

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Catawba Nuclear Station, Unit 1** DOCKET NUMBER (2) **0500041131** PAGE (3) **1** OF **04**

TITLE (4) **Both Trains of Annulus Ventilation System Inoperable Due to Personnel Error**

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		
02	14	86	86	011	00	03	14	86	N/A		
									DOCKET NUMBER(S)		
									05000		
									05000		

OPERATING MODE (9) **1**

POWER LEVEL (10) **11010**

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.408(e)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.408(a)(1)(i)	<input type="checkbox"/> 50.38(a)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(a)
<input type="checkbox"/> 20.408(a)(1)(ii)	<input type="checkbox"/> 50.38(a)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
<input type="checkbox"/> 20.408(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)	
<input type="checkbox"/> 20.408(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)	
<input type="checkbox"/> 20.408(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **Roger W. Ouellette, Associate Engineer - Licensing** TELEPHONE NUMBER **71014 37131-175130**

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

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 February 14, 1986, between 1010 and 1213 hours, the Annulus Ventilation (VE) System was rendered inoperable when an annulus door was propped open to support a maintenance activity. The action statement for Technical Specification 3.0.3 was entered when both trains of the VE System were discovered to be inoperable. The door was immediately closed upon discovery. The unit was at 100% power, Mode 1, at the time of this incident.

This incident is classified as a Personnel Error, because personnel involved did not recall the requirements given in Security Procedures pertaining to Annulus and Containment doors.

This incident is reportable pursuant to 10 CFR 50.73, Section (a)(2)(i)(B).

8603250321 860314
PDR ADOCK 05000413
S PDR

IE22
1/1

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Catawba Nuclear Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 1 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	- 0 1 1	- 0 0	0 2	OF	0 4

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

BACKGROUND

The Annulus Ventilation (VE) System (EIIS:VC) is designed to produce and maintain a negative pressure in the area between the steel containment vessel and the concrete reactor building enclosing the containment structure. The purpose of the VE System is to mitigate the consequences of airborne radioactive products released during and after a LOCA. The system consists of two 100% capacity trains which maintain a negative pressure of -1.0 inches of water column in the annulus area. In order to maintain the integrity of this pressure boundary, the annulus doors are required to remain closed and locked, except for normal access, unless the unit is in Mode 5 (Cold Shutdown) or Mode 6 (Refueling Outage). The VE System does not provide any normal ventilation requirement.

DESCRIPTION OF INCIDENT

On February 14, 1986, a work crew consisting of two electricians and one technician informed the Shift Supervisor that they would need access to the upper annulus area in order to install unistrut and cable trays per a Nuclear Station Modification. At approximately 1008 hours, Security Officer A unlocked the upper annulus door to allow the work crew to enter. The workers told Security Officer A that they would need to run a power cord into the annulus area. An electrical outlet was available inside the annulus door, but the workers did not observe this outlet on their initial inspection of the area. The workers informed Security Officer A that they would need the annulus door open to accommodate the power cable. At 1010 hours, Security Officer A called the Secondary Alarm Station (SAS) Officer, informing the SAS Officer that the upper annulus door would be left open. The SAS Officer placed the door IN ACCFSS on the Security computer system to prevent the door from being in a continuous alarm state. Security Officer A stayed posted on the outside of the annulus door since it was a fire door and also a security boundary. At approximately 1200 hours, Security Officer A was relieved of his post by Security Officer B. As Officer A walked past the Fire Protection Console Officer (FPCO) in the Control Room, Officer A told the FPCO that the upper annulus door was open and that a Security Officer was posted there. The FPCO remembered a Security procedure that required the unit to be in Mode 5 or Mode 6 for the annulus doors to be propped open. The FPCO then went to the horseshoe area of the Control Room to inquire as to what mode the unit was in. After being informed that the unit was in Mode 1, Power Operation, he immediately informed the Shift Supervisor of the problem. At approximately 1210 hours, the Shift Supervisor and Security Officer A walked to the upper annulus door and had the work crew remove the power cord and close the door. Security Officer A then called the SAS Officer and had the upper annulus door taken out of the IN ACCESS mode on the Security computer at 1213 hours.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Catawba Nuclear Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 1 3 8 6 - 0 1 1 - 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	0 1 1	0 0	0 3	OF	0 4

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

CONCLUSION

Security procedures prohibit leaving the annulus doors propped open except in an outage or a refueling situation. Security Officer A unlocked the upper annulus door, but did not verify unit status when the work crew needed to prop the door open. Also, the SAS Officer did not verify unit status before placing the annulus door IN ACCESS. Most Security Officers interviewed during this investigation failed to retain information received from Security training on procedures associated with this incident. All officers involved in this incident were requalified on the containment door procedures in October and November of 1985.

This incident is classified as a Personnel Error, since the Security Officers involved did not recall requirements provided in Security procedures pertaining to containment doors. There have been no previous incidents concerning inoperability of the VE System due to annulus doors being propped open.

CORRECTIVE ACTION

- (1) The power cord was removed from the upper annulus door and the door was closed, making the Annulus Ventilation System operable.
- (2) Signs were placed on all annulus doors with the following information: THIS DOOR CAN NOT BE PROPPED OPEN WITHOUT PERMISSION OF SHIFT SUPERVISOR.
- (3) Security Alarm Door Officer Procedure was revised to require that the Alarm Door Officer remind the CAS/SAS Officer to contact Shift Supervisor prior to placing containment doors IN ACCESS.
- (4) A new training form has been put in service which requires that only the officers qualified on a certain task will be responsible for reviewing procedure changes.
- (5) CAS and SAS Officer Procedure will be revised requiring the CAS and SAS Officers to independently inform the Shift Supervisor before containment doors are propped open.
- (6) All ETQS tests on containment tasks will be consolidated into one test covering all related duties.
- (7) A set of instructions may be developed that would be carried by the Security Officers to their post, reminding them of their specific responsibilities for that post. This item will be studied to determine the appropriateness of this proposed corrective action.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Catawba Nuclear Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 1 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	- 0 1 1	- 0 0	0 4	OF	0 4

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

SAFETY ANALYSIS

Although both trains of the VE System were technically inoperable with the upper annulus door open, the system would have been able to draw a slight negative pressure on the annulus area if needed. The dampers, that direct air flow to recirculate back to the annulus or to the unit vent, modulate to control pressure in the annulus area to -1.0 inches of water column. If this negative pressure cannot be maintained, the damper to recirculate air back to the annulus fails closed, and the damper to the unit vent fails open. Therefore, the VE System would still have been able to draw enough negative pressure to keep contamination from spreading into the Auxiliary Building with the upper annulus door open. Either flow path directs 9000 cfm air flow through the associated high efficiency filter system. The unit vent is monitored with radiation monitors that would have detected any contamination that wasn't removed by the high efficiency filters.

The health and safety of the public were not affected by this incident.

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

March 14, 1986

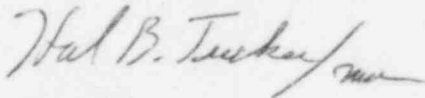
Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 413/86-11 concerning both trains of the Annulus Ventilation System being inoperable due to a personnel error. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

RWO:s1b

Attachment

IE22

1/1

Document Control Desk

March 14, 1986

Page Two

cc: Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

American Nuclear Insurers
c/o Dottie Sherman, ANI Library
The Exchange, Suite 245
270 Farmington Avenue
Farmington, CT 06032

M&M Nuclear Consultants
1221 Avenue of the Americas
New York, New York 10020

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

NRC Resident Inspector
Catawba Nuclear Station