

ATTACHMENT TO LER#82- 020/04T-0

SUPPLEMENT TO CAUSE DESCRIPTION

ON APRIL 1, 1982 AT 2100 HOURS, UNIT 2 VENT STACK GASEOUS MONITOR (2-R/26) INCREASED RAPIDLY. INVESTIGATION IDENTIFIED A SMALL LEAK ON THE UNIT 2 EAST CENTRIFUGAL CHARGING PUMP SEAL. THE PUMP WAS ISOLATED AT 1900 HOURS ON APRIL 2. AT THIS TIME THE GASEOUS RELEASE RATE DECREASED AS SEEN ON 2-R/26 BUT DID NOT CAUSE THE MONITOR TO RETURN TO ITS NORMAL BACKGROUND.

INVESTIGATION CONTINUED BY CHECKING ALL LIQUID DRAIN VALVES. THIS WAS DONE BECAUSE THE LIQUID OFF-GAS MONITOR (R/22) WAS PERIODICALLY INDICATING HIGH RADIOGAS ACTIVITIES IN THE WASTE HOLDUP TANKS AND SUMP TANKS.

ON APRIL 7, 1982 AT 0855 HOURS, THE UNIT 2 REACTOR COOLANT FILTER WAS ISOLATED TO CHANGE THE FILTER CARTRIDGE. SHORTLY AFTER THE FILTER WAS ISOLATED R/22 AND R/26 IN BOTH UNITS RETURNED TO NORMAL BACKGROUND. AFTER THE FILTER WAS REPLACED AND RETURNED TO SERVICE GASEOUS ACTIVITIES AT R/22 AND R/26 IN BOTH UNITS AGAIN WERE ELEVATED. THE FILTER WAS AGAIN ISOLATED AND ALL MONITORS RETURNED TO NORMAL.

EXAMINATION AT THE UNIT 2 REACTOR COOLANT FILTER DRAIN VALVE (2-CS-381) SHOWED THAT THE VALVE STEM HAD BEEN TWISTED AND THE DIAPHRAM WAS TORN. THIS CAUSED LIQUID TO LEAK PAST THE VALVE SEAT TO THE CLEAN SUMP TANK AND ALSO TO ATMOSPHERE AT THE FILTER. THESE LEAKS CREATED RADIOGASEOUS ACTIVITY AT R/26 IN BOTH UNITS AND R/22.

VALVE 2-CS-381 IS SUSPECTED OF HAVING BEEN DAMAGED ON A PREVIOUS FILTER CHANGE WHICH TOOK PLACE ON MARCH 30, 1982.

VALVE 2-CS-381 HAD BEEN CHECKED TO BE IN THE CLOSED POSITION EARLIER IN THE INVESTIGATION BY INSURING THAT THE REACH ROD FOR THE VALVE WAS NOT PARTIALLY OPEN. THIS TYPE OF CHECK WOULD NOT HAVE IDENTIFIED THAT THE VALVE HAD FAILED; THEREFORE, THE FAILURE REMAINED UNDETECTED UNTIL THE FILTER WAS REMOVED FROM SERVICE. DISASSEMBLY OF THE VALVE CONFIRMED THE FAILURE.

SUPPLEMENT TO CAUSE DESCRIPTION (Continued)

THE TOTAL RELEASE DURING THIS TIME PERIOD FROM BOTH SOURCES: THE 2-EAST CENTRIFUGAL CHARGING PUMP AS WELL AS THE REACTOR COOLANT FILTER DRAIN VALVE FAILURE WAS:

TOTAL	1.18 E 2	Ci of Xe-133
	2.28 E-4	Ci/Sec
	3.82 E-1	% Technical Specification

THE MAXIMUM RELEASE RATE DURING THIS PERIOD WAS:

	2.25 E-3	Ci/Sec
	3.78 E 0	% Technical Specification