



Commonwealth Edison
Byron Nuclear Station
4450 North German Church Road
Byron, Illinois 61010

DATE August 30, 1994

LTR: BYRON 94-0340
FILE: 3.03.0800 (1.10.0101)

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

Dear Sir:

The Enclosed Licensee Event Report from Byron Generating Station is being transmitted to you in accordance with the requirements of 10CFR50.73(a)(2)(i)(B).

This report is number 94-008; Docket No. 50-454.

Sincerely,

G.K. Schwartz
Station Manager
Byron Nuclear Power Station

GKS/DSK/ng

Enclosure: Licensee Event Report No. 94-008

cc: J. Martin, NRC Region III Administrator
NRC Senior Resident Inspector
INPO Record Center
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SIGNATURE PAGE FOR LICENSE EVENT REPORT

LER Number
454: 94-008

Title of Event: Containment Spray Valves not stroked time tested in closed direction due to misinterpretation of Tech Spec Requirements.

Occurred: 08/03/94/1400
Date Time

OSR DISCIPLINES REQUIRED:

ABG

SES 8-26-94
SES DATE

Acceptance by Station Review:

Ed De... 8/29/94
OE Date

Les Hamer ABG/8-26-94
SES Date

J. Brinell 8/29/94
RAS Date

OTHER Date

Approved by:

G. J. Schwartz 8/30/94
Station Manager Date

LICENSEE EVENT REPORT (LER)

FACILITY NAME BYRON NUCLEAR POWER STATION										DOCKET NUMBER 0 5 0 0 0 4 5 4					PAGE 1 OF 0 4			
TITLE CONTAINMENT SPRAY VALVES NOT STROKE TIME TESTED IN CLOSED DIRECTION DUE TO MISINTERPRETATION OF TECH SPEC REQUIREMENTS																		
EVENT DATE			LER NUMBER				REPORT DATE			OTHER FACILITIES INVOLVED								
MONTH	DAY	YEAR	YEAR	SEQ. NUMBER	REVISION	MONTH	DAY	YEAR	FACILITY NAMES				DOCKET NUMBER(S)					
0	8	0	3	9	4	9	4	-	0	0	8	Byron Unit 2				0 5 0 0 0 4 5 5		
											Braidwood 1&2				0 5 0 0 0 4 5 6			
OPERATING MODE		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (CHECK ONE OR MORE OF THE FOLLOWING)																
1		20.402(b)				20.405(e)				50.73(a)(2)(iv)				73.71(b)				
POWER LEVEL		20.405(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				73.71(c)				
0 6 3		20.405(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)				
		20.405(a)(1)(iii)				X 50.73(a)(2)(i)				50.73(a)(2)(viii)(A)								
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)								
		20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(x)								
LICENSEE CONTACT FOR THIS LER																		
NAME S. GOULD, SYSTEM ENGINEER EXT. 2765										TELEPHONE NUMBER 8 1 5 2 3 4 - 5 4 4 1								
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																		
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS									
SUPPLEMENTAL REPORT EXPECTED										EXPECTED SUBMISSION DATE		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).

On 08/03/94 a System Engineer discovered that since startup through 03/04/94, the valves 1CS007A, 1CS007B, 2CS007A, and 2CS007B were not stroke time tested in the closed direction. Technical Specification 3.6.3 lists these valves as having a 30 second requirement for the valve to go to its isolation position. The cause of the event stems from a combination of factors that relate to this valve having a unique configuration as a containment isolation valve. The valves open on a Containment Spray Signal. They do not receive an automatic close signal. The valves had been tested in the open direction since start up.

As immediate corrective action, the valves were verified as being tested in the closed direction since their addition to the IST program on 03/04/94 and that the surveillances were within frequency. As longer term corrective action, the IST review that added these valves was verified as complete and the other valves added to the program were verified as not having any specific timing requirements associated with them.

This event is not considered safety significant since these valves were stroke time tested in the open direction using a 10 second acceptance criteria since the beginning of the IST program. Byron Station feels that this testing would have identified any valve degradation and indirectly ensured that the valve would meet the required stroke time in the closed direction.

This event is reportable pursuant to 10CFR50.73 (a)(2)(i)(B); and operation or condition prohibited by Technical Specifications.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE	
BYRON NUCLEAR POWER STATION		YEAR	SEQ. NUMBER	REVISION		
	0 5 0 0 0 4 5 4	9 4 -	0 0 8 -	0 0	0 2	OF 0 4

TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

A. PLANT CONDITIONS PRIOR TO EVENT:

Event Date/Time 08/03/94 / 1400

Unit 1 MODE 1 - Power Operation Rx Power 63% RCS [AB] Temperature/Pressure NOT/NOP

Unit 2 MODE 1 - Power Operation Rx Power 100% RCS [AB] Temperature/Pressure NOT/NOP

B. DESCRIPTION OF EVENT:

On 08/03/94, during a review of In-service Testing (IST) / Technical Specification requirements associated with proposed UFSAR change (DRP 0-047), a System Engineer discovered that valves 1CS007A, 1CS007B, 2CS007A, and 2CS007B, had not been stroke time tested in the closed direction as required by Tech Specs. Technical Specification 3.6.3 "Containment Isolation valves" lists these valves in table 3.6-1 "Containment Isolation Valves" as having a maximum isolation time of 30 seconds. On 08-03-94, System Engineers verified that the valves were tested in the closed direction after their addition to the Byron IST program on March 4, 1994. These valves had been added as a result of a review to identify non-program valves that may implement SAR requirements or valves that may have a safety function in both the open and closed direction. The stroke times and surveillance frequency were verified to be within Tech Spec Requirements.

It should be noted that although these valves were not stroke time tested in the closed direction since start up and prior to their addition to the IST program, they were stroke time tested in the open direction by Tech Spec surveillances 1/2 BVS 6.3.3-22.1/2 "Unit 1/2 Containment Spray Train A/B Containment Isolation valve Stroke Test". The open direction is the direction that the valves stroke in response to an automatic containment spray signal which is the only automatic signal that these valves receive.

C. CAUSE OF EVENT:

The cause of this event is personnel errors that occurred during the creation of Tech Spec table 3.6-1 and during the initial setup of the Tech Spec surveillance program. Ideally, Byron Station feels that table 3.6-1 should have had "N/A" listed for the isolation time value for the following reasons. First, the only automatic signal that these valves receive is a signal to open on a Containment Spray Actuation signal. The valves never receive an automatic signal to close. The only analytical basis that associates a required stroke time with these valves is a requirement for the valves to open when a Containment Spray actuation signal is received.

Finally, testing of these valves only in the open direction has been a part of the IST/Tech Spec surveillance program at Byron station since startup. It is postulated that this is due to a Com Ed code interpretation/philosophy which only required valves in the IST program to be stroked in one direction.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE		
		YEAR	SEQ. NUMBER	REVISION			
BYRON NUCLEAR POWER STATION	05000454	94	-008	-00	03	OF	04

TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

D. SAFETY ANALYSIS:

Due to the fact that these valves are motor operated valves and have been tested quarterly in the open direction using a ten second acceptance criteria since the beginning of the IST/Tech Spec Surveillance program, Byron station feels that the testing performed would have identified any valve degradation and gives a high level of confidence that the requirements of Tech. Spec. 3.6.3 were indirectly satisfied. Additionally, there is no analytical basis for a stroke time in the closed direction for these valves. Based on this reasoning, this event is not safety significant.

E. CORRECTIVE ACTIONS:

The four valves were verified as being in the Byron IST /Tech Spec Surveillance program to be stroke time tested in the closed direction in addition to already being timed in the open direction. Testing will continue to be performed on a quarterly basis to satisfy the surveillance requirements of Tech. Spec. 3.6.3.

Additionally, a review of the scope of the Byron IST program was verified complete. This review ensured that valves which may have safety functions in both directions or have specific SAR or Tech Spec requirements for stroke timing are being tested in accordance with each requirement. It should be noted that this valve was added to the IST program as a result of this review and is unique in that it is the only valve added to the program that has a stroke time requirement associated with it.

In the future, the Tech Spec table may be revised to place an "N/A" for the closure time in table 3.6-1. This would eliminate the need to test this valve in the closed direction. However, due to the fact that Byron Station is currently in compliance with the Tech Spec the table will remain as is until such time that another change to the table is required.

F. RECURRING EVENTS SEARCH AND ANALYSIS:

LER 90-004, "Increased ASME Test Frequency Exceeded".

Valve 2PS9356B should have been placed on increased test frequency but was not correctly documented or loaded in GSRV. This item is not similar to the current event.

LER 92-006, "IST program surveillance deficiency for CC, and RH check valves." Missed Surveillance - Valves OCC9464, 1/2CC9463A,B and 1/2RH8730A,B were included in the IST program to be backflow tested but were not implemented in surveillance procedures. This item is somewhat related in that it was also a missed surveillance. The difference is that the valves in the current event were never included as part of the approved IST program.

PIF 6-1-93-012 "Inadequate documentation of VT-2 exam on 1WO007A/B" During a review on NWRs B89270 and B89271 it was discovered that a VT-2 was not done. Investigation revealed that the inspection had been done but had not been documented. This item is not related to the current event.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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BYRON NUCLEAR POWER STATION		YEAR		SEQ. NUMBER		REVISION					
	0 5 0 0 0 4 5 4	9	4	-	0	0	8	-	0	0	0 4 OF 0 4

TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

G. COMPONENT FAILURE DATA:

This section is not applicable. No failed component was involved.