV	-	NON-CITED VIOLATION
NI	-	NUCLEAR INSTRUMENTATION
NRC	-	NUCLEAR REGULATORY COMMISSION
PORV	-	PRESSURE OPERATED RELIEF VALVE
PT	-	PERIODIC TEST
QA	-	QUALITY ASSURANCE
RCP	-	REACTOR COOLANT PUMP
RCS	-	REACTOR COOLANT SYSTEM
RP	-	REACTOR PROTECTION
RWP	-	RADIATION WORK PERMIT
SG	-	STEAM GENERATOR
SNSOC	-	STATION NUCLEAR SAFETY AND OPERATING COMMITTEE
SOV	-	SOLENOID OPERATED VALVE
SW	-	SERVICE WATER
TS	-	TECHNICAL SPECIFICATIONS
URI	-	UNRESOLVED ITEM
VPAP	-	VIRGINIA POWER ADMINISTRATIVE PROCEDURES