UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 1217
ATLANTA, GEORGIA 30303

APR 14 1978

In Reply Refer To:
RII:JPO
50-369, 50-370
50-269, 50-270
50-287

Duke Power Company
Attn: Mr. William O. Parker, Jr.
Vice President, Steam Production
P. O. Box 2178
422 South Church Street
Charlotte, North Carolina 28242

Gentlemen:

Enclosed is IE Bulletin No. 78-05 which requires action by you with regard to your power reactor facility(ies) with an operating license or a construction permit.

Should you have questions regarding this Bulletin or the actions required of you, please contact this office.

Sincerely,

for James P. O'Reilly
Director

Enclosures:
1. IE Bulletin No. 78-05
2. List of IE Bulletins Issued in 1978

cc w/encl:
J. C. Rogers, Project Manager
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D. C. 20555

April 14, 1978

IE Bulletin No. 78-05

MALFUNCTIONING OF CIRCUIT BREAKER AUXILIARY CONTACT MECHANISM - GENERAL ELECTRIC MODEL CR105X

Description of Circumstances:

The Sacramento Municipal Utility District recently reported a problem encountered with the operation of the GE Model CR105X auxiliary contact mechanism installed in a 480 volt circuit breaker. Investigation into the cause for the inability to shutdown a booster supply fan (SF-A-7) in the control room emergency air conditioning system revealed that an auxiliary contact (GE Model CR105X) had failed in the closed position, preventing the fan's power supply circuit breaker from opening. The specific cause for failure was binding of the plunger arm due to burrs and nicks on its surface.

An investigation was conducted by the licensee to determine the extent of usage of this type auxiliary contact in other circuits throughout the reactor power plant. Approximately fifty (50) positions in the nuclear service motor control centers were identified as having a similar type auxiliary contact mechanism. It was also determined that many of the affected systems which require contact operation similar to that described above, either permit or provide a safety feature function during emergency conditions. An example of this type application is auxiliary contacts that must open to permit closing of certain safety related valves from 480 volt motor control centers.

The attached GE Service Advice Letter and associated instruction/drawing sheet were sent to all nuclear power reactor facilities by GE Field Service Offices. The letter, together with the instruction/drawing sheet identifies the problem and provides the recommended corrective action.

Action To Be Taken By Licensees:

FOR ALL POWER REACTOR FACILITIES WITH AN OPERATING LICENSE OR CONSTRUCTION PERMIT: