



ATTACHMENT TO LICENSEE EVENT REPORT 77-038/01X-1  
COMMONWEALTH EDISON COMPANY (CWE)  
DRESDEN UNIT-3 (ILDRS-3)  
DOCKET #050-249

While performing a normal diesel generator shift inspection, the equipment operator found the breaker for the diesel generator cooling water pump tripped. The pump had been running to provide cooling water for the HPCI room coolers. The operator tried unsuccessfully to restart the pump. The shift was notified and the following surveillances were performed: The core spray and LPCI pump and valve operability surveillance, CCSW pump operability surveillance and the 2/3 Diesel Generator surveillance.

The cooling water pump was inspected and found damaged. The pump was replaced and placed back in service the following day. This type of event has occurred once previously on Unit 3 as reported under R.O. #50-249/1976-13. This event did not jeopardize the safety of the plant. The required surveillances were successful and the 2/3 diesel generator was available in the event of a loss of offsite power. The failed pump is a Crane Chempump model #CPS-7SL-46H-3T.

The failure of the pump was caused by excessively worn outboard bearings. With the bearings worn, the rotor dropped to contact the canned portion of the pump, containing the motor windings. The rotor wore a hole in the can allowing the pump cooling water to short out the motor.

The pump is self-cooled, using water from its discharge for cooling. The fine mesh screen in an in-line strainer, which filters the cooling water, was deteriorated and permitted abrasives in the river water to enter the rotor portions of the pump. To prevent a recurrence three modifications have been installed. First, the LPCI and HPCI room coolers are now supplied by the service water system thereby decreasing the demand on the pump and increasing its service life. Secondly, pump breaker trip alarms have been installed in the control room for all three Diesel Generator units. Finally, wye strainers have been installed in the discharge cooling lines for each pump, thereby eliminating the need for a yearly inspection of the previously installed in-line screens as committed in the original report.