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MAINE YANKEE ATOMIC POWER COMPANY •
ENGINEERING OFFICE

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B.4.2.1
WMY 79-54

May 21, 1979

United States Nuclear Regulatory Commission
Inspection and Enforcement Office
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Attention: Mr. Boyce H. Grier, Director

References: (a) License No. DPR-36 (Docket 50-309)
(b) I&E letter to MYAPC dated April 17, 1979, I&E Bulletin No. 79-09

Dear Sir:

Subject: Response to I&E Bulletin No. 79-09

The following information is being furnished in response to Reference (b). The item numbers used are identical to the numbers in your request.

1. Maine Yankee has performed a survey of all safety-related systems to determine whether the referenced GE type AK-2 circuit breakers are being used. The results indicate that although many GE type AK-2 circuit breakers are being used, only the Reactor Trip Breakers utilize the breaker undervoltage trip device. It should be noted that these breakers also use a shunt trip device as a redundant tripping mechanism.

2. The following AK-2 circuit breakers are used in safety related circuits:

<u>480 V Bus 7</u>

Incoming feeder breaker
Service Water Pump P-29A
Service Water Pump P-29C
Emergency MCC-7A
Emergency MCC-7B
Bus 7 to Bus 8 Tie

<u>480 V Bus 8</u>

Incoming Feeder Breaker
Service Water Pump P-29B
Service Water Pump P-29D
Emergency MCC-8A
Emergency MCC-8B

303 305

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Reactor Trip Switchgear

Reactor Trip Breaker - TCB-1 thru TCB-9

A preventative maintenance program has always been enforced since the AK-2 circuit breakers were installed. Maintenance is performed on each circuit breaker every other refueling to ensure that these breakers meet design performance.

3a. As stated above, a preventative maintenance schedule has been adhered to.

3b. Circuit breaker maintenance is performed by qualified personnel with use of the GE power circuit breaker instruction manual.

3c. Maine Yankee intends to perform all applicable procedures in GE Service Advice Letter No. 175 (CPDD) 9.3, and to incorporate these procedures in its maintenance program. Maine Yankee, however, has the following concerns regarding this Service Advice Letter as it applies to AK-2 breakers with undervoltage trip devices:

In performing the inspections and adjustments specified in the GE SAL it was found that insufficient information was provided to adequately address the concerns and that the adjustments specified led to inconsistent results relative to the setpoint for the undervoltage relay pickup voltage. Specifically, it was found that:

1. the inspection of the clearance between the armature and the rivet of the UV trip device indication no binding. There did appear however, to be a significant amount of clearance. The SAL didn't specify how much clearance was acceptable or at what point an adjustment should be made.

2. when adjusting the pickup voltage setpoint, an exact setpoint of 85% of rated voltage could not be obtained due to the coarse nature of the adjustment. It had to be assumed that a range of 85-90% of rated voltage was acceptable.

3. the pickup setpoint was found to be variable dependent upon whether the coil had warmed up prior to checking the setpoint. No conditions were specified in the SAL as to whether the test should be performed "hot" or "cold".

4. when checking the drop-out voltage setpoint, the SAL did not specify whether or not the breaker should be closed and the UV device warmed up prior to testing. It had to be assumed this was the correct method.

5. when adjusting the drop-out setpoint to meet the 30-60% of rated voltage specification, it was found that this adjustment varied the pickup setpoint. Additionally, following this adjustment, the pickup voltage setpoint was found to be erratic.

On May 3, 1979 the Service Representative for General Electric in Boston, Massachusetts, was contacted to relate the above listed problems. He stated that he would contact his engineering group for resolution.

As soon as the necessary information is received from GE, additional inspections and adjustments of the UV tripping device for these breakers will be performed based on the manufacture's recommendations and reactor trip breaker availability dependent upon plant operation.

Should any further information be necessary, please feel free to contact us.

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY

Robert H. Groce
Licensing Engineer