LICENSEE EVENT REPORT

CONTROL BLI [ ] (1–6) **(PLEASE PRINT ALL REQUIRED INFORMATION)**

	LICENSEE NAME	LICENSE NUMBER	LICENSE TYPE	EVENT TYPE
01	ARARK I	00-0000-00	4 1 1 1 1	0 3
(7–8, 9–14)		(15–25)	(26–30)	(31–32)

	CATEGORY	REPORT TYPE	REPORT SOURCE	DOCKET NUMBER	EVENT DATE	REPORT DATE
01 CONT		L	L	0 5 0 - 0 3 1 3	0 5 1 2 7 6	0 6 0 9 7 6
(7–8)	(57–58)	(59)	(60)	(61–68)	(69–74)	(75–80)

EVENT DESCRIPTION

02 During the refueling period E.S. test, four valves and
03 a Reactor Building cooling fan failed to properly respond to
04 their respective E.S. signals. Redundant components were
05 available and operable. No previous similar occurrence. Following
06 adjustments and replacements all components were successfully retested.
(50-313/76-9)

	SYSTEM CODE	CAUSE CODE	COMPONENT CODE	PRIME COMPONENT SUPPLIER	COMPONENT MANUFACTURER	VIOLATION
07	S H	E	V A L V E X B L O W E R	N A	Z 9 9 9	N
(7–8, 9–10)		(11)	(12–17)	(43)	(44–47)	(48)

CAUSE DESCRIPTION

08 Two valves torqued out due to aging caused friction between
09 stem and packing. One valve had dirty relay contact. One valve had
10 loose connection at terminal plug. Contact in fan hand switch failed.

	FACILITY STATUS	% POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION
11	H	0 0 0	NA	b	NA
(7–8)	(9)	(10–12)	(13–44)	(45)	(46–80)

	FORM OF ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY	LOCATION OF RELEASE
12	Z	Z	NA	NA
(7–8)	(9)	(10)	(11–44)	(45–80)

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION
13	0 0 0	Z	NA
(7–8)	(11)	(12)	(13–80)

PERSONNEL INJURIES

	NUMBER	DESCRIPTION
14	0 0 0	NA
(7–8)	(11)	(12–80)

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

	TYPE	DESCRIPTION
16	Z	NA
(7–8)	(9)	(10–80)

PUBLICITY

17 NA

ADDITIONAL FACTORS

18 See text of report for individual component manufacturer
19 nameplate data.

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1. Reportable Occurrence Report No. 50-313/76-9

2. Report Date: June 9, 1976 3. Occurrence Date: May 12, 1976

4. Facility: Arkansas Nuclear One-Unit 1
Russellville, Arkansas

5. Identification of Occurrence:

Failure to respond to simulated E.S. signal during refueling period testing.

6. Conditions Prior to Occurrence:

Steady-State Power		Reactor Power	0 MWth
Hot Standby		Net Output	0 MWe
Cold Shutdown		Percent of Full Power	0 %
Refueling Shutdown	X	Load Changes During Routine Power Operation	
Routine Startup Operation			
Routine Shutdown Operation			
Other (specify)	Defueled		

7. Description of Occurrence:

The following equipment failed to respond properly to a simulated E.S. signal during the refueling period test:

A. Make up pump recirculation valve, CV-1300, which received an E.S. signal but the valve torqued out and did not close.
B. Auxiliary cooling water valve, CV-3643, which received an E.S. signal but the valve torqued out and did not close.
C. Service water to the Reactor Building, CV-3814, failed to respond to an E.S. signal and open.
D. Reactor Building particulate monitor isolation valve, CV-7454, failed to respond to an E.S. signal and close.
E. Reactor Building cooling fan, VSF-1B failed to start on an E.S. signal.

8. Designation of Apparent Cause of Occurrence:

Design		Procedure	
Manufacture		Unusual Service Condition Including Environmental	
Installation/ Construction	X	Component Failure	X
Operator			
Other (specify)	X		

See attachment.

9. Analysis of Occurrence:

The redundant component for CV-1300, CV-3643, CV-3814, CV-7454 and VSF-1B was operable and did respond properly to an E.S. signal. CV-3814, CV-7454 and VSF-1B were also operable manually from the control room. Due to the redundant components responding properly there was no hazard to the health and safety of the public.

10. Corrective Action:

Adjustments were made to the torque switches for CV-1300 and CV-3643 relay was cleaned that caused CV-3814 failure to respond. The loose connection at the terminal plug for CV-7454 was tightened. The hand switch, HS-7411, for VSF-1B was replaced. All components were retested by simulating an E.S. signal and responded properly.

11. Failure Data:

Handswitch HS-7411 is a GE Type CR2940 spring return to neutral.
CV-1300 is a 2" Bolted Bonnet Gate Valve 1500# Velan Fig. No. W8-354B-13MS
CV-3643 is an 18" 150# 9123 Double R/L Fisher Controls Butterfly Valve
ES relay for CV-3814 is GE catalog No. 12HGA11J52

8. Other

A. The apparent cause for CV-1300 and CV-3643 torquing out was increased friction between the valve stem and packing due to aging.

B. CV-3814 did not respond due to a dirty relay contact.

C. CV-7454 did not respond due to a loose connection at a terminal plug.

D. VSF-1B did not respond due to contact failure in the fan handswitch (HS-7411).