# LICENSEE EVENT REPORT

CONTROL BLOCK: [1 6] (PLEASE PRINT ALL REQUIRED INFORMATION)

| | LICENSEE NAME | LICENSE NUMBER | LICENSE TYPE | EVENT TYPE |
|---|---|---|---|---|
| 01 | ARARK 1 | 00-00000-00 | 4 1 1 1 1 | 0 3 |
| | 7 8 9 14 | 15 25 | 26 30 | 31 32 |

| | CATEGORY | REPORT TYPE | REPORT SOURCE | DOCKET NUMBER | EVENT DATE | REPORT DATE |
|---|---|---|---|---|---|---|
| 01 CON'T | | L | L | 050-0313 | 06 02 77 | 07 01 77 |
| 7 8 | 57 58 | 59 | 60 | 61 68 | 69 74 | 75 80 |

EVENT DESCRIPTION

02 At steady-state power (100%FP), a reactor building cooling fan was found to be
03 inoperating as indicated by feeder breaker BS-512 opening to load center BS,
04 which supplies power to reactor building cooling fans VSFM-1A and 1B.
05 The redundant system was available and operable. This is not a repetitive
06 occurrence. The motor was removed and returned to the vendor for repairs. (50-313/77-13)

| | SYSTEM CODE | CAUSE CODE | COMPONENT CODE | PRIME COMPONENT SUPPLIER | COMPONENT MANUFACTURER | VIOLATION |
|---|---|---|---|---|---|---|
| 07 | SB | E | BLOWER | A | R165 | N |
| | 9 10 | 11 | 12 17 | 43 | 44 47 | 48 |

CAUSE DESCRIPTION

08 A Reliance Electric Company motor failed due to insufficient lubrication
09 for the motor bearings. After this motor is repaired and returned by
10 the vendor and placed in service, all four fans will have the bearings
lubricated on a frequent schedule.

| | FACILITY STATUS | % POWER | OTHER STATUS | METHOD OF DISCOVERY | DISCOVERY DESCRIPTION |
|---|---|---|---|---|---|
| 11 | F | 100 | NA | D | NA |
| | 9 | 10 12 | 13 44 | 45 | 46 80 |

| | FORM OF ACTIVITY RELEASED | CONTENT OF RELEASE | AMOUNT OF ACTIVITY | LOCATION OF RELEASE |
|---|---|---|---|---|
| 12 | Z | Z | NA | NA |
| | 8 | 10 | 11 44 | 45 80 |

PERSONNEL EXPOSURES

| | NUMBER | TYPE | DESCRIPTION |
|---|---|---|---|
| 13 | 000 | Z | NA |
| | 9 11 | 12 | 13 80 |

PERSONNEL INJURIES

| | NUMBER | DESCRIPTION |
|---|---|---|
| 14 | 000 | NA |
| | 9 11 | 12 80 |

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

| | TYPE | DESCRIPTION |
|---|---|---|
| 16 | Z | NA |
| | 9 | 10 80 |

PUBLICITY

17 NA

ADDITIONAL FACTORS

8004110 827

18 NA

19

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GPO 881-467

1. Reportable Occurrence Report No. 50-313/77-13

2. Report Date: July 1, 1977 3. Occurrence Date: June 2, 1977

4. Facility: Arkansas Nuclear One-Unit 1
Russellville, Arkansas 72801

5. Identification of Occurrence:

The failure of a Reactor Building cooling fan which is a condition leading to operation in a degraded mode permitted by a limiting condition for operation (Technical Specification 3.3.4).

6. Conditions Prior to Occurrence:

| | | | |
|---|---|---|---|
| Steady-State Power | X | Reactor Power | 2568 MWth |
| Hot Standby | | Net Output | 805 MWe |
| Cold Shutdown | | Percent of Full Power | 100 % |
| Refueling Shutdown | | Load Changes During Routine Power Operation | |
| Routine Startup Operation | | | |
| Routine Shutdown Operation | | | |
| Other (specify) | | | |

7. Description of Occurrence:

At 2159 hours on June 2, 1977, Feeder Breaker B5-512 opened to Load Center B5, which supplies power to Reactor Building Cooling Fans VSFM- 1A & 1B. An investigation and meggering of both fan motors indicated grounded phase windings in VSFM-1A after which Load Center B5 was re-energized. The tripping of Breaker B5-512 indicated that selective tripping did not occur since Breaker 52-523 (feeder breaker to VSFM-1A) should have tripped.

8. Designation of Apparent Cause of Occurrence:

| | | | |
|---|---|---|---|
| Design | | Procedure | |
| Manufacture | | Unusual Service Condition Including Environmental | |
| Installation/ Construction | | Component Failure (See Failure Data) | X |
| Operator | | | |
| Other (specify) | X | | |

The motor bearings had insufficient lubrication.

9. Analysis of Occurrence:

Since a safety analysis was performed for operation with less than 4 RB cooling fans and the subsequently approved technical specification changes allow 2 cooling units to be operable and powered from independent busses, there was no hazard to the health and safety of the public.

10. Corrective Action:

The motor was removed and shipped to the vendor (Reliance Electric Company) to be rebuilt. The remaining 3 fan unit's bearings were lubricated and will be placed on a more frequent lubrication schedule. The bearings in at least one of the redundant fans will be inspected by the end of the next refueling outage. A breaker test was performed on Breaker 52-523 which indicated that the trip had drifted high. A Preventive Maintenance Program is being established to test all vital 480 volt circuit breakers and calibrate all overcurrent relays.

11. Failure Data:

Fan Motor: VSFM-1A, 480 volt, 125 HP, 1800 RPM, 60 cycle, 3 phase induction motor, fram design 7DB-5003, Reliance Electric Company.

Circuit Breaker: 52-523, 480 volt, 225 AMP ACB, Trip Coil Model OD-5, ITE Manufacturer.