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November 9, 1984

84-13 #1

Mr J G Keppler, Regional Administrator US Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, IL 60137

MIDLAND ENERGY CENTER PROJECT DOCKET NOS 50-329 AND 50-330 SMALL BORE PIPING ANCHOR DESIGN FILE: 0.4.9.100 SERIAL: 32055

On August 16, 1984, Consumers Power Company notified your staff of a potentially reportable condition concerning small bore piping anchor design. Pending resolution of our discussion with the staff on our request to waive the requirement to submit a written 30-day 50.55(e) report during the project shutdown, we have prepared this interim report on the above subject.

# Description of Concern

Bechtel Safety Concern Evaluation Report (SCER) 84-30-SP provides the following:

Small bore standard calculation 400-010(Q) and 400-011(Q) allow a reduction in the collapse moments on the non-seismic side of an anchor by a factor of 2.1 due to the proximity of the socket-weld elbow. It appears that the intensification factor was incorrectly applied in the aforementioned calculations resulting in inaccurate load and stress distribution to the baseplates and anchor bolts of approximately 550 small bore anchor calculations. However, the factor of safety of related stress allowables used in the design appear to be conservative enough to maintain the validity of the engineering calculation results.

The calculations are used to design base plates at the seismic/nonseismic boundary of systems.

#### Safety Impact

The safety impact of this condition is indeterminate; however, it is anticipated that reanalysis would demonstrate that an actual safety condition does not exist.

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### Root Cause

No root cause has been determined for this condition.

### Corrective Action

The following corrective actions are necessary to resolve this condition:

- 1) Determine specifically which small bore anchor calculations are affected by this condition.
- 2) Choose a 10% sample and review the calculations for the specific effect of the incorrect intensification factor.
- Determine whether an adverse safety impact exists from the results of item 2, above.
- 4) Determine root cause and take action to prevent recurrence.
- 5) Document and resolve known nonconforming conditions.

The above corrective actions will not be pursued and no further reports on this subject will be made unless the Midland Energy Center Project is reactivated. This item will be entered in our Correspondence and Commitment Management System for long-term tracking.

JWC/WRB/1r

CC: Document Control Desk, NRC Washington, DC

DSHood, NRC Office of NRR Bethesda, MD

INPO Records Center

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