

George A. Lippard
Vice President, Nuclear Operations
803.345.4810



March 30, 2016

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

Dear Sir/Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION UNIT 1
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
ANNUAL OPERATING REPORT

Enclosed is the 2015 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 Specification 6.9.1.4.

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

Very truly yours,

George A. Lippard

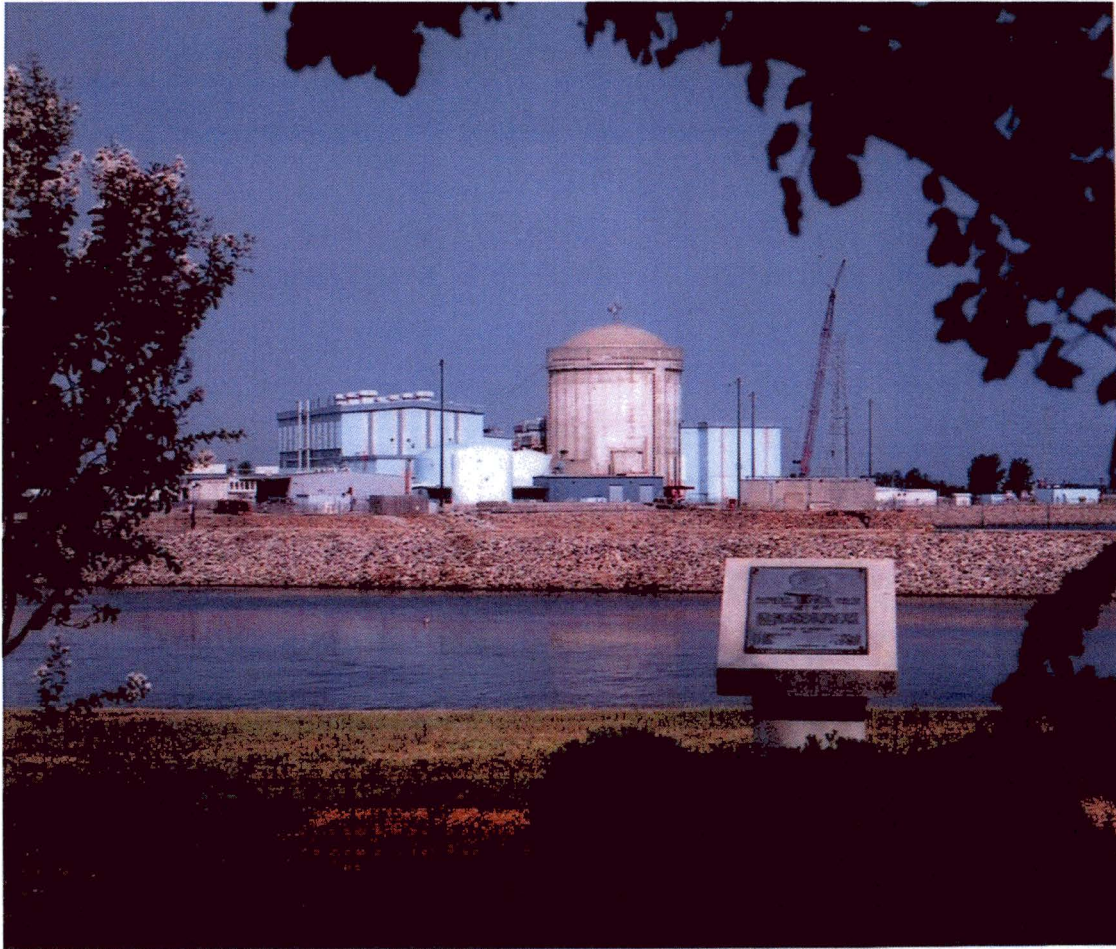
SBR/GAL/ts
Attachment

c: K. B. Marsh
S. A. Byrne
J. B. Archie
N. S. Carns
J. H. Hamilton
J. W. Williams
W. M. Cherry
C. Haney
S. A. Williams
M. L. Thomas

K. M. Sutton
J. C. Mellette
C. Logan (ANI)
Marsh USA, Inc.
NRC Resident Inspector
NSRC
RTS (LTD 292)
File (818.02-10, RR 8225)
PRSF (RC-16-0048)

IE 47
NRR

VIRGIL C. SUMMER NUCLEAR STATION UNIT 1



2015 ANNUAL OPERATING REPORT

PREFACE

The 2015 Annual Operating Report for the Virgil C. Summer Nuclear Station Unit 1 is hereby submitted in accordance with Technical Specification 6.9.1.4 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	Failed Fuel	5

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, 2015, the station operated at a capacity factor of 84.1% (using maximum dependable capacity) and a unit availability of 83.3%. The reactor was critical for a total of 7337.4 hours, the generator remained on line 7301.2 hours and the total gross electrical energy generated for 2015 was 7,397,220 MWH.

3.0 OPERATING SUMMARY

The Virgil C. Summer Nuclear Station (VCSNS) Unit No.1 operated at 100% power from January 1st through January 3rd. On January 3rd power was reduced to 86.7% in order to isolate one set of high pressure feedwater heaters to repair a steam leak. The repair was completed on January 8th and the feedwater heaters were restored to service. Power was restored to 100% on January 8th.

VCSNS operated at 100% power from January 8th to January 16th. On January 16th power was reduced to approximately 93% to support planned main turbine valve testing. Reactor power was restored to 100% on January 17th.

VCSNS operated at 100% power from January 17th to April 24th. On April 24th power was reduced to approximately 91% to support planned main turbine valve testing. Reactor power was restored to 100% on April 25th.

VCSNS operated at 100% power from April 25th to June 26th. On June 26th power was reduced to approximately 90% to support planned main turbine valve testing. Power was restored to 100% on June 27th.

VCSNS operated at 100% power from June 27th to September 30th. On September 30th power was reduced to approximately 91% to allow planned testing of the reheat steam safety valves. On October 1st power was reduced to 85% to support planned testing of the main steam safety valves.

Power reduction for VCSNS Unit 1 Refueling Outage Twenty-Two (RF-22) started on October 2nd at 2135 hours and concluded on October 3rd at 0021 hours when the Main Generator Breaker was opened. The reactor was manually tripped October 3rd at 0231 hours to begin the scheduled refueling outage.

The outage was originally planned through November 27th, however fuel transfer equipment problems, reactor coolant pump seal modification delays and weather related delays (e.g. Hurricane Joaquin) resulted in an unplanned extension of five and one-half days. The unit remained shutdown for the refueling outage until December 1st when the reactor was returned to criticality and synchronized to the grid on December 2nd. Reactor power was restored to 100% on December 5th. The plant operated at 100% power for the remainder of 2015.

Refueling Outage 22 Summary

The main generator breaker was opened at 0021 hours on October 3rd for Refueling Outage 22. The outage duration was originally planned through November 27th, however several plant issues resulted in an unplanned extension of five days and one half days.

Major work included:

- Fukushima FLEX modifications
- NFPA 805 modifications
- Reactor Water Storage Tank piping changes
- Switchyard upgrades
- Main Generator Field replacement
- Reactor Incore Thimble replacement
- Feedwater Piping replacement
- Reactor Building Cooling Unit piping changes

Refueling Outage 22 duration was 60.7 days. Outage business plan duration was 55 days. Personnel exposure in 2015 due to the outage was approximately 77.1 Rem, based on electronic dosimeters.

Forced Power Reduction >20% Exceeding 4 Hours

None

4.0 FAILED FUEL

VCSNS did not have any indications of failed fuel in 2015.