



March 25, 2009

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

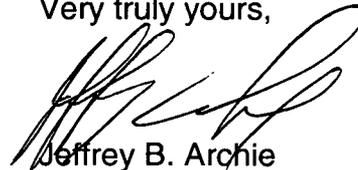
Dear Sir/Madam:

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

Enclosed is the 2008 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

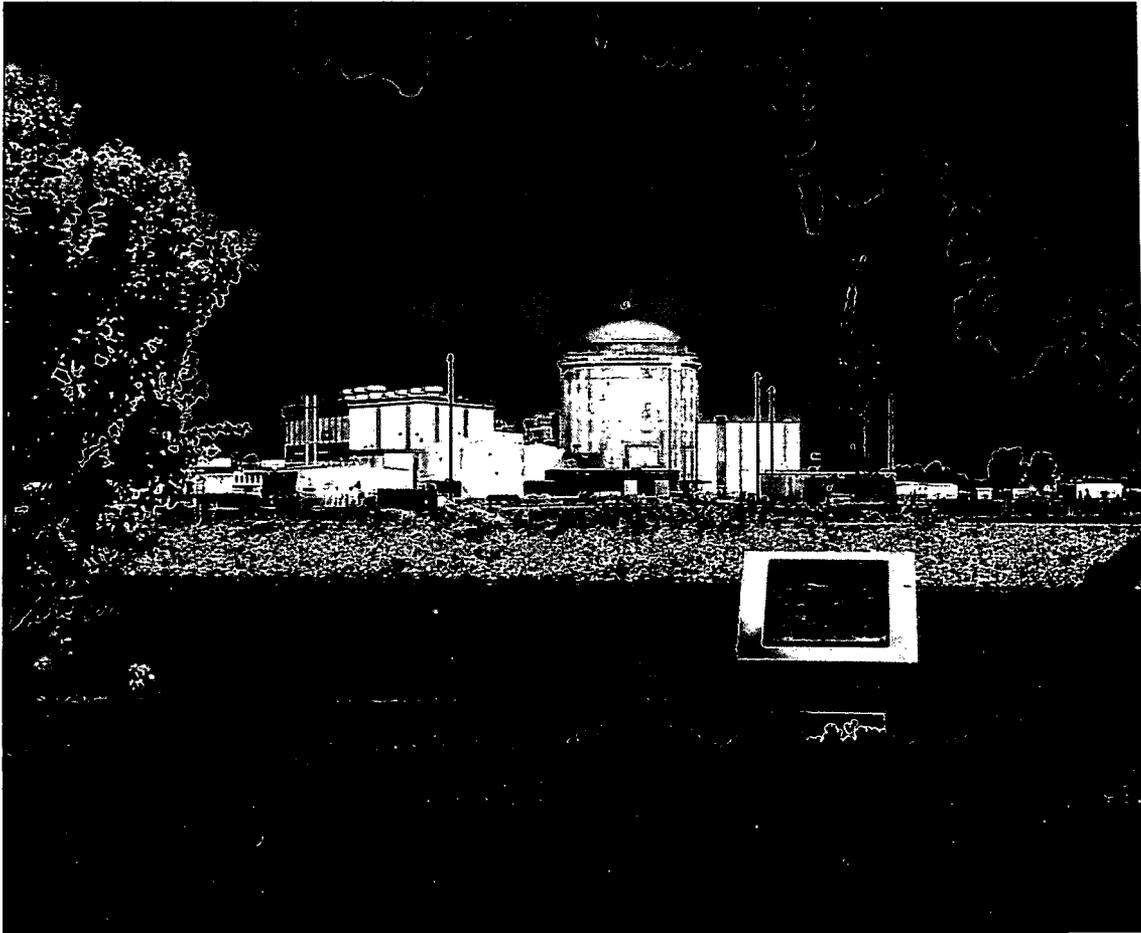
SBR/JBA/cm
Attachment

c: K. B. Marsh
S. A. Byrne
N. S. Carns
J. H. Hamilton
R. J. White
K. J. Browne
L. A. Reyes
R. E. Martin
REIRS Project Manager
M. L. Thomas

K. M. Sutton
D. L. Abstance
E. Everett
J&H Marsh & McLennan
NRC Resident Inspector
NSRC
RTS (LTD 292)
File (818.02-10, RR 8225)
PRSF (RC-09-0031)

AC01
NRR

VIRGIL C. SUMMER NUCLEAR STATION



2008 ANNUAL OPERATING REPORT

PREFACE

The 2008 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.

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ATTACHMENTS

- I. 2008 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, 2008, the station operated at a capacity factor of 84.6% (using maximum dependable capacity) and a unit availability of 84.3%. The reactor was critical for a total of 7451.6 hours, the generator remained on line 7405.6 hours, and the total gross electrical energy generated for 2008 was 7,462,980 MWH.

3.0 OPERATING SUMMARY

The Virgil C. Summer Nuclear Station (VCSNS) Unit No.1 operated at 100% power from January 1st, through January 24th. On January 24th, the reactor was manually tripped due to a rapid decrease in level in the "C" steam generator. The decreasing steam generator level was caused by a failure of the "C" feedwater flow control valve. The "C" feedwater flow control valve failure was caused by brass particulate in the valve positioner. Several hours after the reactor trip, the upper motor bearing on the "B" circulating water pump failed. Repairs were completed on the "C" feedwater flow control valve and the "B" circulating water pump motor on February 1st. Reactor power was restored to 100% on February 2nd.

VCSNS operated at 100% power from February 2nd to April 23rd. On April 23rd, power was reduced to 85% for main steam safety valve testing and preparation for the unit shutdown for Refueling Outage Seventeen (17). The refueling outage began with the opening of the main generator breaker at 23:36 on April 25th. The plant remained shutdown for the refueling outage until June 14th when the main generator breaker was closed. The turbine was taken offline from June 14th at 08:44 to June 14th at 10:30 to perform turbine overspeed trip testing. Reactor power was restored to 100% at on June 17th.

VCSNS operated at 100% power from June 17th to October 4th. On October 4th, power was reduced to 90% for turbine valve testing. Reactor power was restored to 100% on October 4th. The plant operated at 100% power for the remainder of 2008.

Refueling Outage 17 Summary

The main generator breaker was opened at 23:36 on April 25th for Refueling Outage 17.

Major work included:

- Weld overlay of the nozzles of the reactor coolant system pressurizer
- Replacement of the main flange gasket and pump seals on "C" reactor coolant pump
- Inspection and testing of the main turbine high pressure rotor
- Regreasing of the reactor building tendons
- Visual and integrity testing of the main generator
- Inspection and repair of the "A" main steam isolation valve
- Overhaul and inspection of the "B" feedwater booster pump
- Addition of vacuum reliefs and valves changes on the service water lines to the reactor building cooling units
- Upgrades to the reactor building safety equipment

Refueling Outage 17 duration was 49.2 days. Outage planned duration was 38 days. Personnel exposure in 2008 due to the outage was approximately 56.8 Rem based on electronic dosimeters.

Forced Power Reduction >20% Exceeding 4 Hours

On January 24th, the reactor was manually tripped due to a rapid decrease in level in the "C" steam generator. The decreasing steam generator level was caused by a failure of the "C" feedwater flow control valve. The "C" feedwater flow control failure was caused by brass particulate in the valve positioner. Several hours after the reactor trip, the upper motor bearing on the "B" circulating water pump failed. Repairs were completed on the "C" feedwater flow control valve and the "B" circulating water pump motor on February 1st. Reactor power was restored to 100% on February 2nd. 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 195.5 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 not have any indications of failed fuel in 2008.

ATTACHMENT I

TO

2008 ANNUAL REPORT

South Carolina Electric & Gas Company V. C. Summer Nuclear Station
Computerized Exposure Nuclear Tracking System

Personnel and Man-Rem by Work and Duty Function
Final End of Year Report for 2008

Work and Job Function	Number of Personnel Over 100 mRem			Total Man-Rem		
	Station Workers	Utility Workers	Contract Workers	Station Workers	Utility Workers	Contract Workers
Routine Maintenance						
Maintenance Personnel	5	0	41	2.525	0.000	14.501
Operations Personnel	1	0	0	0.551	0.000	0.350
Health Physics Personnel	0	0	2	0.280	0.000	0.448
Supervisory Personnel	0	0	0	0.031	0.000	0.000
Engineering Personnel	0	0	1	0.120	0.000	0.184
Special Maintenance						
Maintenance Personnel	8	0	52	3.071	0.000	16.563
Operations Personnel	0	0	0	0.414	0.000	0.323
Health Physics Personnel	3	0	2	0.585	0.000	0.566
Supervisory Personnel	0	0	0	0.053	0.000	0.000
Engineering Personnel	0	0	1	0.154	0.000	0.257
Reactor Operations & Surveillance						
Maintenance Personnel	0	0	5	0.490	0.000	2.879
Operations Personnel	0	0	0	0.552	0.000	0.174
Health Physics Personnel	2	0	0	0.399	0.000	0.438
Supervisory Personnel	0	0	0	0.030	0.000	0.000
Engineering Personnel	0	0	0	0.034	0.000	0.003
Waste Processing						
Maintenance Personnel	0	0	1	0.014	0.000	0.146
Operations Personnel	0	0	0	0.000	0.000	0.001
Health Physics Personnel	2	0	0	0.464	0.000	0.030
Supervisory Personnel	0	0	0	0.055	0.000	0.000
Engineering Personnel	0	0	0	0.000	0.000	0.003
In-Service Inspection						
Maintenance Personnel	1	0	17	0.229	0.000	4.623
Operations Personnel	1	0	0	0.392	0.000	0.000
Health Physics Personnel	0	0	0	0.008	0.000	0.010
Supervisory Personnel	0	0	0	0.006	0.000	0.000
Engineering Personnel	0	0	0	0.008	0.000	0.022
Refueling						
Maintenance Personnel	1	0	26	0.506	0.000	7.771
Operations Personnel	0	0	0	0.132	0.000	0.013
Health Physics Personnel	0	0	0	0.100	0.000	0.144
Supervisory Personnel	0	0	0	0.000	0.000	0.000
Engineering Personnel	0	0	1	0.010	0.000	0.420
Totals						
Maintenance Personnel	15	0	142	6.835	0.000	46.483
Operations Personnel	2	0	0	2.041	0.000	0.861
Health Physics Personnel	7	0	4	1.836	0.000	1.636
Supervisory Personnel	0	0	0	0.175	0.000	0.000
Engineering Personnel	0	0	3	0.326	0.000	0.889
Grand Total	24	0	149	11.213	0.000	49.869