

ATTACHMENT TO LICENSEE EVENT REPORT 78-033/03X-1
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT-2 (ILDRS-2)
DOCKET # 050-237

While Unit 2 was locked in refuel during an outage, a test was performed by electrical maintenance to measure the overshooting and overspeed setpoint of Unit 2 diesel generator. The diesel tripped four times on overspeed during start up. Since Unit 2 was in refuel, this event is of little safety significance.

Western Engine representative was called in immediately to investigate this event. He found the governor speed setting was too high. The setting was lowered and the diesel was started with no problem. The governor speed should have been set at 61 Hertz (915 rpm) at the conclusion of the last surveillance test of the diesel according to the diesel surveillance procedure. It is possible that the operator set the speed too high at that time or someone actuated the governor switch sometime prior to starting the diesel for surveillance.

On June 15, 1978, another Western Engine representative was called in to further investigate the problem. It was found that if the governor speed was set at 61 Hertz (915 rpm), the overshoot was to 980 rpm, and at the maximum setting which is 64 Hertz (960 rpm) the overshoot was about 1050 rpm. At a speed setting of 62.5 Hz (940 rpm), the overshooting was to about 1020 rpm. Since the overspeed trip setpoint of this diesel was tested to be 1030 rpm, any speed setting above 63 Hertz would result in overspeed due to the overshooting. Since the maximum range of the frequency meter in the Control Room is 62 Hertz, it is very unlikely that the operator would set the speed above 62 Hertz. The exact reason for the high speed setting cannot be determined at this time. All operators were instructed not to set the speed above 61 Hertz.

Measurements of overshooting and overspeed setpoint have been performed on the other two diesel generators and resulted in similar values. Therefore any corrective measures to be done on Unit 2 diesel were also applied to the other two diesel generators.

To prevent recurrence, the overspeed trip setpoint was raised to 1035 rpm on all diesels as suggested by manufacturer. A caution was also added to the surveillance procedure to make the operator aware of this failure possibility. In order to prevent the speed switches being actuated inadvertently, the switches will be covered by plastic boxes.