

# LICENSEE EVENT REPORT

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

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## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During the performance of shutdown cooling interlock test (ST-SDC-1) it was discovered  
 03 that PC-105B was not operating. Further investigation showed relay 94-347/348 (the  
 04 valve closing relay) was not wired to PC-105B and was inoperable since the 1977  
 05 Refueling Outage. The redundant shutdown cooling interlock PC-105 was operable during  
 06 this period.

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## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

101 During installation of Power Operated Relief Valve Modification during the 1977  
 102 refueling outage, relay 94-347/348 was inadvertently disconnected from PC-105B. This  
 103 error was not detected prior to subsequent unit operation since it was not known at  
 104 the time that the shutdown cooling pressure interlock system had been affected. Upon  
 105 discovery redundant interlock was provided and both interlocks tested satisfactorily.

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LER 78-042  
Omaha Public Power District  
Fort Calhoun Station Unit No. 1  
Docket No. 05000285

Attachment No. 1

Safety Analysis

The Fort Calhoun Station Unit No. 1 safety system is so designed that no single inoperable channel can prevent the performance of a safety function if required. During the time in which PC-105B was inoperable, P105, the redundant channel was operable.

The function of the shutdown cooling interlock is to provide automatic isolation of the shutdown cooling isolation valves HCV-347 and HCV-348 to protect the safety injection piping in the event the reactor coolant loop pressure exceeds 250 psia while on the shutdown cooling decay heat removal system. Operator action and the automatic operation of P105 interlock provided adequate protection of the piping during the time PC-105B was inoperable. It should be noted that HCV-347 and HCV-348 are locked closed during power operation. Opening these valves when reactor coolant system pressure is greater than 250 psia is prevented by:

1. Administrative control of key operated control switch,
2. P-105 pressure interlock, and
3. PC-105B pressure switch interlock.

PC-105B was incapable of performing its interlock function as a result of this incident. Pressure channel 113/115 now performs this interlock function in conformance with the design package.

*R. Williams*

LER 78-042  
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Fort Calhoun Station Unit No. 1  
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Attachment No. 2

Corrective Action to Prevent Reoccurrence

Adherence to the recently revised Station Modification Control Procedure should prevent reoccurrence of this type incident.

*At. Andrew*

LER 78-042  
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Fort Calhoun Station Unit No. 1  
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Attachment No. 3

Failure Data

This is the first installation error reportable at the Fort Calhoun  
Station Unit No. 1.

*W. Andrews*