LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
Byron, Unit 1	0 5 0 0 0 4 5 4	1 of 0 4

Title (4)
ASME INSPECTION NOT PERFORMED ON TWO SI VALVE WELDS

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	Docket Number(s)
										0 5 0 0 0
0 8	0 9	8 5	8 5	0 8 5	0 0	0 9	2 3	8 5		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)					
		___ 20.402(b)	___ 20.405(c)	___ 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)		
(10)	0 1 5	___ 20.405(a)(1)(ii)	___ 50.36(c)(2)	___ 50.73(a)(2)(vii)	___ Other (Specify in Abstract below and in Text)		
		___ 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 (12)

Name	TELEPHONE NUMBER
	AREA CODE
Joel J. Ewald Ext. 2605	8 1 5 2 3 4 - 5 4 4 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
E	B R			N							

SUPPLEMENTAL REPORT EXPECTED (14)

		Expected Submission Date (15)	Month	Day	Year
___ Yes (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

It was determined that two ASME Code Class 2 welds in the safety injection system were not examined per ASME Code requirements during the Unit 1 preservice inspection. While performing the preservice inspection of the safety injection system of Byron Unit 2, the inspection personnel realized that the valve-to-pipe weld for the containment sump outlet isolation valves (ISI8811A and ISI8811B) on Unit 1 had been misidentified. Upon notification, the Operating Department declared an Unusual Event and placed the Unit in Hot Standby (Mode 3) within the time frame required by the Technical Specifications. On September 3, 1985, relief from the ASME Code requirements was granted by the NRC, allowing resumption of operation and deferral of the ASME examination requirements of the two subject welds until the first outage of an expected duration of greater than ten (10) days.

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On August 29, 1985, at 1600 hours, with the Unit in Mode 1 and at 15% power, it was determined the two valve-to-pipe welds for the containment sump outlet isolation valves, 1SI8811A and 1SI8811B, were not examined per the ASME Code, Section XI, 1977 Edition through Summer 1978 Addenda, Class 2 requirements during the Unit 1 preservice inspection (PSI).

While performing the Byron Unit 2 PSI for the safety injection (SI) system, the inspection personnel realized that the valve-to-pipe welds (FW368 and FW372) on Unit 1 had been misidentified. This identification error occurred during the initial piping system walkdown by the inspection personnel who identified and stamped the valve-to-pipe welds as the pipe-to-valve containment assembly welds (FW398 and FW408). (See Figure 1 for orientation). Therefore, the pipe-to-valve containment assembly welds were examined by volumetric (ultrasonic) and surface methods, but the results were assigned to the valve-to-pipe welds. In addition, subsequent reviews of the PSI Program and data did not reveal the existence of welds FW398 and FW408, which had not been identified prior to this incident.

Previously, in accordance with ASME Code, Section III, 1974 Edition through Summer 1975 Addenda, a radiographic examination of the subject welds had been satisfactorily completed. Subarticle IWC-2200 of ASME Code, Section XI, 1977 Edition through Summer 1978 Addenda states in part "Shop and field examinations may serve in lieu of the on-site preservice examinations, provided...such examinations are conducted under conditions and with equipment and techniques equivalent to those which are expected to be employed for subsequent inservice examinations." This would allow the completed radiographic examinations to satisfy the PSI requirements. However, Byron does not intend to use radiography as the inservice volumetric examination method. Consequently, the valve-to-pipe welds (FW368 and FW372) were not examined by volumetric (ultrasonic) and surface methods, as required by Section XI.

On August 29, 1985, at 1600 hours, the Operating Department was notified of these welds in the SI system that were not examined per ASME Code requirements. The SI system was declared INOPERABLE, an Unusual Event was declared, and the Unit was brought to Hot Standby (Mode 3) within the time frame required by the Technical Specifications. An emergency relief request was submitted to the NRC and at 2100 hours, August 29, 1985, a temporary waiver from the ASME Code requirements was granted, effective until 2100 hours, September 3, 1985. On September 3, 1985, the relief request (from ASME Code requirements) was accepted by the NRC. This relief allows resumption of operation and deferral of the volumetric and surface examination of welds FW368 and FW372 on the SI system until the first outage of an expected duration of greater than ten (10) days.

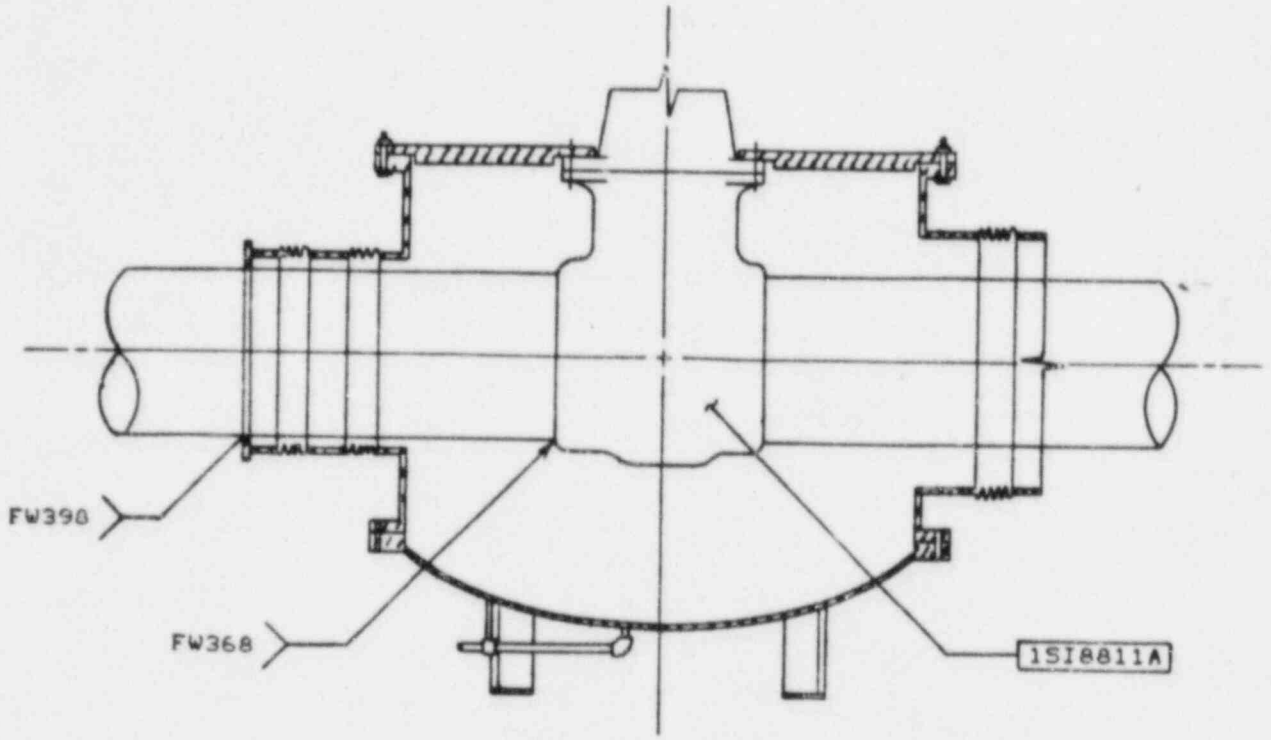
The root cause of this event was personnel error. Inspection personnel inadvertently identified the improper weld for examination. This identification error was then not detected during various independent reviews of the PSI Program and data.

There was no effect on plant and/or public safety. The structural integrity of the subject welds was verified by satisfactory completion of a radiographic volumetric examination in accordance with ASME Code, Section III, Class 2 requirements during fabrication. Also, since Byron Unit 1 has only been in operation for approximately seven months, it is not anticipated that these welds would have degraded to a level which is detrimental to the structural integrity of the weld joints. In the unlikely event that a leak should develop due to degradation of the welded joint, leakage into the valve containment assemblies is continuously monitored by a water level sensing device for each assembly. High water level is alarmed in the Main Control Room assuring prompt operator action in response to a potential leak. For the above stated reasons, an acceptable level of quality and safety exists to allow continued operation of Byron Unit 1.

TEXT

There have been no previous occurrences.

This condition will be corrected by the performance of the required examinations during the next planned outage of greater than ten (10) day duration, as authorized by the ASME Code relief granted by the NRC. Due to the various independent reviews of the PSI Program and data, and the unique structural nature of the valve containment assemblies, this event is considered an isolated occurrence.



Train	Valve	Valve-to-Pipe Weld		Pipe-to-Valve Containment Assembly Weld*	
		Hunter #	ISI #	Hunter #	ISI #
A	1SI8811A	FW368	C-1	FW398	C-2A
B	1SI8811B	FW372	C-1	FW408	C-2A

* Weld was identified and inspected as the Valve-to-Pipe Weld

FIGURE 1

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

September 23, 1985

LTR: BYRON 85-1309

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) which requires a 30 day written report.

This report is number 85-085; Docket No. 50-454.

Very truly yours,

R. E. Querio
Station Manager
Byron Nuclear Power Station

REQ/gt

Enclosure: Licensee Event Report No. 85-085

cc: J. G. Keppler, NRC Region III Administrator
J. Hinds, NRC Resident Inspector
INPO Record Center
CECO Distribution List

#3/017

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