

DMB

UNION ELECTRIC COMPANY

1901 GRATIOT STREET
ST. LOUIS, MISSOURI

DONALD F. SCHNELL
VICE PRESIDENT

September 12, 1984

MAILING ADDRESS:
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Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

ULNRC- 925

Dear Mr. Keppler:

SUPPLEMENT TO 10CFR50.55(e)/PART 21 REPORT U-70
EMERGENCY DIESEL GENERATOR KEEPWARM LUBE OIL PUMP
CALLAWAY PLANT

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- Ref: 1) ULNRC-780, 3/28/84
 - 2) ULNRC-831, 5/26/84

The referenced letters reported failures of Crane-Deming Model 1549 positive displacement gear pumps used as keepwarm lube oil pumps on the Callaway Plant emergency diesel generators.

Additional failures of the Crane-Deming keepwarm pumps have occurred subsequent to the referenced reports as follows:

- o The "A" engine pump idler gear bushing failed during operation on August 4. A spare Crane-Deming pump was installed.
- o The "B" engine pump seized during operation on August 9. Inspection revealed 7 broken teeth on the drive gear and scoring of the idler gear bushing. The pump was replaced with the Viking pump originally furnished with the engine as discussed below.
- o The "A" engine pump installed after the August 4 failure failed during operation on August 16. Inspection revealed broken teeth on the drive gear. The pump was replaced with the Viking pump originally furnished with the engine as discussed below.

The cause of these recent failures, which are of the same nature as the previously reported failures, has not been conclusively determined. Since Crane-Deming has discontinued their "N" stamped

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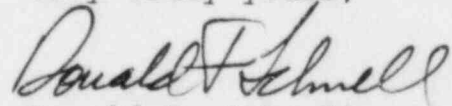
gear pump product line and replacements are not available, no further expenditure of resources will be made regarding continued use of these pumps.

To eliminate suspected causes of failure, other than a possible inherent problem with the Crane-Deming pump, a design change has been initiated to relocate the keepwarm pumps to provide improved accessibility for performing pump to motor alignment and to provide flexible pipe connections to eliminate any possibility of pipe strain on the pump. The replacement pumps will be Viking Model AL193, specified and procured with appropriate controls to assure equivalency to ASME Section III, Class 3, Seismic Category I, Quality Group C requirements.

In the interim, until the design change can be implemented, the manufacturers standard Viking pumps originally furnished with the engines (because of unavailability of "N" stamped pumps at the time of shipment) are being utilized under the temporary modification program. Critical evaluation of operation with these pumps by our A/E (Bechtel) and Union Electric indicates that the safe shutdown capability of the plant is not adversely affected and that an unreviewed safety question does not exist.

We expect that the design change documents and the ASME Section III equivalent replacement Viking pumps will be available by January 1985. However, since we consider replacement of the presently installed pumps to be an enhancement, it is our intent to defer installation until the first plant outage of sufficient duration, but no later than the first refueling.

Very truly yours,


Donald F. Schnell

RPW/jds