



LER NO. 82-68/3L  
DOCKET NO. 50-317  
LICENSE NO. DPR 53  
EVENT DATE 11-09-82  
REPORT DATE 12-08-82  
ATTACHMENT

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (CONT'D)

During normal Mode 1 operation at 0946 on November 9, 1982, the DC input breaker to the inverter supplying 120 Volt AC vital instrument bus #11 (T.S. 3.8.2.1) was inadvertently opened, deenergizing the vital instrument bus. Due to the ensuing voltage stepdown transient, #11 4KV bus supply breaker opened on undervoltage. The DC breaker was believed to have been accidentally opened by contractor personnel pulling electrical cables in the Cable Spreading Room for Unit 1. These cables were being moved to Unit 1 Cable Spreading Room to supply power to the Unit 2 Auxiliary Feedwater System third train. #11 Diesel Generator started and closed in on #11 4KV bus shortly thereafter, reenergizing the 4KV bus. The loss of the vital AC instrument bus resulted in a loss of the normal power supply to #11 Steam Generator Feedwater Regulating Valve (FRV) control system. The alternate AC supply was not automatically supplied to the FRV control system, due to failure of a power supply relay. The loss of the FRV control system led to a reactor trip on low water level in #11 Steam Generator. The three redundant 120V AC vital buses remained operable during the event. The instrument bus was reenergized at approximately 1010. This is not a repetitive event.

CAUSE DESCRIPTION AND CORRECTIVE ACTION (CONT'D)

The cause of the opening of the DC input breaker to the inverter is believed to have been an electrical cable brushing against the control switch for the breaker. Subsequent testing of the control switch revealed it was easily opened by downward movement of the switch. Due to the quiet operation of the breaker, the contractor personnel were not aware that the breaker had tripped. The power supply relay which failed was replaced and tested. A one-time test will be performed on the redundant bus power supply relays for the FRV control systems for Units 1 and 2 to verify operability. In addition, all operators will be trained on the specifics of this event. These actions will be completed by May 31, 1983. To prevent recurrence of the event, a modification will be performed to the inverter cabinets to prevent inadvertent opening of the DC or AC breakers on these cabinets. A study will be initiated to identify cabinets in the Cable Spreading Room that are susceptible to this type of occurrence.