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A SCANA COMPANY

March 31, 2006

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sir/Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
ANNUAL OPERATING REPORT

Enclosed is the 2005 Annual Operating Report for the South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station Unit No. 1. This report is being submitted in accordance with Technical Specifications 6.9.1.4, 6.9.1.5, and Regulatory Guide 1.16.

If there are any questions, please call at your convenience.

Very truly yours,

Jeffrey B. Archie

SBR/JBA/sr
Attachment

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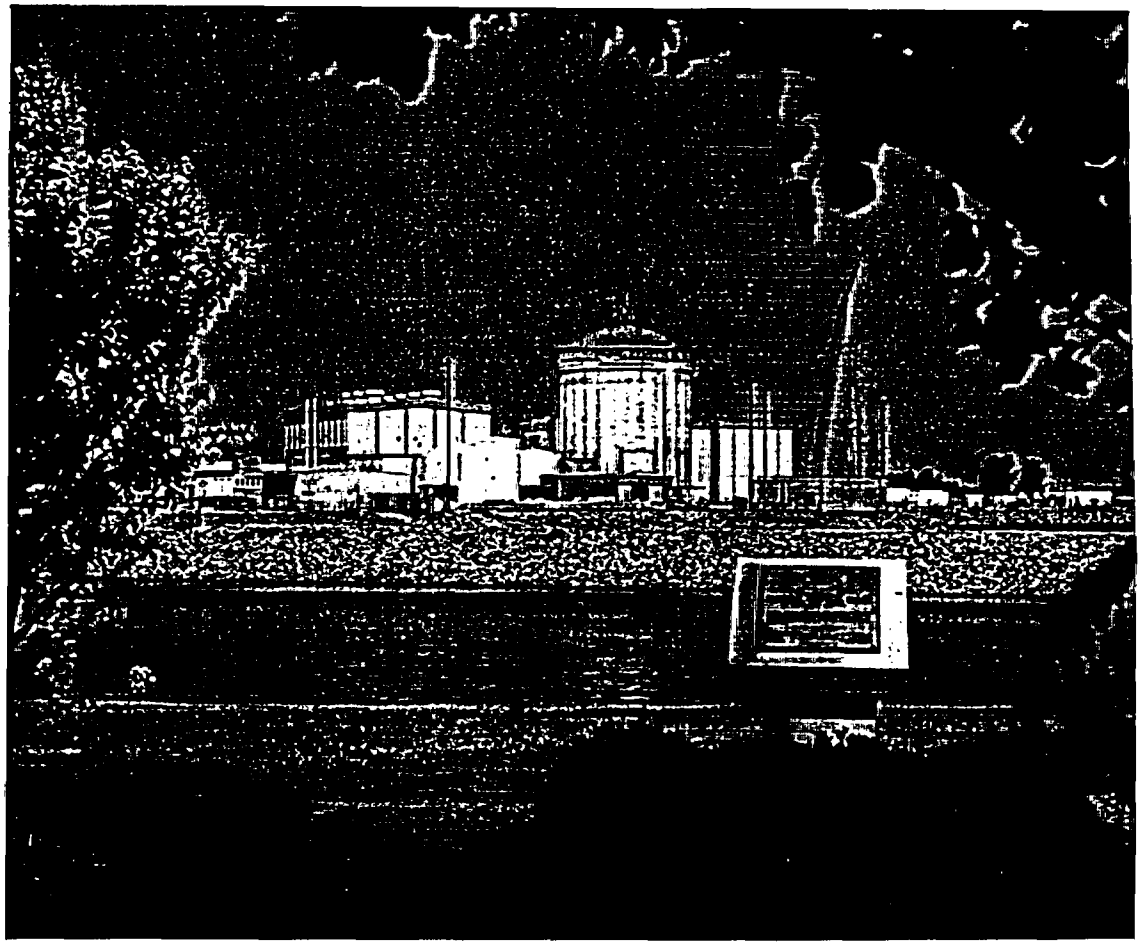
VIRGIL C. SUMMER NUCLEAR STATION



2005 ANNUAL OPERATING REPORT

PREFACE

The 2005 Annual Operating Report for the Virgil C. Summer Nuclear Station is hereby submitted in accordance with Technical Specifications 6.9.1.4, 6.9.1.5, and Regulatory Guide 1.16 under Docket Number 50/395 and Facility Operating License NPF-12.

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ANNUAL OPERATING REPORT

1.0 INTRODUCTION

The Virgil C. Summer Nuclear Station (VCSNS) utilizes a pressurized water reactor rated at 2900 MWT. The maximum dependable capacity is 966 Mwe.

The station is located approximately 26 miles northwest of Columbia, South Carolina.

2.0 OPERATIONAL DATA

For the reporting period of January 1 through December 31, 2005, the station operated at a capacity factor of 88.3 % (using maximum dependable capacity) and a unit availability of 88.4 %. The reactor was critical for a total of 7787.8 hours, the generator remained on line 7746.9 hours, and the total gross electrical energy generated for 2005 was 7,774,380 MWH.

3.0 OPERATING SUMMARY

The Virgil C. Summer Nuclear Station (VCSNS) Unit No.1 operated at 100 % power from January 1st, through March 1st. On March 1st, power was reduced to 95% during the repair of the back-up computer in the heater drain level control system. The power reduction provided "reactivity management" margin in the unlikely event that both heater drain control processors failed. Power was restored to 100% at 0000 hours on March 3rd.

VCSNS operated at 100% power from March 3rd to April 17th. As part of a pre-planned power reduction in preparation for Refueling Outage Fifteen (RF-15), power was reduced to 90% on April 17th to support maintenance on the "C" Main Feedwater Pump Turbine. Power was further reduced to 80% on April 21st and on April 23rd the refueling outage began with the opening of the Main Generator breaker. The plant remained shutdown for the refueling outage until June 1st when the Main Generator breaker was closed. Reactor power was restored to 100% on June 7th.

VCSNS operated at 100 % power from June 7th to July 27th. On July 27th, power was reduced to 85% due to the failure of the "B" Circulating Water Pump Motor. The pump was repaired and reactor power was restored to 100% at 2003 hours on August 13th.

VCSNS operated at 100% power from August 13th to August 25th. On August 25th, the plant experienced a reactor trip following the failure of the "B" Condensate Pump Motor. The trip occurred due to the slow operation of the discharge isolation valve for the standby "A" Condensate Pump resulting in a secondary side transient. Reactor power was restored to 100% at 1800 hours on August 28th.

VCSNS operated at 100% power from August 28th to September 27th. On September 27th, power was reduced to 87% when the "C" Main Feedwater Pump tripped due to the failure of the pump speed control. The "C" Main Feedwater Pump controller and flow control valve were repaired and reactor power was restored to 100% on September 28th.

VCSNS operated at 100% power from September 28th to October 28th. On October 28th, power was reduced to 93.5% to repair an air leak in the level control system for the 1A Feedwater Heater. Power was restored to 100% at 0800 hours on October 29th.

VCSNS operated at 100% from October 29th to November 8th. On November 8th, power was reduced to 80% due to a level fluctuation in the 1A Feedwater Heater. Repairs were completed and power was restored to 100% on November 9th.

The plant operated at 100% for the remainder of 2005.

Refueling Outage 15 Summary

The Main Generator breaker was opened at 0007 hours on April 23rd for Refueling Outage 15.

Major work included:

- "B" Residual Heat Removal (RHR) Pump Coupling Retrofit
- Modification of Refueling Water Storage Tank (RWST) Automatic Swap- over to Cold Leg Recirculation
- Modification of the Pressure Relief/Component Cooling Water (CCW) Cross-Train Isolation Valve

- Relocation of Suction Tap to RMA-9 (Condenser Offgas Radiation Monitor)
- Replacement of the Integrated Plant Computer System
- Installation of Reactor Vessel Fluence Monitor
- Rewind of Main Generator
- Main Feedwater Flow Control Piping Upgrade
- Cycle-16 Core Design
- "A", "B", and "C" Steam Generator Primary Side Inspections
- "A", "B", and "C" Steam Generator Secondary Side Inspections
- "B" Reactor Coolant Pump
    - Seal Maintenance
    - Motor Replacement
    - Main Flange Gasket Replacement
- CCW Heat Exchanger Inspections
- "A" and "B" Diesel Generator Maintenance
- Engineered Safety Features Integrated Safeguards Testing on "A" and "B" Trains
- Service Water Piping Cleaning and Inspection
- Main Steam Isolation Valve Inspection
- Identification of Failed Fuel

Refueling Outage 15 duration was 39.9 days. Outage planned duration was 35 days. Personnel exposure in 2005 due to the outage was 65.3 rem based on thermoluminescent dosimeters (TLDs).

Forced Power Reduction >20% Exceeding 4 Hours

On August 25th, the "B" Condensate Pump tripped and "A" Condensate Pump was started immediately. The "A" Condensate Pump discharge valve was slow to respond to the open signal resulting in a decreasing Deaerator level. This resulted in a reactor trip. The event was reported in Licensee Event Report 2005-003 submitted on October 24, 2005. The cause of the trip of "B" Condensate Pump was determined to be a phase to ground short in the motor windings. A root cause analysis is being performed to determine the cause of the "A" Condensate Pump discharge valve failure to open in a timely manner. This root cause will be completed during Refueling Outage 16 when plant conditions will allow completion of confirmatory tests. Interim measures are in place to eliminate the concern. This outage did not result in any single release of radioactivity or single radiation exposure that accounted for more than 10 % of the allowable annual values. The duration of the outage was approximately 54 hours.

Safety-related work performed during this forced outage included:

- Repack of "C" Steam Generator Turbine Driven Emergency Feedwater Pump Control Valve
- Repair of Intermediate Range NI 36 Channel 2
- Repair of "C" Service Water Pump Discharge Pressure Transmitter
- Replacement of the "B" Reactor Coolant System Crossover Pipe Drain Snubber
- Repair of Reactor Coolant Loop "B" Standpipe Isolation Valve

4.0 EXPOSURES

Attachment I consists of tables, which list the number of station, utility, and other personnel (including contract personnel) receiving exposures greater than 100 mrem/year and their associated man-rem exposure according to work and job function. The exposures reported are estimated doses based on electronic dosimeters.

5.0 FAILED FUEL

VCSNS did have indications of failed fuel in 2005.

The reactor coolant system specific activity did not exceed the 1.0 microcuries per gram dose equivalent iodine-131 specific activity or the 100/Ē microcuries per gram limits of Technical Specification 3.4.8, for this reporting period. VCSNS imposed an administrative limit for reactor coolant system specific activity of 0.059 microcuries per gram dose equivalent iodine-131. This limit was not exceeded during 2005.

ATTACHMENT I

TO

2005 ANNUAL REPORT

SOUTH CAROLINA ELECTRIC AND GAS CO. V.C. SUMMER NUCLEAR STATION
PEOPLE COMPUTERIZED EXPOSURE NUCLEAR TRACKING SYSTEM PAGE 1
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PERSONNEL AND MAN-REM BY WORK AND DUTY FUNCTION
FINAL END OF YEAR REPORT FOR 2005

	NUMBER OF PERSONNEL OVER 100mREM			TOTAL MAN-REM		
WORK AND JOB FUNCTION	STATION WORKERS	UTILITY WORKERS	CONTRACT WORKERS	STATION WORKERS	UTILITY WORKERS	CONTRACT WORKERS
ROUTINE MAINTENANCE						
MAINTENANCE PERSONNEL	17	0	59	5.693	0.002	22.391
OPERATIONS PERSONNEL	1	0	1	0.925	0.000	0.443
HEALTH PHYSICS PERSONNEL	4	0	1	1.253	0.000	1.062
SUPERVISORY PERSONNEL	0	0	0	0.182	0.000	0.011
ENGINEERING PERSONNEL	0	0	0	0.276	0.000	0.455
SPECIAL MAINTENANCE						
MAINTENANCE PERSONNEL	17	0	61	5.181	0.000	19.853
OPERATIONS PERSONNEL	6	0	5	1.245	0.000	1.207
HEALTH PHYSICS PERSONNEL	8	0	5	1.674	0.000	1.357
SUPERVISORY PERSONNEL	1	0	0	0.443	0.000	0.003
ENGINEERING PERSONNEL	0	0	3	0.127	0.000	1.323
REACTOR OPERATIONS & SURVEILLANCE						
MAINTENANCE PERSONNEL	4	0	6	1.308	0.000	1.673
OPERATIONS PERSONNEL	3	0	0	1.109	0.000	0.155
HEALTH PHYSICS PERSONNEL	0	0	1	0.397	0.000	0.530
SUPERVISORY PERSONNEL	0	0	0	0.045	0.000	0.001
ENGINEERING PERSONNEL	0	0	0	0.033	0.000	0.008
WASTE PROCESSING						
MAINTENANCE PERSONNEL	0	0	0	0.051	0.000	0.071
OPERATIONS PERSONNEL	0	0	0	0.000	0.000	0.003
HEALTH PHYSICS PERSONNEL	4	0	1	0.555	0.000	0.186
SUPERVISORY PERSONNEL	0	0	0	0.068	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.001	0.000	0.000
IN-SERVICE INSPECTION						
MAINTENANCE PERSONNEL	2	0	31	0.454	0.000	7.085
OPERATIONS PERSONNEL	1	0	0	0.492	0.000	0.012
HEALTH PHYSICS PERSONNEL	0	0	2	0.056	0.000	0.554
SUPERVISORY PERSONNEL	0	0	0	0.000	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.000	0.000	0.129
REFUELING						
MAINTENANCE PERSONNEL	1	0	28	0.474	0.000	7.350
OPERATIONS PERSONNEL	0	0	0	0.134	0.000	0.000
HEALTH PHYSICS PERSONNEL	0	0	0	0.094	0.000	0.157
SUPERVISORY PERSONNEL	0	0	0	0.004	0.000	0.001
ENGINEERING PERSONNEL	0	0	1	0.024	0.000	0.369

TOTALS						
MAINTENANCE PERSONNEL	41	0	185	13.161	0.002	58.423
OPERATIONS PERSONNEL	11	0	6	3.905	0.000	1.820
HEALTH PHYSICS PERSONNEL	16	0	10	4.029	0.000	3.846
SUPERVISORY PERSONNEL	1	0	0	0.742	0.000	0.016
ENGINEERING PERSONNEL	0	0	4	0.461	0.000	2.284
GRAND TOTAL	69	0	205	22.298	0.002	66.389

********** END OF REPORT **********