

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

L	0	5	0	0	2	3	7	0	5	2	2	7	8	1	2	1	2	7	8	
60	61	DOCKET NUMBER						68	69	EVENT DATE				74	REPORT DATE					80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

Figure 1 is a line graph showing the relationship between the number of nodes  $N$  (x-axis) and the relative error (y-axis). The x-axis is marked from 0 to 30 in increments of 5. The y-axis is marked from 0 to 1 in increments of 0.2. The curve begins at a relative error of 1.0 when  $N=0$  and decreases sharply, reaching approximately 0.2 at  $N=5$ , 0.05 at  $N=10$ , and continuing to approach 0 as  $N$  increases towards 30.

SYSTEM CODE E E 11		CAUSE CODE A 12		CAUSE SUBCODE X 13		COMPONENT CODE Z Z Z Z Z Z 14						COMP SUBCODE Z 15		VALVE SUBCODE Z 16	
EVENT YEAR 7 8 17		SEQUENTIAL REPORT NO. 0 3 3 24		OCCURRENCE CODE 0 3 28		REPORT TYPE X 30		REVISION NO. 1 32							
ACTION TAKEN E 18		EFFECT ON PLANT Z 19		SHUTDOWN METHOD Z 21		HOURS 0 0 0 0 22		ATTACHMENT SUBMITTED Y 23		NPRO-4 FORM SUB Y 24		PRIME COMP. SUPPLIER A 25		COMPONENT MANUFACTURER E 1 6 0 26	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Gov. speed was found set too high. Further test revealed overspeed trip would occur due to overshoot if speed was set above 63 Hz. The diesel surv. proc. calls for a setting of 61 Hz at end of test. Reason for high settings could not be found. To prevent recurrence the overspeed trip setpoint was raised and a caution was added to the surveillance procedure.

FACILITY STATUS		POWER			OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
1	2	3	4	5	6	7	8	9	10	11
H	0	0	0	0	NA	C	Overshoot and Overspeed Setpoint Test			
ACTIVITY CONTENT		RELEASED OF RELEASE			AMOUNT OF ACTIVITY		LOCATION OF RELEASE			
1	2	3	4	5	6	7	8	9	10	11
Z	Z	NA		NA						
PERSONNEL EXPOSURES		TYPE		DESCRIPTION						
1	2	3	4	5	6	7	8	9	10	11
0	0	0	Z	NA						
PERSONNEL INJURIES		TYPE		DESCRIPTION						
1	2	3	4	5	6	7	8	9	10	11
0	0	0	-	NA						
LOSS OF OR DAMAGE TO FACILITY		TYPE		DESCRIPTION						
1	2	3	4	5	6	7	8	9	10	11
Z	NA									
PUBLICITY		TYPE		DESCRIPTION						
1	2	3	4	5	6	7	8	9	10	11
N	NA									

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7812270302

NAME OF PREPARED Joe Chan

PHONE \_\_\_\_\_ 421

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.