

ACTION REQUEST 00237296

Type : NCR Orig Date: 06/21/07 16:44 Discovery Date:  
Subject : AOP-5 ENTRY DUE TO SPILL AT U2 CST

**Description**

WHILE UNIT 1 WAS LOWERING TORUS LEVEL PER IOP-17, THE CONTROL ROOM RECEIVED A REPORT OF A SPILL AT THE UNIT 2 CST. THE UNIT 1 TORUS LINE UP WAS SECURED AND THE SPILL STOP. INITIAL REPORTS ARE THAT UNIT 1 TORUS WATER HAS BEEN SPILLED ONTO THE GROUND AND HAS ENTERED THE STORM DRAIN SYSTEM. AOP -5 WAS ENTERED. E&RC AND LICENSING HAS BEEN NOTIFIED. CURRENTLY UNABLE TO DETERMINE VOLUME OF LEAK. THE STORM DRAIN SYSTEM ELECTRIC PUMP BREAKERS ARE TURNED OFF TO PREVENT UNCONTROLLED PUMPING AND PLANS ARE BEING DEVELOPED TO PUMP BASIN.

Priority : 1 Report To. : Status: COMPLETE 06/03/08  
Due Date : 06/21/08 Event Date :

Originator : STACYL Originator Group:  
Facility : BNP Department : BK5 Organization:

Owed To : Owed To Group : OPSUEVAL  
Owed To Fac: BNP Department : Discipline :

**AR Status History**

Updated Date	Updated By	AR Status	AR Due Date
06/21/07	STACYL	INPROG	
06/21/07	STACYL	H/APPR	
06/27/07	VANLEW		06/21/08
06/27/07	VANLEW	PRE-APRV	
06/27/07	VANLEW	APPROVED	
06/03/08	VANLEW	COMPLETE	

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Request Attribute	Value	Reqd	Date
1A POT'L OPER/REPORT	N	Y	06/21/07
Name : LARRY	STACY		

Request Attribute	Value	Reqd	Date
1B EQUIPMENT RELATED	N	Y	06/21/07
Name : LARRY	STACY		

Request Attribute	Value	Reqd	Date
2 SUPERVISOR REVIEW	Y	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
2A CR VALID?	Y	Y	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
2B FURTHER INVN REQD	Y	Y	06/22/07
Name : MARK	SCHALL		

Information to include for No Further Investigation Required  
Include the following information for Priority 2:  
" Inappropriate Act statement (include work group involved, if known)  
" Apparent Cause including code  
" Completed Corrective Actions - CORR, or  
" Additional Corrective Actions if needed - including recommended assignee and recommended due date  
Include the following information for Priority 3:  
" Completed Corrective Actions - CORL, or  
" Additional Corrective Actions if needed - including recommended assignee and recommended due date

Request Attribute	Value	Reqd	Date
2C RECOMMENDED OWNER OPERATIONS		N	06/22/07
Name : MARK	SCHALL		

Initial investigation has shown that it is probable that the associated work order for disassembly of the check valve (WO 1033023, task 11, Clearance request 10836) was added to the CST clearance (CO 138829) without providing a proper isolation. Therefore it appears that the error was in the clearance preparation process.

Request Attribute	Value	Reqd	Date
2D OPER/REPORT ISSUE	Y	Y	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
2D1EQUIPMENT RELATED	N	Y	06/22/07
Name : MARK	SCHALL		

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Request Attribute	Value	Reqd	Date
2E MAINT RULE APPLIC	N	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
2F SYSTEM	3070	Y	06/25/07
Name : SYLVIA	EDWARDS		

Changed from N/A to 3070 per Jim Boone, MR Coordinator. sde 6/25/07

Request Attribute	Value	Reqd	Date
3 OPERATIONS REVIEW	Y	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
3A IMMED REPT ISSUE	N	N	06/22/07
Name : MARK	SCHALL		

See log entry made into the Unit 2 autolog on 6/21/2007 at 15:43. This condition is not immediately reportable.

Request Attribute	Value	Reqd	Date
3B OCR	N	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
3B1 OPER ISSUE	N	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
3B2 REPORT ISSUE	Y	N	06/22/07
Name : MARK	SCHALL		

Reportability will need to be evaluated due to a condition that existed from the time the check valve was disassembled (approximately 6/1/2007) until the line was properly isolated on the evening of 6/21/2007. The need for this evaluation is based on the following:  
During the subject time frame, if an accident occurred on either unit, with fuel damage, and in the course of the accident, the suppression pool needed to be pumped, many gallons of highly contaminated water would have been released through the disassembled check valve to the storm drain basin.

Request Attribute	Value	Reqd	Date
3B3 REW	N	N	06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
3B4 DEG/NCON	N		06/22/07
Name : MARK	SCHALL		

Request Attribute	Value	Reqd	Date
3C TRACKING NUMBER	N/A	N	06/22/07
Name : MARK	SCHALL		

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Request Attribute	Value	Reqd Date
4 REG AFF REVIEW		N
Name :		

Request Attribute	Value	Reqd Date
4A OPER/REPORT ISSUE	N	Y 06/26/07
Name : WILLIAM	MURRAY	

Request Attribute	Value	Reqd Date
4A1 OPER ISSUE	N	Y 06/26/07
Name : WILLIAM	MURRAY	

Request Attribute	Value	Reqd Date
4A2 REPORT ISSUE	N	Y 06/26/07
Name : WILLIAM	MURRAY	

This is not immediately reportable under 10 CFR 50.72. However, per Attribute 4B, a follow-up assignment to Engineering has been requested in order to determine whether the identified configuration (i.e., the 2-CO-V162 check valve being disassembled, but the pathway not being isolated) could have resulted in an event or condition that could have prevented fulfillment of the safety function of structures or systems needed to control the release of radiation.

=====  
Updated 7/9/07: Based on discussions with Paul Flados, the only scenario of concern for getting highly contaminated water to the torus would be an Alternate Source Term design bases LOCA. A Group 2 isolation occurs on a LL1 or high drywell pressure signal, which would isolate the path to radwaste and prevent release of contaminated water under the conditions which are documented in this NCR. This condition could not have prevented fulfillment of containment and, as such, is not reportable. Mark Turkal

Request Attribute	Value	Reqd Date
4A3 REW	N	Y 06/26/07
Name : WILLIAM	MURRAY	

Request Attribute	Value	Reqd Date
4A4 DEG/NCON	N	06/26/07
Name : WILLIAM	MURRAY	

Request Attribute	Value	Reqd Date
4B FOLLOWUP ASG REQD	N	Y 07/09/07
Name : MARK	TURKAL	

Update 7/9/07. It was determined that this is not a reportable condition. See Attribute 4A2 for additional discussion on reportability. Mark Turkal

=====  
A follow-up assignment should be issued to Engineering to evaluate the postulated scenario described in Attribute 3B2 to determine whether the identified configuration (i.e., the 2-CO-V162 check valve being disassembled, but the pathway not being isolated) could have resulted in an event or condition that could have prevented fulfillment of the safety function of structures or systems needed to control the release of radiation. The due date should be July 10, 2007, to allow time for root cause and LER preparation if past operability is a concern. Please

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Request Attribute Value Reqd Date  
 6F LAST COM ITM DUE  
 Name :

Request Attribute Value Reqd Date  
 6G EQUIP PRI ISSUE  
 Name :

Request Attribute Value Reqd Date  
 6H RESP MGR  
 Name :

Request Attribute Value Reqd Date  
 6I EQUIP PRI STATUS  
 Name :

**ACTION REQUEST APPROVAL REVIEW**

Route List: 001				Route List Initiator: STACYL			
Alert	Send	Send	Action	Action			
PASSPORT Fac Group/Type Last Name	Date	Time	Taken	Date/Time			
SCHALM BNP OPSSUPV A SCHALL	06/21/07	16:44	APPROVED	06/22/07 01:21			
SCHALM BNP CONTROOM A SCHALL	06/22/07	01:21	APPROVED	06/22/07 01:21			
MURRAW BNP REGREV A MURRAY	06/22/07	01:21	APPROVED	06/26/07 08:46			
VANLEW BNP UNITEVAL A VAN KLEECK	06/26/07	08:46	APPROVED	06/27/07 06:52			

**TREND-CAUSE**

Facility: BNP Trend 1: CCAUSE Trend 2: F Trend 3: F4A Date: 08/07/07  
 Process: N/A Org: MNT Rank: S Assign:  
 Description: POLICY/EXPECTATIONS WERE NOT WELL DEFINED OR UNDER  
 INAPPROPRIATE ACT: CLEARANCE HOLDER/WORK ORDER IMPLEMENTER  
 PERFORMED AN INADEQUATE PRE-JOB BRIEF PRIOR TO STARTING WORK.  
 CONTRIBUTING CAUSE: FAILURE TO ESTABLISH AND ENFORCE PROPER  
 PRE-JOB BRIEF STANDARDS.  
 CAUSE CODE: F4A

Facility: BNP Trend 1: CCAUSE Trend 2: I Trend 3: I8G Date: 08/07/07  
 Process: N/A Org: MNT Rank: S Assign:  
 Description: FAILURE TO FOLLOW PROCEDURE AS WRITTEN  
 INAPPROPRIATE ACT: FAILURE TO PROPERLY IMPLEMENT THE CLEARANCE  
 REQUEST, AND CLEARANCE DEVELOPMENT PROCESS.  
 CONTRIBUTING CAUSE: CLEARANCE REQUESTER, CLEARANCE PREPARER,  
 AND CLEARANCE REVIEWER FAILED TO FOLLOW THE APPLICABLE PROCEDURES  
 CAUSE CODE: I8G

Facility: BNP Trend 1: CCAUSE Trend 2: I Trend 3: I8G Date: 08/07/07  
 Process: N/A Org: OPS Rank: S Assign:  
 Description: FAILURE TO FOLLOW PROCEDURE AS WRITTEN  
 INAPPROPRIATE ACT: FAILURE TO PROPERLY IMPLEMENT THE CLEARANCE  
 REQUEST, AND CLEARANCE DEVELOPMENT PROCESS.  
 CONTRIBUTING CAUSE: CLEARANCE REQUESTER, CLEARANCE PREPARER,  
 AND CLEARANCE REVIEWER FAILED TO FOLLOW THE APPLICABLE PROCEDURES  
 CAUSE CODE: I8G

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include Licensing as a secondary owed-to organization for this assignment.  
- Bill Murray 6/26/07

Request Attribute	Value	Reqd	Date
4C T. SPEC VIOLATION	N	Y	06/26/07
Name :	WILLIAM MURRAY		

Request Attribute	Value	Reqd	Date
4D ADD'L REPORT REQD	N	Y	06/26/07
Name :	WILLIAM MURRAY		

Request Attribute	Value	Reqd	Date
4E PNSC/CSERB REQD	N	Y	06/26/07
Name :	WILLIAM MURRAY		

Request Attribute	Value	Reqd	Date
5 CLASSIFN/ASSIGNMNT		N	
Name :			

Request Attribute	Value	Reqd	Date
5A CR VALID?	Y	Y	06/27/07
Name :	LEWIS VAN KLEECK		

Request Attribute	Value	Reqd	Date
5B FURTHER INVN REQD	Y	Y	06/27/07
Name :	LEWIS VAN KLEECK		

Request Attribute	Value	Reqd	Date
6 MISCELLANEOUS		N	
Name :			

Request Attribute	Value	Reqd	Date
6A COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6B COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6C COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6D COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6E COMMENTS		N	
Name :			

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Facility: BNP Trend 1: EVENT Trend 2: EC Trend 3: EC65 Date: 06/27/07  
Process: OPI Org: OPWC Rank: Assign:  
Description: REQUIREMENTS NOT FOLLOWED

Facility: BNP Trend 1: RCAUSE Trend 2: I Trend 3: I1C Date: 08/07/07  
Process: N/A Org: MNT Rank: S Assign:  
Description: ASSUMPTIONS NOT VALIDATED  
INAPPROPRIATE ACT: FAILURE TO PROPERLY IMPLEMENT THE CLEARANCE  
REQUEST, AND CLEARANCE DEVELOPMENT PROCESS.  
ROOT CAUSE: AN OVER RELIANCE, BY INVOLVED INDIVIDUALS, ON OTHER  
EXISTING CLEARANCE PROCESS BARRIERS TO ENSURE THE PROCESS  
DEVELOPS A CLEARANCE THAT ENSURES EQUIPMENT AND PERSONNEL SAFETY.  
CAUSE CODE: I1C

Facility: BNP Trend 1: RCAUSE Trend 2: I Trend 3: I1C Date: 08/07/07  
Process: N/A Org: OPS Rank: S Assign:  
Description: ASSUMPTIONS NOT VALIDATED  
INAPPROPRIATE ACT: FAILURE TO PROPERLY IMPLEMENT THE CLEARANCE  
REQUEST, AND CLEARANCE DEVELOPMENT PROCESS.  
ROOT CAUSE: AN OVER RELIANCE, BY INVOLVED INDIVIDUALS, ON OTHER  
EXISTING CLEARANCE PROCESS BARRIERS TO ENSURE THE PROCESS  
DEVELOPS A CLEARANCE THAT ENSURES EQUIPMENT AND PERSONNEL SAFETY.  
CAUSE CODE: I1C

**Keywords**

Keyword	Keyword Description
CFGCTRL	CONFIGURATION CONTROL
CLR/OPS	CLEARANCE/OPERATIONS
HUM PERF	HUMAN PERFORMANCE RELATED
PROCOMP	PROCEDURE COMPLIANCE

**AR REFERENCE DOCUMENTS**

DOC	SUB	DOCUMENT	REV	MIN	TITLE
BNP	AR	00237296	000		AOP-5 ENTRY DUE TO SPILL AT U

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ASSIGNMENT NUMBER 01 SUB

Type : INVN Due Date : 08/07/07  
 Status : COMPLETE Reschedule : 3 Pri Resp Group: OPSWCSUPT  
 Assigned To : L VAN KLEECK Sec Resp Group:  
 Subject : SACE: INVESTIGATE AOP-5 ENTRY DUE TO SPILL AT U2 CST  
 Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : 278 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
06/21/07	STACYL	INPROG	
06/27/07	VANLEW		07/19/07
06/27/07	VANLEW	NTFY/PRI	
06/27/07	WOODBW	ACC/PRI	
06/27/07	WOODBW	NTFY/ASG	
06/28/07	VANLEW	ACC/ASG	
07/19/07	VANLEW		07/26/07
07/25/07	VANLEW		08/02/07
08/02/07	VANLEW		08/07/07
08/02/07	VANLEW	AWAIT/C	
08/02/07	VANLEW	ACC/ASG	
08/02/07	VANLEW	AWAIT/C	
08/07/07	VANLEW	ACC/ASG	
08/07/07	VANLEW	AWAIT/C	
08/07/07	VANLEW	COMPLETE	

Assignment Attribute Value Reqd Date  
 BENEFIT REALIZED N  
 Name :

Assignment Attribute Value Reqd Date  
 EXTERNAL OE RECOMM Y 08/02/07  
 Name : LEWIS VAN KLEECK

Assignment Attribute Value Reqd Date  
 INTERNAL OE RECOMM N 08/02/07  
 Name : LEWIS VAN KLEECK

Assignment Attribute Value Reqd Date  
 1 EVALUATOR/ASSIGNEE N  
 Name :

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Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS      EXTENSION	N      07/19/07
Name : LEWIS              VAN KLEECK	

Obtained PGM approval for a one week extension, to 7/26/07. More time is required to obtain assignee concurrence and appropriate due dates for various assignments. LVK 7/19/07.

Obtained PGM approval for a one week extension, to 8/2/07. More time is required to obtain assignee concurrence and ensure appropriate Root Cause and CAPRs are assigned. LVK 7/25/07.

Permission has been obtained from the PGM to extend the due date on this assignment to 8/7/07. Due date extension is to allow additional time to modify current investigation and then complete required reviews and processing without going overdue. Agreement has been obtained for final product, and revision is in progress. LVK 8/2/07.

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS      RETURNED	N      08/07/07
Name : LEWIS              VAN KLEECK	

This INVN was returned to correct minor errors on the INVN chart prior to completion. No conclusions or assignments were changed. The closure route list was revised to include only the OPSUEVAL as approvals from all required individuals was already obtained and no substantial changes were made. LVK 8/7/07.

Assignment Attribute Value	Reqd Date
2B COMMENTS	N
Name :	

Assignment Attribute Value	Reqd Date
2C COMMENTS	N
Name :	

Assignment Attribute Value	Reqd Date
2D COMMENTS	N
Name :	

Assignment Attribute Value	Reqd Date
2E COMMENTS	N
Name :	

COMPLETION NOTES

CAUSE/ACTION

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ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: VANLEW

PASSPORT	Alert	Fac	Group/Type	Last Name	Send Date	Send Time	Action Taken	Action Date/Time
VANLEW	BNP OPSMGR	A	VAN KLEECK		08/02/07	13:22	RETURNED	08/02/07 16:24
HOWARS	BNP OPSMGR	A	HOWARD		08/02/07	16:26	APPROVED	08/02/07 16:29
HOBBS	BNP PGM	A	HOBBS		08/02/07	16:29	APPROVED	08/06/07 18:01
VANLEW	BNP OPSUEVAL	A	VAN KLEECK		08/06/07	18:01	RETURNED	08/07/07 11:40
VANLEW	BNP OPSUEVAL	A	VAN KLEECK		08/07/07	11:43	APPROVED	08/07/07 11:44
THEARG	BNP OPEXCOORD	I	THEARLING		08/07/07	11:43		08/13/07 10:21

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ASSIGNMENT NUMBER 04 SUB

Type : CAPR Due Date : 10/18/07  
Status : COMPLETE Reschedule : Pri Resp Group: MNTMGR  
Assigned To : R BISSETT Sec Resp Group:  
Subject : COMMUNICATE TO PERSONNEL THE IMPORTANCE OF  
Aff Facility: BNP Unit : System :  
UCR : Schedule Ref :  
Organization: Department : HGL Discipline :  
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
06/21/07	STACYL	INPROG	
08/07/07	VANLEW		10/18/07
08/07/07	VANLEW	NTFY/PRI	
09/20/07	BISSER	ACC/PRI	
09/20/07	BISSER	NTFY/ASG	
09/20/07	BISSER	ACC/ASG	
09/20/07	BISSER	AWAIT/C	
09/20/07	BOYCER	COMPLETE	

COMMUNICATE TO PERSONNEL THE IMPORTANCE OF  
HAVING THE MINDSET THAT EACH INDIVIDUAL  
INVOLVED IN ANY PORTION OF THE CLEARANCE PROCESS  
MUST ACT LIKE THEY ARE THE ONLY BARRIER TO ENSURE  
PERSONNEL AND EQUIPMENT SAFETY

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

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Assignment Attribute Value		Reqd Date
2A COMMENTS	ASSIGNMENT SPLIT OUT	N 08/29/07
Name : SHEILA	WILLIAMS	

This assignment was originally issued to the Maintenance Manager, Susan Rogers. It was split out to each of the Maintenance Supts.  
 -04 Richard Bissett (Maintenance Tech Services)  
 -27 Tim King (Mechanical Maintenance)  
 -28 Paul Smith (I&C/E Maintenance)  
 (SVW 8/29/07)

Assignment Attribute Value		Reqd Date
2B COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2C COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2D COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2E COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
3A LTCA APPROVAL		N
Name :		

Assignment Attribute Value		Reqd Date
3B LTCA CONCURRENCE		N
Name :		

**COMPLETION NOTES**  
 COMMUNICATED TO MTS PERSONNEL ON 9/20/07. RAB 9/20/07.

**CAUSE/ACTION**

**ASSIGNMENT COMPLETION APPROVAL**

Route List: 001		Route List Initiator: BISSER
Alert		Send Send Action Action
PASSPORT Fac Group/Type Last Name		Date Time Taken Date/Time
BISSER BNP MNTPSUPT A BISSETT		09/20/07 09:29 APPROVED 09/20/07 09:29
BOYCER BNP OPSUEVAL A BOYCE		09/20/07 09:29 APPROVED 09/20/07 15:15

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ASSIGNMENT NUMBER 05 SUB

Type : CORR Due Date : 11/13/07  
 Status : COMPLETE Reschedule : 1 Pri Resp Group: MNTPSUPT  
 Assigned To : R BISSETT Sec Resp Group:  
 Subject : REINFORCE CLEARANCE REQUEST QUALITY STANDARDS

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : HGL Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
06/21/07	STACYL	INPROG	
08/07/07	VANLEW		10/18/07
08/07/07	VANLEW	NTFY/PRI	
08/30/07	BISSER	ACC/PRI	
10/18/07	WILLIS01		11/13/07
11/06/07	BISSER	NTFY/ASG	
11/06/07	BISSER	ACC/ASG	
11/06/07	BISSER	AWAIT/C	
11/06/07	VANLEW	ACC/ASG	
11/13/07	BISSER	AWAIT/C	
11/13/07	JOHNSC05	COMPLETE	

REINFORCE CLEARANCE REQUEST QUALITY STANDARDS  
 AND ESTABLISH TARGETED OBSERVATIONS TO VERIFY  
 CLEARANCE REQUEST QUALITY IS AT THE APPROPRIATE  
 LEVEL

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

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Assignment Attribute Value		Reqd Date
2A COMMENTS	ASSIGNMENT SPLIT OUT	N 08/29/07
Name : SHEILA	WILLIAMS	

This assignment was originally issued to the Maintenance Manager, Susan Rogers. It was split out to each of the Maintenance Supts.

- 05 Richard Bissett (Maintenance Tech Services)
  - 29 Tim King (Mechanical Maintenance).
  - 30 Paul Smith (I&C/E Maintenance)
- (SVW 8/29/07)

Extend assignment to 11/13/07 per Richard Bissett, acting for Susan Rogers. Additional time needed to complete the assignment. (SVW 10/18/07)

Assignment Attribute Value		Reqd Date
2B COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2C COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2D COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2E COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
3A LTCA APPROVAL		N
Name :		

Assignment Attribute Value		Reqd Date
3B LTCA CONCURRENCE		N
Name :		

**COMPLETION NOTES**

CLEARANCE REQUEST QUALITY STANDARDS WERE REINFORCED WITH MTS ON 11/06/07. NTM ITEM (NTM 254326) HAS BEEN GENERATED TO PROJECT MANAGERS AND SUPERVISOR TO CONDUCT OBSERVATIONS FO CLEARANCE PROCESS TO ENSURE QUALITY.  
 RAB 11/06/07

**CAUSE/ACTION**

**ASSIGNMENT COMPLETION APPROVAL**

Route List: 001				Route List Initiator: BISSER			
	Alert			Send	Send	Action	Action
PASSPORT	Fac	Group/Type	Last Name	Date	Time	Taken	Date/Time
BISSER	BNP	MNTPSUPT	A BISSETT	11/06/07	16:08	APPROVED	11/06/07 16:08
VANLEW	BNP	OPSUEVAL	A VAN KLEECK	11/06/07	16:08	RETURNED	11/06/07 16:23
BISSER	BNP	MNTPSUPT	A BISSETT	11/13/07	10:18	APPROVED	11/13/07 10:18

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JOHNSC05 BNP OPSUEVAL A JOHNSON 11/13/07 10:18 APPROVED 11/13/07 16:31



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Assignment Attribute Value 2 MISCELLANEOUS Name :	Reqd Date N
Assignment Attribute Value 2A COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3 ASSGN INIT DATE Name :	Reqd Date N

COMPLETION NOTES

ASSIGNMENT CROSS REFERENCES

REF TYP	REF NBR	REF SUB	REF NBR TYPE	STATUS	DESCRIPTION
AS	00190202	2800	GNRL	COMPLETE	VERIFY THAT THE EFFECTIVENESS REVIEW

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: PADLEA
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
BAINDO BNP OPSOUTSUPT A BAIN	05/09/08 11:26 APPROVED 05/09/08 22:21
DUBROP BNP OPSMGR A DUBROUILLET	05/09/08 22:21 APPROVED 05/29/08 15:54
WILLIM03 BNP PGM A WILLIAMS	05/29/08 15:54 APPROVED 06/02/08 17:09
VANLEW BNP OPSUEVAL A VAN KLEECK	06/02/08 17:09 APPROVED 06/03/08 06:13

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ASSIGNMENT NUMBER 09 SUB

Type : ENHN Due Date : 07/10/07  
 Status : CANCELED Reschedule : Pri Resp Group: ESSESYS  
 Assigned To : L KUFFEL Sec Resp Group:  
 Subject : ENGINEERING TO EVALUATE THE POSTULATED SCENARIO

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : MBH Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
06/21/07	STACYL	INPROG	
06/27/07	VANLEW		07/10/07
06/27/07	VANLEW	NTFY/PRI	
07/09/07	VANLEW	CANCELED	

ENGINEERING TO EVALUATE THE POSTULATED SCENARIO DESCRIBED IN ATTRIBUTE 3B2 TO DETERMINE WHETHER THE IDENTIFIED CONFIGURATION (I.E., THE 2-CO-V162 CHECK VALVE BEING DISASSEMBLED, BUT THE PATHWAY NOT BEING ISOLATED) COULD HAVE RESULTED IN AN EVENT OR CONDITION THAT COULD HAVE PREVENTED FULFILLMENT OF THE SAFETY FUNCTION OF STRUCTURES OR SYSTEMS NEEDED TO CONTROL THE RELEASE OF RADIATION.

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N

Name :

Assignment Attribute Value	Reqd Date
1 CHANGE BASIS CANCEL	N 07/09/07

Name : LEWIS VAN KLEECK

Based on additional feedback from Mark Turkal, no follow-up assignment is required. This assignment can be canceled. See Attribute 4A2 and 4B. LVK 7/9/07.

Assignment Attribute Value	Reqd Date
2 COMMENTS	N

Name :

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Alert	Route List Initiator:
PASSPORT Fac Group/Type Last Name	BNP ESSESYS A	Send Date Send Time Action Taken Action Date/Time

ACTION REQUEST 00237296

BNP LICSUPV A  
VANLEW BNP OPSUEVAL A VAN KLEECK

CANCELED 07/09/07 17:24

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 10 SUB

Type : CAPR Due Date : 10/18/07  
 Status : COMPLETE Reschedule : Pri Resp Group: OPSMGR  
 Assigned To : S HOWARD Sec Resp Group:  
 Subject : COMMUNICATE TO PERSONNEL THE IMPORTANCE OF  
 Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : Z78 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	10/18/07
08/07/07	VANLEW	NTFY/PRI	
08/08/07	DUBROP	ACC/PRI	
08/08/07	DUBROP	NTFY/ASG	
10/01/07	HOWARS	ACC/ASG	
10/01/07	HOWARS	AWAIT/C	
10/08/07	VANLEW	COMPLETE	

COMMUNICATE TO PERSONNEL THE IMPORTANCE OF  
 HAVING THE MINDSET THAT EACH INDIVIDUAL  
 INVOLVED IN ANY PORTION OF THE CLEARANCE PROCESS  
 MUST ACT LIKE THEY ARE THE ONLY BARRIER TO ENSURE  
 PERSONNEL AND EQUIPMENT SAFETY

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS	N
Name :	







ACTION REQUEST 00237296

Route List: 001

Route List Initiator: RAINEJ

PASSPORT	Alert	Fac	Group/Type	Last Name	Send Date	Send Time	Action Taken	Action Date/Time
HOWARS	BNP OPSMGR	A	HOWARD		10/15/07	12:13	APPROVED	10/16/07 12:39
VANLEW	BNP OPSUEVAL	A	VAN KLEECK		10/16/07	12:39	APPROVED	10/17/07 06:08







ACTION REQUEST 00237296

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: PADLEA

	Alert			Send	Send	Action	Action
PASSPORT	Fac	Group/Type	Last Name	Date	Time	Taken	Date/Time
POTTEM	BNP	OPSOUTSUPT A	POTTER	09/28/07	12:27	APPROVED	10/01/07 10:58
BOYCER	BNP	OPSUEVAL	A BOYCE	10/01/07	10:58	APPROVED	10/01/07 11:33



ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001 -	Route List Initiator: BISSER
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
BISSER BNP MNTXSUPV A BISSETT	08/30/07 16:57 APPROVED 08/30/07 16:57
BOYCER BNP OPSUEVAL A BOYCE	08/30/07 16:57 APPROVED 08/30/07 17:07

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 15 SUB

Type : CORR Due Date : 09/13/07  
 Status : COMPLETE Reschedule : 1 Pri Resp Group: OPSOUTSUPT  
 Assigned To : A PADLECKAS Sec Resp Group:  
 Subject : CONFIDENTIAL ACTIONS TAKEN WITH THE INVOLVED INDIVIDUALS  
 Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : CU2 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	08/30/07
08/07/07	VANLEW	NTFY/PRI	
08/07/07	WOODBW	ACC/PRI	
08/07/07	WOODBW	NTFY/ASG	
08/30/07	BOYCER		09/13/07
09/13/07	PADLEA	ACC/ASG	
09/13/07	PADLEA	AWAIT/C	
09/13/07	BOYCER	COMPLETE	

CONFIDENTIAL ACTIONS TAKEN WITH THE INVOLVED  
 CLEARANCE PREPARER AND CLEARANCE REVIEWER.

Assignment Attribute Value Reqd Date  
 BENEFIT REALIZED N  
 Name :

Assignment Attribute Value Reqd Date  
 1 UNIT/SECT EVALUATR N  
 Name :

Assignment Attribute Value Reqd Date  
 1A COMMITTED N  
 Name :

Assignment Attribute Value Reqd Date  
 1B CHANGE BASIS EXTENSION REQUEST N 08/30/07  
 Name : ROBERT BOYCE

Due date extended until 09/13/2007 with Ops Manager permission.  
 Additional information is required prior to completion of this item that  
 cannot be obtained at this time due to the ongoing INPO visit. RSB  
 08/30/2007

Assignment Attribute Value Reqd Date  
 2 MISCELLANEOUS N  
 Name :



ACTION REQUEST 00237296

ASSIGNMENT NUMBER 16 SUB

Type : CORR Due Date : 08/30/07  
Status : COMPLETE Reschedule : Pri Resp Group: MNTMSUPV  
Assigned To : K JONES Sec Resp Group:  
Subject : CONFIDENTIAL ACTIONS TAKEN WITH THE INVOLVED INDIVIDUAL  
Aff Facility: BNP Unit : System :  
UCR : Schedule Ref :  
Organization: Department : Z63 Discipline :  
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	08/30/07
08/07/07	VANLEW	NTFY/PRI	
08/08/07	GRADYL	ACC/PRI	
08/08/07	GRADYL	NTFY/ASG	
08/20/07	JONESK	ACC/ASG	
08/20/07	JONESK	AWAIT/C	
08/20/07	VANLEW	COMPLETE	

CONFIDENTIAL ACTIONS TAKEN WITH THE INVOLVED INDIVIDUAL

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS	N
Name :	

ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

COMPLETION NOTES  
 CONFIDENTIAL ACTIONS HAVE BEEN TAKEN WITH THE INVOLVED  
 INDIVIDUAL.

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: JONESK
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
JONESK BNP MNTMSUPV A JONES	08/20/07 09:17 APPROVED 08/20/07 09:18
VANLEW BNP OPSUEVAL A VAN KLEECK	08/20/07 09:18 APPROVED 08/20/07 17:54

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 17 SUB

Type : CORR Due Date : 11/13/07  
 Status : COMPLETE Reschedule : 1 Pri Resp Group: MNTPSUPT  
 Assigned To : R BISSETT Sec Resp Group:  
 Subject : REINFORCE CLEARANCE BOUNDARY VERIFICATION QUALITY STANDAR

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : HGL Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	10/18/07
08/07/07	VANLEW	NTFY/PRI	
08/29/07	BISSER	ACC/PRI	
08/29/07	WILLIS01	NTFY/PRI	
08/30/07	BISSER	ACC/PRI	
10/18/07	WILLIS01		11/13/07
11/06/07	BISSER	NTFY/ASG	
11/06/07	BISSER	ACC/ASG	
11/06/07	BISSER	AWAIT/C	
11/06/07	VANLEW	ACC/ASG	
11/13/07	BISSER	AWAIT/C	
11/13/07	JOHNSC05	COMPLETE	

REINFORCE CLEARANCE BOUNDARY VERIFICATION QUALITY STANDARDS  
 AND ESTABLISH TARGETED OBSERVATIONS TO VERIFY QUALITY IS AT  
 THE APPROPRIATE LEVEL.

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

ACTION REQUEST 00237296

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
2A COMMENTS      ASSIGNMENT SPLIT OUT	N      08/29/07
Name : SHEILA      WILLIAMS	

This assignment was originally issued to the Maintenance Manager, Susan Rogers. It was split out to each of the Maintenance Supts.  
 -17 Richard Bissett (Maintenance Tech Services)  
 -31 Tim King (Mechanical Maintenance)  
 -32 Paul Smith (I&C/E Maintenance)  
 (SVW 8/29/07)  
 Extend assignment to 11/13/07 per Richard Bissett, acting for Susan Rogers. Additional time needed to complete the assignment. (SVW 10/18/07)

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
2B COMMENTS	N
Name :	

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
2C COMMENTS	N
Name :	

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
2D COMMENTS	N
Name :	

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
2E COMMENTS	N
Name :	

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
3A LTCA APPROVAL,	N
Name :	

<b>Assignment Attribute Value</b>	<b>Reqd Date</b>
3B LTCA CONCURRENCE	N
Name :	

**COMPLETION NOTES**  
 CLEARANCE BOUNDARY VERIFICATION QUALITY STANDARDS WERE REINFORCED WITH MTS ON 11/06/07. NIM ITEM (NIM 254326) WAS GENERATED FOR PROJECT MANAGERS TO PERFORM OBSERVATIONS OF CLEARANCE PROCESS.  
 RAB 11/06/07

**CAUSE/ACTION**

**ASSIGNMENT COMPLETION APPROVAL**

<b>Route List: 001</b>				<b>Route List Initiator: BISSER</b>			
	Alert			Send	Send	Action	Action
PASSPORT	Fac	Group/Type	Last Name	Date	Time	Taken	Date/Time
BISSER	BNP	MNTPSUPT	A BISSETT	11/06/07	16:09	APPROVED	11/06/07 16:09
VANLEW	BNP	OPSUEVAL	A VAN KLEECK	11/06/07	16:09	RETURNED	11/06/07 16:21
BISSER	BNP	MNTPSUPT	A BISSETT	11/13/07	10:15	APPROVED	11/13/07 10:18

ACTION REQUEST 00237296

JOHNSC05 BNP OPSUEVAL A JOHNSON

11/13/07 10:18 APPROVED 11/13/07 16:32

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 18 SUB

Type : ENHN Due Date : 12/20/07  
 Status : COMPLETE Reschedule : Pri Resp Group: TRGTSUPT  
 Assigned To : L RIEMAN Sec Resp Group:  
 Subject : CONDUCT TRAINING FOR CLEARANCE REQUESTS, AND  
 Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : GD2 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	12/20/07
08/07/07	VANLEW	NTFY/PRI	
08/13/07	MCPHEM	ACC/PRI	
08/13/07	MCPHEM	NTFY/ASG	
12/17/07	RIEMAL	ACC/ASG	
12/17/07	RIEMAL	AWAIT/C	
12/17/07	BOYCER	COMPLETE	

CONDUCT TRAINING FOR CLEARANCE REQUESTS, AND  
 CLEARANCE HOLDER BOUNDARY VERIFICATION TECHNIQUES

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 CHANGE BASIS	N
Name :	

Please reassign to Eddie Edmunds per Larry Rieman. 09/07/07

Assignment Attribute Value	Reqd Date
2 COMMENTS	N
Name :	

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Alert	Route List Initiator: RIEMAL	Send Date	Send Time	Action Taken	Action Date/Time
PASSPORT Fac	Group/Type	Last Name				
RIEMAL	BNP TRGTSUPT	A RIEMAN	12/17/07	13:19	APPROVED	12/17/07 13:20
BOYCER	BNP OPSUEVAL	A BOYCE	12/17/07	13:20	APPROVED	12/17/07 14:04



ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: BISSER
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
BISSER BNP MNTPSUPT A BISSETT	08/30/07 15:16 APPROVED 08/30/07 15:16
BOYCER BNP OPSUEVAL A BOYCE	08/30/07 15:16 APPROVED 08/30/07 15:32

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 20 SUB

Type : ENHN Due Date : 12/20/07  
 Status : COMPLETE Reschedule : Pri Resp Group: MNTBL2  
 Assigned To : D PROCTOR Sec Resp Group:  
 Subject : REVISE 2-SP-07-205 TO INCLUDE LESSONS LEARNED

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : BL2 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	12/20/07
08/07/07	VANLEW	NTFY/PRI	
08/08/07	GERALK	ACC/PRI	
08/08/07	GERALK	NTFY/ASG	
11/13/07	PROCTD	ACC/ASG	
11/13/07	PROCTD	AWAIT/C	
11/15/07	VANLEW	COMPLETE	

REVISE 2-SP-07-205 TO INCLUDE LESSONS LEARNED  
 FROM THIS EVENT

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 COMMENTS	N
Name :	

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001				Route List Initiator: PROCTD			
	Alert		Last Name	Send Date	Send Time	Action Taken	Action Date/Time
PASSPORT Fac	BNP	MNTBL2	A GERALD	11/13/07	12:59	APPROVED	11/15/07 14:52
GERALK	BNP	OPSUEVAL	A VAN KLEECK	11/15/07	14:52	APPROVED	11/15/07 15:56

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 21 SUB

Type : ENHN Due Date : 01/31/08  
Status : COMPLETE Reschedule : 1 Pri Resp Group: MNTMSUPV  
Assigned To : L GRADY Sec Resp Group:  
Subject : CONDUCT CROSS DISCIPLINE TRAINING

Aff Facility: BNP Unit : System :  
UCR : Schedule Ref :  
Organization: Department : HCG Discipline :  
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	12/20/07
08/07/07	VANLEW	NTFY/PRI	
08/07/07	GRADYL	ACC/PRI	
08/07/07	GRADYL	NTFY/ASG	
08/07/07	GRADYL	ACC/ASG	
11/28/07	VANLEW		01/31/08
01/30/08	GRADYL	AWAIT/C	
01/31/08	VANLEW	COMPLETE	

CONDUCT CROSS DISCIPLINE TRAINING WITH THE  
CLEARANCE WRITERS AND W/O PLANNERS

Assignment Attribute Value Reqd Date  
BENEFIT REALIZED N  
Name :

Assignment Attribute Value Reqd Date  
1 CHANGE BASIS N  
Name :

Please extend due date to 01/31/2008 due to the approaching holiday season. This will maximize attendance of planners and clearance writers.  
LG 11/21/07  
Due date extended as requested. LVK 11/28/07.

Assignment Attribute Value Reqd Date  
2 COMMENTS N  
Name :

COMPLETION NOTES

TRAINING AND FEEDBACK SESSIONS HAVE BEEN COMPLETED BETWEEN CLEARANCE WRITERS AND MAINTENANCE PLANNERS. OVERALL THE CLEARANCE WRITERS ARE RECEIVING ADEQUATE INFORMATION FOR THE DEVELOPMENT OF CLEARANCE ORDERS. ADDITIONAL INFORMATION THAT CAN BE PROVIDED BY THE PLANNERS IS ALWAYS ENCOURAGED. EMPHASIS WAS PLACED ON ENSURING THAT MULTIPLE BOUNDARY CHANGES THAT WOULD BE NEEDED ARE INCLUDED WITHIN THE REQUEST. IN ADDITION, A TOPIC FOR DISCUSSION WILL BE INCLUDED IN THE UPCOMING MAINTENANCE PLANNERCONTINUING TRAINING AND THE

ACTION REQUEST 00237296

CLEARANCE WRITERS OR A REPRESENTATIVE WILL RECEIVE AN  
AN INVITATION TO ATTEND.

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: GRADYL

PASSPORT	Fac	Alert	Group/Type	Last Name	Send	Send	Action	Action
					Date	Time	Taken	Date/Time
GRADYL	BNP	MNTMSUPV	A	GRADY	01/30/08	12:15	APPROVED	01/30/08 16:11
VANLEW	BNP	OPSUEVAL	A	VAN KLEECK	01/30/08	16:11	APPROVED	01/31/08 06:07

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 22 SUB

Type : ENHN Due Date : 10/25/07  
Status : COMPLETE Reschedule : Pri Resp Group: TRGOSUPV  
Assigned To : M PEARSON JR. Sec Resp Group:  
Subject : INCLUDE DISCUSSION OF THIS EVENT  
  
Aff Facility: BNP Unit : System :  
UCR : Schedule Ref :  
Organization: Department : G74 Discipline :  
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	10/25/07
08/07/07	VANLEW	NTFY/PRI	
08/22/07	PEARSM01	ACC/PRI	
08/22/07	PEARSM01	NTFY/ASG	
08/22/07	PEARSM01	ACC/ASG	
09/05/07	PEARSM01	NTFY/ASG	
09/06/07	PEARSM01	ACC/ASG	
10/24/07	PEARSM01	AWAIT/C	
10/24/07	VANLEW	COMPLETE	

INCLUDE DISCUSSION OF THIS EVENT IN CLEARANCE PREPARER  
AND CLEARANCE HOLDER INITIAL AND PERIODIC TRAINING

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 CHANGE BASIS	N
Name :	

The clearance training program belongs to Technical Training. They should have this assignment; I believe Eddie Edmunds is the SME for that material.

Assignment Attribute Value	Reqd Date
2 COMMENTS	N
Name :	

COMPLETION NOTES  
SEE IN PROGRESS NOTES FOR COMPLETED ACTIONS. TONY  
PEARSON 102407

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

ACTION REQUEST 00237296

Route List: 001

Route List Initiator: PEARSM01

	Alert			Send	Send	Action	Action
PASSPORT	Fac	Group/Type	Last Name	Date	Time	Taken	Date/Time
PEARSM01	BNP	TRGOSUPV	A PEARSON JR.	10/24/07	13:47	APPROVED	10/24/07 13:48
VANLEW	BNP	OPSUEVAL	A VAN KLEECK	10/24/07	13:48	APPROVED	10/24/07 14:24

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 23 SUB

Type : ENHN Due Date. : 10/25/07  
 Status : COMPLETE Reschedule : Pri Resp Group: TRGTSUPV  
 Assigned To : E EDMUNDS Sec Resp Group:  
 Subject : INCLUDE DISCUSSION OF THIS EVENT

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : GD1 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/07/07	VANLEW	INPROG	10/25/07
08/07/07	VANLEW	NTFY/PRI	
08/13/07	MCPHEM	ACC/PRI	
08/13/07	MCPHEM	NTFY/ASG	
10/16/07	EDMUNE	ACC/ASG	
10/22/07	EDMUNE	AWAIT/C	
10/24/07	VANLEW	COMPLETE	

INCLUDE DISCUSSION OF THIS EVENT IN CLEARANCE PREPARER  
 AND CLEARANCE HOLDER INITIAL AND PERIODIC TRAINING

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 CHANGE BASIS	N
Name :	

Please reassign to Eddie Edmunds per Larry Rieman. 09/07/07  
 Reassigned as requested. LVK 9/7/06.  
 Eddie Edmunds will accept action for Clearance Holder Training, however  
 Clearance Preparer Training is conducted by Operator Training, contact  
 James Potter to determine who should have that part of the assignment.  
 You actually need two different assignments. EDE 10/5/07

Assignment Attribute Value	Reqd Date
2 COMMENTS	N
Name :	

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: EDMUNE
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
RIEMAL BNP TRGTSUPV A RIEMAN	10/22/07 15:42 APPROVED 10/24/07 07:05

ACTION REQUEST 00237296

VANLEW BNP OPSUEVAL A VAN KLEECK 10/24/07 07:05 APPROVED 10/24/07 14:23



ACTION REQUEST 00237296

Route List: 001

Route List Initiator: TUSAIM

PASSPORT	Alert	Fac	Group/Type	Last Name	Send Date	Send Time	Action Taken	Action	Date/Time
FERGUJ	BNP	ERCMGR	A	FERGUSON	01/11/08	09:42	APPROVED		01/14/08 08:13
VANLEW	BNP	OPSUEVAL	A	VAN KLEECK	01/14/08	08:13	APPROVED		01/14/08 15:31







ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

COMPLETION NOTES

THE MECHANICAL MAINTENANCE SUPERINTENDENT HAS RE-  
 -INFORCED AND COMMUNICATED CLEAR PERFORMANCE  
 EXPECTATIONS IN REGARDS TO PRE-JOB BRIEFINGS TO THE  
 MECHANICAL MAINTENANCE SUPERVISORS. THIS EXPECTATION  
 INCLUDES THAT EACH WORK TASK RECEIVES A PRE-JOB BRIEF  
 PRIOR TO FIELD IMPLEMENTATION. THE COMPLEXITY OF THE  
 TASK WILL DETERMINE THE COMPLEXITY OF THE BRIEFING. TK  
 8/30/07

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: KINGTI
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
KINGTI BNP MNIMSUPT A KING	08/30/07 17:15 APPROVED 08/30/07 17:16
BOYCER BNP OPSUEVAL A BOYCE	08/30/07 17:16 APPROVED 08/30/07 17:56







ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Route List Initiator: SMITHP
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
SMITHP BNP MNTESUPT A SMITH	09/28/07 12:23 APPROVED 09/28/07 12:23
BOYCER BNP OPSUEVAL A BOYCE	09/28/07 12:23 APPROVED 10/01/07 07:29

ACTION REQUEST 00237296

ASSIGNMENT NUMBER 29 SUB

Type : CORR Due Date : 10/18/07  
 Status : COMPLETE Reschedule : Pri Resp Group: MNTMSUPT  
 Assigned To : L GRADY Sec Resp Group:  
 Subject : REINFORCE CLEARANCE REQUEST QUALITY STANDARDS AND ESTABLI  
 Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : HCG Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/29/07	WILLIS01	INPROG	10/18/07
08/29/07	WILLIS01	NTFY/PRI	
09/03/07	KINGTI	ACC/PRI	
09/03/07	KINGTI	NTFY/ASG	
09/09/07	GRADYL	ACC/ASG	
10/17/07	GRADYL	AWAIT/C	
10/18/07	VANLEW	COMPLETE	

REINFORCE CLEARANCE REQUEST QUALITY STANDARDS  
 AND ESTABLISH TARGETED OBSERVATIONS TO VERIFY  
 CLEARANCE REQUEST QUALITY IS AT THE APPROPRIATE  
 LEVEL.

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS	N
Name :	

ACTION REQUEST 00237296

Assignment Attribute Value 2B COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2C COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2D COMMENTS Name :	Reqd Date N
Assignment Attribute Value 2E COMMENTS Name :	Reqd Date N
Assignment Attribute Value 3A LTCA APPROVAL Name :	Reqd Date N
Assignment Attribute Value 3B LTCA CONCURRENCE Name :	Reqd Date N

**COMPLETION NOTES**

CLEARANCE REQUEST QUALITY STANDARDS HAVE BEEN REINFORCED WITH CREW HCG AND TARGETED OBSERVATIONS TO VERIFY QUALITY IS AT THE APPROPRIATE LEVEL ARE BEING TRACKED BY NTM'S.  
 REFERENCE AR 251075 FOR OBSERVATION DETAILS.

**CAUSE/ACTION**

**ASSIGNMENT COMPLETION APPROVAL**

Route List: 001	Route List Initiator: GRADYL
Alert	Send Send Action Action
PASSPORT Fac Group/Type Last Name	Date Time Taken Date/Time
GRADYL BNP MNTMSUPT A GRADY	10/17/07 13:17 APPROVED 10/17/07 13:18
VANLEW BNP OPSUEVAL A VAN KLECK	10/17/07 13:18 APPROVED 10/18/07 06:15





ACTION REQUEST 00237296

ASSIGNMENT NUMBER 31 SUB

Type : CORR Due Date : 10/18/07  
 Status : COMPLETE Reschedule : Pri Resp Group: MNTMSUPT  
 Assigned To : T KING Sec Resp Group:  
 Subject : REINFORCE CLEARANCE BOUNDARY VERIFICATION QUALITY STAND

Aff Facility: BNP Unit : System :  
 UCR : Schedule Ref :  
 Organization: Department : Z77 Discipline :  
 Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/29/07	WILLIS01	INPROG	10/18/07
08/29/07	WILLIS01	NTFY/PRI	
09/03/07	KINGTI	ACC/PRI	
09/03/07	KINGTI	NTFY/ASG	
09/03/07	KINGTI	ACC/ASG	
10/18/07	KINGTI	AWAIT/C	
10/18/07	VANLEW	COMPLETE	

REINFORCE CLEARANCE BOUNDARY VERIFICATION  
 QUALITY STANDARDS AND ESTABLISH TARGETED  
 OBSERVATIONS TO VERIFY QUALITY IS AT THE  
 APPROPRIATE LEVEL.

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS	N
Name :	



ACTION REQUEST 00237296

ASSIGNMENT NUMBER 32 SUB

Type : CORR Due Date : 10/18/07  
Status : COMPLETE Reschedule : Pri Resp Group: MNTESUPT  
Assigned To : P SMITH Sec Resp Group:  
Subject : REINFORCE CLEARANCE BOUNDARY VERIFICATION QUALITY STAND  
  
Aff Facility: BNP Unit : System :  
UCR : Schedule Ref :  
Organization: Department : Z67 Discipline :  
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
08/29/07	WILLIS01	INPROG	10/18/07
08/29/07	WILLIS01	NTFY/PRI	
08/29/07	FATKIG	ACC/PRI	
08/29/07	FATKIG	NTFY/ASG	
10/17/07	SMITHP	ACC/ASG	
10/17/07	SMITHP	AWAIT/C	
10/18/07	VANLEW	COMPLETE	

REINFORCE CLEARANCE BOUNDARY VERIFICATION  
QUALITY STANDARDS AND ESTABLISH TARGETED  
OBSERVATIONS TO VERIFY QUALITY IS AT THE  
APPROPRIATE LEVEL.

Assignment Attribute Value	Reqd Date
BENEFIT REALIZED	N
Name :	

Assignment Attribute Value	Reqd Date
1 UNIT/SECT EVALUATR	N
Name :	

Assignment Attribute Value	Reqd Date
1A COMMITTED	N
Name :	

Assignment Attribute Value	Reqd Date
1B CHANGE BASIS	N
Name :	

Assignment Attribute Value	Reqd Date
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS	N
Name :	



**ATTACHMENT 16**  
**Sheet 1 of 3**  
**Significant Adverse Condition Investigation Report**  
Form CAP-NGGC-0205-16-5

**EXECUTIVE SUMMARY**

**Action Request Number:** 237296

**Event Date:** June 21, 2007

**Sponsoring Manager:** Steve Howard – Operations Manager

**Investigation Team:**

Bill Woodbury – OPS, Team Leader

L. E. Van Kleeck – OPS, Priority 1 Investigator

Rendell Parker – E&RC

Sam Swain – Mechanical Maintenance

Kim Gerald – Maintenance Technical Services

Joe Ward, Jerry Barnes, Vern Roscoe, Levy Grady – Interim Maintenance Representatives

Steve Tabor – SEU, Mentor

**Summary of Event:**

While pumping the Unit 1 Suppression Pool to the Waste Surge Tank, water was inadvertently diverted through a disassembled check valve to the ground adjacent to the Unit 2 CST, due to an inadequate clearance boundary. This resulted in a spill of 2500 to 3000 gallons of contaminated water.

**Summary of Root Cause(s):**

The Root Cause is an over reliance, by involved individuals, on other existing Clearance process barriers to ensure the process develops a Clearance that ensures equipment and personnel safety.

**Summary of Corrective Action(s) to Prevent Recurrence (CAPR):**

Communicate to Operations and Maintenance personnel the importance of having the mindset that you, the individual involved in the process, are the only barrier to ensure personnel and equipment safety. Also, revise OOI-29 to require a Clearance process assessment every two years to verify the processes of clearance request; clearance development; and clearance boundary verification are being appropriately implemented.

CAP-NGGC-0205	Rev. 5	
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Sheet 2 of 3  
Significant Adverse Condition Investigation Report  
Form CAP-NGGC-0205-16-5

Action Request Number: 237296

Event Time: 1440

Facility: BNP

Event Date: 6/21/07

Unit: 0.

Investigator: L. E. Van Kleeck

### 1. Event Description

On June 21, 2007, at approximately 1440, Operators on Unit 1 secured pumping the Unit 1 Suppression Pool to the Waste Surge Tank (WSGT) based on reports of a leak at the Unit 2 Condensate Storage Tank (CST). The leak at the Unit 2 CST was coming from a disassembled check valve on the drain line from the Unit 2 CST to the WSGT. The leak occurred because an inadequate clearance boundary was provided for the check valve disassembly work, and allowed water being pumped to the WSGT to also reach this check valve. This resulted in approximately 2500 to 3000 gallons of contaminated water being pumped to the ground in the area of the Unit 2 CST.

### 2. Problem Description

Adequate clearance boundaries are required to be provided to ensure personnel and equipment safety at all times during the performance of maintenance activities. An adequate clearance boundary was not provided for the work associated with disassembly of the check valve on the drain line of the Unit 2 CST. This inadequate boundary resulted in a spill of 2500 to 3000 gallons of contaminated water to the ground. In addition to the spill, an unsafe condition existed in that pumping of the Unit 1, or Unit 2, Suppression Pool to the WSGT coincident with actual valve disassembly/reassembly activities could have resulted in personnel injury. The extent of condition was limited to the clearance associated with the disassembly of the Unit 2 CST drain line check valve.

### 3. Investigation Summary

Barrier Analysis was the primary investigative technique used in the investigation of this event. A Cause and Effect Analysis was used to a lesser extent. Interviews were conducted with the involved individuals, and a Culpability Decision Tree was completed as part of the Human Performance Analysis.

On March 19, 2007, a Work Request (W/R) was initiated on the Unit 2 CST to have the tank drained, cleaned, and the inside surface recoated due to problems with the paint peeling from the tank interior. This W/R became Work Order (W/O) 1033023 and was approved on April 11, 2007. A Project Manager was assigned and a project team was assembled.

NOTE: Refer to Figure 1 of this investigation for a basic system drawing, if needed.

The draining of the Unit 2 CST was to be completed in two steps. First, clearance order (C/O) 138829 would be hung and the CST would be drained by the normal method by opening the 2-CO-V135 and flowing water through the 2-CO-V162 check valve and the 2-G16-V449 to the WSGT. This clearance was hung and draining began on May 31, 2007 at approximately 1119. Upon completion of this evolution, about three feet of water would remain in the bottom of the CST. The CST manway would then be opened; a submersible pump would be placed in the CST; the bonnet of the check valve, 2-CO-V162, would be removed; a flange and pipe nipple would be installed in place of the bonnet, and the discharge hose of the submersible pump would be routed to the pipe nipple on the 2-CO-V162. This would allow removal of the remaining water in the CST.

W/O task # 11 was initiated to disassemble the 2-CO-V162 bonnet. Clearance request 108360 was initiated to request a clearance for this work. This clearance would actually be a boundary change to clearance 138829, which was in place to allow the first step in the CST draining process. ADM-NGGC-0104, *Work Management Process*, Section 9.8.9 states in part:

*The Clearance request should contain details that will allow the clearance developer to prepare the Clearance Order (CO). The following information should be included:*

- *Clearance boundary scope (electrical, fluid, air, etc.)*
- *Specific tagging order (if important to the maintenance activity)*
- *Components that should NOT be tagged (i.e., components that must be manipulated or removed)*
- *Components that will need position verification following the maintenance activity (due to work instructions that manipulate the component)*
- *Boundary extension need, if known*
- *Special precautions or instructions for the clearance developer, such as "hang when requested."*

Clearance request 108360 actually stated the following:

*Condensate storage tank isolated and drained to the extent possible for recoating tank interior. It is understood that the tank cannot be drained completely and will be drained IAW 2SP-07-205. Reference EC 66436.*

The clearance request was inadequate in that it did not request a fluid boundary for the disassembly of the 2-CO-V162, as required by ADM-NGGC-0104.

The clearance preparer developed a boundary change to C/O 138829 which closed the 2-CO-V135 to isolate the Unit 2 CST from the water being pumped via submersible pump to the 2-CO-V162. The clearance preparer stated during interviews that he asked the project team on two separate occasions if it was necessary to control the valves downstream of the 2-CO-V162 and was told that they would be controlling those valves within the W/O. He did not find it unusual that Maintenance would be controlling valves rather than placing them under clearance. There are other instances where this occurs. The clearance procedure allows maintenance to control air valves on pneumatically operated valves rather than using a clearance. He believed this was a similar situation.

Additionally, he found the following statement in the W/O under Precautions/Prerequisites:  
*Ensure line is isolated from the Aux Surge Tank and drained prior to disassembly.*

The clearance preparer understood this to corroborate the information he had already received and was satisfied he had prepared the proper clearance.

OPS-NGGC-1301, *Equipment Clearance*, Section 4.6.1 includes the following as the Clearance Preparers responsibility:

*Prepare and verify clearances to ensure safe operating conditions exist while equipment is being removed from service, maintained, and returned to service.*

Also in section 9.2.1.2.2 it states:

*The Clearance Preparer shall understand the scope of the maintenance activities and prepare a clearance ensuring that the administrative requirements of this procedure are met.*

Clearance preparation was inadequate in that the clearance did not provide for a proper fluid boundary to allow disassembly of 2-CO-V162, which was clearly included in the scope of the W/O, as required by OPS-NGGC-1301.

The Clearance Reviewer was a Senior Reactor Operator (SRO) who reviews and approves clearances developed by the Clearance Preparer, to provide a second check of clearance adequacy. The Clearance reviewer will have the same expectations that the Clearance Preparer has regarding clearance development. In this instance, the Clearance reviewer no longer works for Progress Energy. When contacted, the reviewer stated he relied mostly on the Clearance Request to determine if he had provided an adequate boundary, and believed that tagging 2-CO-V135 closed met the requirements of the Clearance Request. The clearance review was inadequate as it also did not provide for a proper fluid boundary to allow disassembly of 2-CO-V162, which was clearly included in the scope of the W/O, as required by OPS-NGGC-1301.

The hanging of this boundary change was completed on May 31, 2007 at approximately 1600. Following the hanging of the boundary change, W/O 1033023-11 was given to a Nightshift Duty Crew mechanic to have 2-CO-V162 disassembled. This mechanic stated that he noted the clearance tag on the 2-CO-V135 and believed he had an appropriate clearance for his work. He accepted the clearance, removed the bonnet from the 2-CO-V162, and installed the fabricated drain rig in place of that bonnet.

OPS-NGGC-1301, *Equipment Clearance*, Sect. 4.10, under Clearance Holder responsibilities, lists one of those responsibilities as:

*4.10.1 Verify the clearance boundary is adequate for their assigned work prior to beginning work.*

*Ensure line is isolated from the Aux Surge Tank and drained prior to disassembly.*

*Verify proper boundary and sign onto OPS clearance prior to commencing work.*

Although a physical walk down of the clearance is not required, a boundary verification using the clearance information and applicable prints is the expectation. The verification of an adequate clearance boundary by the mechanic was inadequate in that the failure to isolate the Aux Surge Tank (AST) side of 2-CO-V162 was not identified.

Additionally, only an informal Pre-Job Brief was conducted between the mechanic, an HP Tech, and a member of the Atlantic work force. This brief was inadequate in that it did not cover all aspects of even the Simple Task Brief and did not identify the safety concern of verifying a proper clearance boundary prior to work start.

Periodically Operations is required to pump the Suppression Pool to the WSGT or the AST to maintain Suppression Pool level in the normal band. When Operations began pumping the Unit 1 Suppression Pool on June 21, 2007, the inadequate clearance boundary was discovered.

The **Adverse Condition** for this NCR is that an inadequate clearance boundary existed for the disassembly of 2-CO-V162. As a result, when Operators began pumping the Unit 1 Suppression Pool, a spill occurred. Individual procedure non-compliance errors by the Clearance Requestor, Clearance Preparer, and the Clearance Reviewer resulted in a failure to properly implement the Clearance request, Clearance development, and Clearance implementation processes **{Inappropriate Act #1}**. Each individual involved in this sequence failed to follow the applicable procedure **{Contributing Cause #1}**. The Team believed the event was caused by an over reliance, by involved individuals, on other existing Clearance process barriers to ensure the process develops a Clearance that ensures equipment and personnel safety **{Root Cause}**.

The Clearance Holder in this event did not perform an adequate verification of the clearance boundary prior to starting work **{Inappropriate Act #2}**. The Clearance holder's actions did not cause the inadequate boundary to exist, but allowed the inadequate boundary to continue to exist while work was performed. This was also caused by a failure of the individual to follow applicable procedures **{Contributing Cause #2}**. The procedures include OPS-NGGC-1301, *Equipment Clearance*, and the instructions in the associated W/O.

Lastly, the Clearance Holder/Work Order Implementer did not obtain an adequate Pre-Job Brief prior to starting work **{Inappropriate Act #3}**. The Clearance Holder was a Nightshift Duty Crew Mechanic. Although there was no Supervisor present on the Duty Crew, there is a Lead Mechanic on the crew. Maintenance Team members stated that the Lead Mechanic would be expected to lead briefs for his crew when required. The Clearance Holder/Work Order Implementer believed he was meeting the requirements for a brief when he completed the informal brief. Since the Duty Lead Mechanic was not involved with, or familiar with, the work in progress, it was thought that he would not be able to add additional pertinent information. Since the Holder/Implementer thought he was

meeting expectations with an informal brief, the cause of the error would be unclear expectations or policies related to Pre-Job briefs {Contributing Cause #3}.

#### 4. Previous Operating Experience (Internal and External)

##### OE 182213 – Brunswick Unit 1, 3/10/04

During the Brunswick Unit 1 Outage, strainers were being installed in the discharge piping of each Heater Drain Pump (HDP). For the 1B HDP strainer installation there was interference that required the rerouting of a portion of the 1B HDP TBCCW piping. Pressurized water was encountered when cutting the associated TBCCW pipe.

When the planner created W/O tasks for the three Unit 1 HDP strainer installations they were patterned after the Unit 2 modifications. He cut and pasted partial instructions from the Unit 2 W/Os to create the Unit 1 W/Os, but did not remember the TBCCW line interferences. The W/O did not include instructions to modify the TBCCW piping. The clearance request did not address the isolation of the TBCCW piping.

This incident is applicable based on the inadequate boundary and the role that proper W/O planning, as well as properly requesting a clearance, plays in clearance development.

##### OE 22676 – Brunswick Unit 1, 4/4/06

During the Brunswick Unit 1 Outage it was identified that a large Feed Water (FW) system Motor Operated Valve (MOV) operator needed to be rebuilt. At the time the FW system was under clearance. The clearance to support this rebuild only established an electrical boundary. During the rebuild, the FW clearance was removed, pressure was applied to the underside of the valve as the system was restored to service, and the valve disc/stem assembly pushed out to the valve body backseat.

Clearance writers and Maintenance personnel had not questioned if there was a system flow or pressure impact and therefore a need for a fluid boundary since this was an MOV operator clearance.

This incident is applicable based on the inadequate boundary and the need for a questioning attitude when developing a clearance.

##### OE 22828 – St. Lucie Unit 2, 5/4/06.

During the spring 2006 refueling outage, the 2A Turbine Oil Cooler was placed under clearance. When Maintenance removed the end bell cover to repair an oil leak, water began to flow unexpectedly from the cooler. The clearance was found to be inadequate for the work activity. The W/O for repairing the Oil Cooler did not identify the need to isolate, and drain, both sides of the heat exchanger.

This incident is applicable based on the inadequate boundary and the role that proper W/O planning, as well as properly requesting a clearance, plays in clearance development.

## 5. Extent of Cause/Condition

The extent of condition for this investigation involves the entire clearance preparation culture. Corrective Actions to Prevent Recurrence will be to communicate to Operations and Maintenance personnel the importance of having the mindset that you, the individual involved in the process, are the only barrier to ensure personnel and equipment safety. Also, revise OOI-29 to require a Clearance process assessment every two years to verify the processes of clearance request; clearance development; and clearance boundary verification are being appropriately implemented.

A contributing cause for this event, which was common to both organizations involved, was a failure to follow the procedure as written. The extent of Cause would clearly involve a lack of procedure use and adherence behaviors. There is currently a site Adverse Trend in Procedure Use and Adherence documented in NCR 208861. The investigation of this Adverse Trend is complete and six Corrective Actions remain to be implemented. Both Operations and Maintenance have organizational Adverse Trends in Procedure Use and Adherence. The Operations Adverse Trend is tracked by NCR 184970. The Maintenance Adverse Trend is tracked by NCR 194880. Neither organization has open corrective actions remaining in these NCRs.

## 6. Safety Significance

This incident resulted in zero nuclear safety concerns. The actual safety significance involved personnel safety, as an unsafe condition existed such that pumping of the Unit 1, or Unit 2, Suppression Pool to the WSGT coincident with actual valve disassembly/reassembly activities could have resulted in personnel injury. There also existed a potential radiological safety concern based on the activity level of the spilled fluid. The actual radiological safety significance was minimal. No release limits were exceeded and the incident was determined to not be reportable.

## 7. Summary of Results

The Root Cause is an over reliance, by involved individuals, on other existing Clearance process barriers to ensure the process develops a Clearance that ensures equipment and personnel safety.

One Contributing Cause involves the failure of individuals to follow the applicable procedures. Another Contributing Cause involves the failure to establish and enforce proper Pre-Job Brief standards.

## 8. Inappropriate Acts / Equipment Malfunctions/Causal Factors/Corrective Action Plan

- Complete the below table to identify the required information
- Place information in the non-shaded areas only. This is to help align the cause for each Inappropriate Act and to ensure that each Cause is linked to and addressed with a Corrective Action.
- Clearly describe each causal factor as to how it applies to the investigated event / condition. (Do not just cut and paste the cause definition from CAP-NGGC-0206). Designate each causal factor as "Root" or "Contributing"
- The "Code" column is used to identify the Cause Code (CAP-NGGC-0206 Attachment 2)
- The "ORG" column is used to identify the organization responsible for the Inappropriate act.
- Designate the type of action (CAPR, CORR or ENHN). Reference attachment 15 for guidance as needed.
- For completed or interim actions, provide appropriate completion documentation or ensure that the investigation results contain adequate detail to ensure traceability, for example; Work Order "ABC" was completed and approved on mm/dd/yy, Engineering Change Request "XYZ" was completed in the field on mm/dd/yy, or Material Evaluation was completed and approved on mm/dd/yy.

**ATTACHMENT 16**

**Sheet 3 of 3**

**Significant Adverse Condition Investigation Report**

Form CAP-NGGC-0205-16-5

**Corrective Action Plan**

	DESCRIPTION	CAUSE	CODE	ORG	CORRECTIVE ACTION	ASSIGNMENT TYPE*	ASSIGNEE/ CONCURRENCE	DUE OR COMPLETION DATE**
<b>ADVERSE CONDITION</b>	An inadequate clearance boundary existed for the disassembly of the 2-CO-V162 resulting in an unsafe condition and a spill.	N/A	N/A	N/A	1. Secured pumping the Unit 1 Suppression Pool to the WSGT.  2. Roped off area to control access.  3. Sampled fluid for reportability determination.  4. Developed new clearance for adequate boundary	1. CORR  2. CORR  3. CORR  4. CORR	1. OPS  2. E&RC  3. E&RC  4. OPS	1. Completed 6/21/07  2. Completed 6/21/07  3. Completed 6/21/07  4. Completed by 6/22/07
<b>I/A or EQ Malfunction</b>	Failure to properly implement the Clearance request, and Clearance development process.	Root Cause: An over reliance, by involved individuals, on other existing Clearance process barriers to ensure the process develops a Clearance that ensures equipment and personnel safety.	IIC	OPS and MNT	1. Reinforce Clearance request quality standards and establish targeted observations to verify Clearance Request quality is at the appropriate level  2. Communicate to personnel the importance of having the mindset that each individual involved in any portion of the Clearance process must act like they are the only barrier to ensure personnel and equipment safety  3. Reinforce Clearance development quality standards and establish targeted observations to verify quality is at the appropriate level.	1. CORR  2. CAPR  3. CORR	1. Susan Rogers  2. Susan Rogers & Steve Howard  3. Steve Howard	1. 10/18/07  2. 10/18/07  3. 10/18/07

					<p>4. Revise OI-29, Operations Internal Audits, to establish a requirement for a clearance process assessment every 2 years which includes Maintenance and Operations</p> <p>5. Perform Stand Down with Clearance Center Staff</p> <p>6. Issue a Human performance News Flash to the Site</p> <p>7. Develop a Clearance request checklist to aid in request consistency</p>	<p>4. CAPR</p> <p>5. CORR</p> <p>6. CORR</p> <p>7. ENHN</p>	<p>4. Steve Howard</p> <p>5. OPS</p> <p>6. OPS</p> <p>7. A. Padleckas</p>	<p>4. 10/18/07</p> <p>5. Completed by 6/26/07</p> <p>6. Completed by 6/26/07.</p> <p>7. 9/6/07</p>
		Contributing Cause: Clearance requester, Clearance Preparer, and Clearance Reviewer failed to follow the applicable procedures	18G	MNT & OPS	<p>1. Confidential actions taken with the involved Clearance Requester.</p> <p>2. Confidential actions taken with the involved Clearance Preparer and Clearance reviewer.</p>	<p>1. CORR</p> <p>2. CORR</p>	<p>1. R. Bisset</p> <p>2. A. Padleckas</p>	<p>1. 8/30/07</p> <p>2. 8/30/07</p>
<b>IA or EQ Malfunction</b>	Clearance Holder/Work Order Implementer performed an inadequate verification of proper clearance boundary prior to starting work.	Contributing Cause: Failure to follow applicable procedure	18G	MNT	<p>1. Confidential actions taken with the involved individual</p> <p>2. Reinforce Clearance boundary verification quality standards and establish targeted observations to verify quality is at the appropriate level.</p>	<p>1. CORR</p> <p>2. CORR</p>	<p>1. K. Jones</p> <p>2. S. Rogers</p>	<p>1. 8/30/07</p> <p>2. 10/18/07</p>

					3. Conduct Training for, Clearance requests, and Clearance Holder Boundary verification techniques	3. ENHN	3. M. McPherson	3. 12/20/07
I/A or EQ Malfunction	Clearance Holder/Work Order Implementer performed an inadequate Pre-Job Brief prior to starting work.	Contributing Cause: Failure to establish and enforce proper Pre-Job brief standards	F4A	MNT	Reinforce clear expectations for the performance of Pre-Job briefs in the Maintenance Organization	CORR	S. Rogers	8/30/07
OTHER	N/A	N/A	N/A	N/A	Revise 2-SP-07-205 to include lessons learned from this event	ENHN	Bip Proctor	12/20/07
OTHER	N/A	N/A	N/A	N/A	Conduct cross discipline training with the Clearance Writers and W/O planners	ENHN	Levy Grady	12/20/07
OTHER	N/A	N/A	N/A	N/A	Include discussion of this event in clearance preparer and clearance holder initial and periodic training.	ENHN	1. T. Pearson 2. L. Rieman	1. 10/25/07 2. 10/25/07
OTHER	N/A	N/A	N/A	N/A	Complete an evaluation of the spill IAW 10CFR50.75G	ENHN	Jeff Ferguson	1/10/08
OTHER	N/A	N/A	N/A	N/A	Effectiveness Review	EREV	A. Padleckas	5/8/08

\* Designate which assignments are Long Term Corrective Action (non-outage related LTCA requires approval by DSO – Manager PE&RAS for corporate).

\*\*Provide justification for corrective actions to prevent recurrence (CAPR) with initial due date that exceeds 90 days and for corrective actions (CORR) with initial due date that exceeds 120 days.

8. **Basis, If Effectiveness Review is waived: N/A**

9. **PNSC/CSERB Review Required?**

YES

NO

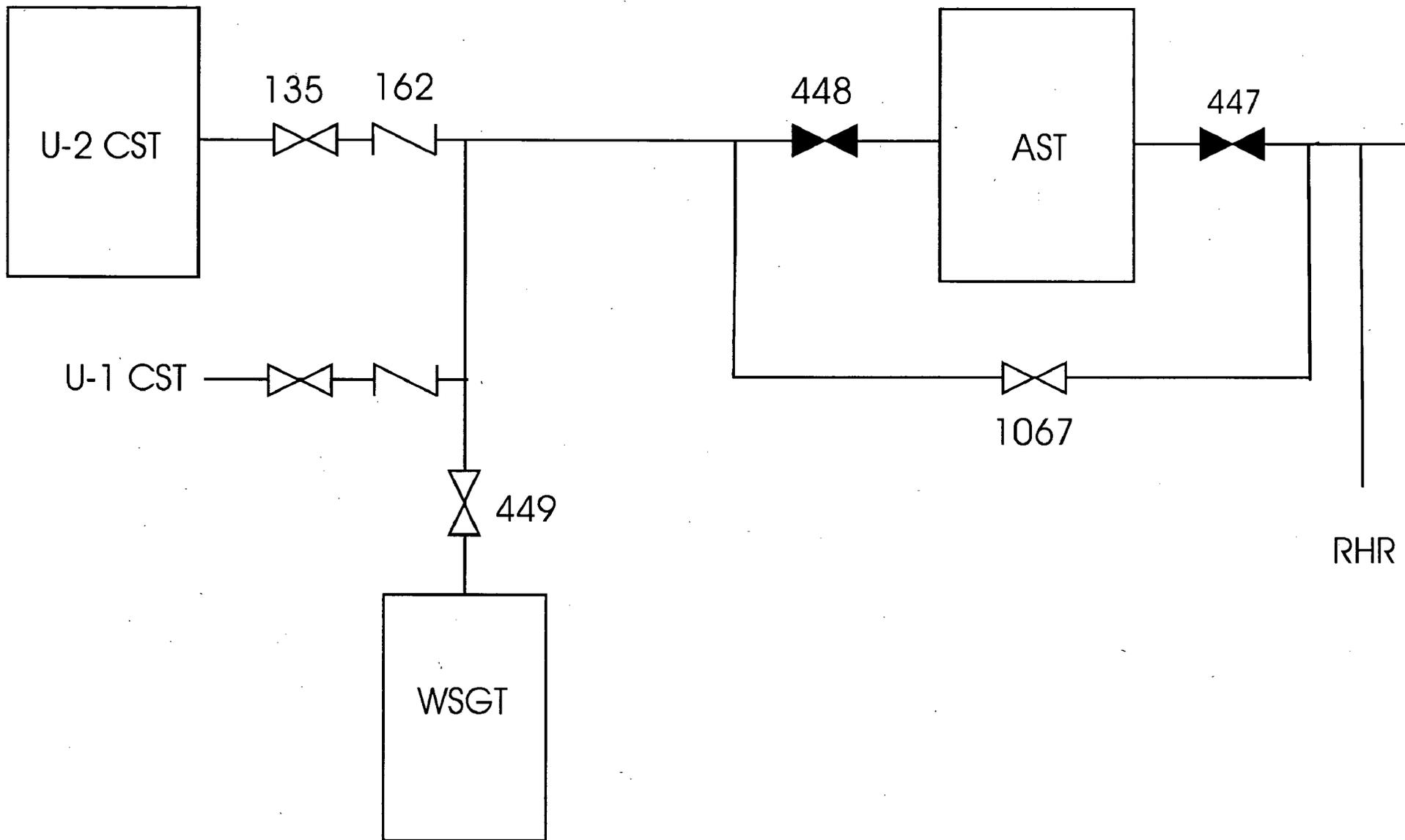


Figure 1

ATTACHMENT 4  
Sheet 1 of 1  
**EFFECTIVENESS REVIEW (EREV) FORM**  
Form CAP-NGGC-0200-4-16

EREV Evaluator:     A. Padleckas                          EREV Date:     05/07/08    

AR Number/Title:     NCR 237296 - AOP-5 ENTRY DUE TO SPILL AT U2 CST    

Event Summary:     While pumping the Unit 1 Suppression Pool to the Waste Surge Tank, water was inadvertently diverted through a disassembled check valve to the ground adjacent to the Unit 2 CST, due to an inadequate clearance boundary. This resulted in a spill of 2500 to 3000 gallons of contaminated water.    

1. Is the current set of Corrective Actions to Prevent Recurrence the same as in the original approved Corrective Action Plan? [Indicate changes, additions, deletions, and reason (e.g., training needs analysis required adding training to LOCT, etc.)] ■ Yes    □ No

**Comments/References:** CAPRs associated with this clearance error primarily were focused on reinforcement of standards, communication of importance or roles and responsibilities within the clearance process and increased assessment of the clearance process by multi-disciplined teams.

2. Have the Corrective Action(s) To Prevent Recurrence been completed and has there been sufficient time for the result of implementation to be assessed? [Indicate how long the CAPR have been in place and degree to which they have been challenged.] ■ Yes    □ No

**Comments/References:** Standard reinforcement and communication CAPRs have been in place for several months (since 10/18/07). The process has been especially challenged throughout B116F3 and B117R1. OOI-29 revision has been completed to schedule multi-discipline assessments, however none of the assessments have been completed to date.

3. Are appropriate barriers in place to prevent recurrence of the Event? [Consider the effectiveness of the barrier resulting from each individual CAPR as well as the collective effectiveness of the barriers. For CAPRs that resulted in procedure revisions, is the CAPR information properly annotated per the applicable procedure writer's guide?] ■ Yes    □ No

**Comments/References:** OOI-29, Operations Internal Audits, Revision 55 incorporated a Bi-annual assessment of the Clearance Process that includes maintenance and operations personnel. The assessment process should aid in identification and resolution of future clearance issues.

4. Based on a review of Corrective Action data, has a Repeat Event been prevented? [If review identifies recurrence of this condition or a condition sufficiently similar to indicate the problem still exists indicate NCR# and source (e.g., NAS, PES, INPO, NRC, Self-Assessment, etc.)] ■ Yes    □ No

**Comments/References:** Based on a review of NCRs generated since Corrective Actions were implemented it appears that actions taken were successful in mitigating reliance on other work groups to ensure an adequate clearance boundary exists. Several examples can be provided where an implementing organization within the clearance process has challenged boundary adequacy. During B117R1 one clearance error (NCR 271607) occurred in which a drain pipe was cut outside of the established clearance boundary. In this case the maintenance individuals involved were shared resources and were not recipients of corrective actions associated with this event. Corrective actions associated with NCR 271607 will address deltas between NGGC fleet clearance process implementation.

5. Based on interviews with personnel, has a Repeat Event been prevented? [If not provide specifics, including references to the Repeat Event documentation. List type of personnel interviewed (supervisors, craft, etc.)] ■ Yes    □ No

**Comments/References:** Based on interviews with clearance preparers and maintenance supervision it appears that actions taken were successful in mitigating reliance on other work groups to ensure an adequate clearance boundary exists. Some candid discussion was exchanged during maintenance supervisor continuing training relative to this event and effectiveness of corrective actions.

6. Overall, are the Corrective Actions to Prevent Recurrence considered effective such that no further actions are required to prevent recurrence?

**Comments/References:** *No further actions are required as a result of this specific event. Corrective actions taken have shown a clear affect on individuals' attitudes toward reliance on others within the clearance process in providing an adequate clearance boundary.*

*Other challenges still exist with implementation of the clearance process. As previously discussed in one instance during B117R1 sufficient barriers were broken such that a drain pipe outside of the established clearance boundary was cut into by a shared resource group. NCR 271607 will drive corrective actions relative to that specific event.*

*Also, NCR 257188 has recently been investigated identifying an adverse trend for Operations in the implementation of the clearance process. Further improvements to the implementation of the clearance process will be driven via this NCR.*

Information was communicated on 10/01/07 via email below and re-emphasized (continuing) in continuing training introduction 07-05.

To All Operations Personnel.  
From Steve Howard

Clearance process barriers to protect equipment and ensure personnel safety. Attached is a summary of the inadequate clearance boundry which enabled contaminated water to be spilled in the area of the Unit 2 CST. The Corrective Action to Prevent Reoccurrence could have been to place another barrier in the clearance process. However, the existing process provides adequate barriers when the process/procedure is followed and it was determined another barrier was not the answer.

With safety as our first priority, we can not afford to make errors and we must maintain a questioning attitude. Each one of these barriers **MUST** be independent of each other and not relying on the other barrier to maintain the person or equipment safe. As clearance requesters, preparers, reviewers and holders; we **MUST** have the mind set that each individual barrier is the only barrier from damaging equipment, injuring personnel or even killing someone.

Thanks,  
Steve

## **SUMMARY**

On June 21, 2007, at approximately 1440, Operators on Unit 1 secured pumping the Unit 1 Suppression Pool to the Waste Surge Tank (WSGT). A leak at the Unit 2 CST was coming from a disassembled check valve on the drain line from the Unit 2 CST to the WSGT. The leak occurred because an inadequate clearance boundary was provided for the check valve disassembly work, and allowed water being pumped to the WSGT to reach this disassembled check valve. This resulted in approximately 2500 to 3000 gallons of contaminated water being pumped to the ground in the area of the Unit 2 CST.

In addition to the spill, an unsafe condition existed in that pumping of the Unit 1, or Unit 2, Suppression Pool to the WSGT coincident with actual valve disassembly/reassembly activities could have resulted in personnel injury.

Adequate clearance boundaries are required to be provided to ensure personnel and equipment safety at all times during the performance of maintenance activities.

## **DISCRPTION**

**Refer to Figure 1 for a basic system drawing.**

Work Order (W/O) 1033023 (April 11, 2007) was to drain, clean, and recoat the inside surface of the Unit 2 CST due to problems with the paint peeling from the tank interior. A Project Manager was assigned and a project team was assembled.

The draining of the Unit 2 CST was to be completed in two steps. First, clearance order (C/O) 138829 would be hung and the CST would be drained by the normal method by opening the 2-CO-V135 and flowing water through the 2-CO-V162 check valve and the 2-G16-V449 to the WSGT. This clearance was hung and draining began on May 31, 2007. Upon completion of this evolution, about three feet of water would remain in the bottom of the CST. The CST man way would then be opened; a submersible pump would be placed in the CST; the bonnet of the check valve, 2-CO-V162, would be removed; a flange and pipe nipple would be installed in place of the bonnet, and the discharge hose of the submersible pump would be routed to the pipe nipple on the 2-CO-V162. This would allow removal of the remaining water in the CST.

W/O task # 11 was initiated to disassemble the 2-CO-V162 bonnet. Clearance request 108360 was initiated to request a clearance for this work. This clearance would actually be a boundary change to clearance 138829, which was in place to allow the first step in the CST draining process.

The first barrier which broke down was that the clearance request was inadequate in that it did not request a fluid boundary for the disassembly of the 2-CO-V162, as required by ADM-NGGC-0104.

The clearance preparer developed a boundary change to C/O 138829 which closed the 2-CO-V135 to isolate the Unit 2 CST from the water being pumped via submersible pump to the 2-CO-V162.

The second barrier which broke down was that the clearance preparation was inadequate in that the clearance did not provide for a proper fluid boundary to allow disassembly of 2-CO-V162, which was included in the scope of the W/O.

The Clearance Reviewer (SRO) who reviews and approves clearances developed by the Clearance Preparer, to provide a second check of clearance adequacy. The Clearance reviewer (a SRO) will have the same expectations that the Clearance Preparer has regarding clearance development. The reviewer relied mostly on the Clearance Request to determine if he had provided an adequate boundary, and believed that tagging 2-CO-V135 closed met the requirements of the Clearance Request.

The third barrier which broke down was that the clearance review was inadequate as it also did not provide for a proper fluid boundary to allow disassembly of 2-CO-V162, which was clearly included in the scope of the W/O, as required by OPS-NGGC-1301

Although a physical walk down of the clearance is not required, a boundary verification using the clearance information and applicable prints is the expectation.

The forth barrier which broke down was that the clearance holder verification of the clearance boundary was inadequate in that the failure to isolate the Aux Surge Tank (AST) side of 2-CO-V162 was not identified.

## **CONCLUSION**

As stated above, four separate and independent barriers broke down and failed to prevent 2500 to 3000 gallons of contaminated water being pumped to the Unit 2 CST ground area and potentially injuring personnel (including death). All four barriers are examples of not following procedure. When ask why four separate tasks (which was four different individuals) including two different departments did not follow procedure, the root cause was determined to be the involved individuals over relied on the other existing Clearance process barriers to protect equipment and ensure personnel safety. With safety as our first priority, we can not afford to make errors. That is why we must maintain the independence of these barriers especially the clearance preparation and review and maintain a questioning attitude.

We as operators CAN NOT allow/tolerate these behaviors. Each one of these barriers MUST be independent of each other and not relying on the other barrier to maintain the person or equipment safe. As clearance requesters, preparers, reviewers and holders; we MUST have the mind set that the each barrier is the only barrier from damaging equipment, injuring personnel or even killing someone.

Clearance standards have been reinforced. A monthly review of clearance standards has been communicated and scheduled.

# Clearance Request Checklist

**WO Task:** \_\_\_\_\_

**CR #:** \_\_\_\_\_

**Planner:** \_\_\_\_\_

This checklist is intended as a guide to ensure that sufficient and specific information is provided for developing an accurate clearance. This is not a QA document and has no record retention requirements.

**REQUIRED ELECTRICAL ISOLATIONS:**

Electrical components should normally be de-energized by:

- Opening a breaker
- Operating a switch
- Pulling a fuse

In those cases where this is not feasible, it is permissible to lift leads or slide links. If leads have to be lifted or links slid, **it is preferred that the leads are lifted/links slid locally at the component and documented using NGGC/Site configuration control methods.** Leads/links shall be Independently Verified on those systems required by site procedures.

4 KV	480 VAC	120 VAC	125 VDC	Logic	Annunciator

**Specifics:**

- Grounding Devices required  
  Motor heaters deenergized  
  Fuses pulled  
  Leads Lifted  
 Breaker Compartment entry required  
  Alternate power supplies addressed
- 
- 

**REQUIRED MECHANICAL ISOLATIONS:**

A clearance is not required to work on pneumatic components if a local pneumatic isolation is available and the pneumatic component is not a boundary isolation valve. NGGC/Site configuration control methods shall be used to ensure the components are restored to correct position.

	Isolated	Vented	Drained
Fluid			
Pneumatics			
Cooling Water			

**Specifics**

- Gagging equipment  
  Torquing Valves into seats  
  Blind flanges  
  Freeze seals  
 Single Isolation  
  Specific Plant Configurations / Conditions
- 
- 

**SPECIAL RESTORATION REQUIREMENT:**

- Rotational Bumps  
  Off Pending Testing  
  Components manipulated within the boundary  
 Required restoration sequencing  
  Pre-planned boundary changes  
 Maintenance present when placing in service
- 
- 

**Reference Drawings Procedures:**

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**Other Comments:**

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Discussed with Thomas his involvement with the #2 CST. His clearance request was incomplete in that he did not request a fluid boundary for the work to be completed (check valve disassembly). He was counseled to request either an electrical, fluid, or hydraulic boundary for the specific work scope in the future.

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The above verbiage has been entered in the subject employee's evaluation. This coaching and documentation was deemed appropriate based on the employee's previous performance (no planning or other performance related issues in recent history) and the nature of his error as pertains to the cause of the event. Item is closed based on this action. RAB 8/30/07.

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Confidential actions complete. This assignment can be considered closed.

DPI1301N, the initial generic lesson plan for Clearance Training, has been revised to require a review of this event as OE for the Clearance Holder BNP population. Also, clearance requests and clearance holder boundary verification techniques were included in the biennial clearance holder required training package which completed 12/12/07.

Expectations for pre-job briefs were reinforced with the MTS organization on 8/29/07.

1. All work, no matter how simple or routine, requires a pre-job brief per AI-122.
2. Continuing jobs (from shift to shift and day to day) must be re-briefed each shift or day
3. All pre-job briefs must include a discussion of critical task(s) (e.g., actions, which if not executed properly, will result in irrecoverable errors/events).
4. All briefs must include a discussion of core management standards and expectations regarding the use of core HU tools
5. Back shift or weekend work where a supervisor may not be present still require a pre-job brief. These briefs can be given by a lead person.
3. All briefs must include a discussion on the expectation to conduct a two-minute or job site drill

A PRR ( PRR-254452) has been generated to capture lessons learned from the spill that occurred during the Unit 2 CST Project. The procedure not yet written for Unit 1 CST will encompass these lessons learned in the unit one special procedure for the CST recoating. There will be a statement addressing clearances boundaries and events pertaining to the unit 2 CST Spill. DBP 11/13/07

OPI1301N, the initial generic lesson plan for Clearance Training, has been revised, (Rev. 11) to require a review of this event as OE for the Clearance Holder BNP population. This event will also be covered in the next retraining session for all BNP clearance holders as indicated in assignment 23. This event was reviewed by the Operations Manager during the LOCT Cycle 07-5 kickoff and was also included for review in the OPS CT Newsletter, Cycle 07-5. Action completed. 102407. T. Pearson

DPI1301N, the initial generic lesson plan for Clearance Training, has been revised, (Rev. 11) to require a review of this event as OE for the Clearance Holder BNP population. This event will also be covered in the next retraining session for all BNP clearance holders.

Evaluation of Spill IAW 10CFR50.75(g)

Based on a review of 10CFR50.75(g), the documentation associated with this spill should be vaulted as a decommissioning record.

Suggest Operations initiate a separate NTM assignment to have Operations DMA transmit/vault this NCR (#237296) as a decommissioning record.

Pre-job briefs were re-enforced with supervisors as required.

The following was communicated to the shop as requested by this action item.

A few months ago during the CST cleaning evolution, while pumping the Unit 1 Suppression Pool to the Waste Surge Tank, water was inadvertently diverted through a disassembled check valve to the ground adjacent to the Unit 2 CST, due to an inadequate clearance boundary. This resulted in a spill of 2500 to 3000 gallons of contaminated water.

Although a physical walk down of the clearance is not required, a boundary verification using the clearance information and applicable prints is the expectation. The verification of an adequate clearance boundary by the mechanic was inadequate in that the failure to isolate the Aux Surge Tank (AST) side of 2-CO-V162 was not identified.

The Clearance Holder in this event did not perform an adequate verification of the clearance boundary prior to starting work. The **Clearance holder's actions did not cause the inadequate boundary to exist**, but allowed the inadequate boundary to continue to exist while work was performed. This was also caused by a failure of the individual to follow applicable procedures. The procedures include OPS-NGGC-1301, *Equipment Clearance*, and the instructions in the associated W/O.

On the surface this may appear to be a minor event. We may rationalize that this was just a spill that was easily cleaned up. However, if conditions had been different (high pressure or high voltage) we could be talking about a significant injury or even death of you or your co-worker. Although other barriers failed, the final barrier of verifying an adequate clearance boundary prior to starting work is your responsibility. It is my expectation and it should be yours that you will verify that you have an adequate clearance boundary prior to starting work.

Thanks  
Paul Smith

Clearance boundary verification quality standards have been reinforced and targeted observations to verify quality is at appropriate level are being tracked by NTM's. Reference AR 251075 for observation details.

Clearance boundary verification quality standards have been reinforced and targeted observations to verify quality is at appropriate level are being tracked by NTM's.  
Reference AR 251003 for observation details