

LISTING OF CONCERNS BY ISSUE

The Maintenance Subcategory (30800) is comprised of 76 concerns grouped into seven elements addressing 59 issues.

Element 308.01 - Adequacy of Procedures

Issue 308.01-1	Craft not allowed to read manual to perform work. (IN-85-129-003)
Issue 308.01-2	Management does not correct identified problems. (IN-85-601-002)
Issue 308.01-3	Questionable quality review of surveillance instructions. (IN-85-677-001)
Issue 308.01-4	Procedures need clarification and more defined criteria. (IN-85-825-002)
Issue 308.01-5	Crafts not credited for surveillance instruction walkdowns. (IN-85-889-X06)
Issue 308.01-6	Work packages do not contain sufficient information. (IN-86-316-003, IN-86-316-005, IN-86-316-006, IN-86-316-007)
Issue 308.01-7	Adequacy of Maintenance Instructions. (MAS-85-004, MAS-86-001, SQP-86-009-004)
Issue 308.01-8	Communications between craft and foreman inadequate. (SQP-86-014-001)
Issue 308.01-9	MA&I-9 does not specify torque requirements for small screws. (TAK-85-002)
Issue 308.01-10	MOV limit switch lubrication not properly inspected. (TAK-85-004)
Issue 308.01-11	Vendor manuals not available. (WBN-242)
Issue 308.01-12	Craft not provided with sufficient procedures. (XX-85-016-001)
Issue 308.01-13	Procedure for inadequate MSR/V removal. (XX-85-106-N02)

Element 308.02 - Preventative Maintenance

- Issue 308.02-1 PMs on valves are signed off without being performed. (EX-85-053-011, EX-85-053-012)
- Issue 308.02-2 Supervisor required unnecessary work to be performed. (IN-85-393-002)
- Issue 308.02-3 Work performed without MR in possession. (IN-86-103-003)
- Issue 308.02-4 Engineering disregards vendor manuals for PM program. (IN-86-316-X09)
- Issue 308.02-5 Hydrogen system PM is not adequate. (QCP10.35-8-19)

Element 308.03 - Corrective Maintenance

- Issue 308.03-1 Non-CSSC valve installed in CSSC system. (BFNIESC-86-01)
- Issue 308.03-2 Butterfly valves leak and spare parts not available. (BNPQCP10.35-17)
- Issue 308.03-3 Inadequate door maintenance. (DHT-85-003)
- Issue 308.03-4 Need to check torque wrench calibration. (GSB-85-001)
- Issue 308.03-5 Maintenance Requests (MR's) are being signed off complete without work being performed. (IN-85-025-005)
- Issue 308.03-6 Need to secure tubing in accordance with drawings. (IN-85-108-X02)
- Issue 308.03-7 Maintenance Request safety review inadequate. (IN-85-129-X05, IN-85-142-X10)
- Issue 308.03-8 Maintenance Requests on security equipment need to be completed promptly. (IN-86-056-001)
- Issue 308.03-9 Sprinkler system drainage inadequate. (IN-86-096-001)
- Issue 308.03-10 Maintenance Request Initiator requires work update. (IN-86-315-005)
- Issue 308.03-11 Work package incomplete. (IN-86-316-002)
- Issue 308.03-12 Supervisor review of work packages required with craft. (SQP-86-014-002)

- Issue 308.03-13 Questionable hardware repair process. (XX-85-071-003)
- Issue 308.03-14 Large spill was misrepresented to NRC as small leak. (XX-85-096-N07)
- Issue 308.03-15 Thimble guide incident recurrence. (XX-85-096-005)
- Issue 308.03-16 Repairs not to ASME requirements. (2850162005)

Element 308.04 - Program Deficiencies/Procedure Violations

- Issue 308.04-1 Foreman using verbal hold orders. (EX-85-048-001)
- Issue 308.04-2 Potential Safety Hazard with Temporary Hose Drainage. (I-86-233-SQN)
- Issue 308.04-3 Inadequate Controls of Instrument Adjustments. (IN-85-142-X11)
- Issue 308.04-4 Check valves removed from welding gas header. (IN-85-338-001)
- Issue 308.04-5 TVA rarely consults vendors for repair. (IN-85-463-005)
- Issue 308.04-6 Nuclear Power responsible for repairs/Modifications at turnover. (IN-85-553-001)
- Issue 308.04-7 Fire door blocked open without breach permit. (IN-85-895-002)
- Issue 308.04-8 Material not being sufficiently supplied to craft. (IN-85-905-001, IN-86-097-001)
- Issue 308.04-9 Configuration control of vendor manuals. (IN-86-073-002)
- Issue 308.04-10 Jackhammers used during ice loading. (IN-86-110-001)
- Issue 308.04-11 Engineering accepts work not completed. (IN-86-315-002)
- Issue 308.04-12 Workplan signed off prematurely . (JAN-86-001)
- Issue 308.04-13 Motor operator grease inspections inadequate. (JLH-86-001)
- Issue 308.04-14 MR's are signed off without work being done. (JLH-86-001)

- Issue 308.04-15 Non-QA material used in QA applications. (JLH-86-001)
- Issue 308.04-16 Violation of Procedures. (SQP-85-004-006)
- Issue 308.04-17 Hanger removed and not replaced. (XX-85-102-001)
- Issue 308.04-18 Out of service tags being violated. (XX-85-122-023)

Element 308.05 - Training Program Deficiencies

- Issue 308.05-1 Cranes improperly used. (EAC-85-004, SQP-85-004-005)
- Issue 308.05-2 Plant personnel need more training. (IN-85-495-001, XX-85-016-001)
- Issue 308.05-3 Unqualified personnel operating MOVATS equipment. (IN-86-114-001)
- Issue 308.05-4 Improper lifting rigging on RCP's (WBN-0217)

Element 308.06 - Subjourneymen/Journeymen

- Issue 308.06-1 Unqualified subjourneymen performing journeymen work. (EX-85-012-001, EX-85-054-002, IN-85-128-001, IN-85-130-001, IN-85-589-002, IN-85-729-001, IN-86-022-002, IN-86-210-002, PH-85-065-001)
- Issue 308.06-2 Laborers are used to perform cement mason work. (IN-85-693-003)

Element 308.07 - Clam Control

- Issue 308.07-1 Clams clogging heat exchangers. (IN-85-948-001, IN-85-948-002, IN-85-948-003)

Checklist for Root Cause Analysis

1. Procedure lacks specifics to perform task.
2. Personnel lack sufficient training in the applicability/use of procedure.
3. Lack of understanding regulatory requirements or commitments.
4. Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes.
5. Inadequate communication within functional group.
6. Inadequate communication between functional groups.
7. Management Assumed Risk.
8. Procedures incomplete or failed to incorporate all technical requirements.
9. Error in judgment by qualified individuals.
10. Unqualified individuals performing the task..
11. Insufficient time to perform task.
12. Inadequate prerequisites defined to ensure satisfactory completion of task.
13. Personnel performed task knowingly in violation of procedure/process.
14. Personnel error in following procedures.
15. Failed to identify root cause of previous deficiencies.
16. Failed to take appropriate action to preclude reoccurrence.
17. Inadequate process to detect adverse trends.
18. Inadequate acceptance criteria defined to ensure satisfactory task completion.
19. Management attentiveness to trends.
20. Lack of accessibility to documentation.
21. Inadequate controls for review of results to ensure compliance with commitments.
22. Timeliness of changes to commitments or changes to licensing/regulatory requirements.
23. Isolated incident.
24. Random error.
25. Other - i.e., equipment related failure.

ATTACHMENT D
SUMMARY OF SYMPTOMS AND ROOT CAUSES

For Element 308.01, Adequacy of Procedures, there was a potential for negative findings at the subcategory level based on the four element evaluations and the NMRG Report R-86-02-NPS. The following symptoms were identified and recurred throughout the evaluation:

- (a) Procedures not containing adequate information or being clear enough to perform work.
- (b) Procedures not incorporating information from upper-tier documents such as design/construction and licensing issues
- (c) Vendor manual control program does not assure vendor manuals are as-constructed documents. Vendor/TVA interface and TVA evaluation of vendor initiated manual changes not controlled.
- (d) Procedure for MR tracking systems does not identify maintenance history and trending for all plant equipment including both CSSC and Non-CSSC
- (e) Post maintenance test guidelines are not procedurally addressed to ensure uniform testing on all equipment prior to returning to service, and verify a re-establishment to as-constructed configuration.
- (f) Gray area between a maintenance activity and a modification activity.
- (g) Dual standards applied to safety related and non-safety related application and passive attitude relative to procedural compliance has a very deleterious effect when the attitude contaminates maintenance programs.

The evaluation effort was not able to categorically state that deficiencies existed in the above areas but there is reason to believe that continuing or escalated management attention should be placed on maintenance activities to integrate long established programs into the configuration control, design verification arena.

Although the concerns for Element 308.02, Preventive Maintenance, were not substantiated, program deficiencies were noted as a result of these evaluations and concurring NMRG findings.

- (a) Vendor manual control program inadequacies at all sites.
- (b) PM instructions not included for all plant equipment required for plant reliability.
- (c) Deficiencies in complete master equipment list that identify all system and equipment for all sites

ATTACHMENT D
(continued)

- (d) The lack of previous corporate support to implement a comprehensive PM program.

For Element 308.03, Corrective Maintenance, there was potential for negative findings at the subcategory level exhibited by the following symptoms: a) Inadequate work control (corrective maintenance activities), and b) Inadequate work control (vendor control for Furmanite). The first symptom occurred at SQN and BFN, and the second symptom occurred only at BFN. As these symptoms were tested for root cause, the appropriate root causes were judged to be as follows:

- (a) Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes (BFN)
- (b) Procedures incomplete or failed to incorporate all technical requirements (SQN)
- (c) Inadequate prerequisites defined to ensure satisfactory completion of task (SQN)
- (d) Personnel error in following procedures (BFN)
- (e) Failure to take appropriate action to preclude recurrence (BFN)
- (f) Inadequate process to detect adverse trends (BFN)
- (g) Inadequate acceptance criteria defined to ensure satisfactory task completion (SQN)

For Element 308.04, Program Deficiencies/Procedure Violations, there were potential negative findings at the subcategory level exhibited by the following symptoms: a) Inadequate work control (procedure violation - not following procedures), b) Inadequate materials control (traceability - problem with not using forms properly), and c) Inadequate design control (vendor manuals). The first two symptoms were indicated for SQN, and the third symptom was identified for WBN. As these symptoms were tested for root cause, the appropriate root causes were judged to be as follows:

- (a) Lack of understanding regulatory requirements or commitments (WBN)
- (b) Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes (WBN)
- (c) Procedures incomplete or failed to incorporate all technical requirements (SQN)

ATTACHMENT D
(continued)

- (d) Personnel performed task in violation of procedure/process (SQN)
- (e) Failed to identify root cause of previous deficiencies (WBN)
- (f) Failed to take appropriate action to preclude reoccurrence (SQN)
- (g) Inadequate controls for review of results to ensure compliance with commitments (WBN)

For Element 308.05, Training Program Deficiencies, there were potential negative findings of the subcategory level exhibited by the following symptom: Inadequate work control (crane side pulls). This symptom was evaluated at SQN and BFN and as this symptom was tested for root cause, the appropriate root causes and applicable plant sites were judged to be as follows:

- (a) Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes (SQN, BFN)
- (b) Unqualified individual performing the task (SQN, BFN)

No analysis for root cause was required in the other elements of this subcategory report because no symptoms of problems were readily apparent.

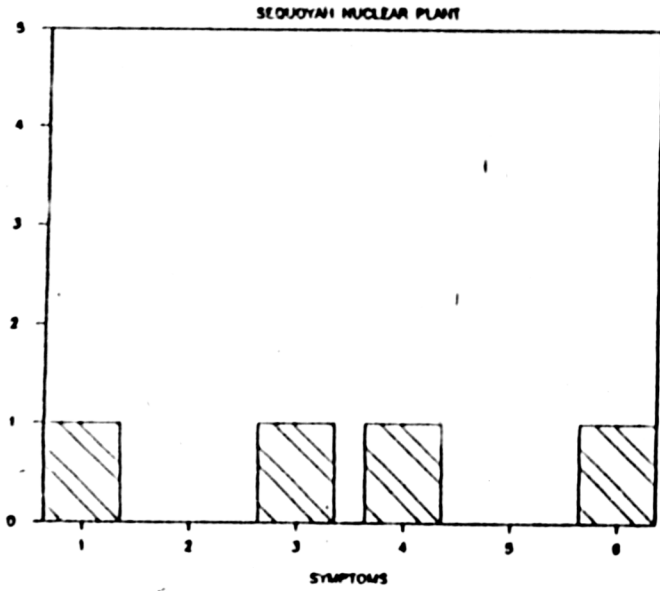
The analysis of the symptoms and root causes is depicted graphically in Attachments E, F, and G. Attachment E is a plot of each element's symptoms versus the root cause pointed out by the symptom. Root cause numbers on the horizontal axis correspond to the 25 items on the "Checklist for Root Cause Analysis" found in Attachment C. Attachment F contains bar graphs showing the number of times each of the symptoms identified for the subcategory occurs for the various plants. Symptom numbers on the horizontal axis in this attachment correspond to the symptoms as listed in Attachment E. Attachment G contains bar graphs showing the number of times each root cause appears in the subcategory for the various plants.

Several observations can be made in studying these attachments. First, it can be seen from Attachments E and F that BFN and SQN share two symptoms in common, one with respect to work control for crane operations and the other with respect to work control for corrective maintenance activities. Next, Attachments E and G show that WBN, BFN, and SQN share root cause number 4 (Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes). At SQN, root cause number 8 (Procedures incomplete or failed to incorporate all technical requirements.) appears more than once as shown on Attachment G.

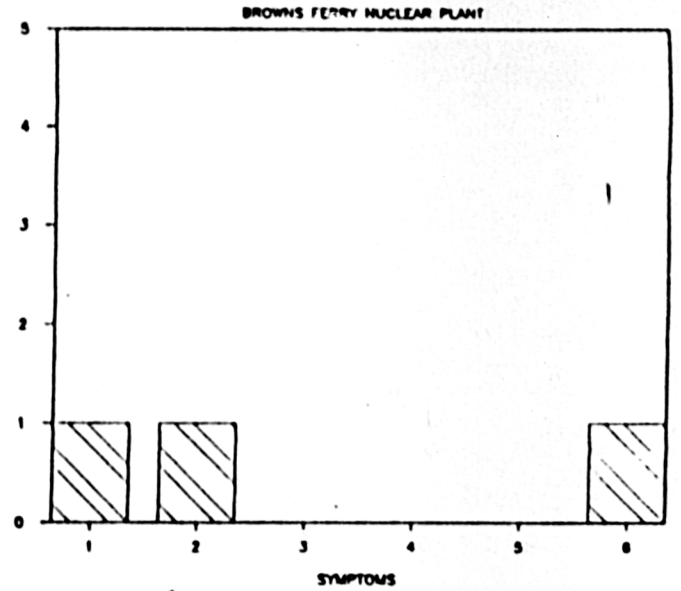
OCCURRENCES VS SYMPTOMS

TOTAL - SUBCAT 308

OCCURRENCES

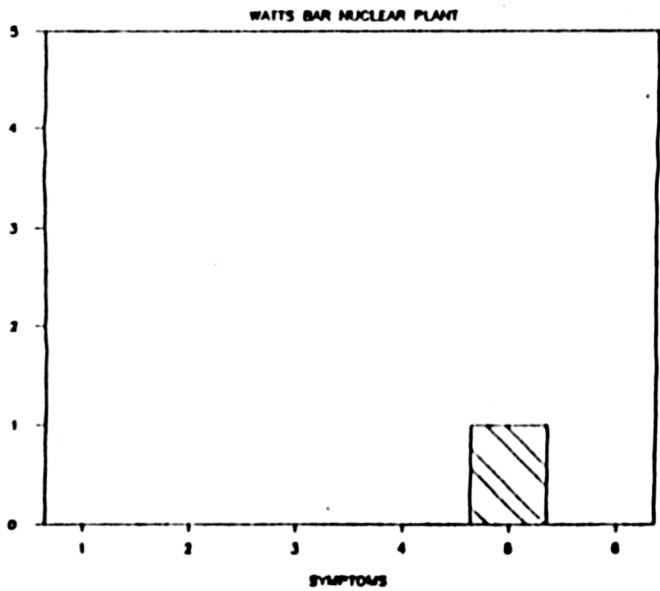


OCCURRENCES

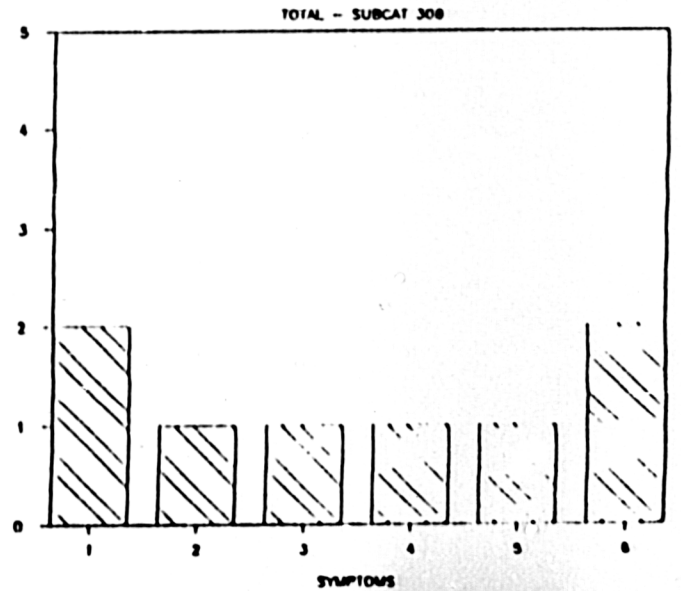


ATTACHMENT F

OCCURRENCES

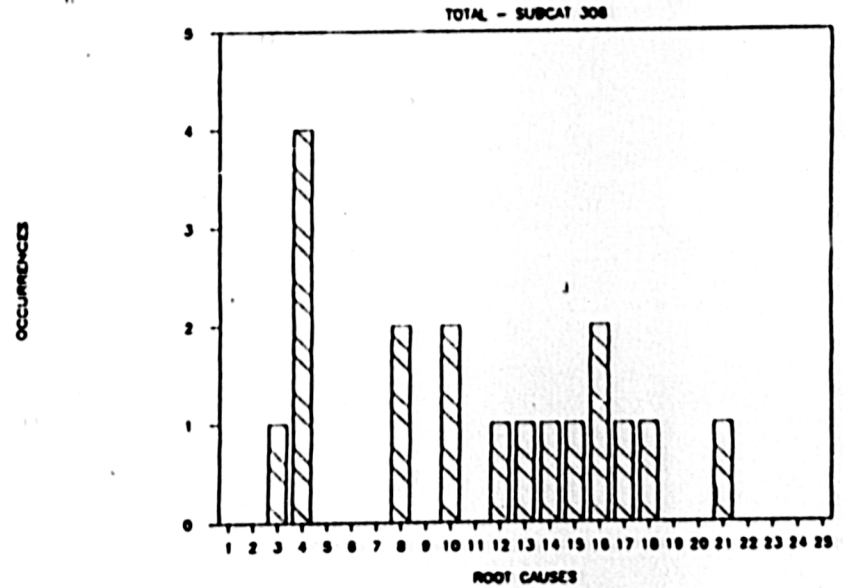
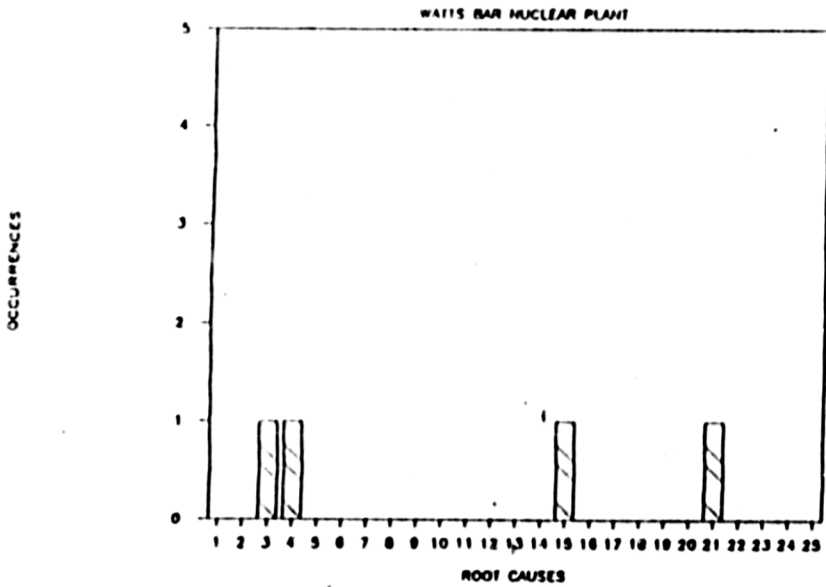
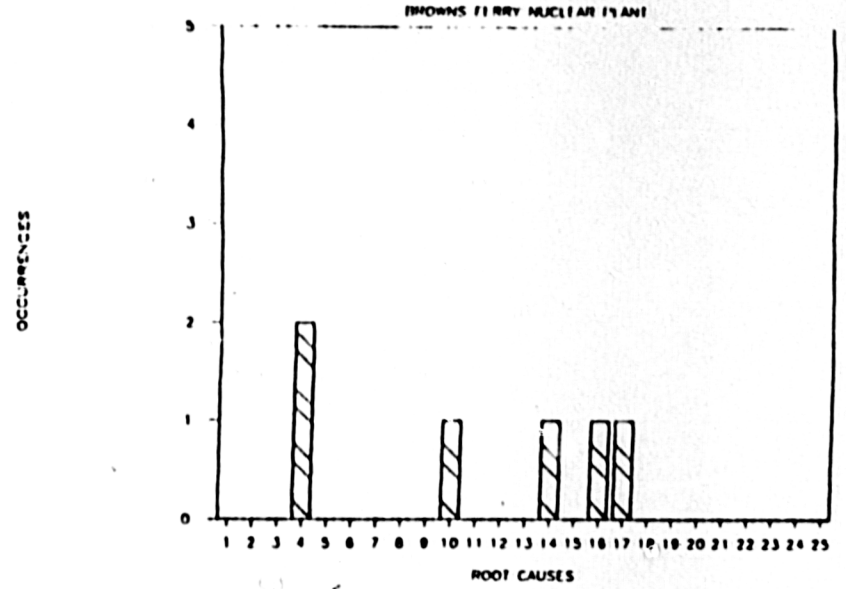
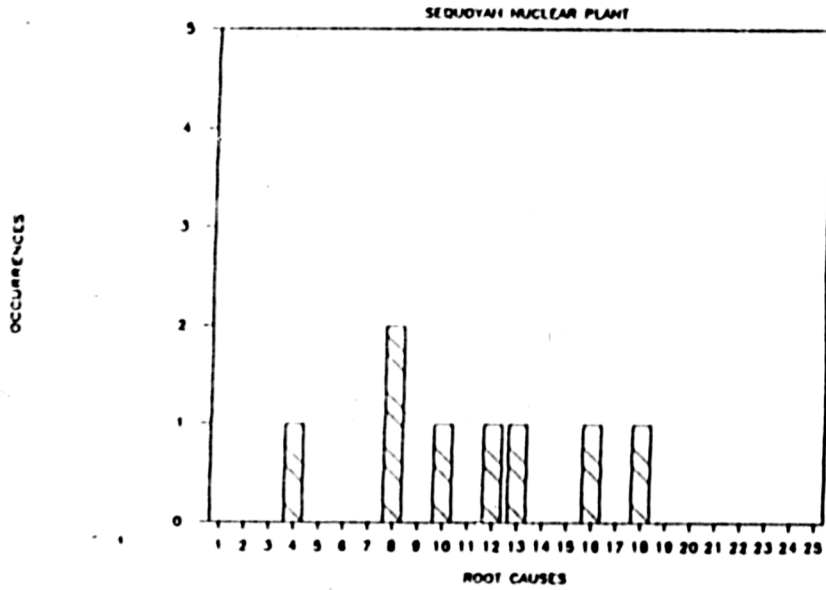


OCCURRENCES



OCCURRENCES VS ROOT CAUSES

TOTAL - SUBCAT 308



Subcategory 30800

CORRECTIVE ACTION TRACKING DOCUMENTS (CATD's)

CATD Number	Corrective Action Plan Approved	CATD Number	Corrective Action Plan Approved
30801-WBN-01	Yes	30805 WBN-01	Yes
30801-SQN-01	Yes	30805 SQN-01	Yes
30801-BFN-01	Yes	30805 SQN-02	Yes
30801-BLN-01	Yes	30805 BFN-01	Yes
		30805 BFN-02	Yes
30802 SQN 01	Yes		
30802 SQN 02	Yes	30807 WBN-01	"Void"
30802 SQN 03	Yes	30807 SQN-01	Yes
		30807 BFN-01	Yes
30803 WBN 01	Yes	30807 BLN-01	Yes
30803 WBN 02	No		
30803 SQN 01	Yes		
30803 SQN-02	Yes		
30803 BLN 01	Yes		
30803 BLN 02	Yes		
30803 BLN 03	Yes		
30803 BFN-01	Yes		
30803 BFN-02	Yes		
30803 BFN 03	Yes		
30803 BFN 04	Yes		
30804 WBN 01	Yes		
30804 WBN 02	Yes		
30804 SQN 01	Yes		
30804 BFN 01	Yes		

ALBEE, ET	3426
ALEXANDER, RD	3328
AYCOCK, BILL	3584
BARBER, BARBIE	1516
BARKER, GAIL	3787
BARLOW, DE	1395
BEDNAR, MD	3323
BONINE, GARY	1512
BONINE, GLENDA	1406
BRADEN, TARA	3859
BROCK, SAUNDRA	3576
BROOKS, PAT	3576
BROWN, DOUG	1373
BROWN, ROB	1374
BROWN, W. R.	3731
BRYANT, GH	3609
BRYANT, JACK	1375
BUNCH, RL	3330
CAREY, PAT	3323
CARPEGGIANI, R	3320
CARTER, GA	1282
CHESNEY, DRUE	3738
COLBAUGH, ROBIN	3756
COLLINS, GA	1573
CROMER, JULIE	1375
CYPHERS, MA	3330
DAGGETT, WENDY	3576
DEAN, TL	8524
DEANGELIS, JJ	1396
DEBBAGE, ART	3751
DIEM, EH	3330
DRANE, STEVE	3779
DUDEK, LW	3330
ELDRIDGE, JW	1282
ELLIOTT, TOM	3646
ENSLEY, TERESA	1399
ENSWORTH, FRANK	3732
FRANKS, STERLING	3777
GAGNE, RON	3788
GASS, KENNETH	3696
GAY, CE	1574
GIBBS, RANDAL	3714
GRAY, TC	3426
GRIDER, DARRELL	3860 or 3732
GRIMES, ROY	1399
GUNNELS, RICHARD	3702
GUYN, TA	1574
HACKNEY, CHUCK	1514
HAERR, CHRIS	1374
HALL, DE	3610
HALVERSON, RD	3320
HATHAWAY, WF	3512
HAWKINSON, DAVE	8855
HENSLEY, BILL	1399
HUFF, GUY	3715
HUNT, TED	3651
HUSS, MJ	3320
HUTZLER, CHUCK	1399
INGER, JOE	1398
IVEY, RHONDA	3576
JACKSON, RW	1396
JAMES, IRA	1516
JENKINS, TAMMY	3576
JENNINGS, TOWANHA	3648
JOHNSON, R	3523
JORDAN, RC	1392
JOYCE, JIMMIE	3860
KARR, JOEL	1538
KNIGHTLY, JOHN	3696

LAGERGREN, BILL	3711
LANHAM, DW	3320
LASKEY, RJ	1574
LAURENT, FRANK	1405
LAWLESS, KIRBY	1403
LEWIS, JAMES	1515
LIGHTNER, JAMES	3426
LINDER, ED	3752
LOFTIS, HENRY	1373
LUNA, SAL	3895
MANN, JIM	3893
MANNING, CHARLIE	1375
MANTLE, HAROLD	8308
MARKLING, BOB	3738
MAXON, BOB	1392
MCCALLUM, NITA	1282
MCCRANEY, RON	3788
MCCRANEY, RON	3788
MCKENSIE, LG	1573
MCNUTT, GEORGE	3701
MCVAY, JIM	3777
MICHAEL, GJ	3328
MORGAN, RUTH	3579
MORROW, KE	3512
MURPHY, MIKE	3777
NAPIER, AL	1513
NEAL, BJ	3330
NIGHTINGALE, ED	3734
OWEN, KAY	3580
PARKER, TAMMY	3576
PATEL, BIPIN	1282
PEOPLES, DEAN	3752
PERRY, RA	1573
PIERCE, KIM	3730
PORTWOOD, GARY	1397
PROFFITT, RICHARD	1397
QUALTER, FJ	1574
RICHARDS, JOHN	3584
RIDING, RUSS	3609
ROBERTSON, TERRY	3754
RODERICK, CHARLOTTE	3576
ROGERS, MARSHA	3708
RUSSELL, JIM	3587
SACCO, RA	1574
SANTOS, DL	1395
SCHOFIELD, DICK	1513
SELEWSKI, BETH	1374
SHEWBRIDGE, ERIC	3702
SMITH, DON	3578
SMITH, KAYWOOD	1398
SPENCE, DIANNE	3753
STEELEFOX, DAVID	3512
STEVENSON, RICK	3426
SUGARMAN, ALFRED	3737
SUTT, RANDY	3646
THOMPSON, LAMAR	1512
TOMLINSON, ERIC	1262
TOUCHTONE, CHARLIE	3702
TUELL, MIKE	3734
VIOLET, JOE	8308
WAYCASTER, MIKE	1398
WEAVER, JAMES	3755
WEISHAAPT, BUD	1371
WENNINGER, GERALD	3584
WHITE, ROGER	3330
WHITE, TOM	3778
WORTHY, JAMES	3776
YELLE, LEO	1282
ZITO, DAVE	1282

1971T

J. Howard

1376

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No.: 308.01 SQN

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30801-SQN-01 4. INITIATION DATE 3-3-87
- 5. RESPONSIBLE ORGANIZATION: Maintenance
- 6. PROBLEM DESCRIPTION: QR NQR The Maintenance Procedure
Enhancement Program at SQN is scheduled for completion in two
phases:
 - 1. 8 months after startup (high risk procedures)
 - 2. 21 months after startup (low risk procedures)

- ATTACHMENTS
- 7. PREPARED BY: NAME Ry Pitt DATE: 3-3-87
 - 8. CONCURRENCE: CEG-H Thomas F. Huth DATE: 3-3-87
 - 9. APPROVAL: ECTG PROGRAM MGR. Randal Alkins DATE: 3/12/87

CORRECTIVE ACTION

- 10. PROPOSED CORRECTIVE ACTION PLAN: Procedure program progress is
being tracked on the Management Action Tracking System (MATS).
- During closeout ensure CAPR initiated MDM 8/17/87

- ATTACHMENTS
- 11. PROPOSED BY: DIRECTOR/MGR: Tracking Only DATE: 3/3/87
 - 12. CONCURRENCE: CEG-H: Thomas F. Huth DATE: 3/3/87
 - SRP: _____ DATE: _____
 - _____ DATE: _____
 - _____ DATE: _____
 - _____ DATE: _____
 - ECTG PROGRAM MGR: James R. Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

- 13. Approved corrective actions have been verified as satisfactorily implemented.

_____ SIGNATURE	_____ TITLE	_____ DATE
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ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No.: 308.01-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30801-BFN-01
4. INITIATION DATE _____
5. RESPONSIBLE ORGANIZATION: Plant Maintenance
6. PROBLEM DESCRIPTION: QR NQR The Phase II Task Force has recommended that appropriate personnel should meet and develop a plan for safety rigging the main stream relief valves to and from the drywell. Included in this plan should be development of a specific rigging procedure, a modification for installing a hatch in the drywell grating, and the addition of jib cranes and dedicated rigging equipment for MSRV removal.

ATTACHMENTS

7. PREPARED BY: NAME Randy J. Sutt DATE: 11-12-86
8. CONCURRENCE: CEG-H Thomas J. Heath for UCL DATE: 12-01-86
9. APPROVAL: ECTG PROGRAM MGR. D. Russell DATE: 12-01-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: The proposed corrective plan for CATD No. 30801-BFN-01 is detailed on the attachment. R33 870129 854

These activities are not a restart item.

These activities will require DNE involvement and are being pursued for use during the upcoming unit 3 outage.

ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR. D. Russell DATE: 1-29-87
12. CONCURRENCE: CEG-H: Thomas J. Heath for UCL DATE: 2-8-87
- SRP: _____ DATE: _____
- _____ DATE: _____
- _____ DATE: _____
- ECTG PROGRAM MGR: James R. Russell DATE: 8-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.01-BLN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30801-BLN-01 4. INITIATION DATE 11-11-86
5. RESPONSIBLE ORGANIZATION: Bellefonte Nuclear Plant
6. PROBLEM DESCRIPTION: QR NQR Neither DAC nor ONP
preventative maintenance programs have included requirements for
inspection of Limitorque valve operator grease for hardening.

- ATTACHMENTS
7. PREPARED BY: NAME M. Murphy DATE: 11-11-86
8. CONCURRENCE: CEG-H: W.R. Lagan DATE: 11-13-86
9. APPROVAL: ECTG PROGRAM MGR. W. Stewart DATE: 11-13-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: _____

SEE Attached

During close out verify a CADR was initiated.
WRL 4-6-87

- ATTACHMENTS
11. PROPOSED BY: DIRECTOR/MGR: James P. Starkey DATE: 3/31/87
12. CONCURRENCE: CEG-H: W.R. Lagan DATE: 4-6-87
SRP: _____ DATE: _____

N/A DATE: _____

DATE: _____
ECTG PROGRAM MGR: AKHibb for DATE: 7/13/87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.02 SQN Revision 0

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30802 SQN 01 4. INITIATION DATE October 9, 1986
5. RESPONSIBLE ORGANIZATION: WRL 5-4-87
6. PROBLEM DESCRIPTION: QR NQR Problems have been identified with preventative maintenance instructions as identified in this report. Line Management is requested to provide corrective action(s) to be taken.
7. PREPARED BY: NAME I. W. White ATTACHMENTS DATE: 10/09/86
8. CONCURRENCE: CEG-H W.R. [Signature] DATE: 10/14/86
9. APPROVAL: ECTG PROGRAM MGR. [Signature] DATE: _____

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE THE CAP TRANSMITTED BY MEMORANDUM 553 861121 814

CATD upgraded to "QR" on 5-4-87. No CAQR will be requested because the identified problems are a subset of CA underway for all NMRG identified problems.
WRL 5-4-87

11. PROPOSED BY: DIRECTOR/MGR: [Signature] ATTACHMENTS DATE: 11-20-86
12. CONCURRENCE: CEG-H: WR [Signature] + DATE: 4-7-87
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: James R. [Signature] DATE: 9-10-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented. *Original CATD missing. Reviewed CAP & NMRG report and concurs. Re-signed WRL 4-7-87

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No: 308.02 SQN Revision 0

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30802 SQN 02 4. INITIATION DATE 10/09/86
- 5. RESPONSIBLE ORGANIZATION: Operations
- 6. PROBLEM DESCRIPTION: QR NQR The Generic Concern Task
Force Report recommended that a revision be made to SQM2, "Standard Practice Maintenance Management System" to include a statement on the use of vendor manuals. This has not been accomplished. Please provide resolution.

ATTACHMENTS

- 7. PREPARED BY: NAME T. W. White DATE: 10/09/86
- 8. CONCURRENCE: CEG-H W.P. [Signature] DATE: 10/14/86
- 9. APPROVAL: ECTG PROGRAM MGR. [Signature] DATE: 10/17/86

CORRECTIVE ACTION

- 10. PROPOSED CORRECTIVE ACTION PLAN: SEE THE CAP TRANSMITTED
BY MEMORANDUM 553 861121 814/303 86 1128 811 | 77H
| 12/3/86

ATTACHMENTS

- 11. PROPOSED BY: DIRECTOR/MGR: H.B. [Signature] DATE: 11-22-86
- 12. CONCURRENCE: CEG-H: Thomas J. Huth DATE: 12/03/86
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
- ECTG PROGRAM MGR: James R. Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

- 13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No: 308.02 SQN Revision 0

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30802 SQN 03 4. INITIATION DATE 10/09/86
- 5. RESPONSIBLE ORGANIZATION: Operations
- 6. PROBLEM DESCRIPTION: QR NQR The Generic Concern Task Force Report recommended improving the March 1988 date for implementation of the Vendor Manual Control Program. This has not been addressed. Provide status/resolution for an earlier implementation date for the vendor Manual Control Program.

ATTACHMENTS

- 7. PREPARED BY: NAME T. W. White DATE: 10/09/86
- 8. CONCURRENCE: CEG-H W.P. Saegert DATE: 10/14/86
- 9. APPROVAL: ECTG PROGRAM MGR. MURKIN DATE: 10-17-86

CORRECTIVE ACTION

- 10. PROPOSED CORRECTIVE ACTION PLAN: SEE CAP TRANSMITTED
BY MEMORANDUM 553 86 1121 814/503 86128 811

1/37H
12/3/86

ATTACHMENTS

- 11. PROPOSED BY: DIRECTOR/MGR: N.B. Perkins DATE: 11-21-86
- 12. CONCURRENCE: CEG-H: Thomas J. Huth DATE: 12/03/86
SRP: N/A DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: William DATE: 4/21/87

VERIFICATION AND CLOSEOUT

- 13. Approved corrective actions have been verified as satisfactorily implemented.

W.P. Saegert OPS CEG-H 4-21-87
SIGNATURE TITLE DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No.: 308.03-WBN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-WBN-02 4. INITIATION DATE 2-25-87
5. RESPONSIBLE ORGANIZATION: _____
6. PROBLEM DESCRIPTION: QR NQR CATD 30803-WBN-02 is being used to track a Design Change Request (DCR) that is to be written to address the fire protection system drains in the Auxiliary Building. The problem identified was a 55-gallon drum that collects the system drainage during spurious actuation of the sprinkler system.

- | | |
|--|--------------------------------------|
| | <input type="checkbox"/> ATTACHMENTS |
| 7. PREPARED BY: NAME <u>Richard Gunnels</u> | DATE: <u>2-25-87</u> |
| 8. CONCURRENCE: CEG-H <u>Thomas F. Huth for WPL</u> | DATE: <u>2-25-87</u> |
| 9. APPROVAL: ECTG PROGRAM MGR. <u>J.R. Russell for</u> | DATE: <u>3/20/87</u> |

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: _____

During closeout ensure CRRP initiated ~~ADW~~ 8/17/87

- | | |
|---|--------------------------------------|
| | <input type="checkbox"/> ATTACHMENTS |
| 11. PROPOSED BY: DIRECTOR/MGR: <u>Tracking Only</u> | DATE: <u>2-25-87</u> |
| 12. CONCURRENCE: CEG-H: <u>Thomas F. Huth for WPL</u> | DATE: <u>2-25-87</u> |
| SRP: _____ | DATE: _____ |
| _____ | DATE: _____ |
| _____ | DATE: _____ |
| ECTG PROGRAM MGR: <u>James R. Russell</u> | DATE: <u>9-10-87</u> |

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE
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ECS^o Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: OP 308.03-SQN Rev. 1

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. OP 30803-SQN-01
4. INITIATION DATE 10-20-86
5. RESPONSIBLE ORGANIZATION: WBN Maintenance
6. PROBLEM DESCRIPTION: QR NQR (1) The question pertaining to the CSCC designation of work activities (mechanical versus instrument and electrical) needs to be addressed including the impact upon the access to potentially vital areas of the plant due to the non-CSSC work. (2) Open maintenance action tracking items 1294, 1295 and 1298 (Reference 26) should be completed and closed out. (3) The training activity conducted for the dedicated door crew appears to be a one time only class, without provision for periodic retraining or training of new personnel assigned to the dedicated door crew. The need for recurring training should be evaluated.
7. PREPARED BY: NAME G. D. Gardner ATTACHMENTS
8. CONCURRENCE: CEG-H W.P. [Signature] DATE: 10-20-86
9. APPROVAL: ECTG PROGRAM MGR. MURPHY DATE: 10-23-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE CAP TRANSMITTED BY MEMORANDUMS (553 861022 835) OR/AND (503 861029 801)

11. PROPOSED BY: DIRECTOR/MGR: [Signature] ATTACHMENTS
12. CONCURRENCE: CEG-H: W.P. [Signature] DATE: 11/5/86
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: James R. Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No.: 308.03-SQN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-SQN-02 4. INITIATION DATE 12-16-86
5. RESPONSIBLE ORGANIZATION: DNE
6. PROBLEM DESCRIPTION: QR NQR General Construction
Specification G-85 is tentatively scheduled for issuance in
January 1987, as per TVA response in Inspection Report
50-327/86-27, item D2.1-1. Closure of this item and implementation
of G-85 is being tracked by CATD 30803-SQN-02. Plant implementing
procedures will need to be written after G-85 is issued before the
use of Durmanite at SQN.

- ATTACHMENTS
7. PREPARED BY: NAME R. Sutt DATE: 12-16-86
 8. CONCURRENCE: CEG-H Thomas F. Huth for WRL DATE: 12/18/86
 9. APPROVAL: ECTG PROGRAM MGR. A. D. Schmitt for DATE: 4/7/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: See memorandum L44 860729 801
"Sequoyah Nuclear Plant units 1 and 2 - NRC OIE Region II
Inspection Report 50-327/86-27 and 50-328/86-27 - response to
deficiencies and unresolved items (D2.1-1).

- ATTACHMENTS
11. PROPOSED BY: DIRECTOR/MGR: L44 860729 801 DATE: _____
 12. CONCURRENCE: CEG-H: Thomas F. Huth for WRL DATE: 12/18/86
SRP: NA DATE: _____
ECTG PROGRAM MGR: A. D. Schmitt for DATE: 4/22/87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

W.R. Sutt OPS CEG-H 4-22-87
SIGNATURE TITLE DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No:

30° 03 - BLN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-BLN-01
4. INITIATION DATE 10-24-86
5. RESPONSIBLE ORGANIZATION: Bellefonte ONP
6. PROBLEM DESCRIPTION: QR NQR Plant layup will shorten the Life of BIF Elastomer Valve seats if they remain dry or kept in the the closed position for an extended period. Any BIF valve that falls in this category, should be identified as a potential problem during restart.

Concern: BNP-QCP-10.35-17

- | | | |
|--------------------------------|---------------------|--------------------------------------|
| | | <input type="checkbox"/> ATTACHMENTS |
| 7. PREPARED BY: NAME | <u>R. J. Sutt</u> | DATE: <u>10-24-86</u> |
| 8. CONCURRENCE: CEG-H | <u>W.P. Long</u> | DATE: <u>11-19-86</u> |
| 9. APPROVAL: ECTG PROGRAM MGR. | <u>D.W. Russell</u> | DATE: <u>4-19-86</u> |

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: See attachment
Trans. Hcd to ECTG VIA 401 861222 800

JFH
1/14/87

- | | | |
|--------------------------------|-------------------------------|--------------------------------------|
| | | <input type="checkbox"/> ATTACHMENTS |
| 11. PROPOSED BY: DIRECTOR/MGR: | <u>401 861222 800</u> | DATE: <u>12-22-86</u> |
| 12. CONCURRENCE: CEG-H | <u>Thomas F. Huth for WRL</u> | DATE: <u>1-14-87</u> |
| SRP: | <u>N/A</u> | DATE: _____ |
| | | DATE: _____ |
| | | DATE: _____ |
| | | DATE: _____ |
| ECTG PROGRAM MGR: | <u>AR White for</u> | DATE: <u>7/13/87</u> |

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No: 3C8.03 - BLN

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30803-BLN-02 4. INITIATION DATE 10-23-86
- 5. RESPONSIBLE ORGANIZATION: Maintenance
- 6. PROBLEM DESCRIPTION: QR NQR Known problems have occurred with BIF Butterfly Valves, however BIF recommends not retaining spare parts or spare valves. Due to the criticality that these valves are maintained in an operable condition, an evaluation should be made on how many and what types of spares should be procured for BIF valves. However valves should not be ordered until after plant start up schedule is resumed and purchased order requirements to be imposed on the supplier should include shelf life requirements for the valves and/or replacement parts subject to deterioration during storage.

ATTACHMENTS

- 7. PREPARED BY: NAME R. J. Sutt DATE: 10-23-86
- 8. CONCURRENCE: CEG-H W. R. Long DATE: 11-13-86
- 9. APPROVAL: ECTG PROGRAM MGR. W. R. Long DATE: 11-19-86

CORRECTIVE ACTION

- 10. PROPOSED CORRECTIVE ACTION PLAN: See attachment
Transmitted to ECTG VIA 401 861222 800

1 JFM
1/14/86

ATTACHMENTS

- 11. PROPOSED BY: DIRECTOR/MGR: 401 861222 800 DATE: 12-22-86
- 12. CONCURRENCE: CEG-H: Thomas F. Huth for WRC DATE: 1-14-87
SRP: N/A DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: W. R. Long DATE: 7/13/87

VERIFICATION AND CLOSEOUT

- 13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.03 - BLN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-BLN-03
4. INITIATION DATE _____
5. RESPONSIBLE ORGANIZATION: Mechanical Maintenance
6. PROBLEM DESCRIPTION: QR NQR Torque wrenches are used on several different jobs without being calibration checked. By procedure this is acceptable, however if wrench is found to be out-of-calibration, then all jobs performed using that wrench since it's last calibration date are suspect.

Concern: GSB-85-001

ATTACHMENTS

7. PREPARED BY: NAME Randy Sutt DATE: 10-22-86
8. CONCURRENCE: CEG-H W.R. [Signature] DATE: 11-19-86
9. APPROVAL: ECTG PROGRAM MGR. [Signature] DATE: 11-19-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: See attachment
Transmitted to ECTG VIA UOI 861222 800

1 J7H
1/14/86

ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: UOI 861222 800 DATE: 12-22-86
12. CONCURRENCE: CEG-H: Thomas F. Huth for WRL DATE: 1-14-87
SRP: _____ DATE: _____
N/A DATE: _____
ECTG PROGRAM MGR: [Signature] DATE: 7/13/87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 30803-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-BFN-01
4. INITIATION DATE 02/10/87
5. RESPONSIBLE ORGANIZATION: Maintenance
6. PROBLEM DESCRIPTION: QR NQR Chronic door maintenance
problems are not being programmatically addressed. Appropriate
modifications are not identified to prevent recurrence of chronic
problems.
7. PREPARED BY: NAME R. J. Sutt ATTACHMENTS DRAFT DATE: 02/10/87
8. CONCURRENCE: CEG-H: Thomas J. Heath for WPL DATE: 2/11/87
9. APPROVAL: ECTG PROGRAM MGR. Oldham DATE: 2/11/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE ATTACHMENT A
During close out verify a CAQR was initiated WPL 5-1-87
11. PROPOSED BY: DIRECTOR MGR: JR Hall for ATTACHMENTS DATE: 4-12-87
12. CONCURRENCE: CEG-H: W.R. Page DATE: 5-1-87
SRP: _____ DATE: _____

ECTG PROGRAM MGR: James R. Russell for DATE: 3-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No.: 30803-BFN

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30803-BFN-02
- 4. INITIATION DATE 02/10/87
- 5. RESPONSIBLE ORGANIZATION: Maintenance 5-4-87
- 6. PROBLEM DESCRIPTION: QR NQR There is no system for tracking temporary repairs to ensure permanent repairs are made in future outages.

- 7. PREPARED BY: NAME Randy Sutt ATTACHMENTS 000FT DATE: 02/10/87
- 8. CONCURRENCE: CEG-H Thomas F. Hill for WRL DATE: 2/15/87
- 9. APPROVAL: ECTG PROGRAM MGR. [Signature] DATE: 2/17/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE ATTACHMENT A

CATD upgraded to QR - BFN to be notified 5-4-87
Since this is considered a program
enhancement NO CAPR is required.

- 11. PROPOSED BY: DIRECTOR/MGR: [Signature] ATTACHMENTS DATE: 4-17-87
- 12. CONCURRENCE: CEG-H: W.R. [Signature] DATE: 5-1-87
- SRP: _____ DATE: _____
- _____ DATE: _____
- _____ DATE: _____
- ECTG PROGRAM MGR: James R. Russell DATE: 8-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No.: 30803-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-BFN-03 4. INITIATION DATE 02/10/87
5. RESPONSIBLE ORGANIZATION: Maintenance 4-17
6. PROBLEM DESCRIPTION: QR NQR Requirements of SDSP 6.2 and BF 7.6 specify Maintenance Requests (MRs) be written for all maintenance work including performance of maintenance by contract services. Many cases were found where work was performed by contract services and no MR or TR was used.

- ATTACHMENTS 02077
7. PREPARED BY: NAME Randy Sutt DATE: 02/10/87
 8. CONCURRENCE: CEG-H Thomas J. Huth for WRL DATE: 2/17/87
 9. APPROVAL: ECTG PROGRAM MGR. DW Stewart DATE: 2/17/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:

SEE ATTACHMENT A

CATD upgraded to QR BFD to be ref'd w/23-9-87

- ATTACHMENTS
11. PROPOSED BY: DIRECTOR/MGR: JRC Hall for DATE: 2-17-87
 12. CONCURRENCE: CEG-H: W.R. Sugg DATE: 5-1-87
- SRP: _____ DATE: _____

DATE: _____
DATE: _____
DATE: _____
DATE: _____
- ECTG PROGRAM MGR: James R Russell DATE: 8-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No.: 30803-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30803-BFN-04
4. INITIATION DATE 02/10/87
5. RESPONSIBLE ORGANIZATION: Maintenance
6. PROBLEM DESCRIPTION: QR NQR There are presently no working procedures which provide instructions and acceptance criteria for the use of temporary sealants at BFN and the assurance that permanent repair/replacement are made when plant conditions permit.

- ATTACHMENTS DP&T
7. PREPARED BY: NAME Randy Sutt DATE: 02/10/87
 8. CONCURRENCE: CEG-H Thomas F. Huth for WRL DATE: 2/15/87
 9. APPROVAL: ECTG PROGRAM MGR. D. W. Steubert DATE: 2/17/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE ATTACHMENT A

During close out process verify CAPR has been initiated WRL 5-1-87

- ATTACHMENTS
11. PROPOSED BY: DIRECTOR/MGR: J.R. Hall for DATE: 4-17-87
 12. CONCURRENCE: CEG-H: W.R. Seaggy DATE: 5-1-87
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: James R Russell DATE: 8-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No.: 308.04-WBN

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30804-WBN-02 4. INITIATION DATE _____
- 5. RESPONSIBLE ORGANIZATION: Instrument Maintenance
- 6. PROBLEM DESCRIPTION: QR NQR Vendor drawings which are not
part of the Drawing Maintenance System are being used to make
repairs to CSSC plant equipment.

ATTACHMENTS

7. PREPARED BY: NAME	<u>Randy Sutt R/S</u>	DATE:	<u>02/12/87</u>
8. CONCURRENCE: CEG-H	<u>Thomas F. Heath for WRL</u>	DATE:	<u>2/20/87</u>
9. APPROVAL: ECTG PROGRAM MGR.	<u>Quistward!</u> <u>Fen</u>	DATE:	<u>2/26/87</u>

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: _____

The attached DRG does not indicate that the problem was considered generic. During close out issue of AQR initiated to look for generic applicability. WRL 3-19-87

11. PROPOSED BY: DIRECTOR/MGR:	<u>William S. Dell</u>	DATE:	<u>3-9-87</u>
12. CONCURRENCE: CEG-H:	<u>W.K. [Signature]</u>	DATE:	<u>3-17-87</u>
	SRP:	DATE:	_____
		DATE:	_____
		DATE:	_____
		DATE:	_____
		DATE:	_____
		DATE:	<u>9-10-87</u>

ECTG PROGRAM MGR: James R. [Signature] [Signature]

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

_____	_____	_____
SIGNATURE	TITLE	DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.04 SQN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30804-SQN-01
4. INITIATION DATE 11-12-86
5. RESPONSIBLE ORGANIZATION: Sequoyah
6. PROBLEM DESCRIPTION: QR NQR Various problems falling under the element "Program/Procedure" violations. See element report conclusions for specific problem descriptions.
7. PREPARED BY: NAME Tom Huth ATTACHMENTS DATE: 11-12-86
8. CONCURRENCE: CEG-H W.R. Long DATE: 11-13-86
9. APPROVAL: ECTG PROGRAM MGR. J.R. Russell for DATE: 4/7/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SQN's response is acceptable. The specific concern corrective actions are shown in the revised element report.
11. PROPOSED BY: DIRECTOR/MGR: 553 861104 918 ATTACHMENTS DATE: 11-7-86
12. CONCURRENCE: CEG-H: W.R. Long DATE: 11-13-86
SRP: _____ DATE: _____
_____ DATE: _____
_____ DATE: _____
ECTG PROGRAM MGR: James R Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.04-BFN

- 1. Immediate Corrective Action Required: Yes No
- 2. Stop Work Recommended: Yes No
- 3. CATD No. 30804-BFN-01 4. INITIATION DATE 11/14/86
- 5. RESPONSIBLE ORGANIZATION: Maintenance
- 6. PROBLEM DESCRIPTION: QR NQR The existing program and procedures do not address methodology to control removal, and subsequent reinstallation, of hangers during maintenance/ modification activities required to gain access to equipment. The current ongoing 79-14 program is a "one shot" correction of existing problems, and does not address hanger removal/ reinstallation for subsequent activities after program closeout

ATTACHMENTS

- 7. PREPARED BY: NAME R.W. Bass DATE: 11/14/86
- 8. CONCURRENCE: CEG-H Thomas F. Heath for WPL DATE: 1/23/87
- 9. APPROVAL: ECTG PROGRAM MGR. DW Stewart DATE: 1/30/87

CORRECTIVE ACTION

- 10. PROPOSED CORRECTIVE ACTION PLAN: MAI-23 and MMI-164 are in place to facilitate hanger removal and reinstallation for maintenance/mod activities. MMI-175, "Repair of hangers and supports", is in the preparation stage and is to be completed 3/15/87. MMI-175 references MMI-164 when removal of a support is needed. MAI-23 is currently being used for modification work on supports. MMI-175 will be used for maintenance purposes. The approval and use of MMI-175 for hanger repairs per ISI generated MR's & NOI's is a restart item.

ATTACHMENTS

- 11. PROPOSED BY: DIRECTOR/MGR. J.R. Hall DATE: 3-4-87
- 12. CONCURRENCE: CEG-H: W.R. [signature] DATE: 3-7-87
SRP: _____ DATE: _____
_____ DATE: _____
_____ DATE: _____
ECTG PROGRAM MGR: James R. Russell Fox DATE: 8-14-87

VERIFICATION AND CLOSEOUT

- 13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: OP 308.05-SQM R1

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. OP 308.05-001-SQM 4. INITIATION DATE 10-02-86
5. RESPONSIBLE ORGANIZATION: SQM Elect & Mech Maintenance
6. PROBLEM DESCRIPTION: QR NQR Crane side pulls are in conflict with the requirements of ANSI-B 30.2-1976 and SQM-31.

Note from CEG-H
OP 308.05 SQM R1 was rejected by SRP because we stated that the findings were not safety related. We concurred and upgraded the finding and conclusion.
WRL

- ATTACHMENTS
7. PREPARED BY: NAME Richard M. Gunnels DATE: 10-02-86
 8. CONCURRENCE: CEG-H W.R. Long DATE: 10-6-86
 9. APPROVAL: ECTG PROGRAM MGR. M. Mulvihill DATE: 10-7-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: _____

SEE THE CAP TRANSMITTED BY MEMORANDUM
502860917905
Bring close out verify CAPOR initiated. WRL 3-20-87

- ATTACHMENTS
11. PROPOSED BY: DIRECTOR/MGR: P.R. Walker DATE: 11/10/86
 12. CONCURRENCE: CEG-H: W.R. Long DATE: 11-12-86
SRP: _____ DATE: _____

ECTG PROGRAM MGR: James R. Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: OP 308.05-SQN R1

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. OP 308.05-002-SQN 4. INITIATION DATE 10-02-86
5. RESPONSIBLE ORGANIZATION: CCP-Special Projects (DNE & Mech Eng)
6. PROBLEM DESCRIPTION: QR NQR Crane side pulls are in conflict with the requirements of ANSI-B 300.2-1976 and SQM-31. Response should include long-term corrective actions for the issue of crane side pulls.

Note from CEG-H

OP 308.05 SQN R0 was rejected by SRI because we stated that the findings were not safety related. We concurred and upgraded the finding and conclusion.

7. PREPARED BY: NAME Richard M. Gunnels DATE: 10-02-86
8. CONCURRENCE: CEG-H Thomas J. Heath DATE: 10-02-86
9. APPROVAL: ECTG PROGRAM MGR. MUK DATE: 10-7-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE THE CAP TRANSMITTED BY MEMORANDUM B25-861031-002 ALSO ATTACHED FOR YOUR USE IS BACK GROUND INFORMATION ABOUT THE CCP, (B44860514 088 AND A 02860605 016)
During close out verify CAPR initiated WCL-3-20-87
11. PROPOSED BY: DIRECTOR/MGR: O.R. Walker DATE: 11/6/86
12. CONCURRENCE: CEG-H: W.R. Long DATE: 11-12-86
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: James R. Russell DATE: 9-10-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.05-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30805-BFN-001
4. INITIATION DATE 10-27-86
5. RESPONSIBLE ORGANIZATION: Electrical Maintenance
6. PROBLEM DESCRIPTION: QR NQR Crane operators are potentially performing side pulls in conflict with ANSI-B30.2-1976. Specifically, performing side pulls without prior engineering evaluation. This also conflicts with plant procedures and crane operator training.

- | | |
|---|---|
| | <input checked="" type="checkbox"/> ATTACHMENTS |
| 7. PREPARED BY: NAME <u>M. W. Murphy</u> | DATE: <u>10-27-86</u> |
| 8. CONCURRENCE: CEG-H: <u>[Signature]</u> | DATE: <u>11-15-86</u> |
| 9. APPROVAL: ECTG PROGRAM MGR. <u>[Signature]</u> | DATE: <u>11-12-86</u> |

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: All Browns Ferry Nuclear Plant (BFN) crane operators have been trained to avoid side-loading. After a side-loading incident on the refuel floor, the importance of avoiding side-loading conditions was reemphasized in a memorandum from C. G. Wages (R36 860331 820) dated April 1, 1986 (attached). Since April 1, 1986, no evidence of side-loading exists at BFN. However, sessions have been scheduled for December 15, 1986 and December 16, 1986 to reemphasize the importance of avoiding side-load conditions during lifting operations.

Based on CAP no QR problem exist. NPL 3-23-87

- | | |
|--|---|
| | <input checked="" type="checkbox"/> ATTACHMENTS |
| 11. PROPOSED BY: DIRECTOR/MGR: <u>R33 861212 839</u> | DATE: <u>12/16/86</u> |
| 12. CONCURRENCE: CEG-H: <u>[Signature]</u> | DATE: <u>2/7/87</u> |
| SRP: | DATE: _____ |
| | DATE: _____ |
| | DATE: _____ |
| ECTG PROGRAM MGR: <u>[Signature]</u> | DATE: <u>8-14-87</u> |

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

_____ SIGNATURE	_____ TITLE	_____ DATE
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ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.05-BFN

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30805-BFN-002
4. INITIATION DATE 10-27-86
5. RESPONSIBLE ORGANIZATION: Maintenance Training
6. PROBLEM DESCRIPTION: QR NQR Maintenance Training Unit has not implemented a schedule to ensure that all safety-related tasks are not replaced by other topics. Tasks identified by efforts to achieve INPO accreditation are replaced by plant requests without evaluation.

- | | |
|---|---|
| 7. PREPARED BY: NAME <u>M. W. Murphy</u> | <input checked="" type="checkbox"/> ATTACHMENTS |
| 8. CONCURRENCE: CEG-H <u>[Signature]</u> | DATE: <u>10-27-86</u> |
| 9. APPROVAL: ECTG PROGRAM MGR. <u>[Signature]</u> | DATE: <u>11-15-86</u> |
| | DATE: <u>11-15-86</u> |

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: The Browns Ferry Training Branch now has a Job Task Analysis Unit onsite. One of their responsibilities is to ensure that tasks requiring training, including safety-related tasks, are not removed from the task list without formal task analysis. The Maintenance Training Unit is currently working with plant maintenance organizations (Electrical, Mechanical, and Instrumentation) to identify training needs for 1987. This training will be coordinated with the Job Task Analysis Unit to ensure that the training includes or supplements training on safety-related tasks. These practices are a matter of standard operating procedure for accredited programs.

- | | |
|---|--------------------------------------|
| 11. PROPOSED BY: DIRECTOR/MGR: <u>[Signature]</u> | <input type="checkbox"/> ATTACHMENTS |
| 12. CONCURRENCE: CEG-H <u>[Signature]</u> | DATE: <u>12/18/86</u> |
| SRP: _____ | DATE: <u>2/17/87</u> |
| _____ | DATE: _____ |
| _____ | DATE: _____ |
| ECTG PROGRAM MGR: <u>James R. Russell</u> | DATE: <u>1-14-87</u> |

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

_____ SIGNATURE	_____ TITLE	_____ DATE
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DEC 18 1986

SUMMARY TABLE

Calculated Core Physics and Safety Parameters for Conversion of
the Worcester Polytechnic Institute Reactor from HEU to LEU Fuel

<u>Fuel Design Data</u>	<u>HEU Core</u>	<u>LEU Core</u>
Type Fuel	UAl Alloy	UAl _x -Al
Enrichment, %	93.4	19.75
Number of Fuel Plates	10	18
Meat Thickness, mm	0.991	0.762
Cladding Material	1100 Al	6061 Al
Cladding Thickness, mm	0.762	0.381
²³⁵ U per Element, g	136.3	167.0
U Density, g/cm ³	0.39	1.78
<u>Reactor Parameters</u>		
Excess Reactivity, % $\Delta k/k$ all blades out	0.29	0.01 ^a 0.37 ^b
Worth of Regulating Blade, % $\Delta k/k$	0.7	0.7
Shutdown Margin with Max. Worth Blade Stuck, % $\Delta k/k$	6.0	6.0
Prompt Neutron Lifetime, μs	69.0	61.2
Delayed Neutron Fraction, %	0.77	0.77
Temperature Coefficient, $\Delta k/k \times 10^{-4}$ per °C	-1.7	-1.6
Void Coefficient, $\Delta k/k \times 10^{-3}/\%$ Void	-2.0	-2.4
Doppler Coefficient, $\Delta k/k \times 10^{-5}$ per °C	0.0	-1.8
Overpower Factor to Onset of Nucleate Boiling	24.9	44.2
Limiting Step Reactivity to Initiate Clad Melting, % $\Delta k/k$	1.5	2.0

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report NO: 308.07
Revision 0

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30807 BFN 01
4. INITIATION DATE 10/3/86
5. RESPONSIBLE ORGANIZATION: Operations
6. PROBLEM DESCRIPTION: QR NQR
No plant CI was found to document chlorine equipment failures
and evaluations for clam control. All clam control documents
need reference to each other.
7. PREPARED BY: NAME F. W. Swearingen ATTACHMENTS
DATE: 10/3/86
8. CONCURRENCE: CEG-H [Signature] DATE: 2/8/87
9. APPROVAL: ECTG PROGRAM MGR. James R. Russell DATE: 8-14-87

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CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: A permanent change is being
submitted to initiate evaluation of effected systems following
failure of chlorination equipment for periods greater than
fourteen days. This submitted change shall be incorporated into
CI-1001 no later than January 31, 1987.

The cross referencing of chlorination documents is adequate and
needs no further action.

R33 861119 819
R10 861212 819

11. PROPOSED BY: DIRECTOR/MGR: [Signature] ATTACHMENTS
DATE: 12-18-80
12. CONCURRENCE: CEG-H: [Signature] DATE: 2/7/87
SRP: _____ DATE: _____
_____ DATE: _____
_____ DATE: _____
_____ DATE: _____
ECTG PROGRAM MGR: James R. Russell DATE: 8-14-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

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ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: 308.07 Revision 0

1. Immediate Corrective Action Required: Yes No
2. Stop Work Recommended: Yes No
3. CATD No. 30807 BLN 01 4. INITIATION DATE 10/3/86
5. RESPONSIBLE ORGANIZATION: Operations
6. PROBLEM DESCRIPTION: QR NQR
Plant SIs for clam control need to be written to include all
commitments and relate all activities. Construction BNP-QCP 6.73,
Revision 0, now controls; it needs revision to document chlorine
equipment failures and evaluation.

ATTACHMENTS

7. PREPARED BY: NAME F. R. Swearingen DATE: 10/3/86
8. CONCURRENCE: CEG-H W.P. Soggy DATE: 10/14/86
9. APPROVAL: ECTG PROGRAM MGR. MORCuda DATE: 10/15/86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: See attachment. 401 870203 802

ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGB: 401 870203 802 DATE: 2/3/87
12. CONCURRENCE: CEG-H: Thomas F. Huth for WRL DATE: 2/6/87
SRP: _____ DATE: _____
_____ DATE: _____
_____ DATE: _____
ECTG PROGRAM MGR: R.P. Huth for DATE: 7/13/87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE

TITLE

DATE

ATTACHMENT I

LIST OF EVALUATORS BY ELEMENT/PLANT

Element 308.01

<u>SQL</u> Gunnels Meers Sutt	<u>WBN</u> Sutt	<u>BFN</u> Sutt	<u>BLN</u> Muir Gunnels
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Element 308.02

<u>SQL</u> Gunnels	<u>WBN</u> Gunnels	<u>BFN</u> Gunnels	<u>BLN</u> Gunnels
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Element 308.03

<u>SQL</u> Gilmore	<u>WBN</u> Gilmore Gunnels	<u>BFN</u> Sutt	<u>BLN</u> Sutt
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Element 308.04

<u>SQL</u> Murphy Halley	<u>WBN</u> Sutt Aycock Elliot	<u>BFN</u> Bass Gunnels	<u>BLN</u> Halley Sutt
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Element 308.05

<u>SQL</u> Murphy	<u>WBN</u> Murphy Richards	<u>BFN</u> Murphy	<u>BLN</u> Murphy
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Element 308.06

<u>SQL</u> Aycock	<u>WBN</u> Aycock	<u>BFN</u> N/A	<u>BLN</u> N/A
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Element 308.07

<u>SQL</u> Swearingen	<u>WBN</u> Swearingen Aycock	<u>BFN</u> Swearingen	<u>BLN</u> Swearingen
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