Commonwealth Edison Company
Quad Cities Generating Station
22710 206th Avenue North
Cordova, IL 61242-9740
Tel 309-654-2241

LWP-96-024

ComEd

March 11, 1996

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

Reference: Quad Cities Nuclear Station
Docket Number 50-265, DPR-30, Unit Two

Subject: Licensee Event Report (LER) 265/95-008 Supplemental Information.

As stated in LER 265/95-008, supplemental information is being provided and is enclosed as Attachment 1. This information constitutes revision 01 to the original LER documentation.

Attachment 2 is a reproduction of the original text of LER 254/95-001.

If there are any questions or comments concerning this letter, please refer them to Nick Chrissotimos, Regulatory Assurance Administrator at 309-654-2241, ext. 3100.

The following commitments are being made by this letter:

1. U-1 HPCI FC testing 2651809500805.
2. Review event as part engineering training 2651809500806.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD CITIES NUCLEAR STATION

L.W. Pearce
Station Manager

Attachment 1- LER Supplemental Information
Attachment 2- LER 265/95-008 (copy)

010134

cc: P. Piet
C. Miller
INPO Records Center
NRC Region III

IE22

ATTACHMENT B

REVISION TO LER

LER NO.

STA		UNIT		YEAR		NO
04	-	2	-	95	-	008

PART 1 TITLE OF EVENT

OCCURRED

Unit Two HPCI Speed, Flow and Discharge Pressure Oscillations Inlet Drain Pot High Level Alarm and Failure of the 2-2301-28 valve.

10/18/95 DATE

1642 TIME

REASON FOR REVISED REPORT

Inform NRC of the root cause for the HPCI Speed, Flow and Discharge Pressure Oscillations.

PART 2 ACCEPTANCE BY ONSITE REVIEW

Alex L. Misak

B R Stutz

SUPPLEMENTAL REPORT APPROVED AND AUTHORIZED FOR DISTRIBUTION

STATION MANAGER

DATE

ComEd

Quad Cities System Engineering Transmittal

To:	**N. Chrissotimos**	**Date:**	**March 12, 1996**
From:	**D. Craddick** **System Engineer Supervisor**	**Prepared by:**	**J. Swales** 3-14-96 **System Engineer**
Subject:	**Supplemental LER Report for LER 2-95-008**		

ATTACHMENT 1

SUPPLEMENTAL EVENT DESCRIPTION

During Unit 2 start-up on November 22, 1995 the reactor pressure was held below 150 psig to further troubleshoot pressure oscillations noted before shutdown. The HPCI system was successfully run at this low pressure with no oscillations noted. The reactor pressure was then increased to approximately 250 psig to demonstrate HPCI system operability. Operability was demonstrated with no speed, flow or discharge pressure oscillations noted.

On November 23, 1995 with reactor pressure at approximately 920 psig the HPCI system was again run to demonstrate operability in accordance with QCOS 2300-1 as required by Technical Specification 3.5.C. During this test the HPCI system had speed, flow and discharge pressure oscillations when started up. The flow controller was taken to manual and the oscillations stopped. A slight adjustment was made to the proportional band on the flow controller and the system was placed back into the automatic flow control mode. No oscillations were noted. Step changes were then made in the flow and discharge pressure to try and induce oscillations. No oscillations could be induced. A decision was made to shut the system down and perform another start-up to verify that the problem with oscillations had been eliminated. This start-up transient would be the most severe test of the flow control system and verify that the oscillations had been eliminated. The test was completed with no oscillations noted.

On November 30, 1995 the HPCI system was again being tested on an increased frequency in accordance with QCOS 2300-1 when speed, flow and discharge pressure oscillations were noted. However, in this case as on November 23, 1995, the HPCI system did fulfill its design function in that pump flow was always greater than 5000 gpm despite the oscillations.

An investigative team consisting of System Engineering, Instrument Maintenance, Corporate Engineering and an outside Industry Expert on the HPCI system was formed. They reviewed the available strip chart data which had been collected during the HPCI runs in October and November 1995. The team reached the conclusion that the oscillations were caused by the particular test conditions and the settings on the HPCI flow controller. The test condition set up had the 2-2301-10 valve open far enough so that the pump discharge pressure on start-up was about 580 psig. The reactor pressure during test conditions is between 920 psig and 1005 psig. This set-up is considered a low turbine loading condition due to the high steam inlet pressure and relatively low pump discharge pressure. With this low turbine loading condition the mechanical turbine linkages located in the front standard and the electronic flow control system had approximately the same time response. This was theorized to be the cause of the flow oscillations. The investigation team implemented a testing program to verify this theory and eliminate other possible causes.

ComEd

Quad Cities System Engineering Transmittal

To:	**N. Chrissotimos**	**Date:**	**March 12, 1996**
From:	**D. Craddick** **System Engineer Supervisor**	**Prepared by:**	**J. Swales** 3-14-96 **System Engineer**
Subject:	**Supplemental LER Report for LER 2-95-008**		

ATTACHMENT 1

On December 2, 1995 several tests were run on the HPCI system to gather data and verify the root cause. The first test was run with the 2-2301-10 valve further closed causing a higher pump discharge pressure on system start-up. It was predicted with the higher turbine loading no flow oscillations would occur. When tested there were no flow oscillations as expected. The next test set-up was the same as on November 30, 1995 when flow oscillations were observed. Again with low turbine loading the flow oscillations occurred. The third test was to verify that the 2-2301-10 valve was not oscillating thereby causing the flow oscillations. The turbine was started up with the flow controller in manual to see if oscillations occurred, they did not. This eliminated the 2-2301-10 valve as a possible cause.

The team next directed the Instrument Maintenance Department to adjust the flow controller. The controller proportional band and reset were adjusted to make it slower to respond to changes during HPCI operation. These adjustments effectively changed the time response of the flow controller so that it would be different from the time response of the turbine mechanical linkages. It was predicted that this would eliminate the flow oscillations at all turbine start-up conditions. The fourth test run was with the 2-2301-10 valve in its normal position causing a pump discharge pressure of approximately 580 psig on start-up. HPCI operation showed no oscillations during this test after the adjustments had been made. The fifth and final test on December 2, 1995 was with the 2-2301-10 valve further open causing a pump discharge pressure of approximately 500 psig on start-up. Again no flow oscillations occurred. This proved that the adjustments to the flow controller had eliminated the oscillations at low turbine loading conditions.

Since the flow controller adjustments could have caused a change in the cold start-up time for HPCI, it was necessary to perform the HPCI Cold Fast Start procedure QCOS 2300-13 after a 72 hour cooling off period. This test was performed on December 6, 1995. The pump discharge pressure came up to approximately 1100 psig on turbine start-up and the test passed with a start-up time of 26 seconds. No flow oscillations were observed.

ComEd

Quad Cities System Engineering Transmittal

To:	**N. Chrissotimos**	**Date:**	**March 12, 1996**
From:	**D. Craddick** **System Engineer Supervisor**	**Prepared by:**	**J. Swales** 3-14-96 **System Engineer**
Subject:	**Supplemental LER Report for LER 2-95-008**		

ATTACHMENT 1

It had now been demonstrated that no flow oscillations would occur from 500 psig to 1100 psig pump discharge pressures. The industry expert assisting in the investigation affirmed that at lower steam pressures the HPCI turbine mechanical linkages have an entirely different time response such that flow oscillations would not occur at these lower pressures. Additionally, the HPCI system is not normally operated at these conditions. The only time low turbine loading occurs is on start-up during testing due to the position of the 2-2301-10 valve. On November 23, 1995 during the second start-up the oscillations were not induced because the 2-2301-10 valve was slightly further closed causing a higher pump discharge pressure. Normal operating procedures require the pump discharge pressure to be 100 to 150 psig above reactor pressure thereby preventing a low turbine loading condition. The investigative team's review of the flow data during oscillations confirmed that the flow was always above 5000 gpm during oscillations. This is the required design flowrate. Therefore the system would have performed its design function. For these reasons the Licensee Event Report associated with the event on November 30, 1995 was cancelled.

SUPPLEMENTAL APPARENT CAUSE OF THE EVENT

The root cause of the HPCI speed, flow and discharge pressure oscillations associated with this event was the low turbine loading conditions set up by the change to the HPCI test flow path. When the position of the 2-2301-10 valve was changed during the refuel outage (Q2R13) to a slightly further open position, a low HPCI turbine loading condition was set up which was not present when the new Yogagawa Flow Controller was installed. The flow controller therefore needed to be adjusted for this different test operating condition. This is believed to be an isolated event.

SUPPLEMENTAL CORRECTIVE ACTIONS

Corrective action #3 (NTS #2651809500803) which was the inspection of the inlet drain pot level switch under NWR #95010214402 has been completed.

The following additional corrective actions are being implemented:

1. Check the tuning on the Unit 1 HPCI flow controller and adjust it if necessary. (NTS #2651809500805, SED). This will be completed no later than the start-up following the next refuel outage on Unit 1 and will resolve whether the Unit 1 HPCI system may be subject to the same speed, flow and discharge pressure oscillations as have been observed on the Unit 2 system.

2. Review this event as part of the lessons learned program for the engineering departments. (NTS# 2651809500806, TRN). This will be completed by June 30, 1996.

ComEd

Quad Cities System Engineering Transmittal

To:	**N. Chrissotimos**	**Date:**	**March 12, 1996**
From:	**D. Craddick** **System Engineer Supervisor**	**Prepared by:**	**J. Swales** 3-14-96 **System Engineer**
Subject:	**Supplemental LER Report for LER 2-95-008**		

ATTACHMENT 1

SUPPLEMENTAL COMPONENT FAILURE DATA

1. Component Description: Electronic Flow Controller

   Manufacturer/Type: Yokogawa Corporation of America Y006

   Part Number: SLPC-271

2. Component Description: Level Switch

   Manufacturer/Type: Magnetrol International Incorporated M040

   Part Number:

ATTACHMENT 2

LICENSEE EVENT REPORT (LER) Form Rev. 2.0

Facility Name (1)	Docket Number (2)	Page (3)
Quad Cities Unit Two	0 5 0 0 0 2 6 5	1 of 0 6

Title (4)
Unit Two HPCI Speed, Flow and Discharge Pressure Oscillations Inlet Drain Pot High Level Alarm and Failure of the 2-2301-28 Valve.

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
1 0	1 8	9 5	9 5	-- 0 0 8	-- 0 0			9 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)					
4		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)		
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)		
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)		
8 7		20.405(a)(1)(iii)	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
Nick Chrissotimos, Regulatory Assurance, Ext. 3100	AREA CODE 3 0 9 6 5 4 - 2 2 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

SUPPLEMENTAL REPORT EXPECTED (14)		Expected Submission Date (15)	Month	Day	Year
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO				

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

ABSTRACT:

At 1642 hours on 10/18/95, Unit Two(U-2) was in the Run mode at 87% of rated core thermal power, at which time the High Pressure Coolant Injection(HPCI) monthly surveillance QCOS 2300-1, "Periodic HPCI Pump Operability Test" was started.

At 1655 hours the Unit Two HPCI was manually tripped from the control room and declared inoperable due to HPCI flow and discharge pressure oscillations.

An Engineering Root Cause Team was formed to investigate this concern. The cause of the event is still under investigation. A Supplemental LER will be submitted when the final root cause(s) of the failure has been identified.

9511270288 8pp

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				Form Rev. 2.0
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)		PAGE (3)
		Year / Sequential Number / Revision Number		
Quad Cities Unit Two	0 5 0 0 0 2 6 5	9 5 - 0 0 8 - 0 0		2 OF 0 6

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

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2511 MWt rated core thermal power.

EVENT IDENTIFICATION: Unit Two HPCI Speed, Flow and Discharge Pressure Oscillations Inlet Drain Pot High Level Alarm and Failure of the 2-2301-28 Valve.

A. CONDITIONS PRIOR TO EVENT:

Unit: Two Event Date: October 18, 1995 Event Time: 1642
Reactor Mode: 4 Mode Name: Run Power Level: 87

This report was initiated by Licensee Event Report LER 265\95-008.

RUN (4) - In this position the reactor system pressure is at or above 825 psig, and the reactor protection system is energized, with APRM protection and RBM interlocks in service (excluding the 15% high flux scram).

B. DESCRIPTION OF EVENT:

At 1642 hours on 10/18/95, the monthly surveillance for the High Pressure Coolant Injection (HPCI) system was being performed. The reactor (Rx) was in the run mode at 87% of rated core thermal power. At 1655 the Unit Two (U-2) HPCI demonstrated unexplained speed, flow and discharge oscillations. At 1655 hours the U-2 HPCI was manually tripped from the control room and declared inoperable and QCOS 2300-2, "HPCI Outage Report" was completed. Event Notification to the NRC was transmitted at 1811. On 10/18/95 at 1655 PIF 95-2673 was generated and Action Requests on the AO-2-2301-28 (#180174) and HPCI (#180187) were written. A 14 day Limiting Condition of Operation (LCO), per Tech Spec section 3.5.C.3. was entered. A Probabalistic Risk Assessment (PRA) evaluation for Core Damage Frequency was completed, which indicated a Yellow condition at 16.27 times nominal.

An Engineering Root Cause Investigation Team was formed on 10/19/95. Three (3) Teams were established to address the three (3) issues:

HPCI Oscillations
HPCI AO-2-2301-28 failure
HPCI Drain Pot High Level Alarm

Investigations including troubleshooting were underway on 10/21/95 when at 2158 hours, U-2 was manually shutdown due to a SCRAM Discharge Volume (reference LER 1-95-007) design issue.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				Form Rev. 2.0
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)		PAGE (3)
		Year / Sequential Number / Revision Number		
Quad Cities Unit Two	0 5 0 0 0 2 6 5	9 5 - 0 0 8 - 0 0		3 OF 0 6
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]				

C. APPARENT CAUSE OF THE EVENT:

Although the exact failure mode(s) has not been determined, it is apparent the following information is relevant to the problems identified.

HPCI OSCILLATIONS

The HPCI oscillations were a contributing factor in declaring the HPCI system inoperable. Prior to U-2 being shut down, a turbine line set was performed in which the travel of the various lever arms and pistons in the turbine front standard were measured. The secondary operating cylinder on the turbine moved five (5) times greater than the specification recommended by the Vendor. This increased gain in the mechanical portion of the system 'may' be a contributing reason for the instabilities that were observed. The decision was made to wait until the U-2 start-up to test this theory. It is planned to run HPCI at a pressure below 150 psig in order to adjust the speed control components in the front standard. When satisfactory pressure and flow performance has been obtained, reactor pressure will be increased to greater than 150 psig to perform the required operability testing. A Supplemental report will be issued when the root cause for these oscillations is identified.

HPCI AO-2-2301-28 VALVE FAILURE

The HPCI Steam Line to Drain Pot Drain Valve, 2-2301-28, failure was identified while using the Quad Cities Annunciator (QCAN) procedures. Approximately one (1) minute into the surveillance, the Drain Pot High Level alarm, 902-3-B-11, annunciated and the control room personnel entered the QCAN's to resolve this anomaly. The procedure calls for the manipulation of the AO-2-2301-29 and AO-2-2301-30 valves prior to manipulating the AO-2-2301-28 valve. When the procedure called for the operator to manipulate the AO-2-2301-28, the valve failed to respond. This failure calls for the operator to terminate the operation of HPCI.

PIF# 95-2687 and Action Request# 950058458 were generated on 10/20/95 to evaluate whether the Unit One (U-1) HPCI AO-1-2301-28 valve would consistently and reliably perform it's design function. An Issue Screening, performed on 10/21/95, verified that required design functions were met and no concerns existed.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				Form Rev. 2.0
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)		PAGE (3)
		Year / Sequential Number / Revision Number		
Quad Cities Unit Two	0 5 0 0 0 2 6 5	9 5 - 0 0 8 - 0 0		4 OF 0 6
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]				

As the investigation on U-2 progressed, it was determined that the 2-2301-28 valve was mechanically stuck in the closed position. Testing/stroking of the valve revealed that the plug hesitated and "jerked" coming off the seat. Upon disassembly it was discovered that the plug was being forced into the valve seat in a manner which deformed the seating surfaces causing a 'burr' to form. This deformation was causing the "jerking" motion. It is postulated that high instrument air pressure (96 psig) was applying excessive force on the plug, thereby forcing the plug into the seat. Recommended air pressure per the manufacturer valve data sheet is between 62 and 91.2 psig. The lack of control to ensure the pressure regulator was set within manufacturer recommendations caused the valve to fail.

Following this event Unit One and Unit Two HPCI air operated valve presure regulators were inspected and found to be within the vendor recommended settings.

HPCI DRAIN POT HIGH LEVEL ALARM

Troubleshooting/testing has indicated the AO-2-2301-31, HPCI Steam Supply Drain Line Trap Bypass valve, opens and closes with the actuation of the HPCI High Level Drain Pot Level switch per design. This testing was performed by draining the water that had collected in the pot while observing the control room alarm and 2-2301-31 valve movement. The Root Cause Team generated a test that provided confidence in the existing switch. One possible root cause of this event is that the existing switch binded slightly. This could have been caused by corrosion on the switches lever assembly. This corrosion could have come from a steam leak at the root of the Magnetrol. This leak was repaired by seal-welding the magnetrol to the drain pot during an earlier outage. The Electrical maintenance personnel evaluated the switch to be fully functional so no repairs or replacement was necessary. On 11/14/95, the Drain Pot level switch was tested under QCOS 2300-15 PFC# 1831, Drain Pot Level Switch Test, and found to be functioning properly. This test allowed the operator to fill and drain the drain pot four(4) times, each time verifying the proper functioning of the AO-2-2301-31 and the B-11 annunciator. All transitions performed as expected. This portion of the troubleshooting indicates that the level switch is working properly at this time. Another, second possible root cause, is that corrosion materials inside the drain pot caused binding between the magnetic pickup plug and the nonmagnetic tubing casing. Further investigation by looking inside the drain bowl with a boroscope might determine if the condition of the drainbowl itself, ie. rust, etc., might have contributed to the binding of the plug. This boroscope inspection is included in the scope of work within NWR# 950102144 task #02. This is a prior to startup work request. Unit One HPCI was run on 11/9/95 to verify operability of the system and it's components. No problems with the drainpot or the level switch were noted.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION					Form Rev. 2.0
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		Year	Sequential Number	Revision Number	
Quad Cities Unit Two	0 5 0 0 0 2 6 5	9 5	- 0 0 8	- 0 0	5 OF 0 6

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

D. SAFETY ANALYSIS OF EVENT:

The safety significance of this event was minimal due to the availability of backup and support systems. Technical Specifications require that if the HPCI system is found to be inoperable, continued reactor operation is permissible for fourteen (14) days providing that backup systems are available.

Throughout this event, the backup systems, i.e. Reactor Core Isolation Cooling (RCIC) [BN], Automatic Depressurization System (ADS)[RV], Core Spray (CS) [BM], and Low Pressure Coolant Injection (LPCI) [BO] mode of Residual Heat Removal (RHR) system were available to provide adequate core cooling in the event of a design basis accident.

Unit One HPCI remained operable during this event.

E. CORRECTIVE ACTIONS:

CORRECTIVE ACTIONS COMPLETED

1. Repairs have been made to the 2-2301-28 valve and air pressure has been reestablished to within Vendor recommended settings. Unit One AO-1-2301-28 was evaluated as fully functional. Remaining HPCI Unit One and Unit Two air operated pressure regulators were inspected and found to be within the vendor recommended settings.

2. The Magnetrol level switch was successfully tested and evaluated under QCOS 2300-15 PFC# 1831 to be fully functional.

3. Ran Unit One HPCI on 11/9/95 to verify system and component operability and availability. No problems with the drainpot or level switch were noted.

CORRECTIVE ACTIONS TO BE COMPLETED

1. HPCI oscillation testing will be completed during U-2 start-up. (NTS # 2651809500801, SED,12/13/95,Hutchinson,Swales)

2. A program to control and document the instrument air pressure settings for selected Air Operated valves will be established. (NTS # 2651809500802, SES,12/31/96,Hutchinson,Arnold)

3. Complete Unit Two HPCI Drain Pot inspection under NWR #950102144 task #02 prior to Unit Two startup.(NTS # 2651809500803,SED,12/13/95,Hutchinson,Swales)

4. Initiate an increased testing frequency on both Unit One and Unit Two HPCI systems in order to increase confidence in the system and determine if any other system components are near failure.(NTS # 2651809500804, OPS, 12/13/95, Cook, Cook)

A Supplemental LER will be submitted when the final root cause(s) of the failure has been determined.

F. PREVIOUS EVENTS:

LER 1-94-007, HPCI 1-2301-63B Restricting Orifice Found 95% Plugged With Slag Due to an Unknown Cause

LER 1-94-008, HPCI Flow Oscillation During Operability Run Due to Broken Instrumentation Wire

G. COMPONENT FAILURE DATA:

1. Data for HPCI Oscillations will be provided in a supplemental report when the root cause(s) is (are) identified.

2. Component Description: Air Operated Valve

   Manufacturer / Type: Copes Vulcan Company/Drain Pot Vent to Condenser

   Serial Number: 6710-58363-17

   Part Number: 139740K (plug), 129309MKD (stem)

3. Data for the HPCI Drain Pot Level Switch event will be provided in a supplemental report when the root cause(s) is (are) identified.

255180950087S (To be filled in by Reg Assurance) Source Document: LER 2-95-008 Rev 1

Assigned to: Hutchinson (Department Manager) Swales (Implementor) Due Date: 5/31/96

Commitment Description:
Complete flow controller testing on V-1 HPCI during start-up from Q1R14.

****

ACCEPTANCE SECTION

I understand and accept responsibility of the above listed action and due date:

_____ Department Manager Signature

****

DUE DATE/EXTENSION/TRANSFER RESPONSIBILITY REQUESTS

_____ Extend to Date _____ Request By/Date Approved by: _____ Dept Mgr/Date _____ Station Mgr/Date

Reasons: _____

_____ Transfer Resp. To _____ Request by/Date Approved by: _____ Dept Mgr/Date _____ Recipient/Date

****

COMPLETION SECTION

*Does this item contain radiological, hazmat, or environmental issues?
No ____ Yes ____
(Items checked Yes must be reviewed and signed by the Rad-Chem. Superintendent)

Completion Date: _____ Close-out Documents: _____

Comments: _____

*Reviewed by: _____ Rad-Chem. Superintendent (Signature) Date: _____

Completed by: _____ Implementor (Signature) Date: _____

Reviewed by: _____ Supervisor (Signature) Date: _____

Reviewed by: _____ Department Manager (Signature) Date: _____

Approved by: _____ Station Manager (Signature) Date: _____

RA\CAF

2651809500806 Source Document: LER 2-95-008 Rev 1
(To be filled in by Reg Assurance)

Assigned to: Kudalis (Department Manager) Chernick (Implementor) Due Date: 6/30/96

Commitment Description:
Review this event with all engineering departments as part of lessons learned. Particularly review the control of equipment such as flow control valves and the effect their positioning may have on surveillance testing.

****

ACCEPTANCE SECTION

I understand and accept responsibility of the above listed action and due date:

Craig Rushing for TPK 3/19/96
Department Manager Signature

****

DUE DATE/EXTENSION/TRANSFER RESPONSIBILITY REQUESTS

Extend to Date _____ Request By/Date _____ Approved by: Dept Mgr/Date _____ Station Mgr/Date _____

Reasons: _____

Transfer Resp. To _____ Request by/Date _____ Approved by: Dept Mgr/Date _____ Recipient/Date _____

****

COMPLETION SECTION

*Does this item contain radiological, hazmat, or environmental issues?
No ____ Yes ____
(Items checked Yes must be reviewed and signed by the Rad-Chem. Superintendent)

Completion Date: _____ Close-out Documents: _____

Comments: _____

*Reviewed by: _____ Date: _____
Rad-Chem. Superintendent (Signature)

Completed by: _____ Date: _____
Implementor (Signature)

Reviewed by: _____ Date: _____
Supervisor (Signature)

Reviewed by: _____ Date: _____
Department Manager (Signature)

Approved by: _____ Date: _____
Station Manager (Signature)