

Dominion Energy South Carolina
V. C. Summer Nuclear Station
Bradham Boulevard & Highway 215, Jenkinsville, SC 29065
Mailing Address:
P.O. Box 88, Jenkinsville, SC 29065
DominionEnergy.com



February 7, 2024

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


Serial No. 24-050
VCS-LIC/JB R0
Docket No. 50-395
License No. NPF-12

DOMINION ENERGY SOUTH CAROLINA (DESC)
VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1
10 CFR 21 REPORT
EMERGENCY DIESEL GENERATOR FIELD FLASH CONTACTOR RELAY

Dominion Energy South Carolina hereby submits the enclosed updated written notification of the identification of a defect, in accordance with the requirements of 10 CFR 21.21(d)(3)(ii). This notification pertains to the Emergency Diesel Generator Field Flash Contactor Relay at VCSNS.

Should you have any questions, please call Mr. Justin Bouknight at (803) 941-9828.

Sincerely,


Robert L. Justice
Site Vice President
V.C. Summer Nuclear Station

Enclosure

Commitments contained in this letter: None

cc:

G. J. Lindamood – Santee Cooper
L. Dudes – NRC Region II
G. Miller – NRC Project Mgr.
NRC Resident Inspector
J. N. Bassett – INPO
Marsh USA, Inc.

10 CFR 21 Report

Emergency Diesel Generator Field Flash Contactor Relay

**Dominion Energy South Carolina
Virgil C. Summer Nuclear Station Unit 1**

10 CFR 21 REPORT

Emergency Diesel Generator Field Flash Contactor Relay

1. Name and address of the individual or individuals informing the Commission.

James Holloway
Vice President, Nuclear Engineering & Fleet Support
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

2. Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which contains a defect or noncompliance.

V.C. Summer Nuclear Station (VCSNS)
Docket No. 50-395
License No. NPF-12
Basic Component: Emergency Diesel Generator Field Flash Contactor Relay
Basler Part Number 10309, ITE part Number P102D12
(Note relay with ITE part Number P102D12 contains the
Gould F10NOCLD1 DC Coil Switch)

3. Identification of the firm constructing the facility or supplying the basic component which contains a defect or noncompliance.

Basler Electric Company
12570 St. Rt. 143
Highland, IL, USA, 62249

4. Nature of the defect or noncompliance and the safety hazard which is created or could be created by such defect or noncompliance.

During testing on May 5, 2021, the 'B' emergency diesel generator was rendered inoperable when its Field Flash Contactor relay coil switch exhibited intermittent binding due to insufficient clearances of the switch actuator from the protective case and plastic switch molding. The inadequate clearances resulted in accelerated loss of graphite lubrication at these locations, which led to mechanical binding. This mechanical binding prevented the DC switch contacts from returning fully to the closed position, thus only the relay's high impedance coil was able to be energized. In this state, the relay coil would not receive sufficient current to pull in the relay and close all four normally open contacts required to supply excitation current to the generator field windings. VCSNS replaced the affected relay and restored operability of its 'B' EDG.

5. The date on which the information of such defect or noncompliance was obtained.

June 16, 2021

6. In the case of a basic component which contains a defect or noncompliance, the number and location of all such components in use at, supplied for, or being supplied for or may be supplied for one or more facilities or activities subject to the regulations in this part.

VCSNS identified one (1) relay effected by this condition. Affected components supplied to other licensees is not known to VCSNS.

7. The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

The affected relay was replaced with a spare Basler Part Number 10309 (ITE part Number P102D12) obtained from onsite stock. A visual inspection and contact resistance readings were performed on the installed relays to verify mechanical binding was not present in the replacement coil switch that could prevent the relay from actuating.

8. Any advice related to the defect or noncompliance about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

None.

9. In the case of an early site permit, the entities to whom the early site permit was transferred.

Not applicable, does not involve an early site permit.