

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8707230623 DOC. DATE: 87/07/20 NOTARIZED: NO DOCKET #
FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv 05000387
AUTH. NAME AUTHOR AFFILIATION
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RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-022-00: on 870619, Control Structure Chiller A
experienced spurious trips. Caused by defective cycle timer &
low refrigerant cut out switch. Timer & switch replaced. W/
870720 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: 1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000387

Table with columns: RECIPIENT ID CODE/NAME, COPIES LTTR ENCL, RECIPIENT ID CODE/NAME, COPIES LTTR ENCL. Rows include internal recipients like ACRS MICHELSON, AEOD/DOA, and external recipients like EG&G GROH, M, LPDR, NSIC HARRIS, J.

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### LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Susquehanna Steam Electric Station Unit 1** DOCKET NUMBER (2) **050000387** PAGE (3) **1 OF 02**

TITLE (4) **Control Structure Chiller Repairs**

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)
06	19	87	87	022	00	07	20	87			050000
											050000

OPERATING MODE (9) <b>1</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)										
POWER LEVEL (10) <b>100</b>	20.405(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)							
	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)							
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)							
	20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)								
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)								
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)									

LICENSEE CONTACT FOR THIS LER (12)  
NAME **Craig L. Wallen - Compliance Evaluator** TELEPHONE NUMBER **717-542-3242**

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
B	VI	TMR	C147	N					
B	VI	TS	C147	N					

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)

On June 19, 1987 with Unit 1 operating at 100% power, Limiting Condition for Operation (LCO) 3.0.3 was entered at 0509 and cleared at 0530 to repair the "A" control structure chiller. While the "B" chiller was out of service for maintenance, the running "A" chiller was experiencing spurious trips due to problems with the cycle timer and low refrigerant trip switch. Maintenance personnel replaced the timer and switch. Following replacement the chiller operated satisfactorily.

The control structure chillers provide cooling water to the emergency switchgear room coolers. The equipment inside the switchgear room is environmentally qualified to operate post accident provided the room temperature does not exceed 104°F. Without one control structure chiller in service there is a possibility that the room temperature could exceed 104°F in the event of a Loss of Coolant Accident (LOCA). Although the switchgear are not qualified to operate above 104°F, there is some probability that they would continue to operate above 104°F for some period of time fulfilling their safety function; however, PP&L considers the switchgear inoperable without at least one control structure chiller in-service. As such, entrance into LCO 3.0.3 was necessitated.

*IF22*  
*1/1*

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PDR ADCK 05000387  
PDR

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

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Description of Event

On June 19, 1987, from 0509 hours to 0530 hours, Unit One operated while Limiting Condition for Operation 3.0.3 was in effect, due to the two control structure chillers (EIIIS Code:VI) being out of service. While performing routine maintenance on the "B" chiller, the "A" chiller tripped repeatedly on low refrigerant temperature. Since the "A" chiller would only operate intermittently it was necessary to remove it from service to affect repairs. As such, both control structure chillers were inoperable for approximately twenty minutes while electrical maintenance personnel repaired the "A" chiller. Throughout this time period the unit operated at approximately 100% rated thermal power.

Cause of Event

Electrical Maintenance personnel determined the cause for the repeated trips of the "A" chiller was due to a defective cycle timer (IEEE Code: TMR, manufacturer: CARRIER) and low refrigerant cut out switch. (IEEE Code: TS, Manufacturer: CARRIER). Following the replacement of the timer and switch the chiller operated satisfactorily.

Analysis of Event

The control structure chillers provide cooling water to the emergency switchgear room coolers. The equipment inside the switchgear room is environmentally qualified to operate post accident provided the room temperature does not exceed 104°F. Without one control structure chiller in service there is a possibility that the room temperature could exceed 104°F in the event of a Loss of Coolant Accident (LOCA). Although the switchgear are not qualified to operate above 104°F, there is some probability that they would continue to operate above 104°F for some period of time fulfilling their safety function; however, PP&L considers the switchgear inoperable without at least one control structure chiller in-service. As such, entrance into LCO 3.0.3 was necessitated.

The LOCA would not have prevented station personnel from repairing the chiller since the chiller is located outside secondary containment.

REPORTABILITY

This Licensee Event Report is being filed pursuant to 10CFR73 (a) (2) (i) (B), in that, for approximately 20 minutes Unit One operated in a condition prohibited by the plant's Technical Specifications.

PREVIOUS SIMILAR EVENTS

A review of past Licensee Event Reports did not reveal any similar instances where the plant operated in a condition prohibited by it's Technical Specifications due to the inoperability of the control structure chillers.



Pennsylvania Power & Light Company

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July 20, 1987

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 87-022-00  
FILE R41-2  
PLAS - 271

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Docket No. 50-387  
License No. NPF-14

Attached is Licensee Event Report 87-022-00. This event was determined reportable per 10CFR50.73 (a) (2) (i) (B), in that the plant entered ICO Action Statement 3.0.3 to perform planned maintenance on the "A" control structure chiller to ensure equipment reliability under accident conditions.

R. G. Byram  
Superintendent of Plant - Susquehanna

CLW/cmw

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