

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 1 DOCKET NUMBER (2) 0 5 0 0 0 3 8 7 1 PAGE (3) 1 OF 0 2

TITLE (4)
Unanticipated ESF Actuation Due to Installation of Jumper in Wrong Panel

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
1	1	0 5 8 7	8 7	0 3 1	0 1	1	2 3	0 8 7			0 5 0 0 0
<p>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</p>											

OPERATING MODE (9) <u>5</u>	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	60.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) <u>0</u>	20.405(a)(1)(i)	60.38(c)(1)		60.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	60.38(c)(2)		60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
	20.405(a)(1)(iii)	60.73(a)(2)(i)		60.73(a)(2)(vii)(A)	
	20.405(a)(1)(iv)	60.73(a)(2)(ii)		60.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	60.73(a)(2)(iii)		60.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)
NAME Robert G. Sheranko - Senior Results Engineer - Compliance TELEPHONE NUMBER 7 1 7 5 4 2 - 3 8 5 6

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14) YES (If yes, complete EXPECTED SUBMISSION DATE) NO
EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

. At 0338 on 11-5-87, an unanticipated Engineered Safeguards Feature actuation occurred on Unit one which was in Refueling. Testing and operating personnel were performing Surveillance Test SE-159-200, "18 Month Logic System Functional Test of the Primary and Secondary Containment Isolation System", when the "B" trains of Standby Gas Treatment System (SGTS), Control Room Emergency Outside Air Supply System (CREOASS), and Reactor Building Recirculation fans unexpectedly actuated. This actuation was caused by the installation of a jumper in the wrong panel. The jumper was removed and affected systems restored.

Causes of the event were cognitive personnel error and incomplete verbal communications. Following normal practice, the test director verbally instructed the electrician to install the jumper. The test director specified the correct terminal points to the electrician but failed to specify the panel. Furthermore, the test director failed to recognize that the jumper was to be placed in a panel different from the panel used in the preceding twenty nine steps of the test procedure.

The test director involved in the event was counselled. This event will be reviewed with test directors on the Plant Staff Technical Section staff along with guidance on proper verbal communications techniques.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Susquehanna Steam Electric Station Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7 8 7 - 0 3 1 - 0 1	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		

TEXT (IN MODIFIED FORM) OF NRC FORM 366A (117)

At 0338 on 11-5-87, an anticipated Engineered Safeguards Feature actuation occurred on Unit One which was in Refueling. Testing and operating personnel were performing Surveillance Test SE-159-200, "18 Month Logic System Functional Test of the Primary and Secondary Containment Isolation System", when the actuation occurred. Per the procedure, the utility licensed operator placed the Reactor Water Sample Valve Isolation Logic Switch in the TEST position. This resulted in a Zone III isolation (EIIS:VA) and actuations of the "B" trains of Standby Gas Treatment System (SGTS) (EIIS:BH), Control Room Emergency Outside Air Supply System (CREOASS) (EIIS:VI), and Reactor Building Recirculation fans (EIIS:VA). Even though this response was per design for the operator's action, it was unexpected during the test since the preceding step in the test procedure installed a jumper to prevent such response. Upon re-check of completed steps, the system test engineer discovered that the jumper had been installed on the correct terminals but in the wrong panel. The jumper was removed and affected systems restored. Review of schematic drawings conclude that the panel and terminals specified in the procedure were correct, and also that the incorrect placement of the jumper did not cause any damage. Testing was subsequently successfully completed.

CAUSE OF EVENT

Causes of the event were cognitive personnel error and incomplete verbal communications. Prior to the event, the test crew assigned to the Lower Relay Room performed twenty nine steps, including the step immediately preceding the incorrect jumper placement, in panel 1C611. These steps included the installation and removal of other jumpers. Following normal practice, the test director verbally instructed the electrician to install the jumper. The test director specified the correct terminal points to the electrician but failed to specify the panel. Furthermore, the test director failed to recognize that the jumper was to be placed in panel 1C623 as stated in the procedural step instead of 1C611 where the previous jumpers were installed.

ANALYSIS

This event is reportable per 10CFR50.53(a) (2) (iv) in that the unit experienced an unanticipated Engineered Safeguards Feature actuation with the start of SGTS, CREOASS, and the Reactor Building Recirculation fans.

There were no implications to the safety of the public in this event in that SGTS, CREOASS, and the Reactor Building Recirculation fans performed their intended function. Evaluation of safety implications under alternative conditions is not necessary since, because of prerequisites specified in the test procedure and normal scheduling philosophies, the test would not have been performed under any other set of initial conditions.

CORRECTIVE ACTIONS

The test director involved in the event was counselled. This event will be reviewed with test directors on the Plant Staff Technical Section staff along with guidance on proper verbal communications techniques.