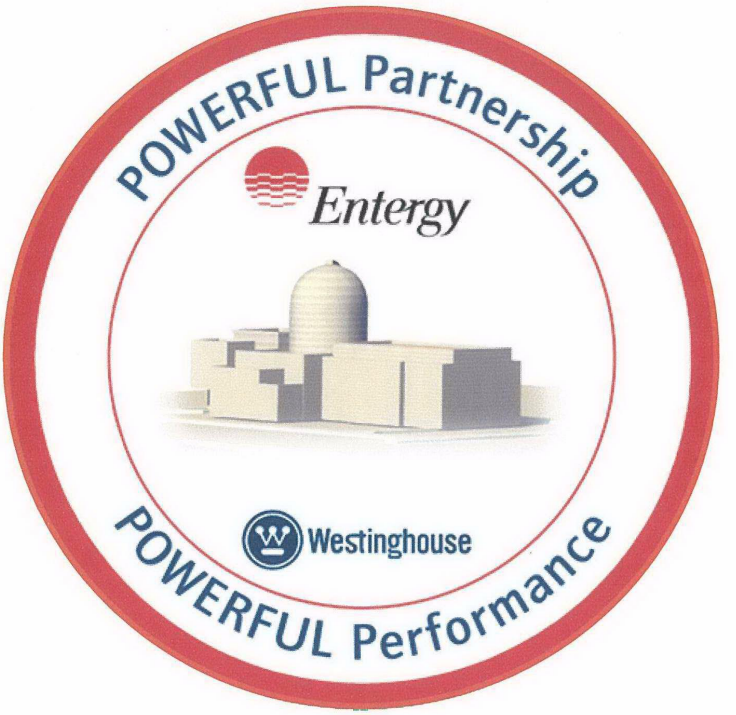


INDIAN POINT UNIT 3

FLOW ACCELERATED CORROSION

3RF13 OUTAGE

ORIGINAL

2005

Entergy — **Ultrasonic Examination Report**

IPEC Unit # 3
Report No.: 05UT054
Page 1 of 6

Sys. / Comp. ID: FW-03.1B-08E , FW-03.1B-09P Exam Item: ELBOW , PIPE

DWG No. or Sketch: EC-H-50047 WR/Mod: IP3-04-13363
QA Category: Non Cat ASME XI Class: N/A Cat: N/A Procedure: ENN-NDE-9.05 Rev.: 0

Component Configuration: ELBOW , PIPE
Orientation: 0 Degree Type of Material: Carbon Steel
Angle: 0 ° Mode: Longitudinal Size: 18" Sch. 60 Thickness: 0.656"

Equipment

Instrument: 103861 Krautkramer DMS-2 Due: N/A

Vertical Linearity Check

Signal 1	100	90	80	70	60	50	40	30	20	10
Signal 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(Signal 2 shall equal 50% of signal 1 ± 5% of full scale.)

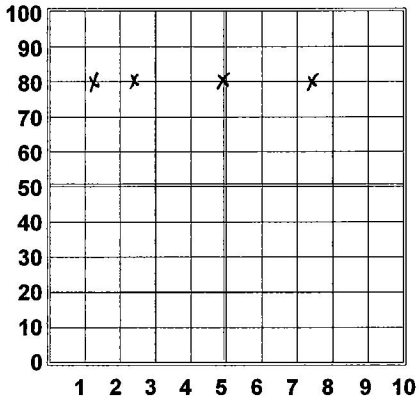
Attenuator Linearity Check

80% - 6 db	80% - 12 db	40% + 6 db	20% + 12 db
N/A	N/A	N/A	N/A
(32 to 48)	(16 to 24)	(64-96)	(64-96)

Transducer: 011790 KBA 8 Mhz 0.38" RND FH2E Dual Wedge: N/A
Search Unit Cable: 6' Self-Cont. Wedge Meas. Angle: N/A ° Exit Point-Front: N/A "
Couplant: 04225 Sonotech / Ultragel II Thermometer: 104248 Due: 1/23/2006 Temperature
Calibration Block: 103882 Step Wedge T= .25" - 3" Material: 1018 Steel 79 °F
Simulator Block: N/A N/A °F
Reference Block: N/A N/A °F
Entry Surface: OD Component: 79 °F

Distance Amplitude Curve

Each Major Screen Division = 0.2"



Reflector	Orient.	% FSH	Pos.	dB
0.250"	Step	80	1.25	N/A
0.500"	Step	80	2.50	N/A
1.000"	Step	80	5.00	N/A
1.500"	Step	80	7.50	N/A

Calibration Times:

1407	1512	1736		

Instrument Settings

Range (in.):	2.0"
Thick Cal:	2-PT
Velocity (in./μs):	.2341
Sensitivity (dB):	58
Scan Sensitivity	maint 80%
Frequency (mHz):	8
Reject:	Off
Filter:	Fullwave
Pulse Length:	Fixed
Damping:	Fixed
Mode Select:	Dual
Rep. Rate:	Fixed
DEC/Gate:	Off
Jacks:	T/R

Acceptance Standard: Minimum wall thickness = 87.5% of nominal thickness
Recordable Indication(s): No Recording Level: N/A % DAC Evaluation Level: N/A % DAC
100 % Complete Limitations: No
Remarks: Gridded and examined as per FAC Engineer direction. U/S two grid lines, D/S gridded 36".

Examiner: Ian H Ped Ian H. Pedersen Level: IIL Date: 3/18/2005

Examiner: _____ N/A Level: NA Date: 3/18/2005

Reviewed by: Dave Geesar Level II Date: 3-27-05

ANII Review: N/A Date: N/A

Entergy

Report No.: 05UT054

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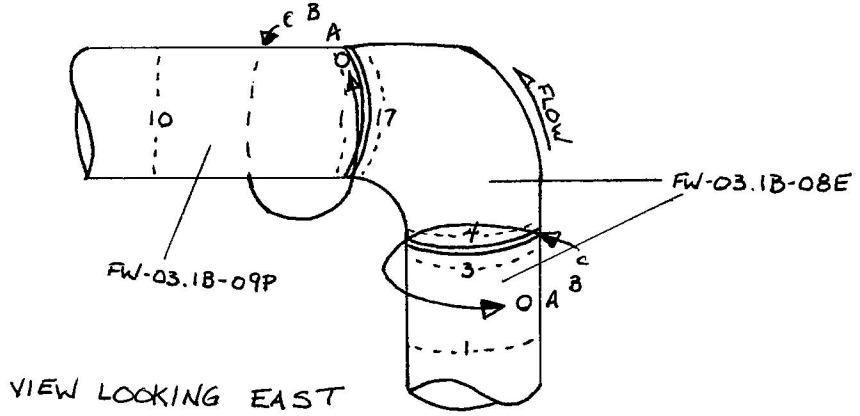
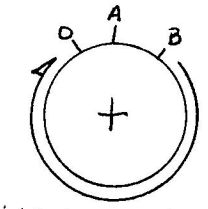
Sys. / Comp. ID:	FW-03.1B-08E , 09P	Material:	Carbon Steel	High Reading:	0.966"	Exam Item:	ELBOW ,PIPE
		Size:	18" Sch. 80	Low Reading:	0.661"		
DWG No.:	EC-H-50047 Rev.2	Thickness:	0.750"	Grid Size:	4"	WR / Mod:	IP3-04-13363
Configuration:	ELBOW , PIPE	Datum Point:	Extrados	QA Category:	Non-Class	ASME XI Class: N/A	Cat: N/A
Acceptance Standard:	Min. wall thickness 87.5% of nominal wall thickness = .656"			Procedure:	ENN-NDE-9.05	Rev.: 0	





Remarks:
Scan lows (see sketch for locations):
U/S of U/S 0.835" between J+K
D/S of U/S 0.679" between N+O
U/S of D/S 0.823" between C+D
D/S of D/S 0.682" between F+G

Examiner: Ian H. Pedersen Level: IIL Date: 03/18/05

Examiner: N/A Level: N/A Date: N/A

Reviewed by: Level: II Date: 5-27-05

ANII Review: N/A Date: N/A

REA5-01

----------File Header----------

P.C. File Name	:				FW031B08E.utm
Gauge File Name	:				FW031B08E
Description	:				
Memo Comment	:				
Creation Date	:				3/18/2005
Date Last Saved	:				3/19/2005
Probe	:	011790	Cal. Stnd.	:	
Temperature	:				
Inspector	:		Company	:	
Instrument Type	:	DMS2	Instrument S.N.	:	0116LM
Min. Alarm Val.	:	0.000	Max. Alarm Val.	:	0.000
% Loss Alarm Val.	:	0.00	% Growth Alarm Val.	:	0.00
Abs. Loss Alarm Val.	:	0.000	Abs. Growth Alarm Val.	:	0.000
Units	:	INCH	Velocity (in/us)	:	0.2341

----------Color Ranges----------

###	0.000 - 0.001	###	0.751 - 9.000
###	0.002 - 0.525	###	9.001 - 9.002
###	0.526 - 0.656	###	9.003 - 9.004
###	0.657 - 0.750	###	9.005 - 9.006

05UT054 Jan Mitchell 03/18/05 3.27cf

LOC1 FW031B08E.utm

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0.901	0.909	0.908	0.921	0.938	0.951	0.961	0.966	0.965	0.954	0.946	0.933	0.924	0.910	0.921
2	0.908	0.919	0.921	0.936	0.945	0.947	0.954	0.946	0.947	0.937	0.930	0.922	0.919	0.926	0.911
3	0.937	0.926	0.930	0.935	0.934	0.932	0.920	0.916	0.928	0.934	0.939	0.929	0.942	0.926	0.934
4	0.685	0.707	0.720	0.732	0.745	0.727	0.737	0.744	0.761	0.749	0.745	0.727	0.713	0.709	0.687
5	0.682	0.712	0.725	0.735	0.753	0.740	0.772	0.740	0.761	0.741	0.754	0.728	0.714	0.702	0.683
6	0.679	0.708	0.724	0.742	0.759	0.765	0.749	0.743	0.762	0.759	0.754	0.730	0.711	0.693	0.671
7	0.673	0.718	0.726	0.740	0.752	0.745	0.747	0.756	0.776	0.754	0.756	0.739	0.704	0.706	0.696
8	0.678	0.709	0.726	0.738	0.755	0.747	0.746	0.753	0.777	0.759	0.762	0.740	0.722	0.713	0.681
9	0.669	0.705	0.727	0.764	0.753	0.745	0.748	0.757	0.776	0.750	0.760	0.767	0.721	0.708	0.682
10	0.677	0.719	0.721	0.736	0.743	0.732	0.746	0.752	0.780	0.747	0.760	0.744	0.720	0.721	0.673
11	0.672	0.711	0.714	0.731	0.744	0.751	0.744	0.752	0.773	0.747	0.752	0.760	0.715	0.706	0.661
12	0.670	0.719	0.712	0.728	0.774	0.719	0.731	0.743	0.761	0.743	0.753	0.740	0.717	0.704	0.665
13	0.678	0.695	0.713	0.724	0.732	0.706	0.725	0.741	0.756	0.736	0.744	0.735	0.727	0.714	0.672
14	0.682	0.708	0.711	0.718	0.730	0.702	0.711	0.727	0.756	0.722	0.765	0.735	0.711	0.718	0.674
15	0.683	0.732	0.713	0.718	0.726	0.702	0.704	0.709	0.743	0.726	0.773	0.725	0.729	0.708	0.672
16	0.689	0.721	0.709	0.719	0.713	0.695	0.697	0.696	0.732	0.716	0.741	0.771	0.715	0.716	0.683
17	0.709	0.713	0.736	0.720	0.733	0.698	0.697	0.695	0.711	0.706	0.733	0.720	0.716	0.716	0.700

05UT054

03/18/05

3-27-05

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----------File Header----------

P.C. File Name :	FW031B09P.utm
Gauge File Name :	FW031B09P
Description :	
Memo Comment :	
Creation Date :	3/18/2005
Date Last Saved :	3/19/2005

Probe :	011790	Cal. Stnd. :	
Temperature :			
Inspector :		Company :	
Instrument Type :	DMS2	Instrument S.N. :	0116LM

Min. Alarm Val. :	0.000	Max. Alarm Val. :	0.000
% Loss Alarm Val. :	0.00	% Growth Alarm Val. :	0.00
Abs. Loss Alarm Val. :	0.000	Abs. Growth Alarm Val. :	0.000
Units :	INCH	Velocity (in/us) :	0.2336

----------Color Ranges----------

###	0.000 - 0.001	###	0.751 - 9.000
###	0.002 - 0.525	###	9.001 - 9.002
###	0.526 - 0.656	###	9.003 - 9.004
###	0.657 - 0.750	###	9.005 - 9.006

05 UT 054

03/15/05

3.27.05

LOC1 FW031B09P.utm

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	0.892	0.886	0.884	0.882	0.881	0.891	0.901	0.904	0.907	0.933	0.907	0.905	0.900	0.894	0.892
2	0.890	0.898	0.894	0.891	0.886	0.896	0.901	0.905	0.903	0.910	0.908	0.893	0.909	0.899	0.895
3	0.898	0.903	0.896	0.885	0.886	0.893	0.902	0.906	0.907	0.912	0.910	0.897	0.915	0.895	0.898
4	0.888	0.887	0.883	0.879	0.887	0.901	0.914	0.910	0.918	0.915	0.914	0.894	0.912	0.895	0.892
5	0.878	0.900	0.910	0.885	0.891	0.901	0.932	0.944	0.926	0.923	0.917	0.877	0.908	0.887	0.876
6	0.880	0.880	0.888	0.890	0.900	0.910	0.925	0.938	0.921	0.919	0.914	0.876	0.912	0.892	0.882
7	0.892	0.900	0.895	0.899	0.914	0.921	0.909	0.916	0.912	0.915	0.901	0.893	0.907	0.891	0.888
8	0.901	0.906	0.903	0.909	0.909	0.915	0.938	0.927	0.902	0.924	0.894	0.891	0.901	0.890	0.893
9	0.909	0.906	0.907	0.902	0.903	0.907	0.900	0.895	0.906	0.904	0.901	0.907	0.894	0.911	0.907
10	0.911	0.927	0.897	0.893	0.889	0.909	0.896	0.890	0.910	0.927	0.907	0.918	0.896	0.906	0.914

05 UT 054

03/18/05

3-27-05

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TRAVELER PACKAGE CHECKLIST

Component FW-03-1B-08E
Work Order IP3-04-13363

1. Preinspection briefing given by Erosion/Corrosion Engineer _____ 3/18/05
   E/C Eng. Date

   UT Tech _____ UT Tech _____ UT Tech _____ UT Tech

2. Traveler package contents _____ UT Tech _____ E/C Eng.
   a. Copy of procedure ENN-NDE-9.05
   b. Calibration sheet
   c. Drawing with point highlighted
   d. Data sheet
   e. E/C Engineers phone number 736-8356. Pager 445-0253

3. Location verified against drawing: _____ UT Tech _____ E/C Eng.

4. Preinspection point setup per procedure ENN-EP-S-005 or FAC Engineer direction (If gridding is used) _____ UT Tech
   a. Correct grid size used
   b. Grid correctly laid out
   c. Grid lettered and numbered correctly
   d. Area up/downstream of component properly laid out

5. Data Logger _____ UT Tech
   a. Inspection point used as file name
   b. Operators ID correct
   c. Instrument ID correct

6. Data Sheet _____ UT Tech
   a. Flow direction correct
   b. Sketch drawn correctly
   c. Component number verified

7. Calibration Sheet correct _____ UT Tech

8. Daily review complete 03/18/05 Date _____ E/C Eng.

NOTE:

- UT Technician sign-off is required prior to start of inspection activity.
- Engineering sign-off is required after verification of activity.