

CONTROL BLOCK: ☐ ☐ ☐ ☐ ☐ ☐ (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)01 C A S 0 5 3 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 37 CAT 38

CONT

01 REPORT SOURCE L 6 0 5 0 0 0 3 6 2 7 0 6 2 1 8 3 8 0 7 0 8 8 3 9
7 8 9 DOCKET NUMBER 30 31 EVENT DATE 34 35 REPORT DATE 38

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On June 21, 1983, while Unit 2 and Unit 3 were in Mode 5, the Unit 3 motor-driven
03 AFW pump 3P-504 was declared inoperable when it failed to successfully complete
04 its 48-hour endurance run. The outboard bearing on the motor failed and the pump
05 was secured. Since the steam driven pumps in both Units would have operated as
06 required had they been called upon to do so, the public health and safety were not
07 affected by this event.

08

09 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
C J 11 B 12 B 13 P U M P X X 14 B 15 Z 16
17 LER/RO REPORT NUMBER 18 8 3 19 0 3 9 20 0 1 21 T 22 0
23 0 24 0 25 0 26 0 27 Y 28 N 29 A 30 S 31 2 32 5
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The bearings (both outboard and inboard) were replaced and during installation
11 of the replacement bearings, it was determined that the dimensions of the oil
12 grooves were not consistent with the vendor drawings. (See attachment.)
13
14

15 FACILITY STATUS % POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)
B 28 0 0 0 29 NA C 31 48-hour endurance run

16 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)
Z 33 Z 34 NA NA

17 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)
0 0 0 37 Z 38 NA

18 PERSONNEL INJURIES NUMBER DESCRIPTION (41)
0 0 0 40 NA

19 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)
Z 42 NA

20 PUBLICITY ISSUED DESCRIPTION (45)
N 44 NA

NAME OF PREPARER

H. B. RAY

PHONE

714/492-7700

NRC USE ONLY

ATTACHMENT TO LER 83-039
SOUTHERN CALIFORNIA EDISON COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION
UNIT NO. 3, DOCKET NO. 50-362

SUPPLEMENTAL INFORMATION FOR CAUSE DESCRIPTION AND CORRECTIVE ACTION

The replacement bearings were removed, re-machined, and re-installed. The bearings on the other AFW pump motor 3P-141 were examined and found to have the same dimensional defect. Investigation of this failure has led to the conclusion that the improperly machined oil grooves would not, of themselves, cause bearing failure but would contribute to bearing failure when combined with other, otherwise acceptable, conditions. This defect does not affect the third AFW pump 3P-140 since it is driven by a steam turbine and its design does not include a motor with these bearings.

One of the two motor-driven AFW pumps at Unit 2 (2P-141) was found to have motor bearings with oil grooves machined within proper tolerances and the other AFW pump (2P-504) has been determined to have improperly machined oil grooves.

As corrective action, properly machined bearings were installed in those AFW pump motors with improperly machined motor bearings. The motor bearings from 3P-504 will be returned to the vendor for additional analysis. In the future, motor bearing dimensions will be verified to be correct prior to their use.