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Abet	1400 une	87-001								
On J	anuary	5, 1987	at 224 Secon	2 hours w	with t	he	unit at	100% F	power,	
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Limerick Gen Unit 1	erating Station	006417 aund 18 21	tan Balautatia	And the And
	L and addressed ISBC Farm Adder (53)	• 15 10 10 10 1 <sup>3</sup> 1 <sup>5</sup> 1 <sup>2</sup>	8 7 - 0 0 1	- 010 012000
Unit Co	nditions Prior to the	e Event:		
Operati Reactor	ng Mode 1 (Power Oper Power 100%	ation)		
Descrip	tion of the Event:			
On Janua a Reacta Enginee Enclosu Standby Enclosu systems conditio	ary 5, 1987 at 2242 h or Enclosure Secondar red Safety Feature) o re differential press Gas Treatment System re Recirculation Syst operating as designe on occurred as a resu	ours with the un cy Containment Is occurred due to 1 sure. Automatic n (SGTS) and the cem (RERS) follow ed. The low diff alt of a series o	it at 100% olation (ar ow Reactor initiation 'A' Reactor ed with the erential pr f events:	power, of the essure
1)	The auxiliary steam the automatic trip air fans due to low	n system was lost of the Reactor E supply air temp	which resu inclosure su erature.	ilted in apply
2)	The loss of supply pressure in the Rea tripped the Reactor	air caused exces actor Enclosure w Enclosure exhau	sive negati hich automa st air fans	tically
3)	The tripping of the low differential pr Enclosure and the o subsequent isolatio	e exhaust air fan essure between t outside atmospher on.	s resulted he Reactor e and the	in the
The EII: (RERS), System)	S Codes for the affec NG (Reactor Enclosur	eted systems are e), and SA (Auxi	BH (SGTS), liary Steam	VA.
Conseque	ences of the Event:			
There we	ere no adverse conseq	uences resulting	from this	event.

The containment ventilation systems, Standby Gas Treatment (SGTS) and Reactor Enclosure Recirculation (RERS) responded as designed. If one of the two SGTS trains or one of the two RERS trains had become inoperable, the redundant trains would have operated as designed. No radioactive release resulted

LICENSEE EVENT	REPORT ILERI TEXT CONTIN	UATIC	N					- 116	
Limerick Generating Station	PALIT BURDER UT		64	-			-		
Unit 1		TEAR			1.			T	
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from the event and the Reactor Enclosure Ventilation system was returned to normal operation within three minutes of the isolation.

Cause of the Event:

## CAUSE CODE: Other (X)

This event was the result of a series of events resulting from the trip of an auxiliary steam boiler. With the 'A' auxiliary boiler out-of-service for maintenance, the 'B' and 'C' boilers were supplying auxiliary steam to the plant at a rate of 20,000 lbs/hr. When the 'C' auxiliary boiler tripped on high furnace pressure, the 'B' boiler was unable to maintain header pressure and tripped on low atomizing steam pressure. Loss of the auxiliary steam to the Reactor Enclosure supply air heating coils resulted in an automatic trip of the supply air fans on low supply air temperature (freeze protection). With the Reactor Enclosure exhaust fans still in operation, excessive negative pressure was created in the Reactor Enclosure resulting from the loss of supply air. The increasing negative pressure caused the automatic trip of the exhaust air fans. The Secondary Containment Isolation occurred when Reactor Enclosure to outside atmosphere differential pressure decreased to the trip setpoint of 0.1 inches of water. The SGTS and RERS then automatically initiated and operated as designed.

## Corrective Actions:

The outside Assistant Operators (AOs) restarted the auxiliary boilers and restored the plant heating system. Upon restoration of plant heat, the isolation was reset and reactor building ventilation systems were returned to normal operation.

	LICENSEE EVENT REPORT (LER) TEXT CONTINUATION					
Limerick Generating Station Unit 1				-		
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The Engineering and Research Department has been requested, through EPE 1084, to evaluate possible methods of improving the reliability of the auxiliary boilers or mitigating the effects of the loss of auxiliary steam on the plant.

## Previous Similar Occurrences:

Reactor enclosure ventilation isolations were reported in the following LERs: 84-041, 84-045, 85-005, 85-012, 85-018, 85-020, 85-023, 85-041, 85-067, 85-089. However, all of these events were of different root causes than this event.

## PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

February 4, 1987 Docket No. 50-352

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

> SUBJECT: Licensee Event Report Limerick Generating Station - Unit 1

This LER concerns a Reactor Enclosure Secondary Containment Isolation due to low differential pressure resulting from the loss of the Reactor Enclosure Ventilation System.

Reference:	Docket No. 50-352
Report Number:	87-001
Revision Number:	00
Event Date:	January 5, 1987
Report Date:	February 4, 1987
Facility:	Limerick Generating Station
	P.O. Box A, Sanatoga, PA 19464

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv).

Very truly yours,

10 mm. Alden for

R. H. Logue Assistant to the Manager Nuclear Support Department

IE 22

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC E. M. Kelly, Senior Resident Site Inspector See Service List