

LICENSEE: WISCONSIN PUBLIC SERVICE CORP.

SITE: KEWAUNEE 1

EN NUMBER: 25323

DOCKET: 05000305

EVENT DATE: 03-28-93

RX TYPE: PWR

EVENT TIME: 12:00

VENDORS: W-2-LP

NOTIFY DATE: 03-28-93

EMERGENCY CLASS: N/A REGION: 3 STATE: WI

TIME: 14:46

OPS OFFICER: RUDY KARSCH

10 CFR SECTION: ADAS 50.72(b)(2)(i)

UNANALYZED COND S/D

CCCC 21.21

UNSPECIFIED PARAGRAPH

UNIT SCRAM RX INIT INITIAL MODE

CURR CURRENT MODE

CODE CRIT PWR

PWR

1 N N 0 REFUELING

0 REFUELING

DEFECTIVE ANTI-ROTATION KEY FOUND ON NINE MOTOR OPERATED VALVES.

DURING MOTOR OPERATED VALVE DYNAMIC TESTING ON 3/27/93 ONE OF THE TWO REDUNDANT SAFETY INJECTION (SI) RECIRCULATION VALVES (SI-208) TO THE RWST FAILED TO CLOSE. THE OTHER VALVE PASSED.

INVESTIGATION REVEALED THAT THE ANTI-ROTATION DEVICE (A KEY BETWEEN THE VALVE STEM AND THE YOKE BUSHING) HAD BROKEN. THE ACTUATOR MOUNTS ON THE YOKE. THE SHORTER PART OF THE BROKEN KEY HAD APPARENTLY JAMMED THE VALVE STEM, PREVENTING CLOSING. THIS ANTI-ROTATION DESIGN IS COMMON TO VELAN BRAND GLOBE VALVES. AT 1200 CST TODAY THE LICENSEE COMPLETED A SCOPING ASSESSMENT OF THE FAILURE. THIS ASSESSMENT IDENTIFIED NINE SIMILAR VALVE/ACTUATORS IN USE. SIX OF THE NINE VALVES HAD BROKEN KEYS. THESE VALVES ARE INSTALLED IN THE FOLLOWING SYSTEMS: ONE IN THE LETDOWN PIPING; ONE IN THE CHEMICAL VOLUME CONTROL SYSTEM IN THE EMERGENCY BORATION PIPING; THE TWO DISCUSSED ABOVE; TWO SI INJECTION VALVES TO THE VESSEL HEAD; TWO SI COLD LEG INJECTION VALVES, WHICH ARE LOCKED OPEN AT POWER; AND ONE EMERGENCY SERVICE WATER VALVE FOR MAKE UP TO THE COMPONENT COOLING WATER SURGE TANK. THE CAUSE OF THE FAILURE HAS NOT YET BEEN DETERMINED. THE LICENSEE IS STILL INVESTIGATING. THE LICENSEE INFORMED THE NRC RESIDENT INSPECTOR.

* * * UPDATE 1245EDT 4/9/93 FROM TOM WEBB BY S.SANDIN * * *

"AT APPROXIMATELY 1600 HOURS ON APRIL 08, 1933 IT WAS DETERMINED THAT THE FAILURES DESCRIBED IN THE ATTACHED EVALUATION MET THE CRITERIA OF 10CFR21. THIS EVENT WAS ORIGINALLY REPORTED ON 3/28/93 AT 1346 HOURS IN ACCORDANCE WITH 10CFR50.72(b)(2)(i) IS A CONDITION FOUND WHILE SHUTDOWN. THE SYSTEMS WILL BE RETURNED TO SERVICE PRIOR TO ENTERING THE MODE THEY ARE REQUIRED IN." FAX OF PART21 NOTIFICATION SUBMITTED BY LICENSEE. THE LICENSEE INFORMED THE NRC RESIDENT INSPECTOR. NOTIFIED R3DO(WRIGHT).