

UPDATE REPORT - Previous Report Date 5/23/80

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

LICENSEE CODE: M I B R P I; LICENSE NUMBER: 00-000000-000; LICENSE TYPE: 411111; CAT: 5

REPORT SOURCE: L; DOCKET NUMBER: 050-0155; EVENT DATE: 050980; REPORT DATE: 080480

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES: A design review of two 24" ventilation isolation valves for the reactor containment indicates that damage to the air operator mechanism might occur during the pressure transient associated with the MCA described in the FHSR. Mechanical stops were placed on the valves to limit the valve opening to 15 degrees angle on 5/9/80, thus eliminating the defect. No hazard to the public occurred. Item is reportable based on Technical Specification 6.9.2.a(9).

SYSTEM CODE: S D; CAUSE CODE: B; CAUSE SUBCODE: A; COMPONENT CODE: VALVE; COMP. SUBCODE: C; VALVE SUBCODE: D

LER/RO REPORT NUMBER: 80; EVENT YEAR: 80; SEQUENTIAL REPORT NO.: 013; OCCURRENCE CODE: 01; REPORT TYPE: X; ACTION TAKEN: F; FUTURE ACTION: Z; EFFECT ON PLANT: Z; SHUTDOWN METHOD: Z; HOURS: 0000; ATTACHMENT SUBMITTED: Y; NRC-4 FORM SUB: N; PRIME COMP. SUPPLIER: A; COMPONENT MANUFACTURER: A585

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS: The cause is due to inadequate specifications for the original valves (CV4094 and CV4096) installed in 1962. This cause is similar to valve defect identified in LER 79-28. The air operators for the valves were modified on 6/17/80 as described in our letter of 6/13/80 and the mechanical stops have been removed to permit normal ventilation for the containment.

FACILITY STATUS: E; POWER: 085; OTHER STATUS: NA; METHOD OF DISCOVERY: D; DISCOVERY DESCRIPTION: Design Review Requested by NRC

ACTIVITY CONTENT RELEASED OF RELEASE: Z; AMOUNT OF ACTIVITY: NA; LOCATION OF RELEASE: NA

PERSONNEL EXPOSURES: NUMBER: 000; TYPE: Z; DESCRIPTION: NA

PERSONNEL INJURIES: NUMBER: 000; DESCRIPTION: NA

LOSS OF OR DAMAGE TO FACILITY: TYPE: Z; DESCRIPTION: NA

PUBLICITY ISSUED DESCRIPTION: NA

Attachment to LER 80-013-01X-1
Consumers Power Company
Big Rock Point Plant
Docket 50-155

On November 29, 1978, the NRC forwarded a request to evaluate the closure capability of the containment isolation ventilation valves during the transient pressure conditions of design basis LOCA.

We previously evaluated the two 24" butterfly valves, CV4095 and CV4097 which resulted in throttled operation (LER 78-28). Our evaluation of the 24 inch check valves CV4094 (in series with CV4095 in the outlet flow path) and CV4096 (in series with CV4097 in the inlet flow path) indicates that the valves would close properly under the worst case transient containment pressure condition, but might be rendered incapable of maintaining leak tightness or of providing vacuum relief capability following the Maximum Credible Accident described in the FHSR.

The check valves are provided with air cylinders (air to open the valve) operated at ~90 psig which would be subjected to transient overpressure of 340 psig and possible failure during rapid valve disc closure. The vendor recommended that these valves be throttled from the normal 45° open limit to 15° open limit to eliminate the potential for failure. This was accomplished by installation of mechanical blocks on May 9, 1980.

A modification consisting of a 3" air cylinder extension was completed to both air operators on June 17, 1980. The increased volume of the cylinder provides adequate margin for the backpressure transient. Other description of the activity associated with the modification is described in our letter of June 13, 1980. The mechanical blocks have been removed and normal ventilation flow is now available for warm weather operation,

Apparently this design deficiency was the result of inadequate specifications for the valves procured for original plant construction in 1962. The valves are identified as 24" check valves per Atwood Morrill drawing 5237-F.