

## LICENSEE EVENT REPORT (LER)

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 2				
TITLE (4) Unit 1 Scram on Phase-to-Phase Fault; Unit 2 Scram on Loss of Condenser Vacuum.																								
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 SSES - Unit 2						DOCKET NUMBER(S) 0 5 0 0 0 3 8 8									
0	7	1	5	8	4	8	4	0	3	4	0	0	0	8	1	4	8	4	0 5 0 0 0					
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)																						
1		20.402(b)				20.408(e)				<input checked="" type="checkbox"/> 80.73(a)(2)(iv)				73.71(b)										
POWER LEVEL (10)		20.408(a)(1)(i)				80.38(a)(1)				80.73(a)(2)(v)				73.71(e)										
1		20.408(a)(1)(ii)				80.38(a)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 365A)										
0		20.408(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(vii)(A)														
		20.408(a)(1)(iv)				80.73(a)(2)(ii)				80.73(a)(2)(vii)(B)														
		20.408(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(x)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME L.A. Kuzcynski - Nuclear Plant Specialist III										TELEPHONE NUMBER 7 1 1 7 5 4 2 1 - 1 3 7 5 1 9														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS														
C	EIL	CIBIL	*	N																				
X	WIF	JIC	**	N																				
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)				MONTH		DAY		YEAR						
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO														

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

On July 15, 1984, at 0914 while operating at 100% power, the 230KV transmission line experienced a phase-to-phase fault. This opened the Unit 1 sync breaker, resulting in a generator load rejection and turbine trip. This, in turn, caused a Unit 1 scram. Subsequently, Unit 2 experienced a reactor scram at 1007 from 25% power due to low condenser vacuum which developed after its associated off gas recombiner tripped and could not be returned to service.

8408200283 840814  
PDR ADOCK 05000387  
S PDR

\* South Wire Co.

\*\* Not Applicable.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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

TEXT (If more space is required, use additional NRC Form 388A's) (17)

On July 15, 1984, at 0914 Unit 1 experienced a B-to-C phase fault on the transmission lines to its 230KV Susquehanna switching station. Within the following second, the generator span protection tripped, the main turbine master trip actuated and a reactor scram occurred. Three safety relief valves actuated to bring reactor pressure from 1081 psig to approximately 975 psig. There were no ECCS initiations associated with this scram and none were required. Approximately fifteen minutes after the Unit 1 scram, the common off-gas recombiner which had been in operation and aligned to support Unit 2 tripped. Operations personnel tried three times to return it to service, but received an isolation each time due to low inlet temperature. The on-call Reactor Engineer was contacted at the time of the initial recombiner trip and provided direction regarding the insertion of control rods to reduce power to prevent condenser vacuum from reaching the turbine trip setpoint. Although several rod adjustments were accomplished (bringing reactor power from 37% to 25%), by 1007 sufficient vacuum was lost to trip the turbine. A reactor scram followed on turbine control valve fast closure. There were no safety relief valve or ECCS initiations; none were required.

The Unit 1 scram was caused by transmission line sag into a tree. This event occurred after several days of high heat and humidity with the unit operating near rated capacity. The tree has been cut down. At the time of the Unit 1 generator trip, the Unit 2 off-gas recombiner was out of service. Unit 2 was operating on the common off-gas recombiner. A review of Unit 2 computer data indicates that the common recombiner began to malfunction at the time of the Unit 1 generator trip. The malfunction of the common recombiner is postulated as being due to a momentary loss of power to the recombiner's control panels. The problems encountered while operations personnel tried to restart the recombiner should be alleviated by revisions which will be implemented to recombiner operation procedures to change the rate at which a recombiner is placed in service.



Pennsylvania Power & Light Company

August 14, 1984

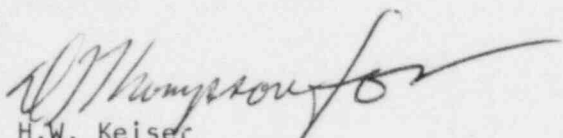
Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 84-034-00  
ER 100450 FILE 841-23  
PLA-2282

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

Attached is Licensee Event Report 84-034-00. This event was determined reportable per 10CFR50.73(a)(2)(iv), in that Unit 1 scrambled due to a phase-to-phase fault on its main transmission lines and Unit 2 scrambled shortly thereafter on loss of condenser vacuum.



H.W. Keiser  
Superintendent of Plant-Susquehanna

LAK/pjg

cc: Dr. Thomas E. Murley  
Regional Administrator-Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Mr. R.H. Jacobs  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P.O. Box 52  
Shickshinny, PA 18655

IE22  
1/1