Big Rock Point U.S. NUCLEAR RECULATORY COMMISSION

NAC FORM 366 (7.77)

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION) 10 0101-10101010101-101010141 1 1 1 1 1 0 MIBRP 1 (2 10 0 1 CONT SOURCE 1 1 10 15 10 1 - 10 11 5 15 0 012 11 7 7 18 8 013 10 117 18 0 1 EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) During review of electrical equipment required for LOCA, related to the [0]] [Systematic Evaluation Program (SEP), the steam drum low level switches, [] REO6A and B and RE20A and B were deemed inadequate to perform in the postu-[0]5] Llated high temperature environment in reactor containment. Additional ad-I ministrative surveillance was established until the switches were modified 0 6 0 7 Lat 1430 Fours on 2/17/78. 0 3 CODE SUBCODE VALVE COMPONENT CODE INSTRUCA 15 1(15) 12 1 (16) (13) 0 9 IA OCCURRENCE REVISION CODE NO. REPORT NO REPORT NUMBER \odot 17181 01110 10111 12 COMPONEN TAKEN ACTION METHOD HOURS 22 101010101 Y | 0 | 0 | 5 26 IT 3 N 2 N 25 2 21 (18) Z Z (20) (19) CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27) [1] [The Reactor Protection System was not previously evaluated for hostile en-[1] [vironmental qualification due to the predominant failsafe nature of the de-[1] [sign and the short time factors involved in the accident analysis of Chapter 13 of the FHSR. All critical portions of the system are now being 1 3 evaluated in the S.E.P. 14 STATUS DISCOVERY OTHER STATUS (30) DISCOVERY DESCRIPTION (32) 019103 E SEP Design Review NA A 31 1 5 ACTIVITY CONTENT 80 AMOUNT OF ACTIVITY 35 Z ALNA LOCATION OF RELEASE (36) RELEASED NA Z 32 1 6 TERSONNEL EXPOSURES DESCRIPTION (39) 0 37 Z 38 NA 010 1 7 INJURIES RESONNEL DESCRIPTION (41) UNRER 10 OL NA 0 1 2 12 OSS OF OR DAWAGE TO FACIL IT () A NA 990053 Z 1 9 10 PUBLICITY DESCRIPTION (45) 790921041 NAC USE ONLY (44) N NA 11111111 7909190185

Attachment to LER-78-010-01T-0 Consumers Power Company Big Rock Point Plant Docket 050-155

A determination was made to include critical Reactor Protection System components in the Systematic Evaluation Program as outlined in the NRC letter of 12/23/77. During this review, the steam drum level transmitter/switches REO6 A and B and RE20 A and B were deemed to be potentially non-failsafe for the temperature environment postulated for small break LOCA. The units are Yarway Model 4320 PE.

During tests conducted in 1975, failures of plastic parts in the cover, diffuser and dial of Yarways Model 4420C used in the core spray actuation system caused binding of the switch mechanism and non-safe operation of those similar units. This was reported as part of AO-1-75 reported by letter to the NRC on 1/27/75and 2/14/75 and in subsequent submittals related to that incident including a summary in cur letter of 5/15/75.

Because of the postulated failure of the similarly constructed units on 2/17/78, additional surveillance was immediately established to require that in the event of a detected LOCA, the reactor should be scrammed when other qualified level indicators, or the Reactor Depressurization System, indicated a level of eight inches below drum center line or lower. Qualified parts were installed in the switches at 1430 hours on 2/17/78 and the additional surveillance was relaxed at that time.

Environmental qualification of components in all systems required to cope with LOCA conditions is in progress as part of the Systematic Evaluation Program.

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