

ATTACHMENT 3

Sheet 1 of 2

**ADVERSE CONDITION INVESTIGATION FORM**

Form CAP-NGGC-0200-3-18

**Action Request Number:** 256010      **Investigator:** Joe A. Lese

**1. Adverse Condition Description**

In conjunction with the 8<sup>th</sup> tendon surveillance at CR3, an IWE/IWL inspection of the containment structure was performed. As detailed in attribute 6A of the subject AR, various findings were documented with regard to the examination of the RB Containment structure. Typical findings which were noted include concrete popouts, discoloration/staining, abandoned anchors, wood formwork embedments, minor spall areas, ungrouted holes, deterioration of cosmetic grout patches, and exposed tie wires. These conditions have been duly noted and documented and presented to engineering to determine if any repair or augmented monitoring plans should be enacted.

**2. Investigation Summary**

Engineering has reviewed each of the notations as presented in attribute 6A (also signed off the corresponding documentation sheet for each item as part of the IWE/IWL inspection) of the subject AR. These items are considered minor in nature and do not adversely affect the overall structural integrity of the RB Containment structure nor prevent it from performing its intended design function. The overall cause can be attributed to normal aging of the containment structure having been exposed to the environment for approximately thirty (30) years. There is no inappropriate act or malfunction of equipment associated with the subject AR. Continued observation of the containment as part of future tendon surveillances/IWE & IWL inspections and, in conjunction with procedure EGR-NGGC-0351 (Condition Monitoring of Structures), will provide an on-going assessment of the Reactor Building structure in the future. The condition is acceptable as-is with no additional corrective actions required. Recommend downgrading to a Priority 5 accordingly.

**3. Corrective Action Plan**

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**ADVERSE CONDITION INVESTIGATION FORM**

Form CAP-NGGC-0200-3-18

**Corrective Action Plan**

|                       | DESCRIPTION   | CAUSE | CODE | ORG | CORRECTIVE ACTION | ASSIGNMENT TYPE * | ASSIGNEE/ CONCURRENCE | DUE OR COMPLETION DATE** |
|-----------------------|---|-------|------|-----|-------------------|-------------------|-----------------------|--------------------------|
| ADVERSE CONDITION     | If no adverse condition exists, recommend downgrading to a Priority 5 NCR | N/A   | N/A  | N/A |                   |                   |                       |                          |
| I/A or EQ Malfunction |   |       |      |     |                   |                   |                       |                          |
| OTHER                 | N/A   | N/A   | N/A  | N/A |                   |                   |                       |                          |

## ADM-NGGC-0107

### Equipment Reliability Form

If this NCR is identified as "Equipment Related" and involves an equipment failure, the investigator should consider the following equipment reliability questions to determine the program area(s) that are affected and where corrective action should be taken. A "No" answer identifies a potential need for corrective action. See ADM-NGGC-0107 Attachment 3 for guidance on strategy for equipment reliability corrective actions.

**Add comments only where needed for clarity. If no failure is evident or the related equipment is Run-to-failure (Zero Tol = R), check the NA block below, enter an appropriate comment, and skip the rest of the form.**

NA - No failure is evident or equipment is Run-to-Failure **Comments** (if needed):

**See disposition above.**

1. **Equipment Reference and Classification** [Link to PERMIT](#)

Is the equipment referenced in PassPort at the AR level correct? Y N

- Look up the EDB "Zero Tol "classification of the equipment involved in the NCR. Is the Zero Tolerance classification of the component appropriate (See ADM-NGGC-0107)? Y N

**Comments** (if needed):

2. **Monitoring**

- Is condition monitoring performed on the system under a System Monitoring Plan per EGR-NGGC-0010 adequate? Y N NA
  - If not performed, should or can it be?
  - If performed, is the monitoring and threshold for action adequate?
- Is predictive maintenance performed on the equipment adequate? Y N NA
  - If not performed should predictive maintenance tasks be initiated?
  - If performed, is the monitoring and threshold for action adequate?

**Comments** (if needed):

3. **Preventive Maintenance (PM)**

- Is PM program adequate? Y N NA

- Is a change to PM activities needed to address the failure mode experienced?
- Is the frequency of performance and the scope adequate to ensure component reliability?
- If a deferral was performed, was it appropriate to not effect equipment failure?

**Comments** (if needed):

4. **System Strategic Plan**

- If the failure is attributed to an aging / obsolescence concern, is the System Strategic Plan adequate? (see ADM-NGGC-0108) Y N NA

**Comments** (if needed):

5. **Work Practices**

- Are the operating procedures and practices appropriate and acceptable?  
Y N NA
- Are the maintenance practices and behaviors appropriate and acceptable?  
Y N NA

**Comments** (if needed):

6. **Design**

Is the design of this component appropriate for the application? Y N

**Comments** (if needed):

7. **Parts**

- Is parts availability and quality adequate? Y N

**Comments** (if needed):

8. **Operating Experience Review** (if preventing problem recurrence is needed).

**Comments** (if needed):

# MREV Screening

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- 1. Does the described condition document the failure or degradation of a component or subcomponent in a Maintenance Rule scoped system? Does the condition describe a plant level event or unplanned /unexpected unavailability?**

Yes to either: Continue to Question 2

No to Both: MREV is not needed. Mark the *1 FUNCTIONAL FAILURE* attribute with an "N". Document in the *1 FUNCTIONAL FAILURE* attribute note why an MREV is not needed. Place "N's" in the remaining required attributes and forward MREV to your Supervisor.

Condition Summary (Optional):

VARIOUS AREAS OF THE RB CONCRETE CONTAINMENT (IWL) ARE DEGRADED. IN ACCORDANCE WITH ASME SECTION XI, SUBSECTION IWL, THE DESIGNATED REGISTERED PROFESSIONAL ENGINEER SHALL EVALUATE THE EXAMINATION RESULTS AND DETERMINE ANY REPAIR OR AUGMENTED MONITORING PLANS. NEW INDICATIONS OR THOSE WHICH HAVE CHANGED SINCE THE PREVIOUS EXAMINATION PERFORMED IN 2001 HAVE BEEN NOTED:  
THE DESIGN ENGINEERING REGISTERED PROFESSIONAL ENGINEER HAS PERFORMED A REVIEW OF THE CONDITIONS FOUND AND CONCLUDED THAT NO OPERABILITY ISSUES EXIST NOR IS ANY REWORK OR REPAIRS ANTICIPATED TO BE REQUIRED FOR R15. (SEE ATTRIBUTE 6A FOR A LISTING OF THE INDICATIONS FOUND DURING THE EXAMINATIONS.) RECOMMEND ASSIGNMENT OF THIS NCR TO DESIGN ENGINEERING, CIVIL/STRUCTURAL.

Since the Reactor Building tendons are within the boundaries of the MX system, the MREV is proceeding to question 2.

The condition does NOT describe a plant level event or unplanned /unexpected unavailability.

- 2. Review PMG basis and functional failure definition. Based on the functional failure definition and PMG basis, is this a functional failure?**

Yes: Mark the *1 FUNCTIONAL FAILURE* attribute with a "Y". Identify affected function and PMG in the *1 FUNCTIONAL FAILURE* attribute note. Identify all other performance criteria (unavailability, Rx trips, etc.) that this PMG is monitored with. If you did not perform the apparent cause investigation for this failure, you must perform one to ensure the cause /corrective action(s) are sufficient to prevent reoccurrence. In accordance with CAP-NGGC-0200, NFIR's are not acceptable and a investigation must be performed by the system engineer. Document the apparent cause information (assignment # and due date) in the MREV.

Go to Question 3.

No: Mark the *1 FUNCTIONAL FAILURE* attribute with an "N". Identify the function and PMG reviewed in the *1FUNCTIONAL FAILURE* attribute note. Using the

## MREV Screening

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functional failure definition or PMG basis, clearly identify why the condition is not a functional failure. List all other performance criteria for this PMG.

Go to Question 4.

1 FUNCTIONAL FAILURE:  Y  N

Note Text:

There are five Performance Monitoring Groups (PMGs) for the MX system:

MXF1 Integrity of structures which house equipment vital to monitoring containment integrity

MXF2 Integrity of structures which house equipment vital to safe shutdown of the reactor.

MXF3 Integrity of structures for equipment containing significant quantities of radioactive material

MXF4 Provide water tight barrier in the event of a flood

MXF5 The documentation of an unacceptable condition as defined in EGR NGGC 0351

Of these groups, the pertinent ones to consider here are PMG function pertinent to this condition is:

MXF1 Integrity of structures which house equipment vital to monitoring containment integrity. It is explained in the Performance Criteria that "For this function, then, a functional failure would be damage or degradation of sufficient severity to prohibit the structure from protecting equipment vital to monitoring containment integrity." Since the design engineering registered professional engineer has performed a review of the conditions found and concluded that no operability issues exist nor is any rework or repairs anticipated, this NCR does not document damage or degradation, as further explained in the attributes. Thus, this condition is not a functional failure under this criterion.

MXF2 Integrity of structures which house equipment vital to safe shutdown of the reactor. It is explained in the Performance Criteria that "For this function, then, a functional failure would be damage or degradation of sufficient severity to prohibit the structure from protecting equipment vital to safe shutdown of the reactor." Since the design engineering registered professional engineer has performed a review of the conditions found and concluded that no operability issues exist nor is any rework or repairs anticipated, this NCR does not document damage or degradation, as further explained in the attributes. Thus, this condition is not a functional failure under this criterion.

MXF3 Integrity of structures for equipment containing significant quantities of radioactive material. It is explained in the Performance Criteria that "For this function, then, a functional failure would be damage or degradation of sufficient severity to prohibit the structure from protecting equipment containing significant quantities of radioactive materials." Since the design engineering registered professional engineer has performed a review of the conditions found and concluded that no operability issues exist nor is any rework or repairs anticipated, this NCR does not document damage or degradation, as further explained in the attributes. Thus, this condition is not a functional failure under this criterion.

Therefore, this condition is not a functional failure.

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**3. Is this a repetitive Maintenance Rule functional failure? Review historical data for the past 3 years to identify if there are any functional failures of the same component type (same manufacturer and model number) that have failed due to the same cause.**

Yes: Mark the 2 *REPETITIVE FF* attribute with a "Y" and identify the repetitive FF in the 2 *REPETITIVE FF* attribute note.

Go to Question 4.

No: Mark the 2 *REPETITIVE FF* attribute with an "N" and document search details in the 2 *REPETITIVE FF* attribute note.

Go to Question 4.

2 *REPETITIVE FF*:      Y    N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered

**4. Is the affected PMG monitored by other criteria?**

Unavailability:                      Go to 5  
Rx. Trips:                              Go to 6  
Safety Sys Acts:                      Go to 7  
Unplanned Mw loss:                      Go to 8

No, AND the condition IS a functional failure:                      Go to 9

No, AND the condition IS NOT a functional failure:                      Place "N's" for the above attributes, and forward to Supervision for approval.

No, AND the condition IS NOT a functional failure.

**5. Did this condition result in exceeded unavailability?**

Yes: Mark the 3 *UNAVAILABILITY* attribute with a "Y" and provide details in the 3 *UNAVAILABILITY* attribute note.

No: Mark the 3 *UNAVAILABILITY* attribute with an "N" and provide details about the unavailability in the 3 *UNAVAILABILITY* attribute note.

3 *UNAVAILABILITY*:      Y    N

Note Text:

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This is the box where the text can be entered. Note that the box grows as more text is entered.

In EITHER case, if plant level criteria are not monitored, place "N's" in the 4A, 4B, and 4C attributes, and go to Question 9, otherwise go to Question 6.

### 6. Did this condition cause a reactor trip?

Yes: Mark *4A RX TRIP* Attribute with a "Y" and provide details in the 4A RX TRIP attribute note.

No: Mark *4A RX TRIP* Attribute with an "N" and provide explanation in the 4A RX TRIP attribute note.

*4A RX TRIP:*      Y    N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered.

IF safety system actuations are monitored, go to Question 7.

ELSE, place an "N" in the *4B SAFETY SYS ACTUAT*, AND go to Question 8.

### 7. Did this condition cause safety system actuation?

Yes: Mark *4B SAFETY SYS ACTUAT* Attribute with a "Y" and provide details in the *4B SAFETY SYS ACTUAT* attribute note.

No: Mark *4B SAFETY SYS ACTUAT* Attribute with an "N" and provide explanation in the *4B SAFETY SYS ACTUAT* attribute note.

*4B SAFETY SYS ACTUAT:*      Y    N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered.

IF unplanned megawatt losses are monitored, go to Question 8.

ELSE, place an "N" in the *4C UNPLANNED CAP LOS*, AND go to Question 9.

### 8. Did the condition cause an unplanned power reduction as reportable to the MicroGads System (Thermal Performance)

Yes: Mark *4C UNPLANNED CAP LOS* Attribute with a "Y" and provide MW hours lost and total hours remaining in the *4C UNPLANNED CAP LOS* attribute note.

No: Mark *4C UNPLANNED CAP LOS* Attribute with an "N" and provide explanation in the *4C UNPLANNED CAP LOS* attribute note.

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4C UNPLANNED CAP LOS: Y N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered.

**9. Have any performance criteria been exceeded? This attribute is required if a functional failure, repetitive functional failure, any unavailability, or a plant level event occurred.**

Yes: Mark the 5 PERF CRIT EXCEEDED Attribute with a "Y" and provide details in the 5 PERF CRIT EXCEEDED attribute note.

No: Mark the 5 PERF CRIT EXCEEDED Attribute with an "N" and provide explanation in the attribute note.

5 PERF CRIT EXCEEDED: Y N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered. Amazing! BTW, Try not to nuke the box.

**10.If any performance criteria have been exceeded or a repetitive functional failure has been identified, has an NCR to perform a significant adverse condition investigation been initiated?**

Yes: Mark the 7A PRI 1 NCR REQ Attribute with a "Y" and provide NCR number in the attribute note.

No: Initiate one, mark the 7A PRI 1 NCR REQ attribute with an "Y" and provide NCR number in the attribute note.

NA: Mark the 7A PRI 1 NCR REQ attribute note with an "N" and proceed to 11.

7A PRI 1 NCR REQ: Y N N/A

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered. Amazing! BTW, Try not to nuke the box.

**11. Does this condition require a log entry in the Maintenance Rule database? This attribute is required to be marked with a "Y" if a functional failure, repetitive functional failure, any unavailability, or a plant level event occurred. Otherwise all other log entries are optional, and you may mark the 6 attribute with an "N" and submit MREV for approval.**

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Yes: Make a log entry in the MR database, mark attribute *6 MR DATABASE ENTRY REQ* with a "Y" and submit MREV for approval.

*6 MR DATABASE ENTRY REQ*: Y N

Note Text:

This is the box where the text can be entered. Note that the box grows as more text is entered. Amazing! BTW, Try not to nuke the box.

ACTION REQUEST 00256010

Type : NCR Orig Date: 11/23/07 13:09 Discovery Date:  
Subject : VARIOUS AREAS OF THE RB CONCRETE CONTAINMENT ARE DEGRADED

**Description**

VARIOUS AREAS OF THE RB CONCRETE CONTAINMENT (IWL) ARE DEGRADED. IN ACCORDANCE WITH ASME SECTION XI, SUBSECTION IWL, THE DESIGNATED REGISTERED PROFESSIONAL ENGINEER SHALL EVALUATE THE EXAMINATION RESULTS AND DETERMINE ANY REPAIR OR AUGMENTED MONITORING PLANS. NEW INDICATIONS OR THOSE WHICH HAVE CHANGED SINCE THE PREVIOUS EXAMINATION PERFORMED IN 2001 HAVE BEEN NOTED:  
THE DESIGN ENGINEERING REGISTERED PROFESSIONAL ENGINEER HAS PERFORMED A REVIEW OF THE CONDITIONS FOUND AND CONCLUDED THAT NO OPERABILITY ISSUES EXIST NOR IS ANY REWORK OR REPAIRS ANTICIPATED TO BE REQUIRED FOR R15. (SEE ATTRIBUTE 6A FOR A LISTING OF THE INDICATIONS FOUND DURING THE EXAMINATIONS.)  
RECOMMEND ASSIGNMENT OF THIS NCR TO DESIGN ENGINEERING, CIVIL/STRUCTURAL.

Priority : 5 Report To : Status: COMPLETE 01/03/08  
Due Date : 11/23/08 Event Date :  
Originator : PORTMR Originator Group:  
Facility : CR3 Department : 498 Organization:  
Owed To : Owed To Group : ESSDUEVAL  
Owed To Fac: CR3 Department : Discipline :

**AR Status History**

| Updated Date | Updated By | AR Status | AR Due Date |
|--------------|------------|-----------|-------------|
| 11/23/07     | PORTMR     | INPROG    |             |
| 11/23/07     | PORTMR     | H/APPR    |             |
| 11/24/07     | ESTEPD     |           | 11/23/08    |
| 11/24/07     | ESTEPD     | PRE-APRV  |             |
| 11/24/07     | ESTEPD     | APPROVED  |             |
| 01/03/08     | LOEHRM     | COMPLETE  |             |

ACTION REQUEST 00256010

| Request Attribute    | Value            | Reqd | Date     |
|----------------------|------------------|------|----------|
| 1A POT'L OPER/REPORT | N                | Y    | 11/23/07 |
| Name :               | RICHARD PORTMANN |      |          |

| Request Attribute    | Value            | Reqd | Date     |
|----------------------|------------------|------|----------|
| 1B EQUIPMENT RELATED | Y                | Y    | 11/23/07 |
| Name :               | RICHARD PORTMANN |      |          |

| Request Attribute   | Value | Reqd | Date |
|---------------------|-------|------|------|
| 2 SUPERVISOR REVIEW |       | N    |      |
| Name :              |       |      |      |

| Request Attribute | Value          | Reqd | Date     |
|-------------------|----------------|------|----------|
| 2A CR VALID?      | Y              | Y    | 11/24/07 |
| Name :            | TIMOTHY HOWARD |      |          |

| Request Attribute     | Value          | Reqd | Date     |
|-----------------------|----------------|------|----------|
| 2B FURTHER INVNV REQD | Y              | Y    | 11/24/07 |
| Name :                | TIMOTHY HOWARD |      |          |

CAP-NGGC-0200 is the official document for NCR processing.  
Include the following information to process this NCR as no further investigation required. Delete unused sections of template.  
Note: Additional guidance for equipment related events may be found in ADM-NGGC-0107

Priority 2

- " Inappropriate Act statement or equipment malfunction
- " Work Group involved in the inappropriate act. If IA committed by vendor, name the vendor.
- " Apparent Cause and recommended cause code (reference CAP-NGGC-0206).
- " Completed or planned Corrective Action (CORR) to correct the Adverse Condition. Include assignee and due date to be complete or date action was completed (state if complete). Include adequate detail to ensure traceability.
- " Completed or planned Corrective Action (CORR) to correct the Apparent Cause. Include assignee and due date to be complete or date action was completed (state if complete). Include adequate detail to ensure traceability.
- " Additional Actions (ENHN) if needed
  - o recommended assignee
  - o recommended due date

Priority 3

- " Completed or Planned Corrective Actions Low Risk (CORL) to correct the Adverse Condition. Include assignee and due date to be complete or date action was completed (state if complete). Include adequate detail to ensure traceability.
- " Additional Actions (ENHN) if needed
  - o recommended assignee
  - o recommended due date

Priority 5 - No adverse condition exists

- " Completed or planned Enhancements (ENHN) to address the Improvement. Include assignee and due date to be complete or date action was completed (state if complete). Include adequate detail to ensure traceability.
- " Additional Actions (ENHN) if needed
  - o recommended assignee

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o recommended due date

| Request Attribute    | Value          | Reqd | Date     |
|----------------------|----------------|------|----------|
| 2C RECOMMENDED OWNER | DESIGN         | N    | 11/24/07 |
| Name :               | TIMOTHY HOWARD |      |          |

| Request Attribute    | Value          | Reqd | Date     |
|----------------------|----------------|------|----------|
| 2D OPER/REPORT ISSUE | N              | Y    | 11/24/07 |
| Name :               | TIMOTHY HOWARD |      |          |

| Request Attribute    | Value          | Reqd | Date     |
|----------------------|----------------|------|----------|
| 2D1EQUIPMENT RELATED | Y              | Y    | 11/24/07 |
| Name :               | TIMOTHY HOWARD |      |          |

| Request Attribute    | Value          | Reqd | Date     |
|----------------------|----------------|------|----------|
| 2E MAINT RULE APPLIC | Y              | N    | 11/24/07 |
| Name :               | TIMOTHY HOWARD |      |          |

| Request Attribute | Value          | Reqd | Date     |
|-------------------|----------------|------|----------|
| 2F SYSTEM         | RB             | Y    | 11/24/07 |
| Name :            | TIMOTHY HOWARD |      |          |

| Request Attribute   | Value | Reqd | Date |
|---------------------|-------|------|------|
| 3 OPERATIONS REVIEW |       | N    |      |
| Name :              |       |      |      |

| Request Attribute       | Value | Reqd | Date |
|-------------------------|-------|------|------|
| 3A IMMEDIATE REPT ISSUE |       | N    |      |
| Name :                  |       |      |      |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 3B OCR            |       | N    |      |
| Name :            |       |      |      |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 3B1 OPER ISSUE    |       | N    |      |
| Name :            |       |      |      |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 3B2 REPORT ISSUE  |       | N    |      |
| Name :            |       |      |      |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 3B3 REW           |       | N    |      |
| Name :            |       |      |      |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 3B4 DEG/NCON      |       |      |      |
| Name :            |       |      |      |

ACTION REQUEST 00256010

| Request Attribute    | Value    | Reqd | Date     |
|----------------------|----------|------|----------|
| 3C TRACKING NUMBER   |          | N    |          |
| Name :               |          |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4 REG AFF REVIEW     |          | N    |          |
| Name :               |          |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4A OPER/REPORT ISSUE | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4A1 OPER ISSUE       | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4A2 REPORT ISSUE     | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4A3 REW              | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4A4 DEG/NCON         | N        |      | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4B FOLLOWUP ASG REQD | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4C T. SPEC VIOLATION | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4D ADD'L REPORT REQD | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 4E PNSC/CSERB REQD   | N        | Y    | 11/24/07 |
| Name : DAVID         | ROTHROCK |      |          |
| Request Attribute    | Value    | Reqd | Date     |
| 5 CLASSIFN/ASSIGNMNT |          | N    |          |
| Name :               |          |      |          |

ACTION REQUEST 00256010

| Request Attribute | Value | Reqd | Date     |
|-------------------|-------|------|----------|
| 5A CR VALID?      | Y     | Y    | 11/24/07 |
| Name : DEANNA     | ESTEP |      |          |

| Request Attribute    | Value | Reqd | Date     |
|----------------------|-------|------|----------|
| 5B FURTHER INVN REQD | Y     | Y    | 11/24/07 |
| Name : DEANNA        | ESTEP |      |          |

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 6 MISCELLANEOUS   |       | N    |      |
| Name :            |       |      |      |

| Request Attribute | Value                | Reqd | Date     |
|-------------------|----------------------|------|----------|
| 6A COMMENTS       | RB (IWL) INDICATIONS | N    | 11/23/07 |
| Name : RICHARD    | PORTMANN             |      |          |

Various Areas of the RB Concrete Containment (IWL) are degraded.  
New indications or those which have changed since the previous examination performed in 2001 are noted below:

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0001, REV.0

ITEM # 1 (REFERENCE PAGE 1, CONDITION 9) - APPROXIMATE ELEVATION 119', APPROXIMATE AZMUTH 190?, 25' X 4" RUST STAIN (SEE VT-3C REPORT VT-07-097) VT-1C DETERMINED STAIN WAS DUE TO PREVIOUS SPILLAGE, NO DEGRADATION TO CONCRETE.

ITEM # 2 (REFERENCE PAGE 1, CONDITION 10) - APPROXIMATE ELEVATION 119', APPROXIMATE AZMUTH 235?, 17' X 3" GREASE AND RUST STAIN (SEE VT-3C REPORT VT-07-097) VT-1C DETERMINED DISCOLORATION WAS GREASE/RUST, NO DEGRADATION TO CONCRETE.

ITEM # 3 (REFERENCE PAGE 1, CONDITION 7) - APPROXIMATE ELEVATION 102', APPROXIMATE AZMUTH 245?, POPOUT, 2 1/2" X 2 1/2" X 1". (SEE VT-3C REPORT VT-07-097)

ITEM # 4 (REFERENCE PAGE 1, CONDITION 10) - APPROXIMATE ELEVATION 118', APPROXIMATE AZMUTH 295?, VT-1C DETERMINED DISCOLORATION WAS OIL/GREASE (SEE VT-3C REPORT VT-07-097) DUE TO COVER LEAKAGE/PREVIOUS SPILLAGE, NO DEGRADATION TO CONCRETE.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0002, REV.0

Item #1 (Reference Page 1 - Condition 17): Approximate Elevation 98'. Approximate Azimuth 345 Degrees. 8" L X 4" W X 1 1/4" D void area. (See VT-3C Report 07-098).

Item #2 (Reference Page 1 - Condition 10): Approximate Elevation 119'. Approximate Azimuth 55 Degrees. 14' L X 24" W white discoloration area. (See VT-3C Report 07-098).

VT-1C determined that discoloration was due to previous spillage. No degradation to concrete surface identified.

Item #3 (Reference Page 1 - Condition 09): Approximate Elevation 119'. Approximate Azimuth 05 Degrees. 14' L X 24" W dark discoloration area. (See VT-3C Report 07-098).

VT-1C determined that discoloration was oil/grease due to tendon cover leakage/previous spillage. No degradation to concrete surface identified.

Note: this condition is typical for all buttress surfaces. RE: Photo L:\Engineering\Tech Services\ISI IWE & IWL\Photos\2007 R15 IWL Photos\IMJ 0049.jpg.

Item #4 (Reference Page 1 - Condition 08): Approximate Elevation 99'. Approximate Azimuth 45 Degrees. 18" L X 4" W X 1" D deflection area. (See VT-3C Report 07-098). VT-1C determined that this condition is probably due to form slippage during initial construction. Tap testing indicated presence of sound concrete beyond 1" from the edge.

RE: Photo L:\Engineering\Tech Services\ISI IWE & IWL\Photos\2007 R15 IWL

ACTION REQUEST 00256010

Photos\IMJ 0054.jpg.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0003, REV. 0

Item #1 (Reference Page 1 - Condition 22): Approximate Elevation 117'. Approximate Azimuth 80 Degrees. Two (2) ~24" L X ?" Diameter. threaded rods protruding. (See VT-3C Report VT-07-099). VT-1C determined light corrosion of rods and no degradation to concrete surface.

Item #2 (Reference Page 1 - Condition 22): Approximate Elevation 117'. Approximate Azimuth 100 Degrees. One (1) ~?" Dia. Braided grounding cable protruding. (See VT-3C Report VT-07-099). VT-1C determined no degradation to concrete surface.

Item #3 (Reference Page 1 - Condition 04): Approximate Elevation 114'. Approximate Azimuth 110 Degrees. 6" L X 4" W X 1-1/4" Deep honeycombed area. (See VT-3C Report VT-07-099). VT-1C determined that there is no rust staining, exposed rebar, or additional degradation to the concrete surface identified.

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Item #4 (Reference Page 1 - Condition 22): Approximate Elevation 117'. Approximate Azimuth 140 Degrees. Multiple abandoned anchor and embedded wire locations. (See VT-3C Report VT-07-099). VT-1C determined that there is no rust staining or additional degradation to the concrete surface.

Item #5 (Reference Page 1 - Condition 07): Approximate Elevation 117'. Approximate Azimuth 150 Degrees. Four (4) popout locations each ~ 3" Diameter and ~ ?" Deep. (See VT-3C Report VT-07-099). VT-1C determined that these popouts probably resulted from extraction of embedded anchors. No rust staining or exposed rebar was identified in these areas.

Item #6 (Reference Page 1 - Condition 22): Approximate Elevation 105'. Approximate Azimuth 120 Degrees. 18" L X ?" W wood embedment in concrete. Located at center vertical joint of Buttress #3. (See VT-3C Report VT-07-099). VT-1C determined that this condition resulted from failure to totally remove a forming strip during construction. No concrete degradation was identified.

Item #7 (Reference Page 1 - Condition 09): Approximate Elevation 100'. Approximate Azimuth 150 Degrees. Staining of concrete. (See VT-3C Report VT-07-099). VT-1C determined that a 10' L crack (<.040") exists and that a fluid suspected to be grease or oil is seeping from the crack. Paint has partially delaminated at this location. The substance was wiped off and re-emerged. There is a small puddle of the fluid on the floor at this location.

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VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0005, REV. 0

Item #1 (Reference Page 1 - Condition 09): Staining. (See VT-3C Report VT-07-101). VT-1C determined that the stains are as a result of previous spillage from above (143' elevation). No additional degradation to the concrete surface was noted.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0006, REV. 0

ITEM #1 (REFERENCE PAGE 1 - CONDITION 1) APPROXIMATE ELEVATION = 139'; APPROXIMATE AZIMUTH = 75?. SPALL 5 ?" X 5 ?" (SEE VT-3C REPORT VT-07-102). VT-1C DETERMINED THE SPALL WAS AROUND A FORM TIE HOLE.

ITEM #2 (REFERENCE PAGE 1 - CONDITION 1) APPROXIMATE ELEVATION = 137'; APPROXIMATE AZIMUTH = 75?. SPALL 8" X 4" (SEE VT-3C REPORT VT-07-102). VT-1C DETERMINED THE SPALL WAS AROUND A FORM TIE HOLE.

ITEM #3 (REFERENCE PAGE 1 - CONDITION 7) APPROXIMATE ELEVATION = 135'; APPROXIMATE AZIMUTH = 75?. POPOUT 4" X 3" X 1" (SEE VT-3C REPORT VT-07-102). VT-1C DETERMINED THE POPOUT WAS A FORM TIE HOLE.

ITEM #4 (REFERENCE PAGE 1 - CONDITION 7) APPROXIMATE ELEVATION = 132'; APPROXIMATE AZIMUTH = 75?. POPOUT 4" X 3" X 1" (SEE VT-3C REPORT VT-07-102). VT-1C DETERMINED THE POPOUT WAS A FORM TIE HOLE.

ITEM #5 (REFERENCE PAGE 1 - CONDITION 1) APPROXIMATE ELEVATION = 141'; APPROXIMATE AZIMUTH = 75?. SPALL 6" X 5.5" (SEE VT-3C REPORT VT-07-102). VT-1C DETERMINED THE SPALL WAS AROUND A FORM TIE HOLE.

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ITEM #6 (REFERENCE PAGE 1 - CONDITION 10) APPROXIMATE ELEVATION = 149', APPROXIMATE AZIMUTH = 65?. DISCOLORATION 30' X 3' (SEE VT-3C REPORT). VT-1C DETERMINED DISCOLORATION WAS OIL / GREASE DUE TO COVER LEAKAGE / PERVIOUS SPILLAGE. NO DEGRADATION TO CONCRETE.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0008, REV. 0

ITEM # 1 (REF PAGE 1 CONDITION # 9) : STAINING - FLUID LEAKED FROM 167' DOWN TO 143' ELEVATION. NO DEGRADATION TO CONCRETE NOTED. AREA IS APPROXIMATELY 12' STARTING APPROXIMATELY 18' FROM BUTRESS # 5 SEE PICTURE VT-07-300-1.jpg (SEE VT-1C REPORT VT-07-104)

ITEM # 2 (REF PAGE 1 CONDITION # 3) : DELAMINATION - NOTED ON WALL 3' FROM FLOOR 2 1/4" L x 3/4" W x 1/16" D. SEE PICTURE VT-07-300-2.jpg & VT-07-300-3.jpg (SEE VT-1C REPORT VT-07-104)

ITEM # 3 (REF PAGE 1 CONDITION # 9) : STAINING - FLUID LEAKED FROM 167' DOWN TO 143' ELEVATION. NO DEGRADATION TO CONCRETE NOTED. AREA IS APPROXIMATELY 15' STARTING APPROXIMATELY 12' FROM BUTTRESS # 6 SEE PICTURE VT-07-300-4.jpg, VT-07-300-5.jpg & VT-07-300-6.jpg (SEE VT-1C REPORT VT-07-104)

ITEM # 4 (REF PAGE 1 CONDITION # 9) : STAINING - WHITE SUBSTANCE ON WALL THROUGH OUT AREA. SEE PICTURE VT-07-300-7.jpg (SEE VT-1C REPORT VT-07-104)

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0009, REV. 0

Item #1 (Reference Page 1 - Condition 22): Approximate Elevation 177'. Approximate Azimuth 270 Degrees. Abandoned anchor locations. (See VT-3C Report VT-07-105). VT-1C determined two (2) locations where anchor bolt holes were not grouted. No additional degradation of the concrete surface was identified.

Item #2 (Reference Page 1 - Condition 22): Approximate Elevation 185'. Approximate Azimuth 285 Degrees. Degraded coatings. (See VT-3C Report VT-07-105). VT-1C determined Delamination of the paint from the concrete surface. There was no underlying degradation of the concrete surface.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0010, REV. 0

Item #1 (Reference Page 1 - Condition 16): 2-1/2"L X 3" W X 1" Deep: Displacement of cosmetic grout patch over previously existing popout. (See VT-3C Report VT-07-106). VT-1C determined that there is no rust staining, exposed rebar, or additional degradation to the concrete surface.

Item #2 (Reference Page 1 - Condition 22): Wood embedment in concrete. Nail embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that this condition likely resulted from plywood lamination transfer onto the concrete surface, and face of Buttress #4 above the uppermost grease cap. Three (3) nails were also noted. Note: Three (3) metal clips are also located in this area and appear to have been used as lifting/rigging points. No concrete degradation was identified.

Item #3 (Reference Page 1 - Condition 22): Nail embedment in concrete. (See VT-3C Report VT-07-106).

Nails are ~12" below the horizontal concrete joint and every 12" - 18" between Buttress #4 and Buttress #5. There are a total of ~ 30 nails. VT-1C determined that there is no additional degradation to the concrete surface.

Item #4 (Reference Page 1 - Condition 02, 16): 32'L X 3/4" W (maximum) X <1/2" Deep (maximum): Cracking, deterioration of cosmetic grout patch. (See VT-3C Report VT-07-106). VT-1C determined that this was a probable cold joint location. The discontinuity extends from Buttress #4 to Buttress #5. No exposed rebar or wire was identified.

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Item #5 (Reference Page 1 - Condition 02, 16): ~8'L X 1" W (maximum) X 1/2" Deep (maximum): Cracking, deterioration of cosmetic grout patch. (See VT-3C Report VT-07-106). VT-1C determined that this discontinuity which extends from Buttress #4, exhibits no exposed rebar or wire.

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Item #6 (Reference Page 1 - Condition 02, 16): 18"L X 3/16" W X <1/2" Deep and 12"L X 3/16" W X <1/2" Deep: Cracking, deterioration of two (2)

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cosmetic grout patch. (See VT-3C Report VT-07-106). VT-1C determined that this discontinuity which extends from Buttress #4, exhibits no exposed rebar or wire. Isolated nails, however, were noted.

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Item #7 (Reference Page 1 - Condition 22): Other (Exposed tie wire in concrete). (See VT-3C Report VT-07-106). VT-1C determined no additional degradation to the concrete.

Item #8 (Reference Page 1 - Condition 02, 16): 16"L X 3/16" W X <1/2" Deep: Cracking, deterioration of two (2) cosmetic grout patches. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #9 (Reference Page 1 - Condition 22): Nail embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no additional degradation to the concrete surface.

Item #10 (Reference Page 1 - Condition 03): 30"L X 8" W (maximum) X 3/16" Deep (maximum): Delamination. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #11 (Reference Page 1 - Condition 02, 16): 12"L X 3/16" W X <1/2" Deep: Cracking, deterioration of two (2) cosmetic grout patches. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #12 (Reference Page 1 - Condition 22): Exposed tie wires in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no additional degradation to the concrete surface.

Item #13 (Reference Page 1 - Condition 01): 12"L X 18" W (maximum) X 1" Deep (maximum): Spall. (See VT-3C Report VT-07-106). VT-1C determined that this area is within 6" of a vertical joint. No exposed rebar or wire was identified.

Item #14 (Reference Page 1 - Condition 02, 16): 24"L X 1/2" W (maximum) X <1/2" Deep (maximum); and 14"L X 1/2" W (maximum) X <1/2" Deep (maximum); and 18"L X 1/2" W (maximum) X <1/2" Deep (maximum): Cracking, deterioration of three (3) cosmetic grout patches. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #15 (Reference Page 1 - Condition 02, 16): 12"L X 3/4" W X 1/2" Deep: Cracking, deterioration of cosmetic grout patches. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #16 (Reference Page 1 - Condition 22): Wood embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that no concrete degradation was identified.

Item #17 (Reference Page 1 - Condition 22): Wood embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that no concrete degradation was identified.

Item #18 (Reference Page 1 - Condition 22): Nail and metal embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no additional degradation to the concrete surface.

Item #19 (Reference Page 1 - Condition 22): Nail embedment in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no additional degradation to the concrete surface.

Item #20 (Reference Page 1 - Condition 02, 16): 12"L X 5/8" W (maximum) X <1/2" Deep (maximum); and 18"L X 1" W (maximum) X 3/4" Deep (maximum); and 8'L X 1/2" W (maximum) X 1/2" Deep (maximum): Cracking, deterioration of cosmetic grout patches. (three (3) areas). (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #21 (Reference Page 1 - Condition 02): 12"L X 1/16" W X <1/32" Deep: Crack. (See VT-3C Report VT-07-106). VT-1C determined that no exposed rebar or wire was identified.

Item #22 (Reference Page 1 - Condition 22): Exposed tie wires in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no additional degradation to the concrete surface.

Item #23 (Reference Page 1 - Condition 01): 10"L X 2" W (maximum) X 1/2" Deep (maximum): Spall. (See VT-3C Report VT-07-106). VT-1C determined that

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this area is within 6" of a vertical joint. No exposed rebar or wire was identified.

Item #24 (Reference Page 1 - Condition 22): Exposed tie wires in concrete. (See VT-3C Report VT-07-106): VT-1C determined that there is no additional degradation to the concrete surface.

Item #25 (Reference Page 1 - Condition 09): Staining. (See VT-3C Report VT-07-106). VT-1C determined that there are numerous minor tendon grease leaks at various tendon cap locations. Additionally, previous tendon grease spills are obvious; most notably on Buttress #5 and on the vent duct structure and supports. No additional degradation to the concrete surface was noted.

Item #26 (Reference Page 1 - Condition 22): Embedded boxes in concrete. (See VT-3C Report VT-07-106). VT-1C determined that there is no degradation to surrounding concrete.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0011, REV. 0

Item #1 (Reference Page 1 - Condition 16): 3' L x 1" W x 1/4" D, cosmetic patch bond and exposed wire. (See VT-3C Report VT-07-107)

Item #2 (Reference Page 1 - Condition 16): 2" L x 1/4" W, cosmetic patch bond and exposed wire. (See VT-3C Report VT-07-107)

Item #3 (Reference Page 1 - Condition 22): 2" long exposed wire. (See VT-3C Report VT-07-107).

Item #4 (Reference Page 1 - Condition 2): tendon service cracking, tendons # 10 thru # 21, 12" L x 1/16"W (See VT-3C Report VT-07-107)

Item #5 (Reference Page 1 - Condition 22): 1" long exposed wire (See VT-3C Report VT-07-107).

Item #6 (Reference Page 1 - Condition 22): 3" long exposed wire. (See VT-3C Report VT-07-107).

Item #7 (Reference Page 1 - Condition 16): 3' L x 3/4" W x 1/4" D cosmetic patch bond and exposed wire.. (See VT-3C Report VT-07-107).

Item #8 (Reference Page 1 - Condition 7): 3' L x 1 1/2" W x 1" D, Popout from grouted area. (See VT-3C Report VT-07-107)

Item #9 (Reference Page 1 - Condition 1): 12' L x 7" W x 2 1/2" D, spalling. (See VT-3C Report VT-07-107)

Item #10 (Reference Page 1 - Condition 16): 40' L x 1/2" W x 3/4" D, cosmetic patch bond. (See VT-3C Report VT-07-107)

Item #11 (Reference Page 1 - Condition 2): 8' L x 1/16" W, tendon service cracking. (See VT-3C Report VT-07-107)

Item #12 (Reference Page 1 - Condition 1): 19' L x 12" W x 1" D, spalling. (See VT-3C Report VT-07-107)

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0012, REV. 0

ITEM 1 - (REFERENCE PAGE 1 - CONDITION 16) 1" X 8" GREASE LEAK COMING FROM COSMETIC PATCH BOND THAT RUNS FROM BUTT 6 TO BUTT 1. (SEE VT-3C REPORT VT-07-230)

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0013, REV. 0

ITEM 1 - (REFERENCE PAGE 1 - CONDITION 1) SPALL 13" X 5" (SEE VT-3C REPORT VT-07-109).

ITEM 2 - (REFERENCE PAGE 1 - CONDITION 1) SPALL 14" X 6" (SEE VT-3C REPORT VT-07-109).

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0014, REV. 0

ITEM 1 - (REFERENCE PAGE 1 - CONDITION 7) POPOUT 3" X 4" X 1" (SEE VT-3C REPORT 07-110)

ITEM 2 - (REFERENCE PAGE 1 - CONDITION 1) SPALL 13" X 8" (SEE VT-3C REPORT 07-110)

ITEM 3 - (REFERENCE PAGE 1 - CONDITION 1) SPALL 29" X 12" (SEE VT-3C REPORT 07-110)

ITEM 4 - (REFERENCE PAGE 1 - CONDITION 1) SPALL 27" X 6" (SEE VT-3C REPORT 07-110)

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0015, REV. 0

Item #1 (Reference Page 1 - Condition 01): 9"L X 6" W (maximum) X 1/2" Deep (maximum): Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

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Photo\VT-07-289-1.jpg.

Item #2 (Reference Page 1 - Condition 12, 22): Reinforcing bar corrosion. Other - wood embedment in concrete, nail embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined that two (2) exposed rebars exhibit medium corrosion with no wastage. Wood embedment likely resulted from plywood lamination transfer onto the concrete surface (10" X 18" area). Three (3) nails were also noted. Note: Five (5) epoxy coated exposed are also located in this area.

Item #3 (Reference Page 1 - Condition 22): Other - Nail embedment in concrete, exposed tie wire in concrete. (See VT-3C Report VT-07-111). VT-1C determined no additional degradation to the concrete.

Item #4 (Reference Page 1 - Condition 02, 12, 22): Cracking along the horizontal joint. Reinforcing bar corrosion, nail embedment. (See VT-3C Report VT-07-111). VT-1C determined intermittent cracking along the horizontal joint. one (1) exposed rebar with light corrosion and no wastage. A nail was also identified in this area.

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Item #5 (Reference Page 1 - Condition 12): Reinforcing bar corrosion. (See VT-3C Report VT-07-111). VT-1C determined that an exposed rebar on the edge of Buttress #3 between Grease Caps 40 and 41 exhibits medium corrosion with no wastage.

Item #6 (Reference Page 1 - Condition 22): Other - Nail embedment in concrete, metal corrosion. (See VT-3C Report VT-07-111). VT-1C determined no additional degradation to the concrete. The angle iron on the edge of Buttress #3 exhibits light rusting with no wastage

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Item #7 (Reference Page 1 - Condition 22): Other - Nail embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined no additional degradation to the concrete.

Item #8 (Reference Page 1 - Condition 07, 22): 2" Diameter X 1/2" Deep (maximum): Popout, wood embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined popout of a previous grout patch over rebar. Medium corrosion and staining has resulted. It was also determined that there are plywood remnants in the center joint of Buttress #3 down to ~ elevation 130'. No additional degradation to the concrete was noted.

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Item #9 (Reference Page 1 - Condition 22): Other - Nail embedment in concrete, metal corrosion. (See VT-3C Report VT-07-111). VT-1C determined 8 nails total in the centerline of the horizontal joint. No additional degradation to the concrete was noted.

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Item #10 (Reference Page 1 - Condition 09): Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined that the staining was from embedded metal. No additional degradation to the concrete was noted.

Item #11 (Reference Page 1 - Condition 01, 22): 7"L X 1-1/2" W (maximum) X 1/2" Deep (maximum) Spall; and 4"L X 1" W (maximum) X 1/2" Deep (maximum) Spall; and Embedded boxes in concrete; and nail embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined spalls were due to embedded cables near the embedded boxes. Multiple nail locations were also noted as well as smaller Popout areas. No additional degradation to the concrete was noted.

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Item #12 (Reference Page 1 - Condition 02): 40"L X 5/8" W X 1/2" Deep: Cracking. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

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Item #13 (Reference Page 1 - Condition 09): Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined that the staining was from embedded nails. No additional degradation to the concrete was noted.

Item #14 (Reference Page 1 - Condition 02): 24"L X 1/8" W X <1/2" Deep: Cracking. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

Item #15 (Reference Page 1 - Condition 22): Other - Nail and tie wire embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined no additional degradation to the concrete.

Item #16 (Reference Page 1 - Condition 22): Other - wood embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined that wood embedment on the bottom face of the ring girder likely resulted from plywood lamination transfer onto the concrete surface (10" X 18" area).

Item #17 (Reference Page 1 - Condition 09): Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined that the staining was from embedded metal. No additional degradation to the concrete was noted.

Item #18 (Reference Page 1 - Condition 16): 4"L X 2-1/4" W X 1/2" Deep: Displacement of cosmetic grout patch over previously existing spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

Item #19 (Reference Page 1 - Condition 1): 9-1/2"L X 3" W X 2-1/2" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined exposed bearing plate surface with minor wastage of metal.

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Item #20 (Reference Page 1 - Condition 1): 12"L X 6" W X 5/8" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire, however there was rust staining present.

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Item #21 (Reference Page 1 - Condition 1): 6"L X 6" W X 5/8" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

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Item #22 (Reference Page 1 - Condition 1): 8"L X 4" W X 1" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire.

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Item #23 (Reference Page 1 - Condition 1): 8"L X 8" W X 3/4" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed rebar or wire; however there are five (5) embedded nails in this area.

Item #24 (Reference Page 1 - Condition 22): Other - wood embedment in concrete. (See VT-3C Report VT-07-111). VT-1C determined that wood embedment likely resulted from plywood lamination transfer onto the concrete surface. Embedded nails and tie wires were also observed. No additional degradation to the concrete was observed.

Item #25 (Reference Page 1 - Condition 09): Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined that the rust staining originated at the edge of the bearing plate above. No additional degradation to the concrete was observed.

Item #26 (Reference Page 1 - Condition 09): Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined that the staining was from embedded nails. No additional degradation to the concrete was noted.

Item #27 (Reference Page 1 - Condition 1, 16): 30'L X 4" W X ?" Deep: Spall; displacement of cosmetic grout patch over previously existing spall. (See VT-3C Report VT-07-111). VT-1C determined that this condition was typical on the west face of Buttress #4, and intermittent areas of exposed wire and rebar were observed. Minor rust staining from bearing plates was noted. Paint was also observed separating from bearing plates and grease caps.

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Item #28 (Reference Page 1 - Condition 02): 72"L X 3/16" W X 1/8" Deep:

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Cracking. (See VT-3C Report VT-07-111). VT-1C determined intermittent cracking along the horizontal joint. No exposed rebar or wire was observed.

Item #29 (Reference Page 1 - Condition 07): 1" Diameter X 1/2" Deep (maximum): Popout. (See VT-3C Report VT-07-111). VT-1C determined that a piece of aggregate likely separated along the horizontal joint. No exposed rebar or wire was observed.

Item #30 (Reference Page 1 - Condition 4, 22): 6'L X 2" W X ?" Deep: Honeycomb/cold joint area with wire embedment. (See VT-3C Report VT-07-111). VT-1C determined the presence of exposed aggregate and wire along the horizontal joint. No exposed rebar was observed.

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Item #31 (Reference Page 1 - Condition 02, 09): Cracking, Staining (rust). (See VT-3C Report VT-07-111). VT-1C determined intermittent cracking along the horizontal joint (continuation of intermittent condition described in Item 12). No exposed rebar or wire was observed.

Item #32 (Reference Page 1 - Condition 12, 16): Reinforcing bar corrosion; displacement of cosmetic grout patch. (See VT-3C Report VT-07-111). VT-1C determined reinforcing bar corrosion resulting from displacement of 6" cosmetic grout patch over a previously existing spall on the face of Buttress #4.

Item #33 (Reference Page 1 - Condition 09, 22): Staining (rust). Other - elastomer separation. (See VT-3C Report VT-07-111). VT-1C determined intermittent separation and loss of the elastomer down the center line of Buttress #4. Staining from exposed metal was also observed along the vertical joint.

Item #34 (Reference Page 1 - Condition 16): 2" L X ?" W: Displacement of cosmetic grout patch over previously existing spall. (See VT-3C Report VT-07-111). VT-1C determined metal wastage in this area on the right side of Buttress #4. Staining from exposed metal was also observed.

Item #35 (Reference Page 1 - Condition 1, 16): 4"L X 6" W X ?" Deep: Spall; displacement of cosmetic grout patch over previously existing spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed wire or rebar.

Item #36 (Reference Page 1 - Condition 1): 8"L X 4" W X 1-1/2" Deep: Spall. (See VT-3C Report VT-07-111). VT-1C determined no exposed wire or rebar.

Item #37 (Reference Page 1 - Condition 09): Staining. (See VT-3C Report VT-07-111). VT-1C determined that there are numerous minor tendon grease leaks at various tendon cap locations. Additionally, previous tendon grease spills are obvious. No additional degradation to the concrete surface was noted.

VT-1C CONTINUATION SHEET: COMPONENT ID: IWL RBCN-0016, REV. 0

ITEM # 1 (REFERENCE PAGE 1 CONDITION 7) - 1 3/4"L X 2 1/2"W X 7/8" D. SEE VT-3C REPORT VT-07-115

| Request Attribute | Value              | Reqd | Date     |
|-------------------|--------------------|------|----------|
| 6B COMMENTS       | DOWNGRADED         | N    | 01/03/08 |
| Name :            | MERYLANNE GOTTERUP |      |          |

Per the INVN response, there is no condition adverse to quality; therefore, this NCR is being downgraded to a priority 5. MLG

| Request Attribute | Value | Reqd | Date |
|-------------------|-------|------|------|
| 6C COMMENTS       |       | N    |      |
| Name :            |       |      |      |

ACTION REQUEST 00256010

**Request Attribute Value Reqd Date**  
 6D COMMENTS N  
 Name :

**Request Attribute Value Reqd Date**  
 6E COMMENTS N  
 Name :

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

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

**Request Attribute Value Reqd Date**  
 6H RESP MGR N  
 Name :

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

**ACTION REQUEST APPROVAL REVIEW**

| Route List: 001 |     |            |            | Route List Initiator: PORTMR |       |          |                |
|-----------------|-----|------------|------------|------------------------------|-------|----------|----------------|
| Alert           |     |            |            | Send                         | Send  | Action   | Action         |
| PASSPORT        | Fac | Group/Type | Last Name  | Date                         | Time  | Taken    | Date/Time      |
| HOWART          | CR3 | ESSTSUPV   | A HOWARD   | 11/23/07                     | 13:09 | APPROVED | 11/24/07 15:23 |
| ROTHRD          | CR3 | REGREV     | A ROTHROCK | 11/24/07                     | 15:23 | APPROVED | 11/24/07 15:33 |
| ESTEPD          | CR3 | UNITEVAL   | A ESTEP    | 11/24/07                     | 15:33 | APPROVED | 11/24/07 16:23 |

**TREND-CAUSE**

Facility: CR3 Trend 1: ACAUSE Trend 2: \$ Trend 3: \$ Date:  
 Process: N/A Org: \$ Rank: Assign:  
 Description: NO CODE

Facility: CR3 Trend 1: CFC Trend 2: \$ Trend 3: \$ Date:  
 Process: N/A Org: N/A Rank: Assign:  
 Description: NO CODE

Facility: CR3 Trend 1: EVENT Trend 2: EC Trend 3: EC8 Date:  
 Process: ES6 Org: N/A Rank: Assign:  
 Description: DEGRADED EQUIPMENT

**Keywords**

| Keyword  | Keyword Description      |
|----------|--------------------------|
| CFGMGMT  | CONFIGURATION MANAGEMENT |
| EQUIP/ME | MECHANICAL EQUIPMENT     |
| EXAM     | EXAMINATIONS             |
| ISI      | INSERVICE INSPECTION     |

ACTION REQUEST 00256010

|         |                           |
|---------|---------------------------|
| MATCON  | MATERIAL CONDITION        |
| PBCNTRL | PRESSURE BOUNDARY CONTROL |



ACTION REQUEST 00256010

| Assignment Attribute Value | Reqd Date  |
|----------------------------|------------|
| 4C UNPLANNED CAP LOS N     | Y 11/26/07 |
| Name : PARKS ALLEN         |            |

| Assignment Attribute Value | Reqd Date  |
|----------------------------|------------|
| 5 PERF CRIT EXCEEDED N     | Y 11/26/07 |
| Name : PARKS ALLEN         |            |

| Assignment Attribute Value | Reqd Date  |
|----------------------------|------------|
| 6 MR DATABASE ENTRY N      | Y 11/26/07 |
| Name : PARKS ALLEN         |            |

| Assignment Attribute Value | Reqd Date |
|----------------------------|-----------|
| 7 RECOMMEND (A) (1)        | N         |
| Name :                     |           |

| Assignment Attribute Value | Reqd Date  |
|----------------------------|------------|
| 7A PRI 1 NCR REQ N         | Y 11/26/07 |
| Name : PARKS ALLEN         |            |

| Assignment Attribute Value | Reqd Date |
|----------------------------|-----------|
| 8 EQUIP. REFERENCE         | N         |
| Name :                     |           |

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

| Route List: 001 |       |            |            | Route List Initiator: ALLENP |       |          |                |
|-----------------|-------|------------|------------|------------------------------|-------|----------|----------------|
|                 | Alert |            |            | Send                         | Send  | Action   | Action         |
| PASSPORT        | Fac   | Group/Type | Last Name  | Date                         | Time  | Taken    | Date/Time      |
| ALLENP          | CR3   | ESSSUPV2   | A ALLEN    | 11/26/07                     | 14:04 | APPROVED | 11/26/07 14:04 |
| LOEHRM          | CR3   | ESSDUEVAL  | A GOTTERUP | 11/26/07                     | 14:04 | APPROVED | 11/26/07 19:15 |
| BARBIL          |       |            | I BARBIERI | 11/26/07                     | 14:04 |          |                |



