

South Carolina Electric & Gas Company Virgil C. Summer Nuclear Station P. O. Box 88 Jenkinsville, SC 29065 (803) 345-5209

> February 21, 1996 RC-96-0048

L¹. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

Dear Gentlemen:

Subject:

VIRGIL C. SUMMER NUCLEAR STATION

DOCKET NO. 50/395

OPERATING LICENSE NO. NPF-12 ANNUAL OPERATING REPORT

Enclosed is the 1995 Annual Operating Report for the South Carolina Electric & Geompany 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,

RAM/GJT/nkk Attachment

c: O. W. Dixon
J. L. Skolds
R. R. Mahan (w/o attachments)
R. J. White
S. D. Ebneter
J. I. Zimmerman
Charleen T. Raddatz
J. B. Knotts Jr.
NRC Resident Inspector
NSRC
RTS (ANN 2800)
File (818.02-10)
Central File System

9602270133 951231 PDR ADDCK 05000395 R PDR



JE47 !

1995 ANNUAL OPERATING REPORT

VIRGIL C. SUMMER NUCLEAR STATION

PREFACE

The 1995 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.

TABLE OF CONTENTS

SECTION	TITLE	PAGE
1.0	Introduction	1
2.0	Operational Data	1
3.0	Operating Summary	2
4.0	Exposurers	3
5.0	Failed Fuel	3

ATTACHMENTS

- I. Outages or Power Reductions Caused by Maintenance Activities
- II. 1995 Man-Rem Report

ANNUAL OPERATING REPORT

1.0 INTRODUCTION

The Virgil C. Summer Nuclear Station (VCSNS) utilizes a pressurized water reactor rated at 2775 MWT. The unit has produced a maximum dependable capacity (MWe-Net) of 885 MWE. The plant is located approximately 26 miles northwest of Columbia, South Carolina.

2.0 OPERATIONAL DATA

For the reporting period of January 1 through December 31, 1995, the plant operated at a capacity factor of 97.5 percent (using maximum dependable capacity) and a unit availability of 96.8 percent. The reactor was critical for a total of 8516.6 hours, the generator remained on line 8479.1 hours, and the total gross electrical energy generated for 1995 was 7,881,860 MWH.

3.0 OPERATING SUMMARY

The Virgil C.Summer Nuclear Station Unit No. 1 operated at 100% power for the first 26 days of January 1995.

On January 27, power was reduced and the generator breaker opened to allow full closure of an overheated OCB disconnect switch. The generator breaker was closed later on January 27 and power increased to 38 percent on January 28. Power was held at less than 50 percent to repair condenser tube leaks and recalibrate nuclear instrumentation. Power escalation began on January 31 and reached 100 percent on February 2nd.

VCSNS operated at 100 percent from February 2nd until March 12th. On March 12th power was reduced to 88 percent for repairs to a feedwater pump and to allow removal from service of a moisture separator reheater to repair a weld on a condenser drain line. Power was returned to 100 percent on March 15th.

VCSNS operated at 100 percent from March 15th until April 12th. On April 12th power was reduced to 94 percent to perform steam generator moisture carry over testing. Power was returned to 100 percent on April 13th.

VCSNS operated at 100 percent from April 13th until May 13th, when the plant was shutdown to replace a reactor coolant pump seal and perform other maintenance activities. The reactor was taken critical on May 23rd and the generator placed online on May 24th. 100 percent power was reached on May 26th.

VCSNS operated at full power for the entire months of June and July. On August 1st, power was reduced 10Mwt for approximately 20 hours as a precaution while a question about the accuracy of the calorimetric program was investigated.

 Annual Operating Report Page 2 of 2

VCSNS was returned to 100 percent on August 2nd and operated at full power for the remainder of 1995.

Attachment I, "Outage or Power Reductions Caused by Maintenance Activities," provides more detailed information on operating time lost as a result of maintenance activities.

4.0 EXPOSURES

Attachment II 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.

5.0 FAILED FUEL

VCSNS has not had indication of failed fuel in 1995.

The reactor coolant system specific activity did not exceed the 1.0 microcuries per gram dose equivalent idodine-131 specific activity or the 100/E microcuries per gram limits of Technical Specification 3.4.8, for this reporting period.

ATTACHMENTI

TO

1995 ANNUAL REPORT

Date/Tir	me Start	Cause of Event/NERCGADS* Code	Date/Time	Finish	Duration	Net Capacity MWe	Type
01/27/95	1248 Hrs	Switchyard Disconnect (8901 Overheat) / 3611	01/28/95	0610 Hrs	17.4 Hrs	108	Unplanned
01/28/95	0611 Hrs	Main Condenser Tube leaks / 3110	01/31/95	2400 Hrs	89.8 Hrs	352	Unplanned
02/01/95	0001 Hrs	Main Condenser Tube leaks / 3110	02/02/95	1350 Hrs	37.8 Hrs	763	Unplanned
03/12/95	1630 Hrs	C" Main Feedwater Pump Repair / 3410	03/16/95	0030 Hrs	80.0 Hrs	764	Planned
04/12/95	1922 Hrs	Moisture Carryover Testing / 2420	04/13/95	0519 Hrs	9.9 Hrs	934	Unplanned
04/17/95	2115 Hrs	Change Feedwater Pump "C" Dahl Controller / 3410	04/18/95	0006 Hrs	2.9 Hrs	937	Unplanned
05/12/95	2228 Hrs	A" Reactor Cooling Pump Seal Replacement / 2200	05/23/95	0517 Hrs	248.2 Hrs	0	Planned
08/01/95	1835 Hrs	Caloric Conservatism / 2060	08/02/95	1500 Hrs	20.4 Hrs	930	Unplanned

ATTACHMENT II

TO

1995 ANNUAL REPORT

PERSONNEL AND MAN-REM BY WORK AND DUTY FUNCTION FINAL END OF YEAR REPORT FOR 1995

NUME	NUMBER OF PERSONNEL OVE			TOTA	TAL MAN-REM	
WORK AND JOB FUNCTION	STATION WORKERS	UTILITY WORKERS	CONTRACT WORKERS	STATION WORKERS	UTILITY WORKERS	CONTRACT
ROUTINE MAINTENANCE Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	0 0 0 0	0 0 0 0	0 0 0 0	1.390 0.257 0.252 0.061 0.032	0.001 0.000 0.000 0.000 0.000	0.776 0.469 0.020 0.006 0.003
SPECIAL MAINTENANCE Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	3 0 0 0	0 0 0 0	2 0 0 0	1.480 0.342 0.341 0.060 0.083	0.000 0.000 0.000 0.000 0.000	1.032 0.295 0.017 0.000 0.151
REACTOR OPERATIONS & SURVEILLANCE Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	0 0 0 0	0 0 0 0	0 1 0 0	0.052 0.860 0.634 0.051 0.110	0.000 0.000 0.000 0.000 0.000	0.056 0.156 0.044 0.031 0.013
WASTE PROCESSING Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	0 0 1 0 0	0 0 0 0	0 0 0 0	0.035 0.010 0.573 0.001 0.000	0.000 0.000 0.000 0.000 0.000	0.033 0.071 0.069 0.000 0.000
IN-SERVICE INSPECTION Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	0 0 0 0	0 0 0 0	0 0 0 0	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000
REFUELING Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	0 0 0 0	0 0 0 0	0 0 0 0	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000
TOTALS Maintenance Personnel Operations Personnel Health Physics Personnel Supervisory Personnel Engineering Personnel	3 0 1 0	0 0 0 0 0	2 1 0 0	2.957 1.469 1.800 0.173 0.225	0.001 0.000 0.000 0.000 0.000	1.897 0.991 0.150 0.037 0.167
GRAND TOTAL	4	0	3	6.624	0.001	3.242