

LICENSEE EVENT REPORT

UPDATE REPORT: PREVIOUS
REPORT DATE 02/16/79

CONTROL BLOCK: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

(PLEASE PRINT OR TYPE IN REQUIRED INFORMATION)

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0 1 | REPORT SOURCE L | 6 0 5 0 0 0 2 3 7 | 7 0 2 0 2 7 9 | 8 0 8 1 5 7 9 | 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2 | While U2 was in normal operation and U3 was in cold shutdown, a section of blowout
0 3 | panel at west side of refueling floor was blown out, breaching the secondary contain-
0 4 | ment. U2 was subsequently shut down. The airborne radioactivity level was low on
0 5 | the refueling floor, therefore any low level release that might have occurred prior
0 6 | to restoring the building to a negative pressure with respect to the atmosphere was
0 7 | insignificant. A similar event was reported on 11/30/74 (U3 R.O. #74-35).

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0 9 | SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE

17 | LER/RO REPORT NUMBER | EVENT YEAR | SEQUENTIAL REPORT NO. | OCCURRENCE CODE | REPORT TYPE | REVISION NO.

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
1 0 | Panel failed after exh. fans tripped while supply fans pressurized bldg. SGBT

1 1 | immediately started and opening covered with canvas to prevent release. It was later

1 2 | covered with permanent steel sheathing. Pressurization by ventilation system mal-

1 3 | function combined with improper design of explosion bolts caused failure. New panel

1 4 | with proper bolts being installed. Vent control modification being evaluated. 80

FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

PERSONNEL INJURIES NUMBER DESCRIPTION

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION PUBLICITY ISSUED DESCRIPTION

7908220400

NAME OF PREPARER: Joe Chan PHONE: X-421
NRC USE ONLY

ATTACHMENT TO LICENSEE EVENT REPORT 79-10/01X-1
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT-2 (ILDRS-2)
DOCKET # 050-237

While Unit 2 was in normal operation and Unit 3 in cold shutdown, a section of a blowout panel at the west side of the refueling floor was blown out, breaching the secondary containment. Unit 2 was subsequently shut down. The airborne radioactivity level was low on the refueling floor. Therefore, any low level release that might have occurred prior to restoring the building to a negative pressure with respect to the atmosphere was insignificant. A similar event was reported on 11/30/74 (Unit 3 R.O. #74-35).

The panel had blown out after all exhaust fans tripped while four supply fans continued running, thereby pressurizing the reactor building. The Standby Gas Treatment System was immediately started and the opening was covered with canvas to prevent any possible release. The opening was later covered with permanent steel sheathing. A special task force was organized to study the exact cause of the event and recommend the proper corrective action. Their findings are summarized below.

Prior to the panel failure, problems had been experienced with the reactor building ventilation system. At the time of the failure, maintenance was being performed on the ventilation pressure sensing equipment, and the exhaust fans were tripping sporadically. An analytical calculation showed that only a pressure of 47 psf could conceivably be developed in 90 seconds with all exhaust fans tripped and four supply fans running. The blowoff panels are intended to relieve at 70 psf. However, a review of the explosion bolts panel fasteners showed that the panels would be released at a calculated pressure of 56 psf.

The explosion bolts and panel mounting have been redesigned to provide a greater release point load rating and they will be installed after the blowoff panels are delivered.

To prevent pressurizing the reactor building, the ventilation system may also be modified. A new ventilation control system is under engineering evaluation and it is expected to be installed when the evaluation is complete and the system design approved. The new control system includes a single atmospheric pressure sensor with larger sensing tubing which will control the exhaust fans and annunciate abnormal building ΔP alarms. Fan trips due to abnormal building ΔP may be eliminated to minimize spurious for trips due to high wind conditions in the new system.