Entergy	CONDITION REPORT	CR-IP2-2011-06250

Originator: Lee,Robert C
Originator Phone: 6612
Originator Site Group: IP2 P&C Eng Codes Staff IP2
Operability Required: N
Supervisor Name: Azevedo,Nelson F
Reportability Required: N
Discovered Date: 12/08/2011 13:40
Initiated Date: 12/08/2011 13:46

Condition Description:

SW Lines 408 and 409 were excavated (Ref. EC 25313, WO # 279576) and the piping prepped for Vendor performance of guided wave ultrasonic inspection. The guided wave inspection of SW Line 409 identified an anomaly at a location on the pipe approximately 5 ft downstream of the transducer collar. This location is within the excavated area. Per Vendor, the anomaly may be an irregularity in the coating, pipe corrosion, or damage to the internal cement lining. The Vendor recommends coating removal and performing UT to confirm wall thickness at this location. The Guided Wave inspection was performed under the IPEC Buried Piping & Tank Program.

Immediate Action Description:

Informed Engineering management.

Suggested Action Description:

Remove coating at location of anomaly and perform UT to confirm adequate pipe wall.
Internal cement lining will be inspected in 2R20 under installation of mod EC 25313.

EQUIPMENT:

Tag Name	Tag Suffix Name	Component Code	Process System Code
LINE409	EX/SR	PIPE	SW

REFERENCE ITEMS:

Type Code	Item Desc
CR	IP2-2011-06248
MOD	EC 25313
WON	00279576Y

TRENDING (For Reference Purposes Only):

Trend Type	Trend Code
HEP FACTOR	E
REPORT WEIGHT	1
INPO BINNING	MA1
EI	MAMG
KEYWORDS	KW-SERVICE WATER
KEYWORDS	KW-PIPE LINING

Entergy	CORRECTIVE ACTION	CR-IP2-2011-06250

CA Number: 1

	Site	Group	Name
Assigned By:	IP2	Operations Watch Staff IP2	Baker,John R
Assigned To:	IP2	P&C Eng Codes Mgmt IP2	Azevedo,Nelson F
Subassigned To :			

Originated By: Baker,John R 12/8/2011 15:09:38
Performed By: Azevedo,Nelson F 1/19/2012 15:59:49
Subperformed By:
Approved By:
Closed By: Schoen,Peter S 1/20/2012 09:35:04

Current Due Date: 01/20/2012 **Initial Due Date:** 01/20/2012

CA Type: ACTION

Plant Constraint: #NONE

CA Description:
Perform inspection of SW Line 409 at location specified in CR IP2-2011-06250. Remove coating and perform UT's as necessary to confirm wall thickness. Based on results, perform an operability evaluation if required.

Response:
The UT pipe inspections were completed on 1/19/12 and no issues were identified. The measured thicknesses were at nominal values. Since there were no unaccepatble thickness readings, an Operability Evaluation is not required. The inspection results are documented in inspection report No. IP2-UT-12-002.

Subresponse :

Closure Comments:
acceptable for closure

Entergy	CA DUE DATE EXTENSION	CR-IP2-2011-06250

Corrective Action : CR-IP2-2011-06250 CA-00001

Version: 1 **Approved:** ☑

Requested Duedate: 12/22/2011 **Previous Duedate:** 12/13/2011

Requested By: Azevedo,Nelson F 12/12/2011

Approved By: Baker,John R 12/12/2011

Request Description:

Please extend the due date to 12/22/11 to allow for sufficient time to prepare contingencies, plan the work package, obtain replacement parts, remove the coating and perform the UT inspection. This extension is acceptable because there is reasonable bases to conclude that the pipe remains structurally capable of carrying the required design loads (see write up below). There is no industrial or nuclear safety concern associated with this extension since the pipe remains structurally sound. Supervisory concurrence has been obtained for this extension

Bases for adequate structural integrity:
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The ongoing Guided Wave UT (GW-UT) inspections in support of the buried piping program identified one area of interest in SW line 409 in an area West of the Unit 2 turbine building. This area of interest could be a result of a coating anomaly and therefore insignificant or it could be a result of some pipe corrosion. The actual cause of the anomaly can not be established until the coating is removed and the area is inspected. However, even if the anomaly is assumed to be a result of pipe corrosion, the amount of corrosion at this location would not be expected to adversely impact the structural integrity (and therefore operability) of the pipe based on the following:

1. Since the anomaly is not located at a weld (based on the GW-UT signal), past experience indicates that internal pipe corrosion is unlikely. The internal cement lining has proven to be an effective corrosion barrier in locations other than welds and downstream of throttled valves. Therefore, if corrosion is present, it is likely to be on the outside surface of the pipe.
2. An inspection of the external protective coating did not identify any visible signs of corrosion under the coating. Significant external corrosion would be expected to occur at locations with visible coating damage. Therefore, if corrosion is the cause of the anomaly is not expected to be significant.
3. There are currently no signs of through wall leakage at this location. Absence of leakage provides additional assurance that if corrosion is present, it is not expected to be extensive.
4. Discussions with Design Civil Structural Engineering indicated that the affected section of pipe has significant inherent structural margin. The nominal pipe wall thickness is 0.375? while the required thickness is 0.120?. This means that corrosion could remove up to 68% of the nominal pipe wall thickness before the structural integrity of the pipe would be challenged. Localized corrosion could be even deeper before the integrity of the pipe would be challenged.

In summary, the anomaly detected during the GW-UT inspection of the 409 SW pipe is not expected to challenge the structural integrity of the pipe even if it is assumed that the anomaly is a result of corrosion of the pipe material.

Approved Description:

Approved

Entergy	CORRECTIVE ACTION	CR-IP2-2011-06250

CA Number: 2

	Site	Group	Name
Assigned By:	IP2	P&C Eng Codes Mgmt IP2	Tesoriero,Michael V
Assigned To:	IP2	P&C Eng Codes Mgmt IP2	Azevedo,Nelson F

Subassigned To :

Originated By: Zzip2crg 12/12/2011 13:45:04

Performed By: Azevedo,Nelson F 1/3/2012 13:07:30

Subperformed By:

Approved By:

Closed By: Azevedo,Nelson F 1/3/2012 13:07:30

Current Due Date: 01/05/2012 **Initial Due Date:** 01/05/2012

CA Type: DISP - CA

Plant Constraint: NONE

CA Description:

You have been assigned as the Responsible Manager for this Category "C", Non-Significant Condition Report by the CRG Address/correct the identified condition per EN-LI-102. Perform disposition review, investigate as needed, and ensure actions are assigned as applicable to correct the problem.

Response:

The area of interest identified during the guided wave UT inspections has been exposed and a visual inspection has been performed of the area. This visual inspection did not identify any signs of corrosion on the outside surface of the pipe nor did it identify any signs that a weld exists at this location. Given these results, it is unlikely that the anomoly identified during the guided wave inspection is a result of pipe corrosion. However, a UT inspection is still scheduled to be performed under task 18 of WO 00279576 to confirm the results of the visual inspection. CA-00001 of this CR remains open to track completion of these UT inspections. Therefore, this CA can be close.

Subresponse :

Closure Comments:

Entergy	CORRECTIVE ACTION	CR-IP2-2011-06250

CA Number: 3

	Site	Group	Name
Assigned By:	IP2	P&C Eng Codes Mgmt IP2	Tesoriero,Michael V
Assigned To:	IP2	P&C Eng Codes Mgmt IP2	Azevedo,Nelson F

Subassigned To :

Originated By: Zzip2crg 12/12/2011 13:46:25

Performed By: Azevedo,Nelson F 1/3/2012 12:55:19

Subperformed By:

Approved By:

Closed By: Azevedo,Nelson F 1/3/2012 12:55:19

Current Due Date: 01/05/2012 **Initial Due Date:** 01/05/2012

CA Type: ACTION

Plant Constraint: #NONE

CA Description:

Include CR-IP2-2011-06248 (Condition Description copied below) in your Category C Review assigned under this CR:

"An As-Found visual inspections of the OD coating on excavated SW Lines 408 & 409 piping were performed under the IPEC Buried Piping Program. The excavated area is at the existing access points on the 24-inch main header, at the west side of the IP2 Turbine Building (Ref. EC 25313, WO # 279576). Various locations where the coating system had failed or possibly mis-applied were found. There were no obvious signs of piping degradation at these locations, and therefore, there are no operability concerns. Coating repairs will be performed after the piping inspections are completed."

Response:

The coating conditions described in CR-IP2-2011-06248 have been evaluated and it was determined that the coating needs repair prior to back filling. In addition, UT inspections of these pipes has indicated that the pipe thickness is acceptable for continue service. The coating repairs will be implemented under task 12 of WO 00279576.

Subresponse :

Closure Comments:

Entergy	CORRECTIVE ACTION	CR-IP2-2011-06250

CA Number: 4

	Site	Group	Name
Assigned By:	IP2	CAA Staff IP2	Firth,Edwin G
Assigned To:	IP2	P&C Eng Codes Mgmt IP2	Azevedo,Nelson F
Subassigned To :			

Originated By: Jowitt,Roseann 1/23/2012 06:41:27

Performed By: Azevedo,Nelson F 1/24/2012 11:15:47

Subperformed By:

Approved By:

Closed By: Hans,Steven 1/27/2012 10:09:20

Current Due Date: 02/01/2012 **Initial Due Date:** 02/01/2012

CA Type: CR CLOSURE REVIEW

Plant Constraint: #NONE

CA Description:

CAT-C, ALL CORRECTIVE ACTIONS ARE CLOSED FOR THIS CR, THEREFORE THIS CR MAY BE READY TO CLOSE. REVIEW CR AND APPROVE / DISAPPROVE CLOSURE IN ACCORDANCE WITH EN-LI-102, SECTION 5.10.

Response:

This CR is ready for closure since all required corrective actions have been completed.

Subresponse :

Closure Comments:

CAA review acknowledged the CR Document Owners closure readiness review and approved closure. The closure review determined that the actions have been performed or a satisfactory explanation provided, no additional actions are required. Therefore, this CA can be closed at this time.

Entergy	OPERABILITY	CR-IP2-2011-06250

OperabilityVersion: 2

Operability Code: OPERABLE

Immediate Report Code: NOT REPORTABLE

Performed By: Gates,Clifton 01/19/2012 20:50

Approved By: Buchal,Timothy J 01/19/2012 21:05

Operability Description:

No degraded or nonconforming condition exists per EN-OP-104 Revision 5 Attachment 9.1 Table 1. The UT pipe inspections were completed on 1/19/12 and no issues were identified. The measured thicknesses were at nominal values. Since there were no unaccepatble thickness readings, SW Lines 408 and 409 that were excavated are OPERABLE. The inspection results are documented in inspection report No. IP2-UT-12-002.

Approval Comments:

Approved

Entergy	ASSIGNMENTS	CR-IP2-2011-06250

Version: 1

Significance Code: C

Classification Code: CORRECT/ADDRESS

Owner Site and Group: IP2 P&C Eng Codes Mgmt IP2

Performed By: Harrison,Christine B 12/12/2011 11:52

Assignment Description: