

RESPONSE TO
OIE BULLETIN 79-09
CONCERNING GE
TYPE AK-2 BREAKERS
FOR BROWNS FERRY NUCLEAR PLANT

The listed items correspond to the action requirements of IE Bulletin 79-09.

1. It has been determined that GE type AK-2 breakers are used in safety-related systems at Browns Ferry.

2. All boards which supply safety-related systems at Browns Ferry Nuclear Plant have been checked for AK-2 type breakers. Attachment A lists the boards which have this type of breakers. However, none of the breakers found in safety-related systems were equipped with an undervoltage trip device.

- 3.a. Electrical Maintenance Instruction 7 (EMI 7) describes the procedure to be followed for the periodic inspection and maintenance of all 4160V, 480V, 240V AC, and 250V DC boards and motor control centers.

Maintenance is scheduled on the critical boards during the refueling outage for each respective unit. Preventative maintenance has been performed on all boards in accordance with EMI 7 beginning with the initial outage of unit 1 in the fall of 1977. Preventative maintenance on critical boards in accordance with EMI 7 and GE Service Alert Letter No. 175 will be completed by the end of the next refueling outage for the associated units. The tentative schedule for completion of the outages is as follows:

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3.a. (Continued)

Unit 3 11-24-79

Unit 1 1-6-80

Unit 2 12-1-80

Because no operational problem has been encountered with AK-2 breakers during the performance of EMI 7 and during normal operation of the plant, there is no plan to increase the frequency of performing this instruction.

3.b. All personnel performing EMI 7 are journeyman electricians. The applicable GE breaker instruction bulletins are referenced in the instruction.

3.c. The applicable recommendations in the GE Service Alert Letter No. 175 (CPDD) 9-3 will be incorporated into existing instructions. At present, all accessible mechanical bearing points and mechanical sliding surfaces are lubricated and the breaker and operating mechanism checked for problems such as loose nuts and retaining rings. In addition, the breaker is slow closed and opened and electrically test closed and opened to verify proper operation.

ATTACHMENT A

The following CSSC boards have AK-2 type breakers:

250V DC battery boards 1, 2, and 3

480V AC shutdown boards 1A, 1B, 2A, 2B, 3A, and 3B

In addition, the following CSSC boards have normal and emergency feeder breakers on the boards which are AK-2 type breakers:

250V DC reactor MOV boards 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, and 3C

480V diesel auxiliary boards A, B, 3A, and 3B

The 250V DC battery boards 1, 2, and 3 have AK-2 breakers which supply the following boards and equipment:

Normal and alternate supply breakers for 250V DC reactor MOV

boards 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, and 3C

250V DC supply circuit breaker for panel 9-9 for units 1, 2, and 3

Unit preferred main generator, main transformer and backup circuit breakers for unit 1, 2, and 3 unit preferred MG sets.

The 480V AC shutdown boards 1A, 1B, 2A, 2B, 3A, and 3B have AK-2 type breakers which supply the following boards and equipment:

Normal and emergency feeder breakers for the 480V shutdown

boards 1A, 1B, 2A, 2B, 3A, and 3B

Normal and emergency feeder breakers for the 480V diesel auxiliary

boards 3A and 3B

Normal and emergency feeder breakers for the 480V reactor MOV boards

1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D, 3A, 3B, and 3C

Feeder breakers for drywell blowers 1A-1, 1B-1, 1A-2, 1B-2, 2A-1,

2B-1, 2A-2, 2B-2, 3A-1, 3B-1, 3A-2, and 3B-2

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ATTACHMENT A

(Continued)

Feeder breakers for 250V battery chargers 1, 2A, 2B, and 3
Standby liquid control pumps 1A, 1B, 2A, 2B, 3A, and 3B
Fuel pool cooling pumps 1A, 1B, 2A, 2B, 3A, and 3B
Unit preferred MG sets 1, 2, and 3
Closed cooling water pumps 1A, 1B, 1C, 2A, 2B, 3A, and 3B
Unit preferred transformer TUP-3
Control bay water chillers 1A and 3B
Normal feeder breakers for 480V control bay vent boards A and B

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