

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9312090010 DOC. DATE: 93/11/30 NOTARIZED: NO DOCKET #
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylvania 05000387
 AUTH. NAME AUTHOR AFFILIATION
 METER, J.J. Pennsylvania Power & Light Co.
 STANLEY, H.G. Pennsylvania Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 93-015-00: on 931005, determined that refueling platform
 main hoist used to offload 38 fuel bundles from reactor
 while interlocks administratively inoperable. Caused by
 insufficient operability testing. W/931130 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: S
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	PD1-2 LA CLARK, R	1 1 1 1	PD1-2 PD	1 1
INTERNAL:	ACRS	2 2	AEOD/DOA	1 1
	AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
	NRR/DE/EELB	1 1	NRR/DE/EMEB	1 1
	NRR/DORS/OEAB	1 1	NRR/DRCH/HHFB	1 1
	NRR/DRCH/HICB	1 1	NRR/DRCH/HOLB	1 1
	NRR/DRIL/RPEB	1 1	NRR/DRSS/PRPB	2 2
	NRR/DSSA/SPLB	1 1	NRR/DSSA/SRXB	1 1
	<u>REG FILE</u> 02	1 1	RES/DSIR/EIB	1 1
	RGNI FILE 01	1 1		
EXTERNAL:	EG&G BRYCE, J.H	2 2	L ST LOBBY WARD	1 1
	NRC PDR	1 1	NSIC MURPHY, G.A	1 1
	NSIC POORE, W.	1 1	NUDOCS FULL TXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTR 30 ENCL 30

A04



Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151


November 30, 1993

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

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 93-015-00
FILE R41-2
PLAS - 580

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

Attached is Licensee Event Report 93-015-00. This report is being made pursuant to 10CFR50.73(a)(2)(i)(B), in that Susquehanna Unit 1 was in a condition prohibited by Technical Specification 3.9.6 when the Unit 1 Refueling Platform main hoist interlocks were administratively inoperable and the main hoist was used to offload fuel bundles from the Unit 1 Reactor.


H.G. Stanley
VP - Nuclear Operations

JJM/mjm

cc: Mr. T. T. Martin
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. G. S. Barber
Sr. Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, PA 18603-0035

060050

9312090010 931130
PDR ADOCK 05000387
S PDR

JE22

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	PAGE (3) 1 OF 0 4
---	---	-----------------------------

TITLE (4)
Administratively Inoperable Refueling Platform Used to Move Fuel.

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	0	0	5	9	3	9	3	0	1	5	0	0	1	1	3	0	9	3			0	5	0	0	0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.406(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.406(a)(1)(i)	<input type="checkbox"/> 50.38(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 50.38(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.406(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)							
	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)							
	<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME Joseph J. Meter - Power Production Engineer	TELEPHONE NUMBER
	AREA CODE 7 1 7
	5 4 2 1 - 1 8 7 3

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)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On October 31, 1993, at approximately 1900 hours with Unit 1 at 0% power, it was determined that the Unit 1 Refueling Platform main hoist had been used to offload 38 fuel bundles from the Unit 1 Reactor while the main hoist interlocks were administratively inoperable. The above determination was made on 10/31/93 while Engineers were reviewing two previously issued Significant Operating Occurrence Reports. Main hoist interlocks were not tested immediately following the replacement of a grapple head rendering the main hoist administratively inoperable. The Unit 1 Refueling Platform main hoist loaded interlocks would have performed as required with the hoist loaded with a fuel assembly. This event was determined to be reportable per 10CFR50.73(a)(2)(i)(B), as a condition prohibited by the plant's Technical Specifications. Since the main hoist interlocks would have performed as needed when the main hoist was loaded with a fuel assembly, the condition did not create a degradation in the Station's ability to protect the health and safety of the public and/or plant personnel. Insufficient Operability testing that was chosen after replacing the grapple head was the cause of the event. Surveillance testing procedures and Refueling Platform work instructions have been revised. The event has been reviewed with appropriate personnel.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (6)				PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 3	- 0 1 5	- 0 0	0 2	OF	0 4

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

DESCRIPTION OF EVENT

On October 31, 1993, at approximately 1900 hours with Unit 1 in Condition 5 at 0% power, it was determined that the Unit 1 Refueling Platform main hoist (EIS Code: DF) had been used on 10/05/93 to offload 38 fuel bundles from the Unit 1 Reactor while the main hoist interlocks were administratively inoperable. This determination was made while three Engineers (Non-licensed, Utility) were reviewing two previously issued Significant Operating Occurrence Reports (SOORs) 93-317 and 93-318.

On October 4, 1993 at approximately 2200 hours while off loading fuel from the Unit 1 Reactor vessel, an operating air leak was discovered on the grapple head for the Unit 1 Refueling Platform main hoist. The decision was made to replace the grapple head. The replacement was performed using generic work instructions and generic Operability testing requirements. Operations (Licensed, Utility) and Maintenance (Non-Licensed, Utility) personnel then changed the generic Operability testing requirement (SO-181-002) to what was believed to be the necessary testing following replacement of the grapple head. The operability testing that was chosen and performed for the replacement work ensured proper operation of the grapple head but did not include testing the main hoist interlocks. It was believed that replacing the grapple head would not affect the interlock setpoints of the main hoist. Removal of fuel from the Reactor vessel was then restarted using the newly installed grapple head from 0340 hours to 0826 hours on 10/05/93. Fuel moves were then suspended in support of control rod drive activities. Further review of the grapple head replacement by day shift Operations personnel determined that the surveillance test containing the interlock checks (SO-181-002) should have been performed in order to be absolutely sure the interlocks were not affected by the replacement work. SOOR 93-317 was generated at 0930 hours on 10/05/93 to document this determination.

The decision was made to perform the interlock surveillance test, SO-181-002. The test weight utilized to demonstrate the one rod interlock was lifted with the main hoist. The Refueling Platform was then driven toward the reactor cavity and the platform did not stop prior to reaching the reactor cavity as required to demonstrate the one control rod withdrawn interlock for the bridge. The surveillance was considered failed and corrective action was initiated to adjust the appropriate interlock. SOOR 93-318 was written to document the failure of the interlock surveillance. Neither SOOR 93-317 nor SOOR 93-318 documented the interrelationship of both events and the initial review of each SOOR failed to recognize this relationship therefore, both events were evaluated as not reportable under 10CFR part 50.73 at the time of their issuance.

When both SOOR's were again reviewed on 10/31/93 to support refueling activities it was determined that replacing the grapple head did affect the Operability of the main hoist interlocks by virtue of SO-181-002 failing. A separate SOOR was generated to document this determination and to reevaluate the previous events for reportability.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 3	— 0 1 5	— 0 0	0 3	OF	0 4

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

CAUSE OF EVENT

The main hoist interlocks were not tested immediately following the replacement of the grapple head because the Operations and Maintenance personnel involved in the decision were not aware that replacing the grapple assembly could have an effect on the hoist interlock settings. Several surveillance test procedures, each containing different Operability requirements for the main hoist, were in place at the time. This contributed to the decision that testing the interlocks was not required when the grapple head was replaced.

Also, generic work instructions along with generic Operability testing requirements contributed to the Operability testing decision. Since the instructions were broad in scope rather than specifically generated for the grapple assembly replacement, the personnel involved changed the generic Operability testing requirements to meet the specific needs of the work that was performed.

The event was determined to be not reportable per 10CFR50.73 until 10/31/93 because neither Operations nor Compliance understood that replacement of the grapple head could have an effect on the hoist interlock setpoints until the relationship was evaluated in detail.

The cause of the Unit 1 Refueling Platform main hoist loaded interlock failure was subsequently determined to be due to the conservative nature by which the main hoist interlock setpoints are set. Although the use of a new grapple head did introduce a slight load variance to the main hoist cable, the Unit 1 Refueling Platform main hoist loaded interlock would have performed as required with the hoist loaded with a fuel assembly.

REPORTABILITY/ANALYSIS

This event was determined to be reportable per 10CFR50.73(a)(2)(i)(B), as a condition prohibited by the plant's Technical Specifications in that Technical Specification 3.9.6 was not met when the Unit 1 Refueling Platform main hoist interlocks were administratively inoperable and the main hoist was used to offload fuel bundles from the Unit 1 reactor. Subsequent evaluation showed that the main hoist interlocks would have performed as needed when the main hoist was loaded with a fuel assembly. Therefore, the condition did not create a degradation in the Station's ability to protect the health and safety of the public and/or plant personnel.

In accordance with guidance provided in NUREG 1022, Supplement 1 item 14.2 and 10CFR50.4(d), the required submission date for this report was determined to be 11/30/93. The actual event date was 10/05/93, however it was not fully recognized as reportable until 10/31/93 during a review of Significant Operating Occurrence Reports associated with refueling.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 3	- 0 1 5	- 0 0	0	4	OF 0 4

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

CORRECTIVE ACTION

When it was realized that the all the necessary Operability testing was not performed after grapple head replacement, fuel movements were suspended until the Refueling Platform main hoist interlocks were successfully demonstrated as Operable. Longer term corrective actions include incorporating all the surveillance Operability requirements for the main hoist into the same surveillance test procedure which has been completed. This will eliminate having to choose which test procedure to perform following maintenance work of this type. Generic work instructions and generic Operability testing requirements were eliminated for maintenance performed on the Refueling Platforms. Work instructions and Operability testing requirements will be specifically planned for all maintenance work on Refueling Platforms. In addition, the event has been reviewed with Control Room Operators, Maintenance personnel and Compliance personnel.

ADDITIONAL INFORMATION

Failed Component Identification:

Not Applicable

Past Similar Events: -

A review of past Licensee Event Reports (LERs) for the station identified no reports involving the use of an inoperable Refueling Platform main hoist.