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ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

LEON D, WHITE, JR. VICE PRESIDENT

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8001300 63

December 21, 1979

Mr. Boyce H. Grier, Director U. S. Nuclear Regulatory Commission Office of Inspection and Enforcement Region I 631 Park Avenue King of Prussia, Pennsylvania 19406

Subject: IE Bulletin No. 79-25, Failures of Westinghouse BFD Relays in Safety-related Systems R. E. Ginna Nuclear Power Plant, Unit #1 Docket No. 50-244

Dear Mr. Grier:

In response to NRC IE Bulletin No. 79-25 an inspection has been completed at Ginna Station to determine if the following Westinghouse BFD/NBFD relays are used in safety-related systems.

a. Type BFD, Style 46E7352 or 766A235, Coil Style 503C428G21.

b. Type BFD, Style 5069A95, Coil Style 1259C71G19.

c. Type BFD, Style 5072A49, Coil Style 1271C50G01.

The results of this inspection have found the above mentioned relay styles and/or coil styles in use in the Reactor Protection System and in the Circulating Water Pump Trip Logic Circuitry. These relays are tested by qualified personnel using approved procedures during each refueling outage. These procedures have existed for six (6) years for the reactor protection system, and five (5) years for circulating water pump logic system, and have encountered none of the problems outlined in the NRC IE Bulletin 79-25 and the Westinghouse Technical Bulletins on BFD Relays.

Regarding the relay style for which the possibility for an overtravel deficiency was identified (Westinghouse type BFD style 5072A49 relay with coil style 1271C50G01), in May 1977 the 28 reactor trip logic relays were replaced with this type, per Westinghouse recommendation. All of these new 28 relays, plus one other relay of this style utilized in the Reactor Protection System, and the 8 spare relays in QA stock were tested on December 9, 1979, for sufficient overtravel by qualified personnel using an approved procedure as recommended in the Westinghouse Technical Bulletin on this relay style. The results of this test found 5 installed and 1 spare relay not

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ROCHESTER GAS AND ELECTRIC CORP. DATE December 21, 1979 TO Mr. Boyce H. Grier, Director

having the Westinghouse established 0.020 inch as the minimum acceptable overtravel. These installed relays were replaced with qualified spares even though they would have performed their intended function.

Based on previous test results the existing test frequency is considered adequate for the above mentioned relays, and there is no need for a replacement schedule at this time.

Attached is a table which identifies the applicable relays to its tag number, safety-related system involved, specific function, relay style, coil style, test procedure and date last tested.

Very truly yours,

L. D. White, Jr.

Att.

xc: U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement Division of Reactor Operations Inspection Washington, D.C. 20555

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| RELAY | SYSTEM | FUNCTION | RELAY | COIL | TESTING | DATE LAST |
|---------|---------------|--------------------|-------------|----------------|-----------------|-------------------|
| TAG NO. | 1 | i | STYLE NO. | STYLE NO. | PROCEDURE | TESTED |
| RT-1 | RPS-TRAIN "A" | REACTOR TRIP RELAY | 5072A49 | 1271C50G01 | M-51.5 i | 12/09/79 |
| RT-2 | 11 . | | | 11 | 11 | 11 |
| RT-3 | £1 | 11 | 11 , | 11 | 11 | 11 . |
| RT-4 | 11 | 11 | 88 k | 11 | 11 · · · · | 11 |
| RT-5 | 11 | 11 | ** | 11 | ** | 11 |
| RT-6 | , II | 11 . | 11 | 11 | 11 | 11 |
| RT-7 | 11 | 11 | 11 1 | 11 | 11 | 11 |
| RT-8 | 11 | . 11 | 11 | •• | 11 | 11 |
| RT-9 | . 11 | 11 | 11 1 | 11 . | 11 | 11 |
| RT-10 | 11 | ¥11 1 | • | . I I : | •• | 11 ⁻ . |
| RT-11 | 11 | | 11 | . 11 , | 11 | 11 |
| RT-12 | 11 | 11 | . 11 . | 11 | 11 | - 11 |
| RT-13 | 1 11 | 11 | 11 . | •• | · • • • • • • • | . 11 |
| RT-14 | 11 | 11 | 11 | 11 | 11 | 11 |
| RT-1 | RPS-TRAIN "B" | 11 | . 11 . | | tt . | 11 |
| RT-2 | 11 | 11 | | - 11 | 11 | 11 |
| RT-3 | | 11 i | | . 11 | 11 | II . |

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| RELAY | SYSTEM | FUNCTION | RELAY | COIL | TESTING | DATE LAST |
|--------------------------------------|----------------|--------------------|----------------------|---|--------------|--------------|
| $\frac{\text{TAG NO.}}{\text{RT}-4}$ | RPS_TRATN URIT | REACTOR TRIP RELAY | 51YLE NO. 5072A49 | 1271C50G01 | M-51-5 | 12/09/79 |
| RT-5 | | | 11 | 1271030001 | , 11 , 11 | |
| RT-6 | 11 | n ^r | 88 | 11 | 11 | 11 |
| RT-7 | 11 . | 11 | - 11 | - 11 | 11 . | ¥ 8 8 |
| RT-8 | 11 | 11 | 11 | 11 | 11 | 11 . |
| RT-9 | 11 | 11 . | 11 | 88 , | . 11 | 11 |
| RT-10 | . " | 11 | 11 | 11 | 11 . | |
| RT-11 | | 11 | 11 . | 11 , | п . | U _ |
| RT-12 | 11 | . 11 | 11 | 11 | | 17 |
| RT-13 | 11 | × 11 - | | 11 | 11 | 11 |
| RT-14 | 11 | 11 | 11 , | . 11 | 11 - | 11 |
| P7-1 | RPS TRAIN "A" | P-7 PERMISSIVE | 44E3742 | 503C428G21 | PT-32 | 03/06/79 |
| P7-2 | 11 | 11 | ** | 11 - | 11 | 11 |
| P7-3 | 11 , | 11 | 18 4 | • | 11 . | 11 |
| P7-4 | 11 . | . 11 . | 11 | | 11 | 11 _ |
| P7-1 | RPS TRAIN "B" | | ti - | 11 | 11 | 11 |
| P7-2 | •• | 11 . | 11 | •• | 11 | 11 |

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| RELAY | SYSTEM | FUNCTION | RELAY | COIL ³ | TESTING | DATE LAST |
|---------|---------------|--------------------|---------------|---------------------------------------|-----------|--------------|
| TAG NO. | · | | STYLE NO. | STYLE NO. | PROCEDURE | TESTED |
| P7-3 | RPS-TRAIN "B" | P-7 PERMISSIVE | 44E3742 | 503C428G21 | PT-32 | 03/06/79 |
| P7-4 | 11 | . 11 , | . 11 . | · · · · · · · · · · · · · · · · · · · | 11 | 11 |
| P8-1 | RPS-TRAIN "A" | P-8 PERMISSIVE | IT - | 21 : | | ù , |
| P8-2 | 11 | . " | 11 | it . | - n | 11 |
| P8-1 | RPS-TRAIN "B" | 11 | 11 | ч н , | н | 11 |
| P8-2 | 11 | | 38 | ** | . 11 | . 11 |
| P9-1 | RPS-TRAIN "A" | P-9 PERMISSIVE | 11 | | 11 | 81 |
| P9-2 | 11 | 11 | 11 : | 11 | H | н. |
| P9-1 | RPS-TRAIN "B" | п . | H , | . 11 . | 11 | |
| P9-2 | -, 11 | . If . | . 11 | | | - 11 - |
| P10-1 | RPS-TRAIN "A" | P-10 PERMISSIVE | • | . 11 1 | п | |
| P10-2 | 11 | 11 | . 11 | u . | п | |
| P10-1 | RPS-TRAIN "B" | 11 | 11 | . 11 . | 11 | . 11 |
| P10-2 | · · · · | 11 | 11 | 11 | 11 | 11 |
| 17 . | RPS-TRAIN "A" | INTERMEDIATE RANGE | - | . 11 | IT , | n . |
| 18 | 11 | | • • • • • • | 81 | 11 | |
| 17 | RPS-TRAIN "B" | 11 | . 11 | £1 | 11 | |

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| RELAY | SYSTEM | FUNCTION | | COIL | TESTING | DATE LAST |
|--------------|----------------|--------------------|-------------|-------------|---|---|
| TAG NO. | | I | STYLE NO. | STYLE NO. | PROCEDURE | TESTED |
| 18 | RPS-TRAIN "B" | INTERMEDIATE RANGE | 44E3742 · | 503C428 | PT-32 | 03/06/79 |
| | l l | BLOCK | • • | 1 | 1 · · · · · · · · · · · · · · · · · · · | f i i i i i i i i i i i i i i i i i i i |
| 15 | RPS-TRAIN "A" | POWER RANGE BLOCK | 11 1 | 17) | | |
| | • ; | | | i i | | |
| 16 | 11 | | 11 | | •• | 11 |
| | | | | , | ۱ | |
| 15 | DDG_TRATH "B" | 11 | 11 | н (| | |
| 1.5 | | | | | | - |
| 10 | 11 | 1 | . 11 | | 11 . | 11 |
| 10 | | | | | | · · |
| | | | 40 | | · · · · | |
| 21 | RPS-TRAIN "A" | SOURCE RANGE BLOCK | •• | | i '' ' | · · · · · · · · · · · · · · · · · · · |
| | | | | · · · | | · · · · · · · · · · · · · · · · · · · |
| 22 : | 11 | | . 11 | | · · · · | |
| | 1 | | ; | | 1 | |
| 21 | RPS-TRAIN "B" | 11 ; | 11 , | 11 1 | 11 1 | , II , |
| 1 | 4 | | | · · · · | } . | 1 |
| 22 | 11 i | | 11 1 | , u | 11 | |
| | | | | | ļ | |
| 520 /DCD1 AV | DDC_TTDATN UAU | UAU DOD BREAKER | 11 , | - 11 . | 11 | |
| JZJ/RUE IAA | NIO-INAIN A | A NOL DIVERIVER | | | | |
| | | UDU DOD DDEAKED | 11 | l | | |
| 52S/RCPIBX | | "B" RCP BREAKER | | | Ŧ | , |
| | · | | | • | | i |
| 52S/RCP1AX | RPS-TRAIN "B" | "A" RCP BREAKER | 1 •• | | | |
| | · · · | t. | • | י ן | | |
| 52S/RCP1BX | i i i | "B" RCP BREAKER | 5072A49 | 1271C50G01 | M-51.5 | 12/09/79 |
| | _ 1 | · · · | • | | - | |
| STAM1X ' | RPS-TRATN "A" | SAFETY INJECTION | 44E3742 | 503C428G21 | PT-32 | 03/06/79 |
| | | TRATN "A" | , | | | |
| OTAMOV | 11 , | CAFETY TALECTION | | | 11 | |
| OTHICY | | TOATN HOL | | | | |
| 0 - 0 | | IKAIN "B" | | · · · | | j ' |
| SLAMIX | RPS-TRAIN "B" | SAFETY INJECTION | | | | · · · |
| | | TRAIN "A" | | | | · · · |
| SIAM2X | 11 1 | SAFETY INJECTION | | l " | . IT | |

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| RELAY | SYSTEM | FUNCTION | RELAY | COIL | TESTING | DATE LAST |
|----------|---|-----------------|-------------|-----------------|-----------|---|
| TAG NO. | | | STYLE NO. | STYLE NO. | PROCEDURE | TESTED |
| MT-1-1X | RPS-TRAIN "A" | MANUAL TRIP | 44E3742 · | 503C428G21 | PT-32 | 03/06/79 |
| MT-1-2X | RPS-TRAIN "A" | 11 | , 11 | . | - , II | i i i i i i i i i i i i i i i i i i i |
| MT-2-1X | 11 | | 11 | . 11 | . 11 . | , 11 |
| MT-2-2X | | | - 11 | , II | | II |
| MT-1-1X | RPS-TRAIN "B" | | •• | . | | 11 |
| MT-1-2X | <u> </u> | 11 | . 11 | . 11 . | t1 | 11 |
| MT-2-1X | | . 11 | 11 | . 11 . | 11 | * 11 |
| MT-2-2X | 21 | 18 | - 11 | 11 | 11 | · • • • • • • • • • • • • • • • • • • • |
| PC-484AX | RPS-TRAIN "A" | HIGH CONDENSER | , ti | - 11 | 11 | 11 |
| PC-484BX | RPS-TRAIN "B" | · II | 11 | • • • | ** | - |
| SHE1A | CIRC PUMP | CIRC WATER PUMP | 766A235 | 1259C71G19 | PT-14 | ·03/26/79 |
| SHE2A | | | 11 , | t1 [*] | 11 | ч. |
| SHE3A | ₿. I | 11 | | - 11 1 | 11 | |
| SHEA | 11 . | - | | . 11 | 11 | . 11 |
| SHEB | 11 | 11 | E E E | . 11 | | 11 |
| SHW1A | CIRC PUMP | £1 . | . 11 | | 11 | 11 |
| SHW2A | i ii i | | | | 11 | |

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| RELAY | SYSTEM | FUNCTION | RELAY | COIL | TESTING | DATE LAST |
|-------------------|-----------|-----------------|---------------|---------------|--------------|---|
| TAG NO. | 1 | 1 | STYLE NO. | STYLE NO. | PROCEDURE | TESTED |
| SHW3A | CIRC PUMP | CIRC WATER PUMP | 766A235 | 1259C71G19 | PT-14 | 03/26/79 |
| , | LOGIC | TRIP CIRCUIT | | i . | | |
| SHWA | 11 | | , , | . 11 . | | · · · · |
| | •• | | • | •• | | |
| SHWB | | | | | | |
| A 1517 1 | · · · · · | • • • • | . 11 . | 11 | 11 | 11 |
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| THEB | | | | ¥¥ g | 11 | и . |
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| THW3A ; | н. | 11 | | ** | ** | tt I |
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| THWA | 11 , ; | . 11 , | 11 | . 11 . | 11 h | . 11 |
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| THWB | | | . " | t ∎€ , | , II , | · • • • • • • • • • • • • • • • • • • • |
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