VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

September 29, 1989

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

Serial No.: 88-788E
SPS/GDM:pmk
Docket Nos.: 80-280
80-281
License Nos: DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NRC BULLETIN 88-10 AND SUPPLEMENT 1
NONCONFORMING MOLDED CASE CIRCUIT BREAKERS

Nontraceable molded case circuit breakers (MCCBs) installed in safety related systems have been tested in accordance with the subject bulletin criteria. The test results are provided in Attachment 1. In addition, the NRC positions provided in Supplement 1 to the bulletin have been considered and addressed in this and earlier correspondence.

Prior to the issue of Supplement 1 to the bulletin, seven nontraceable MCCBs were obtained from stock, satisfactorily tested, and issued for installation in the station. A list of these MCCBs and their installed locations is provided in Attachment 2. Since these breakers passed the bulletin testing criteria prior to installation, we considered them acceptable for use. However, the bulletin supplement considers nontraceable stock circuit breakers to be acceptable for use only as replacements for installed nontraceable MCCBs. Based on this position, we will replace these breakers with traceable MCCBs during each unit's next refueling outage.

Attachment 3 provides a revised listing of the nontraceable MCCBs installed in safety related systems that was previously provided in Table 2 of our letter dated June 22, 1989 (Serial No. 88-788D). No additional MCCBs were identified; however, certain minor corrections to the table were incorporated. A revised Table 2 is provided in its entirety with the corrections noted by revision bars in the margin.

The information contained herein is true and accurate to the best of my knowledge. If you require additional information, please contact us.

Very truly yours,

W. L. Stewart
Senior Vice President - Power

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1/1

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
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Mr. W. E. Holland
NRC Senior Resident Inspector
Surry Power Station

Mr. J. L. Caldwell
NRC Senior Resident Inspector
North Anna Power Station

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by W. L. Stewart who is Senior Vice President - Power, of Virginia Electric and Power Company. He is duly authorized to execute and file the foregoing document in behalf of that Company, and the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 29 day of September, 1989.

My Commission Expires: February 25, 1990.

Vicki L. Hull
Notary Public

(SEAL)

ATTACHMENT 1

Nontraceable MCCB Testing Results

As noted in our previous response dated June 22, 1989 (Serial No. 88-788D), we considered every safety related MCCB in stock to be nontraceable; consequently, we did not test these breakers. However, the installed safety related MCCBs were reviewed for traceability and tested as appropriate. The installed MCCBs identified as nontraceable were removed from their respective systems, tested for acceptability, and reinstalled. A list of the tested breakers is provided in the attached table. Every MCCB tested met the bulletin acceptance criteria with the exception of one breaker installed in a control rod drive mechanism shroud cooling fan circuit. This breaker tripped six minutes short of the two hour 100% hold-in test. However, an engineering evaluation of the test results plotted the test points obtained against the manufacturer's circuit breaker trip characteristic curve. This plot indicated the breaker test points were in agreement with the manufacturer's curve, and the breaker is operating within the proper design specifications. Therefore, the breaker was considered acceptable for use and reinstalled. One nontraceable MCCB installed in the reactor containment upender control cabinet could not be tested due to contamination. Consequently, a nontraceable replacement MCCB was obtained from stock, tested satisfactorily to the bulletin test requirements, and installed in the cabinet.

We had previously proposed testing the nontraceable in-stock MCCBs and considering them acceptable for use in the station, provided they satisfactorily passed the bulletin testing requirements. However, NRC Position #5 in Supplement 1 to the bulletin restricts the use of the tested nontraceable MCCBs in stock. These MCCBs are limited to replacing only nontraceable installed breakers. To ensure the nontraceable MCCBs in our warehouse are not used to replace installed traceable MCCBs, we are obsoleting and removing the MCCBs from station stock. They will be replaced with MCCBs procured from or directly traceable to a MCCB manufacturer with a 10CFR50 Appendix B program. If any in-stock breakers must be retained due to the unavailability of replacements due to redesign, etc., they will only be used as replacements for installed nontraceable MCCBs.

INSTALLED NONTRACEABLE MCCBs SATISFACTORILY TESTED TO NRCB 88-10 TESTING REQUIREMENTS

Item	No.	Manufacturer	Model No.	Installed Location	Probable Procurement Chain
1.	2	Westinghouse	EHB2020	EDG Control Panel (DC 1A CKT11) (DC 2A CKT6)	Electrical Suppliers, Inc.
2.	2	Westinghouse	HFC3070	Alternate Power Supply for Semi-Vital Bus (1H1-1211; 2H1-1211)	Electrical Suppliers, Inc. from Cutler-Hammer from Westinghouse
3.	1	Westinghouse	FB3015	Charging Pump Suction Line MOV (01-CH-MOV-1286A)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
4.	2	Square D	AIB120	Semi-Vital Bus Panel (2SVB1-CKT-16, 26)	(16)-ECK Supply Co. from Square D (26)-Electrical Suppliers, Inc. from Stock/Square D
5.*	1	Westinghouse	FB3015	RX Side Fuel Assembly Upender Cabinet (02-FH-BKR-NA)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
6.	1	Westinghouse	FB3015	Heat Trace Panel #5 (01-CH-HTT-CKT-2)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
7.	1	Square D	QOB120	Heat Trace Panel 2A2 (01-CH-HTT-CKT-36)	Electrical Suppliers, Inc. from Stock/Square D

* The replacement MCCB was tested due to contamination of the installed breaker.

Item	No.	Manufacturer	Model No.	Installed Location	Probable Procurement Chain
8.	1	Westinghouse	JA3225W	Emergency Switchgear Room Ventilation Equip. (02-EP-BKR-143)	WESCO from Westinghouse
9.	2	Westinghouse	KA3225	Control Room Ventilation Chillers (01-VS-E-4B,C)	Electrical Equipment Co. from Westinghouse
10.	1	Westinghouse	EHB3070A	Pressurizer Heater (02-RC-BKR-44)	WESCO from Westinghouse
11.	1	Square D	AIB215	Main Steam Trip Valve (DC Panel 2-1-CKT-8) (02-EPD-PNL-2-1-8)	Electrical Suppliers, Inc. from Stock/Square D
12.	1	Square D	AIB220	(DC Panel 1-2-CKT-13) (01-EPD-BKR-PN-1-2)	ECK Supply, Co. from Square D
13.**	1	Westinghouse	JA3150W	Control Rod Drive Mechanism Shroud Cooling Fan (1-VS-F-60C)	WESCO from Westinghouse
14.	1	Square D	QOB120	Heat Trace Panel 2A1 (01-CH-HTT-2A154)	Electrical Suppliers, Inc. from Stock/Square D
15.	1	Square D	QOB120	Heat Trace Panel 2B3 (02-CH-HTT-2B3-03)	Electrical Suppliers, Inc. from Stock/Square D
16.	1	Square D	QOB120	Heat Trace Panel 2B1 (01-CH-HTT-2B1-16)	Unknown

TOTAL MCCBs Tested - 20

** Test results were determined to be satisfactory based on comparison with the manufacturer's breaker test curve.

ATTACHMENT 2

In-stock Nontraceable MCCBs That Have Been Tested and Installed in Safety Related Systems Prior to Issue of Supplement I to NRCB 88-10

Item	Manufacturer	Model No.	Installed Location
1	Westinghouse	FB 3030	Annunciator Circuit in the #2 Emergency Diesel Generator Excitation Cabinet
2	Westinghouse	FB 3015	1-PG-MOV-107A
3	Westinghouse	FB 3050	1-SI-MOV-1865B
4	Westinghouse	FB 3050	1-SI-MOV-1865C
5	Westinghouse	FB 3030	1-SI-MOV-1869A
6	Westinghouse	FB 3030	1-CH-MOV-1275B
7	Square D	A1B20AMP	02-EPL-LF-CONT (Light Fixture)

ATTACHMENT 3

Table 2

(Ref. Letter dated June 22, 1989: Serial No. 88-788D)

INSTALLED NONTRACEABLE MCCBs

Item	No.	Manufacturer	Model No.	Installed Location	Probable Procurement Chain
1.*	16	Square D	Q1B2100VH	Vital Bus Panels' Feeder Breakers (VBI-1,1A;1-4) (VBII-1,1A;1-4)	Electrical Suppliers, Inc. from Square D
2.	2	Westinghouse	EHB2020	EDG Control Panel (DC 1A CKT11) (DC 2A CKT6)	Electrical Suppliers, Inc.
3.	2	Westinghouse	HFC3070	Alternate Power Supply for Semi-Vital Bus (1H1-1211; 2H1-1211)	Electrical Suppliers, Inc. from Cutler Hammer from Westinghouse
4.	1	Westinghouse	FB3015	Charging Pump Suction Line MOV (01-CH-MOV-1286A)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
5.	2	Square D	AIB120	Semi-Vital Bus Panel (2SVB1-CKT-16,26)	(16)-ECK Supply Co. from Square D (26)-Electrical Suppliers, Inc from Stock/Square D
6.	1	Westinghouse	FB3015	RX Side Fuel Assembly Upender Cabinet (02-FH-BKR-NA)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
7.	1	Westinghouse	FB3015	Heat Trace Panel #5 (01-CH-HTT-CKT-2)	Electrical Suppliers, Inc. from Electrical Panelboard or Westinghouse
8.	1	Square D	QOB120	Heat Trace Panel 2A2 (01-CH-HTT-CKT-36)	Electrical Suppliers, Inc. from Stock/Square D

* Traceable

Item	No.	Manufacturer	Model No.	Installed Location	Probable Procurement Chain
9.	1	Westinghouse	JA3225W	Emergency Switchgear Room Ventilation Equip. (02-EP-BKR-143)	WESCO from Westinghouse
10.	2	Westinghouse	KA3225	Control Room Ventilation Chillers (01-VS-E-4B,C)	Electrical Equipment Co. from Westinghouse
11.	1	Westinghouse	EHB3070A	Pressurizer Heater (02-RC-BKR-44)	WESCO from Westinghouse
12.	1	Square D	AIB215	Main Steam Trip Valve (DC Panel 2-1-CKT-8) (02-EPD-PNL-2-1-8)	Electrical Suppliers, Inc. from Stock/Square D
13.	1	Square D	AIB220	(DC Panel 1-2-CKT-13) (01-EPD-BKR-PN-1-2)	ECK Supply Co. from Square D
14.	1	Westinghouse	JA3150W	Control Rod Drive Mechanism Shroud Cooling Fan (1-VS-F-60C)	WESCO from Westinghouse
15.	1	Square D	QOB120	Heat Trace Panel 2A1 (01-CH-HTT-2A154)	Electrical Suppliers, Inc. from Stock/Square D
16.**	1	Square D	QOB120	Heat Trace Panel 2B3 (02-CH-HTT-2B3-03)	Electrical Suppliers, Inc. from Stock/Square D
17.**	1	Square D	QOB120	Heat Trace Panel 2B1 (01-CH-HTT-2B1-16)	Unknown
18.*	6	Westinghouse	(1) Five Star 480V MCC (6) HFB 20A	Motor Control Center w/ (6) 20 AMP Breakers (DCP 88-33)	Public Service of Indiana from Westinghouse

Notes:

* Traceable
** Installed after 8/88

Item	No.	Manufacturer	Model No.	Installed Location	Probable Procurement Chain
19.*	4	Westinghouse	FD3150L	EDG Excitation Bkr (EWR 88-578)	Spectrum Technologies from Westinghouse
20.*	3	Westinghouse	HFB2100	DC Panels 1A/2A	Systems Control from Westinghouse
	9	Westinghouse	HFB2050		
	15	Westinghouse	HFB2030		
	6	Westinghouse	HFB2020		
21.*	1	Westinghouse	JD3200	Alternate Power Supply to 1-VS-E-4B	Spectrum Technologies from Westinghouse

Total: Nontraceable - 20
Traceable - 60

TOTAL NUMBER: 80

Note:

* Traceable