



Jeffrey B. Archie
Vice President, Nuclear Operations
803.345.4214

March 23, 2007

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

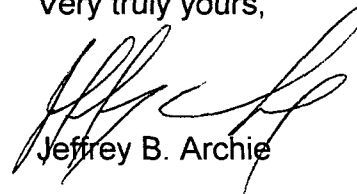
Dear Sir/Madam:

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

Enclosed is the 2006 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 and Regulatory Guide 1.16.

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

Very truly yours,



Jeffrey B. Archie

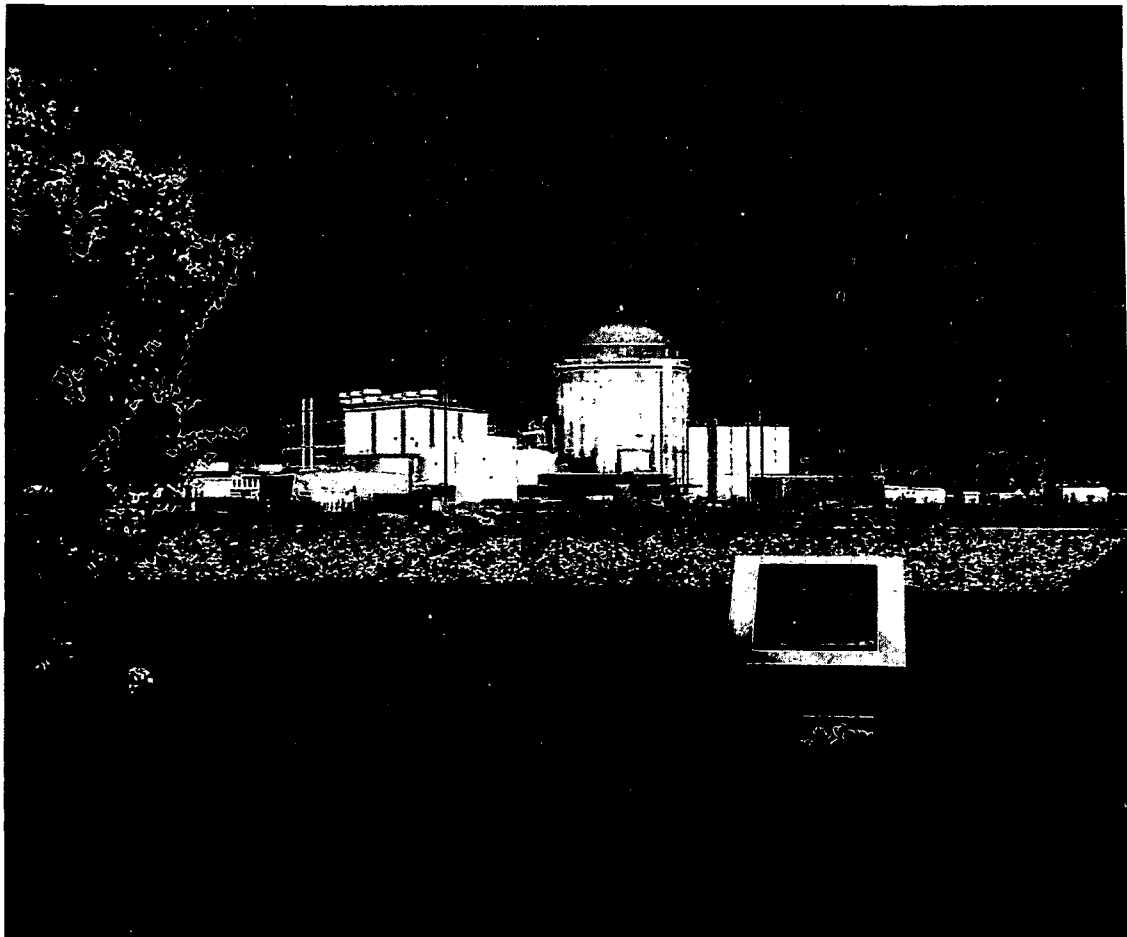
SBR/JBA/cm
Attachment

c: K. B. Marsh
S. A. Byrne
J. H. Hamilton
R. J. White
W. D. Travers
R. E. Martin
REIRS Project Manager
M. L. Thomas
K. M. Sutton

D. L. Abstance
W. G. Wendland
J&H Marsh & McLennan
NRC Resident Inspector
NSRC
CER (L-99-0107)
File (818.02-10, RR 8225)
PRSF (RC-07-0040)

JE25

VIRGIL C. SUMMER NUCLEAR STATION



2006 ANNUAL OPERATING REPORT

PREFACE

The 2006 Annual Operating Report for the Virgil C. Summer Nuclear Station is hereby submitted in accordance with Technical Specifications 6.9.1.4 and Regulatory Guide 1.16 under Docket Number 50/395 and Facility Operating License NPF-12.

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	Introduction	4
2.0	Operational Data	4
3.0	Operating Summary	4
4.0	Exposures	5
5.0	Failed Fuel	6

ATTACHMENTS

- I. 2006 Man-Rem Report

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, 2006, the station operated at a capacity factor of 88.9 % (using maximum dependable capacity) and a unit availability of 88.9 %. The reactor was critical for a total of 7847.0 hours, the generator remained on line 7783.9 hours, and the total gross electrical energy generated for 2006 was 7,820,340 MWH.

3.0 OPERATING SUMMARY

The Virgil C. Summer Nuclear Station (VCSNS) Unit No.1 operated at 100% power from January 1st, through May 26th. On May 26th, power was reduced to 75% to repair a leak in the "C" Feedwater Booster Pump (FWBP) inboard seal. Reactor power was restored to 100% at 1615 hours on May 29th.

VCSNS operated at 100% power from May 29th to October 11th. As part of a pre-planned power reduction in preparation for Refueling Outage Sixteen (16), power was reduced to 80% on October 11th. The refueling outage began with the opening of the Main Generator breaker at 0012 hours on October 14th. The plant remained shutdown for the refueling outage until November 22nd when the Main Generator breaker was closed. The turbine was taken off line from November 24th to November 25th to perform balancing on the Turbine Generator due to elevated turbine vibration. Reactor power was restored to 100% at 1900 hours on November 28th. The plant operated at 100% power for the remainder of 2006.

Refueling Outage 16 Summary

The Main Generator breaker was opened at 0012 hours on October 14th for Refueling Outage 16.

Major work included:

- Reactor Vessel Volumetric Head Inspection
- Installation of Reactor Vessel Hydra Nuts
- Turbine Low Pressure Rotor "A" Inspection
- Condenser Bellows Replacement
- Reactor Building Tendon/IWE/IWL Inspections
- "A" Reactor Coolant Pump Seal Inspection
- Reconfigure Reactor Building Residual Heat Removal and Spray Sumps
- Installation of Alternate Power Source to 1DX

Refueling Outage 16 duration was 39.7 days. Outage planned duration was 37 days. Personnel exposure in 2006 due to the outage was approximately 64.1 rem based on electronic dosimeters.

Forced Power Reduction >20% Exceeding 4 Hours

On May 26th reactor power was reduced to approximately 75% to repair a leak on the "C" Feedwater Booster Pump inboard seal. 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 down power was approximately 69.1 hours.

4.0 EXPOSURES

Attachment I lists 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 2006.

The reactor coolant system specific activity did not exceed the 1.0 microcuries per gram dose equivalent iodine-131 specific activity or the 100/E 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 2006.

ATTACHMENT I

TO

2006 ANNUAL REPORT

SOUTH CAROLINA ELECTRIC AND GAS CO. V.C. SUMMER NUCLEAR STATION
 PEOPLE COMPUTERIZED EXPOSURE NUCLEAR TRACKING SYSTEM PAGE 1
 CNTRPT_PERG116R 31-JAN-2007 07:26

PERSONNEL AND MAN-REM BY WORK AND DUTY FUNCTION
 FINAL END OF YEAR REPORT FOR 2006

WORK AND JOB FUNCTION	NUMBER OF PERSONNEL OVER 100mREM			TOTAL MAN-REM		
	STATION WORKERS	UTILITY WORKERS	CONTRACT WORKERS	STATION WORKERS	UTILITY WORKERS	CONTRACT WORKERS
ROUTINE MAINTENANCE						
MAINTENANCE PERSONNEL	11	0	85	5.355	0.000	27.544
OPERATIONS PERSONNEL	2	0	2	1.251	0.000	0.651
HEALTH PHYSICS PERSONNEL	6	0	7	2.789	0.000	1.403
SUPERVISORY PERSONNEL	0	0	0	0.158	0.000	0.000
ENGINEERING PERSONNEL	2	0	1	0.841	0.000	0.440
SPECIAL MAINTENANCE						
MAINTENANCE PERSONNEL	3	0	3	1.464	0.000	2.919
OPERATIONS PERSONNEL	2	0	1	0.536	0.000	0.441
HEALTH PHYSICS PERSONNEL	0	0	1	0.139	0.000	0.273
SUPERVISORY PERSONNEL	0	0	0	0.096	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.036	0.000	0.067
REACTOR OPERATIONS & SURVEILLANCE						
MAINTENANCE PERSONNEL	1	0	6	0.905	0.000	2.137
OPERATIONS PERSONNEL	0	0	0	0.826	0.000	0.104
HEALTH PHYSICS PERSONNEL	1	0	0	0.515	0.000	0.110
SUPERVISORY PERSONNEL	0	0	0	0.038	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.036	0.000	0.003
WASTE PROCESSING						
MAINTENANCE PERSONNEL	0	0	0	0.018	0.000	0.014
OPERATIONS PERSONNEL	0	0	0	0.000	0.000	0.003
HEALTH PHYSICS PERSONNEL	1	0	0	0.387	0.000	0.056
SUPERVISORY PERSONNEL	0	0	0	0.019	0.000	0.000
ENGINEERING PERSONNEL	0	0	0	0.000	0.000	0.000
IN-SERVICE INSPECTION						
MAINTENANCE PERSONNEL	1	0	23	0.491	0.000	6.795
OPERATIONS PERSONNEL	2	0	0	0.539	0.000	0.015
HEALTH PHYSICS PERSONNEL	1	0	1	0.242	0.000	0.279
SUPERVISORY PERSONNEL	0	0	0	0.012	0.000	0.000
ENGINEERING PERSONNEL	0	0	3	0.027	0.000	0.709
REFUELING						
MAINTENANCE PERSONNEL	2	0	29	0.877	0.000	7.892
OPERATIONS PERSONNEL	0	0	0	0.363	0.000	0.031
HEALTH PHYSICS PERSONNEL	0	0	3	0.046	0.000	0.507
SUPERVISORY PERSONNEL	0	0	0	0.051	0.000	0.000
ENGINEERING PERSONNEL	0	0	1	0.115	0.000	0.157
TOTALS						
MAINTENANCE PERSONNEL	18	0	146	9.110	0.000	47.301
OPERATIONS PERSONNEL	6	0	3	3.515	0.000	1.245
HEALTH PHYSICS PERSONNEL	9	0	12	4.118	0.000	2.628
SUPERVISORY PERSONNEL	0	0	0	0.374	0.000	0.000
ENGINEERING PERSONNEL	2	0	5	1.055	0.000	1.376
GRAND TOTAL	35	0	166	18.172	0.000	52.550

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