D. Harrison IE

Consumers Power Company

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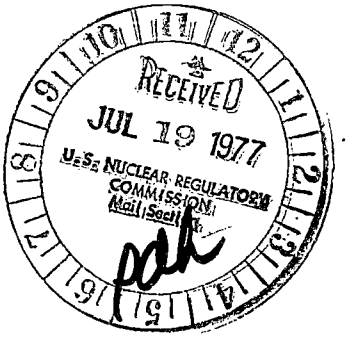
July 12, 1977

Regulatory File Cy



Mr James G Keppler
Office of Inspection and Enforcement
Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

DOCKET 50-255, LICENSE DPR-20 -
PALISADES PLANT - ADDITIONAL INFORMATION
RELATING TO IE BULLETIN 77-01

Your letter of June 10, 1977 requested additional information relating to IE Bulletin 77-01 which dealt with the use of pneumatic time delay relays in safety-related systems. The responses to your inquiries are as follows:

Question 1

"Date by which relays will be replaced."

Response 1

During the scheduled two-week Technical Specification testing outage in September 1977 (if the new relays are available) or the refueling outage January 1978.

Question 2

"Action taken in the interim to assure proper relay operation."

Response 2

Relay No		Action Taken
PCX/0216A	P-55A	Proper operation is checked each time a charging pump is started. All pumps are tested monthly by Technical Specification Surveillance Procedure No MO-20, Rev 6.
PCX/0216B	P-55B	
PCX/0216C	P-55C	
62-1105	P-55C	Proper operation is checked each time a charging pump is started. All pumps are tested monthly by Technical Specification Surveillance Procedure No MO-20, Rev 6.
62-1206	P-55B	
62-1205	P-55A	

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Relay No	Action Taken
PCX/0218A P-55A PCX/0218B P-55B PCX/0218C P-55C	If this time delay relay failed to operate, the charging pump would continue to run and not trip on low suction.
162-5 162-6	Proper operation is checked by start-up transformer 1-2 undervoltage. This is tested by the refueling Technical Specification Surveillance Procedure RO-8, Rev 5. Completed last refueling outage.
162-107 162-213	These time delay relays are operated by the 2400 V bus transfer (instant) initiating relays (386B, 386C or 386P). The last operation of 386P and 386C was April 7, 1977.
362/DS1 362/DS2 362/DS3 362/DS4	Proper operation is checked by start-up transformer 1-2 undervoltage. This is tested by the refueling Technical Specification Surveillance Procedure RO-8, Rev 5. Completed last refueling outage.
162-105 162-106 162-202 162-203	Proper operation is checked by manual transfer of 1C and 1D bus feeder breakers each time the unit is removed and returned to service. Last outage May 14, 1977.

Question 3

"Type of relays which will be used as replacements for the present relays."

Response 3

Replacement relays will be Agastat 7000 Series Pneumatic Time Delay Relays with plus or minus five percent repeat accuracy.

Question 4

"If the replacement relays are pneumatic, what is your basis for concluding that they will function properly throughout plant life, or what your plans are to assure satisfactory operation throughout plant life?"

Response 4

The Nuclear Plant Reliability Data System 1975 Annual Report of Component Reliability for Pneumatic Time Delays indicates a failure rate of 1 in 67 years.

The five percent repeat accuracy and extremely low failure rate indicate that these relays will operate satisfactorily throughout plant life.

David P. Hoffman

David P Hoffman
Assistant Nuclear Licensing Administrator