INDIAN POINT UNIT 3

FLOW ACCELERATED CORROSION

3RF13 OUTAGE

ORIGINAL

2005

Entergy — **Ultrasonic Examination Report**

IPEC Unit # 3
Report No.: 05UT002
Page 1 of 2

Sys. / Comp. ID: Main Steam / FAC-05-TD-03
Exam Item: FAC-05-TD-03 / Pipe, Elbow, Pipe Items 01, 02, & 03
DWG No. or Sketch: 9321-F20173
WR/Mod: IP3-03-24803
QA Category: Non Cat ASME XI Class: N/A Cat: N/A
Procedure: ENN-NDE-9.05 Rev.: 0

Component Configuration: Pipe to Elbow to Pipe
Orientation: 0 Degree
Type of Material: Carbon Steel
Angle: 0 ° Mode: Longitudinal
Size: 3/4" SCH 80 Thickness: 0.154"

Equipment

Instrument: 031110106 Panametrics 37DL+ 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.)

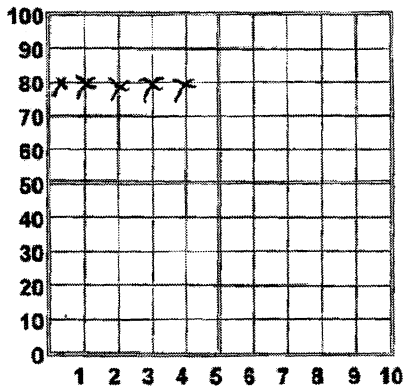
Attenuator Linearity Check

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: 1004023 Panametrics 10 Mhz 0.283" Round D793 / Dual Element Wedge: N/A
Search Unit Cable: 6' Self-Cont. Wedge Meas. Angle: N/A ° Exit Point-Front: N/A "
Couplant: 00120 Sonotech / Soundsafe Thermometer: QS-12 Due: 5/13/2006 Temperature
Calibration Block: 99-7437 Step Wedge T= .04" - .5" Material: 4340 Carbon Steel 90 °F
Simulator Block: N/A N/A °F
Reference Block: N/A N/A °F
Entry Surface: OD Component: 94 °F

Distance Amplitude Curve

Each Major Screen Division = 0.1"



Reflector	Orient.	% FSH	Pos.	dB
0.040"	Step	80	0.4	N/A
0.100"	Step	80	1.0	N/A
0.200"	Step	80	2.0	N/A
0.300"	Step	80	3.0	N/A
0.400"	Step	80	4.0	N/A

Calibration Times:

0845	0930	1000		

Instrument Settings

Range (in.):	1.0"
Thick Cal:	2-PT
Velocity (in./µs):	.2260
Sensitivity (dB):	55
Scan Sensitivity	55
Frequency (mHz):	10
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 = .059" per IP-CALC-04-01795, REv 0
Recordable Indication(s): Yes Recording Level: N/A% DAC Evaluation Level: N/A% DAC
N/A % Complete Limitations: 6" Long section, Top Dead Center of 12" Long Horiz. Run due to pipe above.
Remarks: This UT Report is for components 01 thorugh 03 of Inspection Point FAC-05-TD-03. The results of this examination are shown on the attached pages.

NOTE: This FAC point has been renumbered as part of the evolving FAC Program at IPEC. The original Point was numbered 01-PT-07.

Examiner: P E Deeds Paul E. Deeds Jr. Level: III Date: 1/6/2005

Examiner: N/A Level: NA Date: 1/6/2005

Reviewed by: Level III Date: 1/6/05

ANII Review: N/A Date:

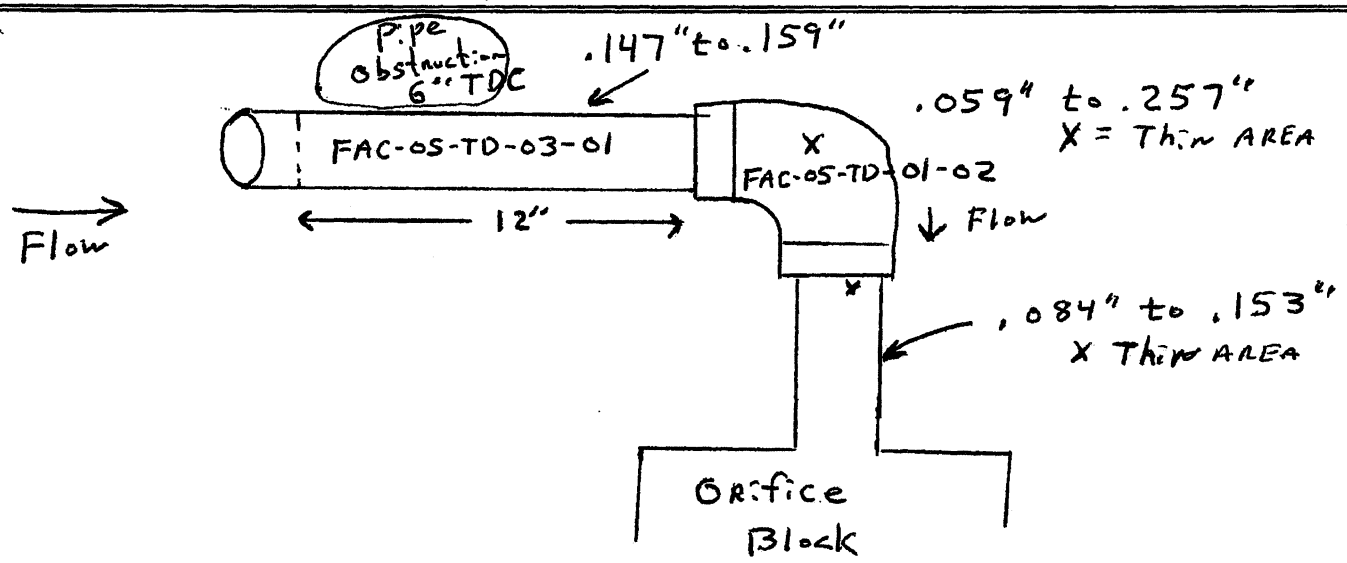
NDE-9.4-12(I) Rev.4
Attachment 2
Page 1 of 1

Entergy

Report No.: 05UT002

Page 2 of 2

Sys. / Comp. ID:	Main Steam FAC-05-TD-03	Material:	Carbon Steel	High Reading:	.257"	Exam Item:	AC-05-TD-03 / Pipe, Elbow, Pi
		Size:	3/4" CS	Low Reading:	.059"		
DWG No.:	9321-F-20173	Thickness:	.154"	Grid Size:	N/A	WR / Mod:	IP3-03-24803
Configuration:	Pipe to Elbow to Pipe	Datum Point:	N/A	QA Category:	Non Cat 1	ASME XI Class: N/A	Cat: N/A
Acceptance Standard:	.059" per Calculation IP-CALC-04-01795, Rev 0			Procedure:	ENN-NDE-9.05	Rev.: 0	



Remarks:
All readings are in thousandths of an inch.

FAC-05-TD-03 High: .159 Low: .147

FAC-05-TD-03 High: .257 Low: .059

FAC-05-TD-03 High: .153 Low: .084

Examiner:	P E Deeds	P.E. Deeds Jr.	Level: III	Date: 1/6/05
Examiner:		N/A	Level:	Date:
Reviewed by:			Level: III	Date: 1/6/05
ANII Review:		N/A		Date:

REA5-01

Entergy — Ultrasonic Examination Report

IPEC Unit # 3
Report No.: 05UT070
Page 1 of 5

Sys. / Comp. ID: HD / FAC-05-VCD-08(01-02) Exam Item: ELBOWS AND PIPE

DWG No. or Sketch: 9321-F-20233 Rev 23 WR/Mod: IP3-03-24791
QA Category: Non Cat ASME XI Class: N/A Cat: N/A Procedure: ENN-NDE-9.05 Rev.: 0

Component Configuration: ELBOWS AND PIPE
Orientation: 0 Degree Type of Material: Carbon Steel
Angle: 0 ° Mode: Longitudinal Size: 3.0" Sch. 40 Thickness: .216"

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.)

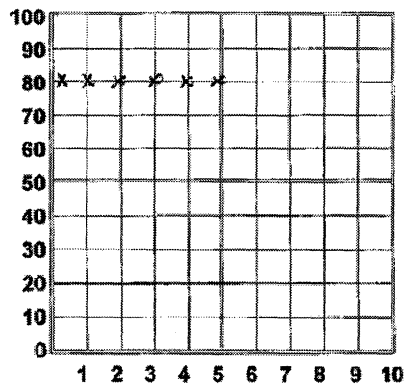
Attenuator Linearity Check

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: 103458 Step Wedge T= .04" - .5" Material: 1018 Steel 70 °F
Simulator Block: N/A N/A °F
Reference Block: N/A N/A °F
Entry Surface: OD Component: 70 °F

Distance Amplitude Curve

Each Major Screen Division = 0.1"



Reflector	Orient.	% FSH	Pos.	dB
0.040"	Step	80	0.4	N/A
0.100"	Step	80	1.0	N/A
0.200"	Step	80	2.0	N/A
0.300"	Step	80	3.0	N/A
0.400"	Step	80	4.0	N/A
0.500"	Step	80	5.0	N/A

Calibration Times:

1110	1121	1320	1355	

Instrument Settings

Range (in.):	1.0"
Thick Cal:	2-PT
Velocity (in./µs):	.2351
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
98 % Complete Limitations: Yes
Remarks: No U/S or D/S on FAC-05-VCD-08(01) due to valves.
FAC-05-VCD-08(02) Obstructions on D/S due to pipe hanger C20-22, D20-22, E20-22.

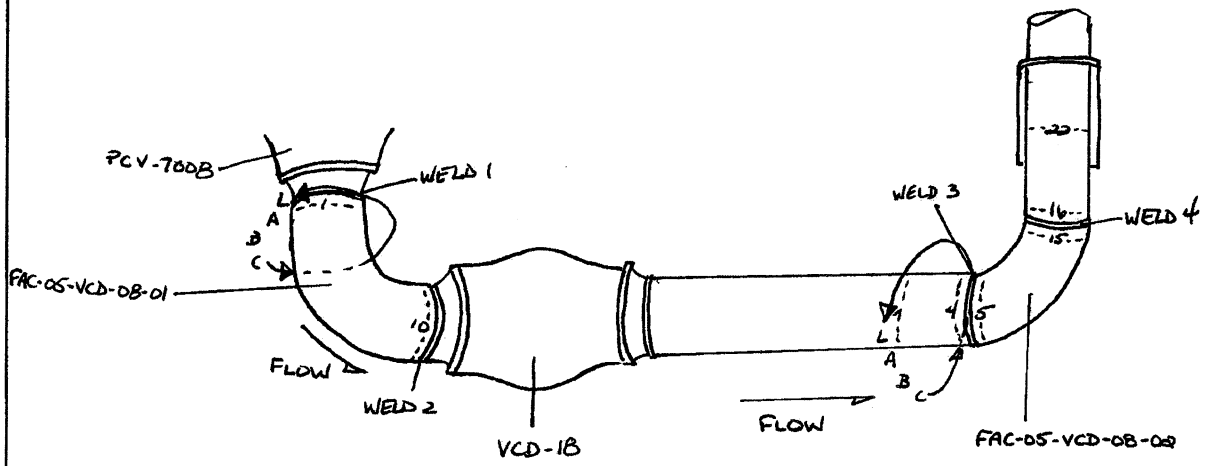
Examiner: [signature] Ian H. Pedersen Level: III Date: 3/22/2005
Examiner: [signature] Matthew E. Wilson Level: III Date: 3/22/2005
Reviewed by: [signature] Level II Date: 3/23/05
ANII Review: N/A Date: N/A

Entergy

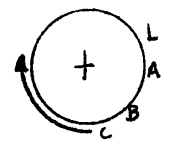
Report No.: 05UT070

Page 2 of 5

Sys. / Comp. ID:	HD/ FAC-05-VCD-08(01-02)	Material:	Carbon Steel	High Reading:	0.336"	Exam Item:	Pipes, Elbows
		Size:	3.0 " Sch. 40	Low Reading:	0.052"		
DWG No.:	9321-F-20233 Rev 23	Thickness:	0.216"	Grid Size:	1"	WR / Mod:	IP3-03-24791
Configuration:	Pipes, Elbows	Datum Point:	Extrados	QA Category:	Non-Class	ASME XI Class:	N/A Cat: N/A
Acceptance Standard:	Minimum wall thickness = 87.5% of nominal wall thickness = .189"			Procedure:	ENN-NDE-9.05	Rev.:	0



TOP VIEW



LOOKING IN DIRECTION OF FLOW
APPLIES FOR BOTH FAC-05-VCD-08(01+02)

Remarks:
All thickness readings above are in thousandths of an inch
Weld 1 D/S 0.060" between J+K
Weld 2 U/S 0.157" Between B+C
Weld 3 U/S 0.231" Between A+B
Weld 3 D/S 0.230" @ B
Weld 4 U/S 0.219" Between B+C
Weld 4 D/S 0.201" Between C+D
Refer to sketch for weld locations.

Examiner: Ian H. Pedersen Level: IIL Date: 03/22/2005

Examiner: Matthew E. Wilson Level: IIL Date: 03/22/2005

Reviewed by: Level: III Date: 3/23/05

ANII Review: N/A Date: N/A

REA5-01