

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.