



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

Report No.: 50-395/92-21

Licensee: South Carolina Electric & Gas Company  
 Columbia, SC 29218

Docket No.: 50-395

License No.: NPF-12

Facility Name: Virgil C. Summer Nuclear Station

Inspection Conducted: November 1-30, 1992

Inspectors: *R. C. Haag* 12/11/92  
 R. C. Haag, Senior Resident Inspector Date Signed

*L. A. Keller* 12/11/92  
 L. A. Keller, Resident Inspector Date Signed

Approved by: *Floyd S. Cantrell* 12/11/92  
 for Floyd S. Cantrell, Chief Date Signed  
 Reactor Projects Section 1B  
 Division of Reactor Projects

SUMMARY

Scope:

This routine inspection was conducted by the resident inspectors onsite in the areas of monthly surveillance observations, monthly maintenance observations, operational safety verification, cold weather preparations, installation and testing of modifications, onsite follow-up of written reports of nonroutine events at power reactor facilities and action on previous inspection findings. Selected tours were conducted on backshift or weekends. These tours were conducted on eight occasions.

Results:

One non-cited violation was identified.

A NCV was identified for failure to document TS required surveillance channel checks (paragraph 5). Repeated failures to meet an administrative limit for testing S/G blowdown valves have occurred. The limit is associated with water hammer concerns for fast stroking valves (paragraph 3). An engineering evaluation that accepted a temporary condition did not consider the structural aspects of the condition (paragraph 4). Appropriate operator action and management involvement were exhibited to a loss of offsite power event. Post modification testing requirements failed to recognize and evaluate an extended testing time period on equipment that was in service.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*W. Baehr, Manager, Chemistry and Health Physics
- K. Beale, Supervisor, Emergency Services
- \*C. Bowman, Manager, Maintenance Services
- \*M. Browne, Manager, Design Engineering
- \*B. Christiansen, Manager, Technical Services
- \*M. Fowlkes, Manager, Nuclear Licensing & Operating Experience
- S. Furstenberg, Associate Manager, Operations
- W. Higgins, Supervisor, Regulatory Compliance
- D. Lavigne, General Manager, Nuclear Safety
- \*K. Nettles, General Manager, Station Support
- H. O'Quinn, Manager, Nuclear Protection Services
- M. Quinton, General Manager, Engineering Services
- \*L. Shealy, Senior Engineer, Independent Safety Engineering Group
- J. Skolds, Vice President, Nuclear Operations
- \*R. Sweet, Supervisor, Quality Assurance
- G. Taylor, General Manager, Nuclear Plant Operations
- \*B. Williams, Manager, Operations
- \*R. White, Nuclear Coordinator, South Carolina Public Service Authority

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

#### \*Attended exit interview

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

### 2. Plant Status

The plant operated at or near 100 percent power throughout the inspection period. On November 11, 1992, the licensee conducted an emergency preparedness drill which included activation of the alternate emergency offsite facility (EOF). The inspectors observed different portions of the drill, including the manning of the alternate EOF which is located in the licensee's corporate office building.

### 3. Monthly Surveillance Observation (61726)

The inspectors observed surveillance activities of safety related systems and components listed below to ascertain that these activities were conducted in accordance with license requirements. The inspectors verified that required administrative approvals were obtained prior to initiating the test, testing was accomplished by qualified personnel in accordance with an approved test procedure, test instrumentation was calibrated, and limiting conditions for operation were met. Upon completion of the test, the inspectors

verified that test results conformed with technical specifications and procedure requirements, any deficiencies identified during the testing were properly reviewed and resolved and the systems were properly returned to service. Specifically, the inspectors witnessed/reviewed portions of the following test activities:

- Monthly sampling and analysis of fuel oil in "B" EDG underground storage tank (STP 606.001).
- Train "B" containment hydrogen monitor calibration (STP 301.005). This procedure satisfies the requirements of TS 4.6.5.1. All activities observed were satisfactory.
- Quarterly stroke test of the S/G blowdown valves (STP 136.001). The outside containment isolation valves, XVG 503A, B and C, in the blowdown lines were tested in both the open and close direction. These valves use air force for opening and spring force for closing. Closing times have been consistently below the 20 second maximum limit. However, the licensee has experienced repeated problems with meeting the 120 second minimum opening limit. New air operated actuators were installed on the XVG 503 valves in May, 1990. The minimum opening limitation was invoked at this time due to a concern that fast opening times could result in water hammer of the downstream piping. The inspector reviewed the test history for XVG 503 valves and noted that ten failures of the opening stroke test have occurred since May, 1990. To correct the opening stroke times the inlet air flow control valves were either adjusted or replaced. The inspector noted only limited engineering involvement in response to these opening test failures and that no NCNs were written on these repeated failures.

The inspector discussed with engineering the basis for the minimum stroke time and consequence of fast opening time. As discussed earlier, the opening time limitation was invoked due to water hammer concerns. The licensee also made changes to operating procedure involving the blowdown system which would prevent water hammer of piping downstream of the XVG 503 valves. With these other changes in place, the licensee stated that a water hammer event would be prevented even if the XVG 503 valves were to open too fast. After reviewing the data for the open time limits, the inspector concluded that individual test failures do not significantly impact system reliability. However, the large number of test failures that have occurred without corrective action to prevent recurrence or an evaluation which justifies this number of failures indicates the licensee has not recognized overall scope of this problem.

- Monthly test of "A" charging/SI pump XPP 43A (STP 105.001). To support running of XPP 43A, "A" VU chiller was started to provide cooling water to XPP 43A. After approximately three minutes the chiller tripped off due to low oil pressure. The chiller was

satisfactorily restarted after manually running the auxiliary oil pump. Several hours later the chiller was started again (without manual use of auxiliary oil pump) to verify normal starting capacity. Operations and engineering reviewed this event to determine the cause of the chiller tripping off.

The licensee believes that the single train operation of the VU system during the winter months contributed to the event. When SW temperature is less than 65 degrees Fahrenheit, one train of VU is operating while the other train is idle in standby condition. If a chiller remains idle for a long period of time, oil in the compressor oil reservoir tends to absorb refrigerant. The amount of absorbed refrigerant is dependent on oil temperature and pressure. With excessive refrigerant in the oil, low oil pressure can occur when the chiller is initially started. The "A" chiller had been idle for eight days prior to testing of XPP 43A. As part of the corrective action, the licensee has proposed a rotation schedule for running the three chillers which will prevent long idle periods. System engineering is also developing a checklist to be used during observation of the chiller start. The inspector will continue to monitor chiller performance by review of logs and observation of actual chiller starts.

The observed tests were performed in accordance with procedural requirements. A trend of repeated failures to satisfy an administrative limit for opening times on S/G blowdown valves was noted.

#### 4. Monthly Maintenance Observation (62703)

Station maintenance activities for the safety-related systems and components listed below were observed to ascertain that they were conducted in accordance with approved procedures, regulatory guides, and industry codes or standards and in conformance with TS.

The following items were considered during this review: that limiting conditions for operation were met while components or systems were removed from service, approvals were obtained prior to initiating the work, activities were accomplished using approved procedures and were inspected as applicable, functional testing and/or calibrations were performed prior to returning components or systems to service, activities were accomplished by qualified personnel, parts and materials used were properly certified, and radiological and fire prevention controls were implemented. Work requests were reviewed to determine the status of outstanding jobs and to ensure that priority was assigned to safety-related equipment maintenance that may affect system performance. The following maintenance activities were observed:

- Troubleshooting of RBCU 1A fan (MWR 9204328). Each RBCU unit has two motors per fan. One motor is for normal operations (fast speed) and the other is for emergency/post accident operation (slow speed).

On November 11, 1992, RBCU 1A fan (XFN0064A) had its feeder breaker trip due to overcurrent. The fan and motors are inside the reactor building (RB) and inaccessible at power, therefore, the licensee was unable to determine the exact failure cause. The inspector observed the licensee's subsequent test of the fan using the slow speed motor and noted that the fan was fully operational and unaffected by whatever caused the overcurrent condition for the fast speed motor. TS 3.6.2.3 requires that the RBCU's have at least one of two cooling units per train operable in slow speed, therefore, they were not required to enter into a TS action statement. Additionally, this should not affect normal operations since only three of the four fans are routinely used to maintain RB temperature below 120 degrees Fahrenheit.

- Calibration of the motor driven emergency feedwater pump (MDEFP) flow indicator (PMTS P0161342). This flow indicator (IFI13507) was calibrated in accordance with ICP 240.019. No discrepancies were noted.
- Inspection, cleaning and lubrication of the emergency feed pump area air handling unit (PMTS P0157415).
- Blowdown of the sensing lines for the "B" steam generator main steam header pressure transmitter (MWR 9213305).
- Troubleshooting power range nuclear instrumentation NI-44 (MWR 9204368). When an operator attempted to adjust indicated reactor power (from NI-44) to actual reactor power (based on secondary plant calorimetric), the output from NI-44 spiked high. This adjustment is made with the gain potentiometer. The operator stated that when he unlocked the potentiometer the spike occurred. During troubleshooting, I&C could not reproduce the spike on the NI-44 channel. The adjustment was completed and the licensee plans to replace the potentiometer during the upcoming refueling outage.
- Replacement of fasteners at flange connection for boric acid flow element IFE7580 (MWR 92N3098). While investigating the leakage at the flange joint, the licensee discovered the bolts were grade B-8 in lieu of the required grade B-7 alloy steel per ASME SA193. The stronger B-7 bolts would allow torquing of the fasteners to 111 foot-pounds versus the 32 foot-pounds of torque that had been applied to the B-8 fastener. NCN 4532 was written to address the incorrect bolting material for the flange joint. The flow element was installed during the Fall, 1991, outage. The MRF which installed the flow element did not specify B-7 bolts but did reference Specification SP-220-044461-0000 which does require B-7 bolting material. The licensee believes the B-8 bolts were installed because they were supplied with the flow element.

The NCN provided instructions to replace the bolts, but also stated that the incorrect bolting material did not affect the operability of the flow element. This was based on the flow element being able

to perform it's function. The bolts were replaced approximately one month after the NCN disposition was provided by engineering. While reviewing the NCN after the work had been completed, the inspector noted that the structural effects of the weaker bolts on the system were not discussed nor evaluated in the NCN disposition. While this has no effect on the current system configuration (since the correct bolts are installed), the inspector considered this an incomplete engineering evaluation that accepted a nonconformance condition on a temporary basis.

All maintenance activities observed were performed using good work practices and per the required procedures. An engineering evaluation to accept a temporary condition was inadequate in that the structural integrity aspect of the condition was not evaluated.

5. Operational Safety Verification (71707)

a. Plant Tour and Observations

The inspectors conducted daily inspections in the following areas: control room staffing, access, and operator behavior; operator adherence to approved procedures, TS, and limiting conditions for operations; and review of control room operator logs, operating orders, plant deviation reports, tagout logs, and tags on components to verify compliance with approved procedures.

The inspectors conducted weekly inspections for the operability verification of selected ESF systems by valve alignment, breaker positions, condition of equipment or component(s), and operability of instrumentation and support items essential to system actuation or performance. The component cooling water system and the emergency borate system were included in these inspections.

Plant tours included observation of general plant/equipment conditions, fire protection and preventative measures, control of activities in progress, radiation protection controls, physical security controls, plant housekeeping conditions/cleanliness, and missile hazards. Reactor coolant system 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. Selected tours were conducted on backshifts or weekends.

b. Failure to Document TS Required Channel Checks

During an administrative review of shift logs conducted on November 24, 1992, the licensee noted that page 11 of the November 22, 1992, Operator At The Controls (OATC) TS log had not been filled out for the night shift. Page 11 of the OATC log is used in part to document four channel checks for "C" steam generator, and one main steam line pressure channel check, required by TS. The licensee also noted that both the Duty Shift Supervisor

and Control Room Supervisor had reviewed and signed the log without noting this discrepancy.

The operator responsible for filling out this log stated that a contributing factor for the missed log entries was the distraction associated with adverse weather conditions experienced during the shift. The operator also stated that those readings which he failed to record were parameters that were closely monitored throughout the shift due to problems associated with the "B" steam generator feed regulating valve. The parameters for "A" and "B" steam generators had been recorded on the logs. The operator stated that prior to recording any of the parameters, he had observed all the steam generator parameters and verified they were in the normal range. Based on this increased awareness for the parameters involved and the recording of logs for "A" and "B" steam generators, the licensee concluded that a qualitative assessment of channel behavior as defined by TS was performed. Therefore, the failure to fill out the log did not constitute a missed surveillance. Based on a review of plant computer readings for the parameters that were omitted on the log, which indicated satisfactory channel agreement, and interviews with the personnel involved, the inspectors concluded a qualitative assessment of channel behavior as required by TS had occurred.

Criteria XVII of 10 CFR 50, Appendix B, requires that operating logs and test records be maintained. The failure to document the TS required channel checks on page 11 of the OATC log for November 22, 1992, is identified as a non-cited violation (NCV 92-21-01). This violation will not be subject to enforcement action because the licensee's efforts in identifying and correcting the violation meet the criteria specified in Section VII.B of the Enforcement Policy. The inspectors concluded that the review of the OATC log for November 22, 1992, by the Duty Shift Supervisor and the Control Room Supervisor was inadequate. The licensee has re-emphasized the responsibilities of supervisory reviews and the need to ensure adequate reviews are performed. No generic or programmatic weaknesses were noted.

c. Loss of One Offsite Power Supply

On November 14, 1992, a loss of offsite power to the "B" safeguards bus (1DB) occurred and the "B" EDG started and tied onto the bus. The normal power supply for 1DB is from the 230 kV station switchyard through emergency auxiliary transformer XTF31. Due to a fault on one of the switchyard's transmission lines, buses 2 and 3 in the switchyard were isolated and de-energized. This caused a loss of power to XTF31 and safeguards bus 1DB. Plant equipment responded as required to the loss of offsite power, the starting of "B" EDG and the sequencing of loads back onto 1DB.

The isolation of switchyard buses 2 and 3 was attributed to the slow opening of the oil circuit breaker (OCB) which fed the transmission line that had the fault. The OCB should have opened in

approximately five cycles, however, the actual opening time was 38 cycles. A backup protection relay which has a ten cycle time delay sensed that the faulted condition still existed and isolated all feeds for buses 2 and 3. After the licensee verified that the fault had cleared from the switchyard, buses 2 and 3 were re-energized. Problems associated with closing one of the switchyard OCBs resulted in some delays in restoring offsite power to 1DB. Approximately five hours after the fault, offsite power was restored to 1DB and "B" EDG was secured. The inspector responded to the site event and observed operator actions associated with "B" EDG tied to 1DB and the efforts to restore the offsite power supply. Appropriate operation's actions were taken, and management involvement was provided in response to this event.

The licensee performed subsequent testing on the OCB to determine the cause of the slow stroke time. When the OCB was cycled after the event the slow opening time was not repeated. Testing provided no additional information on the initial slow opening of the OCB. The inspectors observed portions of the OCB testing. While testing of the OCB did not confirm that mechanical binding was the cause of the slow OCB opening, the licensee believes that this was the most probable cause. This OCB had its last major five year PM performed in 1987. Functional testing and external lubrication which is performed on a yearly basis was completed in September, 1991. The licensee is investigating the need to increase the frequency of the major PM for OCBs from five years to three years.

A non-cited violation for failure to document TS required channel checks was identified. The inspectors concluded that the shift oversight and review for this activity was inadequate.

6. Cold Weather Preparations (71714)

The inspector noted that the licensee had completed their inspection of heat tracing in September. The inspector verified that the procedure for the heat tracing inspection incorporated all safety-related equipment subject to cold weather. Additionally, all annunciator panels associated with heat tracing were clear of alarm indications, and there were no open MWR's associated with heat tracing for safety-related equipment. The inspector also reviewed the licensee's Special Instruction for freeze protection. Based on the above reviews and inspections, the inspector concluded that the licensee's cold weather preparations were adequate.

7. Installation and Testing of Modification (37828)

Two minor modifications were reviewed as part of the ongoing evaluation of plant modification activities. Included in the review were direct observation of portions of the installations, post-modification testing and review of the MRF packages.

MRF 21783B and D installed new relays on the contact follower card for the EDG annunciator system. The EDG annunciator system is classified as a non-nuclear system. The contact follower cards are located in the EDG local control panel. These cards receive a signal from field instrumentation/component that an alarm condition exists and they process these signals to allow the appropriate control room annunciator to be alarmed. Operators had noted that occasionally alarms on the local EDG panel would not be alarmed in the control room as required. Corrective action involved replacement of a relay on the card which had a low ampacity rating with a relay with a high ampacity rating. The existing contact follower cards were removed and replaced with a modified card on a one for one basis. This was to ensure the operability of each card prior to replacement of the next card. The post modification test involved bench testing of the modified cards to ensure the cards functioned properly, then verification that the installed cards provided the required alarm response.

MRF 22516 changed the setpoint of the EDG air start compressor auto start/stop switches IPS15425 A and B and IPS15426 A and B. The inspector observed the work associated with A EDG. The switch setpoint for stopping the air compressors was changed from 425 psig to 415 psig. The starting setpoint was not changed. The basis of the MRF was to provide additional margin between the air compressor shutoff pressure and the setpoint for the air tank relief valves (430 psig). The inspector observed changing the setpoints for switches IPS15425 A and IPS15426 A which included the static verification that the setpoints were correct.

Post modification testing requirements in the MRF specified that the air compressor starting and stopping points be monitored for three complete cycles. A chart recorder was used to monitor the pressure cycles. Initially, the licensee planned to allow air pressure in a tank to bleed down due to existing system leakage. The first bleed down cycle took approximately 24 hours to complete. The inspector questioned the rationale of extending the testing period for a modification after the work had been completed and the equipment was being used for compliance with TS. Based on the initial pressure bleed down it would have taken approximately six days to complete the post modification testing. The testing method was changed to create a small system leak (using a vent valve) and the testing was satisfactorily completed the following day. The initial post modification testing requirements failed to recognize and evaluate the effects of an extended testing time period on equipment that was in service.

8. Onsite Follow-up of Written Reports of Nonroutine Events at Power Reactor Facilities (92700)

(Closed) LER 91-07, Programmatic Weakness Leads to a Missed Surveillance

On August 26, 1991, the licensee noted that the allowed interval for the in-service test of the CCW isolation valves had been exceeded by

two days. The valves were subsequently tested successfully. The event was caused by a weakness in the program for tracking and implementing surveillances. The surveillance procedure coupled the testing of the isolation valves with the testing of the CCW pumps even though the valves and pumps had different surveillance interval requirements. Corrective action included the modification of the CCW surveillance to include tracking the valve tests as a separate task. This weakness was isolated to the CCW surveillance.

(Closed) LER 91-08, Steam Generator Tube Eddy Current Test Results

Results from the sixth inservice eddy current examination indicated that more than one percent of the inspected tubes were defective. This met the C-3 inspection category of TS. Tube degradation was localized in the tubesheet area and was the result of primary water stress corrosion cracking. Based on the inspection results and other factors, the licensee has changed the scheduled date for S/G replacement from March, 1996, to September, 1994. In addition, the licensee is pursuing TS changes to allow an increase in allowable percent of plugged tubes and for use of an alternate plugging criteria.

(Closed) LER 91-09, Emergency Core Cooling System (ECCS) Test Flow Discrepancies

After receiving information from Westinghouse concerning a lower runout limit for the charging/SI pumps and non-conservative aspects for SI flow measurements, the licensee rebalanced the existing SI flows. The results identified that the runout limit of 680 gpm would be exceeded for all three pumps during hot leg recirculation and that "B" pump flow was below the value assumed in the FSAR accident analysis for high flow conditions. The flows were rebalanced to comply with TS requirements. Westinghouse evaluated the flow data for "B" pump and determined that the as-left flow conditions were acceptable to perform ECCS safety functions.

The licensee has administrative controls to ensure the manufacturer's recommended runout limit of 675 gpm is maintained. During the next refueling outage, the licensee plans to perform additional testing of the charging/SI pumps to determine the specific runout limit of the pumps. If the actual runout limits can be increased, then additional flow margin can be established between the rebalanced flows and the TS minimum high head ECCS flow requirements.

9. Action on Previous Inspection Findings (92701 and 92702)

(Closed) Violation 395/91-05-01, Failure to periodically test emergency diesel generators (EDG) from ambient conditions.

The licensee had been performing the semi-annual EDG test after completion of the monthly EDG test. This sequencing of tests did not allow the semi-annual test to be performed from ambient conditions as required by the safety evaluation for Amendment No. 50 to TS. The

licensee has revised the surveillance test program for the EDGs such that the monthly and semi-annual test requirements are satisfied by one EDG test run from ambient condition. Also, the STP for this test has an initial condition which requires the EDG to be at ambient conditions prior to starting the test.

(Closed) Violation 395/91-05-02, Failure to adequately maintain equipment control when using the Equipment Misalignment Status Log (EML).

During maintenance on a charging pump, an isolation valve for chill water from the pump was closed. This mispositioned valve was not included in repair tagout, but was tracked in the EML. When the pump was started for a maintenance run the valve was not opened as required. OAP 105.2 prohibits the use of the EML, if the alignment makes the equipment TS inoperable. Operations personnel were provided additional training on the limitations and scope of the EML.

Subsequent to this training, the inspector had noted several uses of the EML during maintenance activities where the misalignment would have made the equipment inoperable. However, during the activities the equipment was not being used for TS compliance and other work associated with the activities also made the equipment inoperable. The inspectors were still concerned that the mispositioning was required to be realigned prior to returning the equipment to operable status and was only being tracked by the EML. The inspectors discussed these uses of the EML with operations management. Recently, operations personnel were provided additional training on the EML which defined the requirement in OAP 105.2 to prohibit the use of the EML for any cases where the misalignment could prevent TS equipment from performing its function.

(Closed) Inspector Follow-up Item 395/91-10-04, Turbine driven emergency feedwater pump (TDEFP) room temperature concerns.

During the summer months, the inspector had noted high temperatures (above 102 degrees Fahrenheit) in the TDEFP room. The licensee's position was that the TDEFP room was not included in TS 3.7.9 temperature limit of 102 degrees for the emergency feedwater pump area. The licensee's basis for this position was that the TS temperature limitations are to ensure that safety-related equipment will not be subjected to temperatures in excess of their EQ temperatures and that no equipment in the TDEFP room had any EQ limitations associated with the TS requirement. The inspector reviewed TS Bases 3/4.7.9 and the EQ files for equipment located in the TDEFP room. Based on this review and the inspector's verification that the EQ files contained the applicable EQ sensitive equipment in the TDEFP room, the inspector agreed with the licensee's position regarding TS applicability for the TDEFP room.

The licensee revised Special Instruction 92-10 to include instructions for starting one of the EFW pump area cooling fans during warm weather

periods. During the past summer, the inspectors noted during tours of the TDEFP room that a cooling fan was running and the room temperatures were comparable with other locations in the plant.

#### 10. Exit Interview (30703)

The inspection scope and findings were summarized on December 4, 1992, with those persons indicated in paragraph 1. The inspectors described the areas inspected and discussed the inspection findings.

No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during the inspection.

<u>Item Number</u>	<u>Description and Reference</u>
395/92-21-01	NCV - failure to document the TS required channel checks on page 11 of the OATC log for November 22, 1992, paragraph 5.

#### 11. Acronyms and Initialisms

ASME	American Society of Mechanical Engineers
CCW	Component Cooling Water
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EFW	Emergency Feedwater
EML	Equipment Misalignment Status Log
EOF	Emergency Operating Facility
EQ	Environmental Qualification
ESF	Engineered Safety Feature
FSAR	Final Safety Analysis Report
GPM	Gallons Per Minute
I&C	Instrumentation and Control
ICP	Instrumentation Control Procedure
LER	Licensee Event Reports
MDEFP	Motor Driven Emergency Feedwater Pump
MRF	Modification Request Form
MWR	Maintenance Work Request
NCN	Nonconformance Notice
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
OAP	Operations Administrative Procedure
OATC	Operator At The Controls
OCB	Oil Circuit Breaker
PM	Preventive Maintenance
PMTS	Preventive Maintenance Task Sheet
PSIG	Pounds Per Square Inch Gauge
RB	Reactor Building
RBCU	Reactor Building Cooling Unit
RCS	Reactor Coolant System

RWP	Radiation Work Permits
S/G	Steam Generator
SI	Safety Injection
SPR	Special Reports
STP	Surveillance Test Procedures
SW	Service Water
TDEFP	Turbine Driven Emergency Feedwater Pump
TS	Technical Specifications
VU	Chill Water