UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION II
101 MARIETTA STREET, SUITE 3100
ATLANTA, GEORGIA 30303

DEC 12 1986

MEMORANDUM FOR: J. Nelson Grace, Regional Administrator
Region II

FROM: James Y. Vorse, Field Office Director JYV
Office of Investigations Field Office, Region II

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT: ALLEGED FALSIFICATION OF RADIATION EXPOSURE RECORDS, AND ALLEGED DISCRIMINATION (Q2-86-017)

Enclosed, for whatever action you deem appropriate, is the Office of Investigations Report of Inquiry concerning the above matter.

Enclosure:
As Stated

cc w/o encl:
E. Gilbert, OI:HQ
R. Fortuna, OI:HQ

8802120058 880209
PDR FOIA
KATZ86-596 PDR

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 6
FOIA- 86-596 + 86-793

Portion 6 9/2

RESULTS OF INTERVIEW WITH D. W. MORGAN AS
PREPARED BY INVESTIGATOR LARRY L. ROBINSON

On July 2, 1986, D. W. MORGAN, Radiation Protection Officer, North Carolina State University (NCSU), Raleigh, NC, was interviewed in the office of Dr. Paul TURINSKY, Nuclear Engineering Department, NCSU, by NRC Investigator Larry L. Robinson. MORGAN provided the following information in substance:

MORGAN stated that in April 1985, NCSU's Nuclear Engineering Department received a request from the Dosimetry Section at Shearon Harris Nuclear Power Plant (SHNPP) for a summary of NCSU's Radiation Exposure History on Patty S. MIRIELLO, during the period September - October 1983, when MIRIELLO was a graduate student in Nuclear Engineering at NCSU.

MORGAN stated that his office searched the records of readings of student thermoluminescent dosimeters (TLD) during that period of 1983 for any record on MIRIELLO, with negative results. MORGAN advised that, accordingly, he notified, by letter, the SHNPP Dosimetry Section that his records indicated that MIRIELLO had not been monitored at NCSU. MORGAN provided a copy of this letter, dated April 18, 1985, and signed by MORGAN.

MORGAN then provided a copy of a letter to him from MIRIELLO, dated April 24, 1985, which pointed out that she had both a temporary and permanent TLD at NCSU.

MORGAN stated that his office then searched the records of TLD readings on visitor badges and found that between September 12 and October 26, 1983, MIRIELLO had received [redacted] radiation dose.

MORGAN provided a copy of a second letter to the Dosimetry Section, SHNPP, dated May 13, 1985, in which his office advised SHNPP of MIRIELLO's [redacted] dose. This letter was signed by Douglas B. BEASLEY, Associate Radiation Protection Officer.

This Results of Interview was prepared on July 10, 1986.

Larry L. Robinson

Larry L. Robinson, Investigator

North Carolina State University
Box 7108, Raleigh, NC 27695-7108

Telephone (919) 737-2894

314 David Clark Labs

18 April 1985

Shearon Harris Nuclear Power Plant
Carolina Power & Light Co.
Dosimetry Records
Route 1, Box 165, Zone 3
New Hill, NC 27562

Reference your request dated 04/03/85 for the radiation exposure history for MIRIELLO, Patty S., S.S. No [redacted]

Our records indicate that Ms. Miriello was not furnished personnel monitoring dosimetry while associated with North Carolina State University.

D. W. Morgan
Radiation Protection Officer

EXHIBIT B
Page 1 of 1 Pages

North Carolina State University is a Land-Grant University and a constituent institution of The University of North Carolina

North Carolina State University
Box 7108, Raleigh, NC 27695-7108

Telephone (919) 737-2491

214 David Clark Labs

13 May 1985

Shearon Harris Nuclear Power Plant
Carolina Power & Light Co.
Dosimetry Records
Route 1, Box 165, Zone 3
New Hill, NC 27562

Following Ms. Patty S. Miriello's phone call this date and an extensive search of the personnel monitoring dosimetry reports, we are hereby furnishing the following radiation exposure history for Ms. Miriello,

[redacted]

09/12/83 - 10/26/83

10/26/83 - 12/01/83

Total [redacted]

Douglas B. Beasey

Douglas B. Beasey, Associate
Radiation Protection Officer

cc: Ms. Miriello

EXHIBIT 9
Page 1 of 1 Page

Attachment 1
Sheet A

~~IST 501-0394~~ CN 1-22-85
~~IST 501-0394~~

Plant/Unit SHNPP #1
Comp/System Reactor Coolant
ISO 1-RC-AF-33 Loop N/A

CALIBRATION DATA SHEET

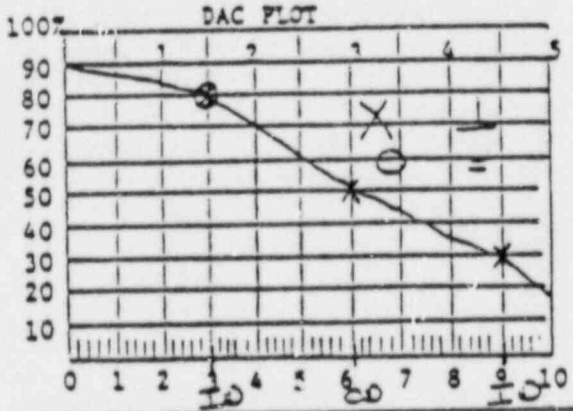
Page 1 of 5
Data Sheet No. IST 501-0394
Procedure No. IST-501
Subject: Piping Welds
Rev/Change No. 2/1
Calibration Block No. UT-20-1
Fabrication No. N/A
Surface O.D.
Block Temp S/N JJ4-C1 57 °F
Comp. Temp S/N JJ4-C8 70 °F
Thickness .772"
CRT Calibrated in Inches of Metal Path
Each Maj. Screen Div = .357"
Ref. procedure paragraph 7.2.n.

INSTRUMENT SETTINGS	
Mfg/Model No.	KB USM-31
Serial No.	211596
Sweep Length	7.80
Sweep Delay	7.80
Pulse Length/Damping	Fixed
Freq.	2.5 Rep. Rate: N/A
Filter:	N/A Video: N/A Jack: R
Rec/Gate Switch	Set Range 2.5
Mode Selector	SFD Reject: Min
Gain (course)	40/40 ; (fine) 8/8
Scan Sensitivity	58/68 +/=

SEARCH UNIT	
Scan Angle	45° Mode: Shear
Fixturing (Lucite if any)	Wedge
Style or Type No.	Ultrasonic
Size & Shape	.25" Round
Frequency	2.25 MHz
Serial No/Brand:	Aerotech A11343
Measured angle	45° material 43°
Cable Type & Length	RG-58/U 6'
Coupling Brand	Ultragel II
Coupling Batch:	# 8336

DIST. LINEARITY CAL.	Amplitude				
	High	Low		High	Low
1	100	51	5	60	30
2	90	45	6	50	25
3	80	40	7	40	20
4	70	35	8	30	14

DAC PLOT



SCAN AREA	
0° LRV	N/A
0° Up-Int	N/A
═ To Weld	X
⊥ To Weld	X
Calibration	
Int 48 dB	X
Circ 58 dB	X

AMPL. CONTROL LINEARITY		
Initial	dB	Result
80	-6	39
80	-12	19
40	+6	82
20	+12	82

EXAMINATION WELD/AREA	Recordable Indications: Yes	No	Geom	COMMENTS/REASON FOR INCOMPLETED SCAN (S)
1-RC-SW-A3	N/A	N/A	X	Complete S.I. from both sides, P.T. to Reactor

CALIBRATION CHECKS	TIME
Initial Cal.	0820
Intermediate	—
Intermediate	—
Intermediate	—
Final Cal.	1700

EXAMINERS 1 [signature] Date 1/9/85 Level II
2 [signature] Date 1-19-85 Level I

REVIEWERS 1 _____ Date _____
2 _____ Date _____
3 _____ Date _____

ADDITIONAL SHEETS? CHECK BOX			
Continuation	N/A	Beam Plot	N/A
Supplements	X	None	N/A

NUCLEAR ENERGY SERVICES, INC.

0/11

NUCLEAR ENERGY SERVICES, INC.

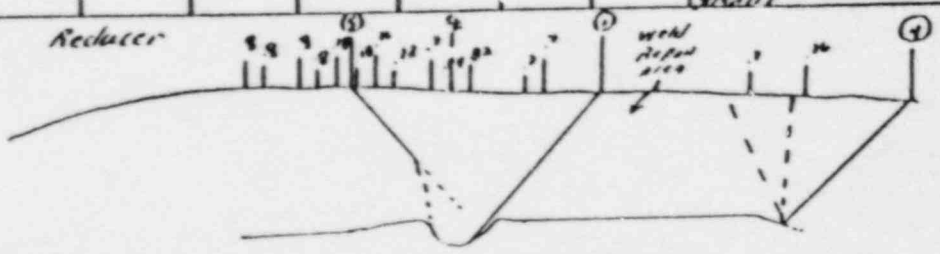
Project No. 5565	Site SHNPP #1	L_o Location Cobra Ø	Date: (Mo/Day/Yr) 11/8/95
Item Identification 12" 1-RC-NX-23		W_o Location weld Ø	Page 2 of 5
Examiner: TC-1A Level III		Angle Beam: 0° 45°↓ 45°= N/A	Attached Cal. Data Sheet ESI 501-0394
Examiner: TC-1A Level I		Scanning dB: N/A 58dB N/A N/A	Thickness .337"
			Diameter (nom.) 6"

HP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0

W_{max} Distance from ℓ to S.U. at maximum response.
W_1 Distance from weld ℓ at 50% of Max amp. (fwd)
W_2 Distance from weld ℓ at 50% of Max amp. (backward)

Ind. No.	% of DAC	FWD W MAX	FWD W MAX	FWD 50% W_1	FWD 50% MAX	BACKWARD 50% W_2	BACKWARD MAX	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
1	30	0.8"	1.04"	0.65"	0.96"	0.85"	1.14"	*	0.5"w	*	N/A	Pipe	weld was Pipe to #2 Bolt 360° circumferential examination
4	15	2.35"	1.87"	2.25"	1.93"	2.40"	1.68"	*	0.5"w	*	N/A	Pipe	weld is inaccessible for 360° of circumferential examination
5	10	0.52"	0.82"	0.5"	0.79"	0.54"	0.77"	*	Cobra Ø	*	N/A	Reducer	Indications S.U. 1 and 2 were at same location for 360° inaccessible but were evaluated as shown in this report

DRAW FULL SCALE PLOT HERE:



REVIEWER _____ DATE _____
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

—— Sound Path
- - - Possible sound paths when there exist more than one option

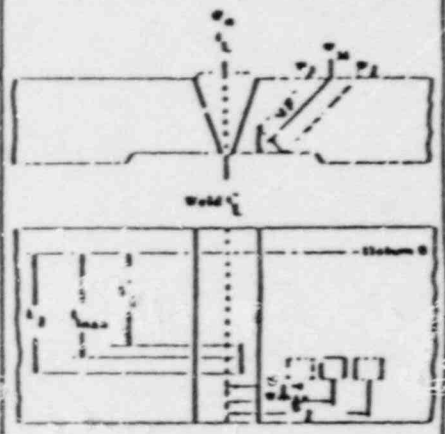
ESI 501-0394

NUCLEAR ENERGY SERVICES, INC.

Project No. 5565	Site SAMPLE #1	L_o Location Datum Ø				Date: (Mo/Day/Yr) 11/19/85
Item Identification 10" 1-151-FC-23		W_o Location weld ℄				Page 3 of 5
Examiner: TC-1A Level III		Angle Used	0°	45°↓	45°→	Attached Cal. Data Sheet TST SOI-0394
Examiner: TC-1A Level II		Scanning dB	K / A	SE dB	N / A	Thickness .272"
					N / A	Diameter (nom.) 6"

MP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0

W_{MAX} Distance from ℄ to S.U. at maximum response.
W_1 Distance from weld ℄ at 50% of Max amp. (Fwd)
W_2 Distance from weld ℄ at 50% of Max amp. (backward)



Ind. No.	% of DAC	FWD W MAX	FWD W MAX	FWD 50% W_1	FWD 50% MAX	BACKWARD 50% W_2	BACKWARD 50% MAX	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
2	15	0.8"	0.96"	0.60"	0.72"	0.95"	0.93"	*	0.5"CW	*	N/A	Pipe	Toe of weld line @ 2, both 360° intermittently at varying amplitude
3	20	1.35"	1.38"	0.15"	0.72"	1.95"	0.93"	*	0.5"CW	*	N/A	Pipe	Toe intermittently for 360° at varying amplitude
6	30	0.53"	1.00"	0.7"	0.81"	0.7"	1.18"	*	2"CW @ 0	*	N/A	Pipe	Indication 6 toe of weld line for 360° then intermittently
7	20	0.88"	1.23"	0.45"	1.44"	0.13"	1.09"	*	Weld	*	N/A	Pipe	Ind. Indication 7 exceeds 100% DAC at location 1" CW

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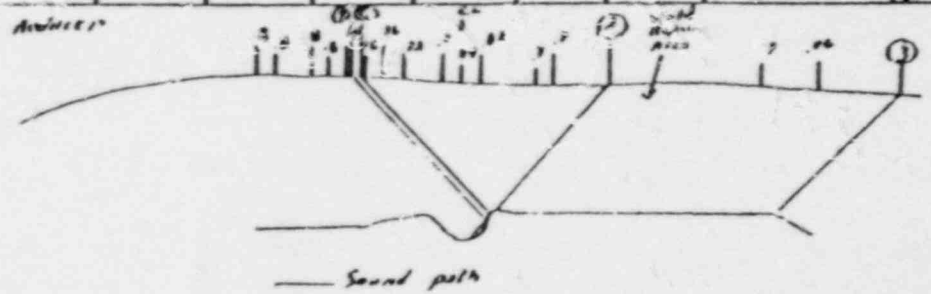


REVIEWER _____ DATE _____
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

- - - Possible sound paths when there exist more than one plane

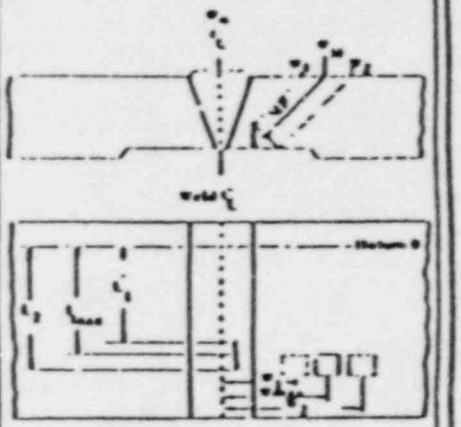
TST SOI-0394

NUCLEAR ENERGY SERVICES, INC.

Project No. 5565	Site Saxton #2	L_o Location Datum Ø	Date: (Mo/Day/Yr) 11/19/83
Item Identification Rx. 1-151-RC-23		W_o Location Weld 9	Page 4 of 5
Examiner: TC-1A-Level III		Angle Used: 0° / 45°↓ / 45°= / ~ / ~	Attached Cal. Data Sheet ISI Cal-0314
Examiner: TC-1A Level I		Scanning dB: ~ / SF dB / ~ / ~	Thickness .777"
			Diameter (nom.) 6"

MP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0
W max Distance from ℓ to S.U. at maximum response.
W_1 Distance from weld ℓ at 50% of Max amp. (fwd)
W_2 Distance from weld ℓ at 50% of Max amp. (backward)

Ind. No.	% of DAC	W MAX W	W MAX MP	FWD 50% W_1	FWD MAX MP	BACKWARD 50% W_2	BACKWARD MAX MP	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
8	75	0.6	1.14	0.55	1.07	0.75	1.22	"	9"CW	"	N/A	Reducer	All indications 50% @ 360°
9	16	0.7	0.97	0.60	0.93	0.80	1.09	"	9"CW	"	N/A	Reducer	intermittently at welding crystalline
10	20	1.5"	2.11"	1.15"	2.09"	1.60"	2.22"	"	9"CW	"	N/A	Reducer	weld at 12 o'clock, decreases at 8
11	20	2.4"	1.65"	2.25"	1.57"	2.60"	1.73"	"	9"CW	"	N/A	Pipe	50 would be 50 at bottom of weld
12	20	0.15"	0.30"	0.05"	0.68"	0.25"	0.20"	"	9"CW	"	N/A	Pipe	crown weld minimum
													9 & 12 could be either small
													indications or geometry from weld
													reduction



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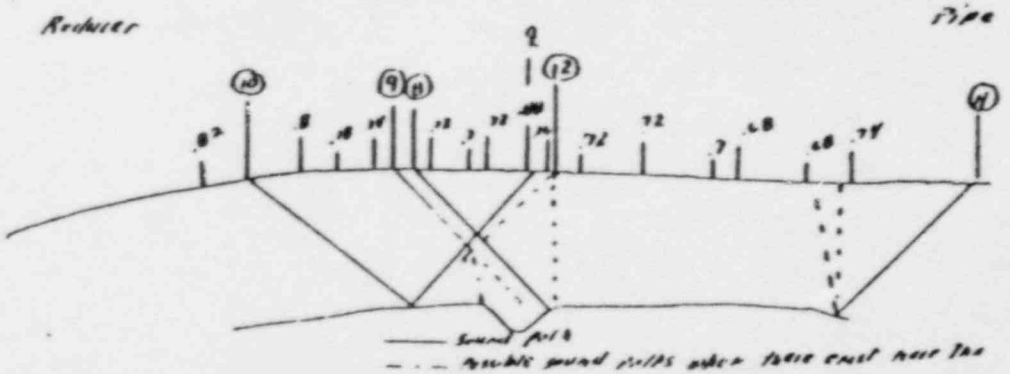


REVIEWER _____ DATE _____
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

Project No.	Site
5566	SMALL A1

Item Identification

Examiner: TC-1A Level III

Examiner: TC-1A Level II

L_o Location	Pulse 1
U Location	weld centerline

Angle Used	0°	45°L	45°S	N/A
Scanning dB	N/A	N/A	68.0 dB	N/A

Date: (Mo/Day/Yr) 11/11/92

Page 5 of 5

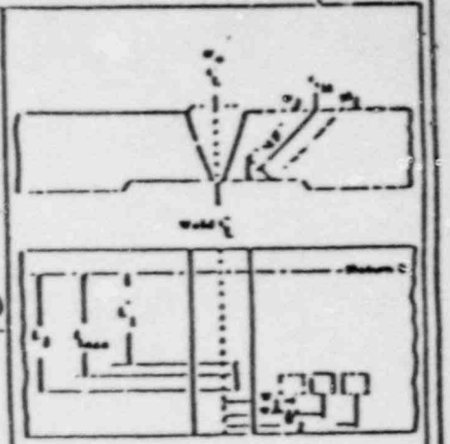
Attached Cal. Data Sheet TST-301-0394

Thickness .272"

Diameter (nom.) 6"

HP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0

U max Distance from C_L to S.U. at maximum response.
U_1 Distance from weld C_L at 50% of Max amp. (fwd)
U_2 Distance from weld C_L at 50% of Max amp. (backward)



Ind. No.	% of DAC	U MAX U	U MAX HP	FWD 50% U_1	FWD MAX HP	BACKWARD 50% U_2	BACKWARD MAX HP	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.
13	50	E	0.86"	a	0.65"	E'	0.89"	*	6"cw	*	N/A	E

REMARKS

Rem Reflection: 554
calculated for 360° in pipe
drawing

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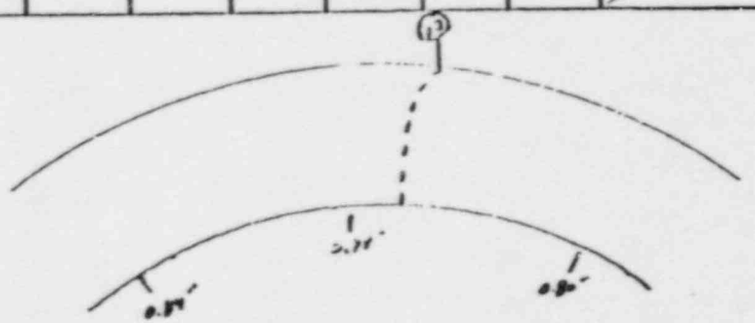


REVIEWER Ronald Saunders DATE 1-26-95

REVIEWER _____ DATE _____

REVIEWER _____ DATE _____

Rim 12345

TST-301-0394

Attachment 2
Sheet B

IST SCV-0394-L
~~IST 501-0394~~

Plant/Unit SHNPP #1
Comp/System Reactor Coolant
ISO/Isl. #: 23 Loop N/A

CALIBRATION DATA SHEET

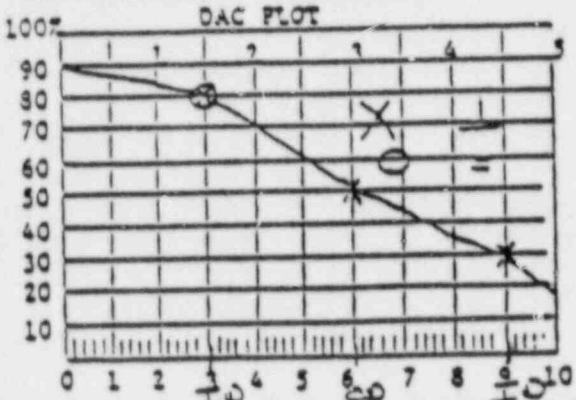
Page 1 of 5 (0394)
Data Sheet No. IST 501-0394
Procedure No. IST-501
Subject: P. Weld Welds
Rev/Change No. 01
Calibration Block No. UT-20-1
Fabrication No. N/A
Surface O.D.
Block Temp S/N JIH-01 57 °F
Comp. Temp S/N JIH-01 70 °F
Thickness .772"
CRT Calibrated in Inches of Metal Path
Each Maj. Screen Div = .357"
Calibration is per procedure, paragraph 2.3.(a)

INSTRUMENT SETTINGS
Mfg/Model No.: KB USK-3B
Serial No. : 211596
Sweep Length : 7.90
Sweep Delay : 7.90
Pulse Length/Damping: Med
Freq.: 2.5 Rej. Rate: N/A
Filter: N/A Video N/A Track: R
DEC/Gate Sync: Int Range: 2.5
Mode Select: SEQ Select: Pulse
Gain Course: 40/46 Fine: +1/2 Vernier: 5/8
Scan Sensitivity: 59/69 +1/2

SEARCH UNIT
Scan Angle: 45° Mode: Shear
Fixturing (if any): Wedge
Style or Type No.: Contour
Size & Shape: .25" Round
Frequency: 2.25 MHz
Serial No./Brand: Herotech A11343
Measured Angle: 45° material 43°
Cable Type & Length: Due to SMDT (1X6')
Compliance Record: Ultrasel III
Compliance Record: # 8336

DISTR. LINEARITY CAL. Amplitude					
	High	Low		High	Low
1	100	51	6	60	30
2	90	45	6	50	25
3	80	40	7	40	20
4	70	35	8	30	14

DAC PLOT



SCAN AREA	
0° WRT	N/A
0° WRT	N/A
∥ To Weld	X
⊥ To Weld	X
Calibration	
Line 43 dB	X
Circ 58 dB	X

AVG CONTROL INITIAL		
Initial	dB	Result
80	-6	39
80	-12	19
40	+6	82
20	+12	82

CALIBRATION CHECKS	TIME
Initial Cal.	0820
Intermediate	—
Intermediate	—
Intermediate	—
Final Cal.	1700

EXAMINATION WELD/AREA	Recordable Indications: Yes	No	Geom	COMMENTS/REASON FOR INCOMPLETED SCAN (S)
1-RC-SW-A3	N/A	N/A	X	Complete Scan from Both Sides, Ops to Reverse

PSW 1-23-95

EXAMINERS 1 [signature] Date 1/19/95 Level III
2 [signature] Date 1-19-95 Level I

REVIEWERS 1 Ronald Saunders Date 1-26-95
2 _____ Date _____
3 _____ Date _____

ADDITIONAL SHEETS? CHECK BOX			
Continuation	N/A	Beam Plot	N/A
Supplements	X	None	N/A

NES NUCLEAR ENERGY SERVICES, INC.

Project No.	Site	L Location	Date (Mo/Day/Yr)
5565	Sewell #1	Datum Ø	11/19/87
Item Identification: 1-111-RC-87		U Location	Page 2 of 5
Examiner: TC-1A Level II		Angle Hand: 0° | 45°1 | 45°2	Attached Cal. Data Sheet(s)
Examiner: TC-1A Level I Help wi Comm		Scanning dB: / / 36dB / /	Thickness .122"
			Diameter (nom.) 6"

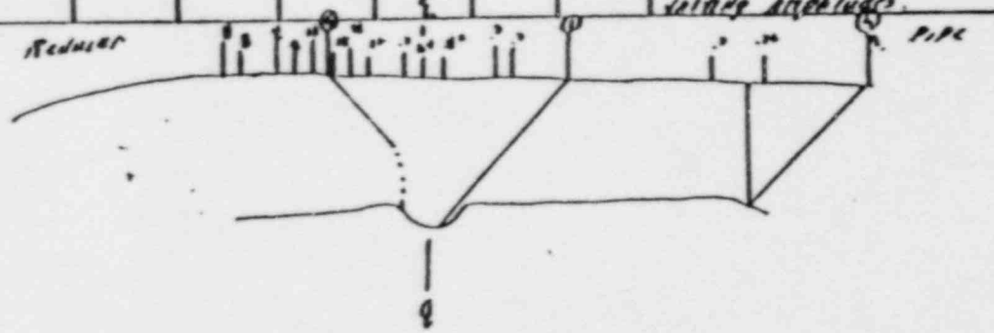
HP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0
U max Distance from ℄ to S.U. at maximum response.
U_1 Distance from weld ℄ at 50% of Max amp. (fwd)
U_2 Distance from weld ℄ at 50% of Max amp. (backward)

Ind. No.	Z of DAC	U MAX U	U MAX HP	FWD 50% MAX U_1	FWD 50% MAX HP	BACKWARD 50% MAX U_2	BACKWARD 50% MAX HP	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.
1	20	0.8"	1.0"	0.65"	0.98"	0.95"	1.11"	"	0.5"W	"	A	Side
HP 2.4	15	2.4"	1.5"	2.25"	1.41"	2.60"	1.68"	"	0.5"W	"	A	Pipe
3	10	0.53"	0.52"	0.4"	0.79"	0.64"	0.97"	"	Reduced	"	A	Reducer

REMARKS

1# Reducer seen at same Dist as number 2
2# Eccentric, tapers on 90 degree inclination 3 & 4 seen at same Dist but opposite inclination
3# 90° Intermittent at saddle supports
4# 90° Intermittent at saddle supports

DRAW FULL SCALE PLOT HERE:



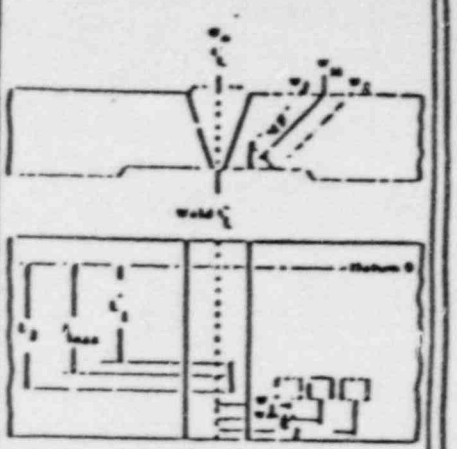
REVIEWER Ronald Saunders DATE 1-26-88
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

Project No.	Site	L_o Location	Date: (Mo/Day/Yr)
5565	SHAPP #1 W-NP-1-RC-Tw-RB	Datum 0	11/19/85
Item Identification:		U_o Location: Weld 6	Page 3 of 5
Examiner: TC-1A Level III		Angle Used: 0° / 45°1 / 45°2 / A / B	Attached Cal. Data Sheet: ISI SDI-033
Examiner: TC-1A Level I		Scanning dB: K / A / SS48 / A / A / A	Thickness: .771"
			Diameter (nom.): 6"

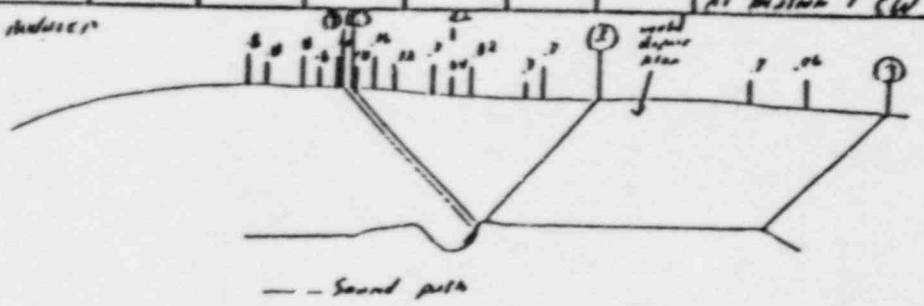
HP Metal Path
RBR Remaining Back Reflection
L. Distance from Datum 0

U_{max} Distance from C_L to S.U. as maximum response.
U_1 Distance from weld C_L at 50% of Max amp. (fwd)
U_2 Distance from weld C_L at 50% of Max amp. (backward)

Ind. No.	% of DAC	FWD U	FWD MAX HP	FWD 50% U_1	FWD MAX HP	BACKWARD 50% U_2	BACKWARD MAX HP	L_1 50% MAX	L. max	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
2	15	0.9"	0.86"	0.60"	0.11"	0.95"	0.93"	"	0.5"(w)	"	N/A	Pipe	Toe of weld line at 2, Both 360°
3	20	1.35"	0.84"	1.15"	0.74"	1.45"	0.93"	"	0.5"(w)	"	N/A	Pipe	intermittent at varying amplitude
6	20	0.53"	1.05"	0.4"	0.91"	0.7"	1.18"	"	Attached	"	N/A	Weld	Toe at 3 weld at 360° at varying amplitudes
7	20	0.48"	1.23"	0.25"	1.21"	0.73"	1.08"	"	Attached	"	N/A	Reflector	indication 6 & 7 weld at toe pipe for 360° Have amplitude reflector/shape
													will indicate 7 towards weld pipe at inside 1" CW



DRAW FULL SCALE PLOT HERE:



REVIEWER Ronald Saunders DATE 1-26-95
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

BM 1-23-95

— — — Possible sound paths when flaw could have been oriented

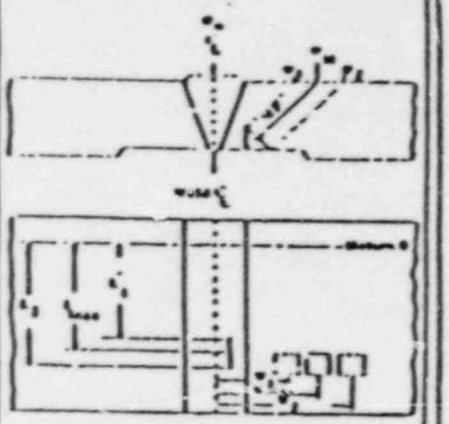
ISI SDI-0994

NUCLEAR ENERGY SERVICES, INC.

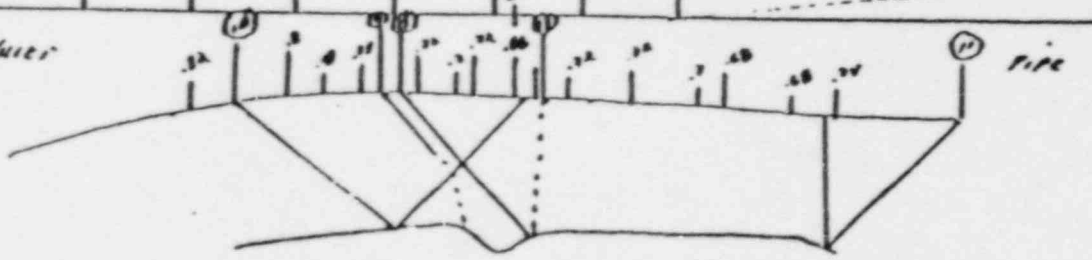
Project No. 5565	Site EANP #1	L Location Pattern B	Date: (Mo/Day/Yr) 1/19/95
Item Identification 1-RC-BC-23		U Location 10"SRH R	Page 4 of 5
Examiner: TC-IA Level II		Angle Used: 0° 45°1 45°2	Attached Cal. Data Sheet: 1st Cal of 4th.
Examiner: TC/IA Level I		Scanning dB: N/A 58 N/A N/A	Thickness .322"
			Diameter (nom.) 6"

HP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0
W max Distance from ℓ to S.U. at maximum response.
W_1 Distance from weld ℓ at 50% of Max amp. (fwd)
W_2 Distance from weld ℓ at 50% of Max amp. (backward)

Ind. No.	% of DAC	W MAX W	W MAX HP	FWD 50% MAX W_1	FWD 50% MAX HP	BACKWARD 50% MAX W_2	BACKWARD 50% MAX HP	L_1 50% MAX	L mrs	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
8	25	0.6	1.14	0.55	1.07	0.75	1.32	*	4"CCW	*	N/A	Reduc	EP eccentric
9	16	0.7	0.96	0.80	0.92	0.50	1.00	*	4"CCW	*	N/A	Reduc	Area Reduction
10	20	1.5	2.11	1.75	2.04	1.40	2.22	*	4"CCW	*	N/A	Reduc	OD geometry changes ID to OD
11	20	2.4	1.65	2.25	1.57	2.60	1.72	*	4"CCW	*	N/A	Pipe	OD geometry changes ID to OD
12	20	0.15	0.70	0.05	0.68	0.25	0.72	*	4"CCW	*	N/A	Pipe	Area Reduction
													* Scan 360° circumferentially
													using probes.



DRAW FULL SCALE PLOT HERE:



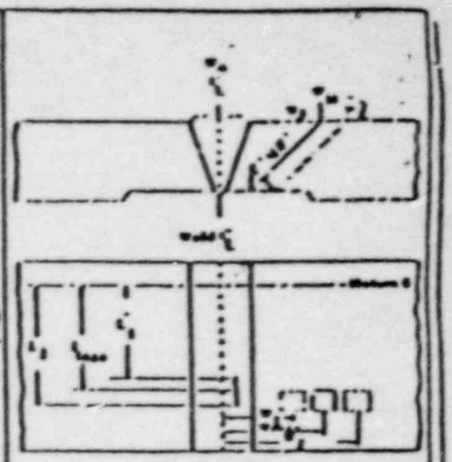
REVIEWER Ronald Saunders DATE 1-26-95
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

RTD-SOP-0112

Project No.	Site	L_o Location	Date: (Mo/Day/Yr)
5565	SAMPLE A1	Point 0	11/1/95
Item Identification: WELD: 1-RC-SW-A1		U_o Location: weld Centerline	Page 5 of 5
Examiner: JC-IA Level II		Angle Head: 0° / 45°s / 45°m / N/A	Attached Cal. Data Sheet: TST 101-0394
Examiner: TQ-IA Level II		Scanning dB: N/A / N/A / 48.00 / N/A	Thickness: .272"
			Diameter (nom.): 6"

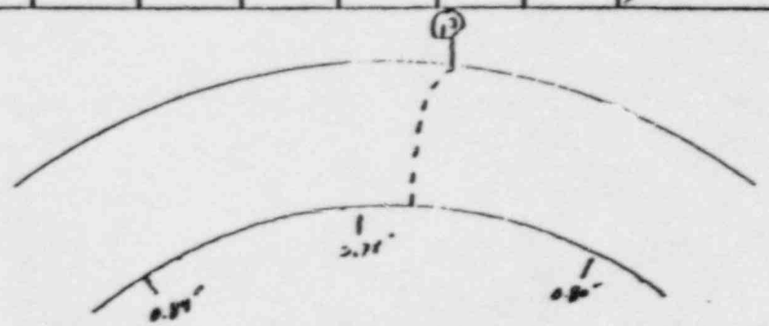
HP Metal Path
RBR Remaining Back Reflection
L Distance from Datum 0

U max Distance from ℓ to S.H. at maximum response.
U_1 Distance from weld ℓ at 50% of Max amp. (fwd)
U_2 Distance from weld ℓ at 50% of Max amp. (backward)



Ind. No.	% of DAC	U MAX U	U MAX HP	FWD 50% U_1	FWD MAX HP	BACKWARD 50% U_2	BACKWARD MAX HP	L_1 50% MAX	L max	L_2 50% MAX	RBR amp	S.U. Loc.	REMARKS
17	50	6"	0.86"	6"	0.68"	6"	0.89"	*	6"cw	*	N/A	1"	2nd Reflection; ESA calculations for 110° in both directions

DRAW FULL SCALE PLOT HERE:



REVIEWER Ronald Saunders DATE 1-26-95
REVIEWER _____ DATE _____
REVIEWER _____ DATE _____

Rev 1 2/95

REPORT OF INQUIRY

Title: SHEARON HARRIS NUCLEAR POWER PLANT:

ALLEGED FALSIFICATION OF RADIATION EXPOSURE REPORTS AND ALLEGED DISCRIMINATION

Licensee:

Carolina Power and Light Company
Raleigh, North Carolina

Docket No.: 50-400

Case Number: 02-86-017

Report Date: December 12, 1986

Control Office: OI:RII

Status: CLOSED

Reported by:

J.L. Robinson, Investigator
Office of Investigations
Field Office, Region II

Approved by:

James Y. Norse, Director
Office of Investigations
Field Office, Region II

RESULTS OF INTERVIEW WITH DR. PAUL TURINSKY
AS PREPARED BY INVESTIGATOR LARRY L. ROBINSON

On July 1, 1986, Dr. Paul TURINSKY, Nuclear Engineering Department, North Carolina State University (NCSU), Raleigh, NC was interviewed in his university office by NRC Investigator Larry L. Robinson. TURINSKY provided the following information in substance:

TURINSKY stated that he has been in the Nuclear Engineering Department at NCSU for six years. He advised that in September of 1983, Patty MIRIELLO was admitted into the graduate program in nuclear engineering at NCSU, but that she only stayed in the program for a month or so before she withdrew. TURINSKY advised that MIRIELLO's withdrawal letter indicated that she missed both the challenge and the income of being employed as an engineer, so she was leaving her graduate studies at NCSU.

TURINSKY advised that in the short time MIRIELLO was enrolled in 1983, she had two separate altercations of which he (TURINSKY) was aware. One such incident involved a technical assistant in the nuclear engineering department, Tom BRACKEN. The other involved another graduate student, Robin HOLIDAY, who was currently employed with the Office of Naval Analysis, in the Washington, DC area. TURINSKY stated that he did not observe either of these altercations, and he did not discipline MIRIELLO, but there had never been any incidents between students and technical assistants during TURINSKY's tenure in the department either before or after MIRIELLO's presence in the graduate program.

TURINSKY stated that his initial impression of MIRIELLO was negative, in that she had a superior, "know-it-all" attitude right from the start. He advised that this impression, combined with the two previously mentioned altercations convinced him that MIRIELLO was a problem student, and that he did not want her in NCSU's graduate program again.

TURINSKY advised that sometime after her withdrawal from the graduate program in 1983, he received a request for a reference on MIRIELLO from a prospective employer of hers. He stated that he gave an honest reference, based on his observation of MIRIELLO, which was not favorable. He stated that he soon got a phone call from MIRIELLO in which she cursed him for giving her a bad reference. He advised that during this phone conversation, he did tell her that, in his opinion, she would have trouble getting a job in the industry. He stated that this was just a frank statement of his opinion of her chances of getting a job with her current personality and attitude, and the statement was in no way a threat. He stated that he has taken absolutely no self-initiated action to make it difficult for MIRIELLO to get a job in industry. He stated that, if asked, he would give his honest appraisal of MIRIELLO, which would not be favorable to her. TURINSKY stated that during this phone conversation with MIRIELLO, he did ask her why she wanted to get her Masters Degree.

TURINSKY stated that, when MIRIELLO re-applied for the graduate program again in late 1985 or early 1986, he had a discussion with the campus attorney, Clausten JENKINS, in which he told JENKINS that he did not want

EXHIBIT 11
Page 1 of 3 Pages

MIRIELLO admitted to the program, and for JENKINS to research ways to deny MIRIELLO admission. TURINSKY stated that JENKINS said that just because TURINSKY did not want MIRIELLO in the graduate program, plus the evidence of the previous altercations involving MIRIELLO, were not sufficient justification to deny MIRIELLO admission.

TURINSKY stated that he told MIRIELLO that he would not be her advisor, but a letter again admitting MIRIELLO to NCSU's graduate program was eventually issued. TURINSKY stated that MIRIELLO never showed up to start classes. TURINSKY advised that he thought that one qualification on MIRIELLO's re-admission was that she clear up a [redacted] to NCSU that she had incurred during her 1983 enrollment.

TURINSKY stated that in November-December 1985, prior to the issuance of the admission letter to MIRIELLO, MIRIELLO felt that she was unjustly being denied admission. He stated that she wrote letters to both him (TURINSKY) and the Chancellor of NCSU, Bruce POULTON, expressing her dissatisfaction at this apparent denial of admission. He advised that campus attorney JENKINS wrote a response, dated December 19, 1985 to MIRIELLO's letter to POULTON.

TURINSKY stated that, to his knowledge, no one at Carolina Power and Light Company (CP&L) ever provided any negative or derogatory information to NCSU admission officials regarding Patty MIRIELLO or her NCSU admission application.

Regarding MIRIELLO's allegation that CP&L threatened to discontinue research grant money to NCSU if NCSU admitted MIRIELLO, TURINSKY stated that both he and Dr. MURTY had been the recipients of many research grants from CP&L. He advised that in May of 1985, CP&L committed $100,000 to NCSU's Electric Power Research Center. He stated that because of this commitment, he did not expect CP&L to renew or extend a two-year, $25,000 per year grant that expired on December 31, 1985. This was Grant No. XT 300000083 (also identified with the number 83-0518). TURINSKY advised that, to his surprise, CP&L did extend this grant from January 1, 1986 through June 30, 1986.

TURINSKY advised that, to his knowledge, CP&L's decision to extend, or not to extend this two-year grant had absolutely nothing to do with NCSU's decision to admit or deny admission to MIRIELLO. TURINSKY stated that he was not certain how MIRIELLO even found out about that two-year grant coming close to expiration at the same time she was applying for re-admission to the graduate program, but he assumed that that was the grant to which she referred when she alleged that CP&L was threatening to discontinue it if NCSU admitted her.

TURINSKY stated that during MIRIELLO's efforts to be re-admitted in late 1985, he had a conversation with her in his office in which he denied her request that he be her advisor if she were admitted. TURINSKY stated that he did have the prerogative to refuse to be her advisor, even if he did not have sufficient justification to deny MIRIELLO admission to the graduate program.

This Results of Interview was prepared on July 7, 1986.

Larry L. Robinson, Investigator

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Page 3 of 3 Pages

RESULTS OF INTERVIEW WITH DR. K. LINGA MURTY
AS PREPARED BY INVESTIGATOR LARRY L. ROBINSON

On July 1, 1986, Dr. K. Linga MURTY, Nuclear Engineering Department, North Carolina State University (NCSU), Raleigh, NC, was interviewed in his campus office by NRC Investigator Larry L. Robinson. MURTY provided the following information in substance:

MURTY stated that back in 1983, when Patty S. MIRIELLO applied for entrance into NCSU's graduate program in Nuclear Engineering, he (MURTY) saw from her application that she had some Nuclear Materials background, and that excited him because his background was in Materials and they could "speak the same language."

MURTY also stated that he was just getting his program started at NCSU at the time, and he was anxious to get more students. He advised that MIRIELLO was to be only the second student in his program at that time. MURTY stated that MIRIELLO was doing a teaching assistantship for Dr. STAM while she (MIRIELLO) was enrolled, but that he (MURTY) discovered that MIRIELLO was not attending many of her scheduled metallurgy classes. MURTY advised that this did not concern him too much, because he figured that MIRIELLO may have already known most of the metallurgy course, and he did not have too much time to monitor her class attendance because he was busy writing grant proposals. MURTY stated that MIRIELLO was carrying out her assistantship duties satisfactorily, to his knowledge.

MURTY stated that he was not aware of MIRIELLO having any altercations with any other students, or with any lab technicians during her brief 1983 enrollment.

MURTY stated that in early 1985, MIRIELLO called him and told him that she wanted to be re-admitted to NCSU and work with MURTY again. MURTY stated that he suggested that MIRIELLO call A.G. BULLARD at Carolina Power and Light Company (CP&L) to see if CP&L could provide a stipend or grant for MIRIELLO. MURTY stated that MIRIELLO called BULLARD and asked for financial assistance from CP&L, but BULLARD referred her back to MURTY. MURTY advised that one problem he had with MIRIELLO's admission to the program in 1985 was that she wanted to work with fuel cladding, while MURTY's project was more an "in core" type project.

MURTY stated that BULLARD called him and asked if he (MURTY) could help MIRIELLO out on her project. MURTY advised that the cladding project was a "modeling project", and not an expensive one, but that MIRIELLO would not be working with MURTY much at all if she was doing the cladding project.

MURTY stated that MIRIELLO met with him, at which time he told her that her application was in order, but that they still needed to see what they could do about financial assistance. He advised that he never told her she was not going to be admitted. He stated that he never received any pressure not to admit MIRIELLO from anyone at CP&L.

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Page 1 of 2 Pages

MURTY stated that he never told MIRIELLO that Dr. TURINSKY had concocted any slander about her. He stated that he had a good working relationship with TURINSKY, and he (MURTY) had heard that MIRIELLO had cursed TURINSKY during a disagreement between them (MIRIELLO and TURINSKY), so he (MURTY) told MIRIELLO that it was not fair for her to curse TURINSKY.

MURTY advised that MIRIELLO had absolutely nothing to do with the decision to award, or not award any grants from CP&L to NCSU. He stated that a two-year grant from CP&L terminated at the end of December 1985. He advised that Jerry PHILLIPS, from CP&L, had already told him (MURTY), in the summer of 1985, that CP&L would not have any money for a new project when the grant term expired at the end of December. CP&L did, in fact, extend the existing grant for six months, on the basis of a student stipend only, but this extension had nothing whatsoever to do with MIRIELLO. He advised that if the grant had not been extended, it would also have had nothing to do with MIRIELLO.

This Results of Interview was prepared on July 11, 1986.

Larry L. Robinson

Larry L. Robinson, Investigator

EXHIBIT 12 -
Page 2 of 2 Pages

RESULTS OF INTERVIEW OF
THOMAS W. BROMBACH
AS PREPARED BY
INVESTIGATOR LARRY L. ROBINSON

On September 23, 1986, Thomas W. BROMBACH, Project Specialist, Inservice Piping, at Carolina Power and Light's (CP&L) Shearon Harris Nuclear Power Plant (SHNPP), was interviewed by NRC Investigators Larry L. Robinson and Gary H. Claxton in the NRC Resident Inspector's Office at SHNPP. The nature of the interview pertained to an allegation of a threat to fire former CP&L employee Patty MIRIELLO if she complained about problems at SHNPP within earshot of NRC Inspectors. BROMBACH provided the following information in substance:

BROMBACH stated that the incident that probably precipitated this allegation from MIRIELLO was an occasion when he (BROMBACH) was having a conversation in his office with Phil TEMPLE, a former CP&L employee who worked for BROMBACH, and, possibly, NRC Inspector Bill Kleinsorge. BROMBACH stated that this conversation was being interrupted by a loud discussion, right outside his office, between Patty MIRIELLO and another individual, possibly Jim STARK, the Authorized Nuclear Inspector. BROMBACH advised that he did not recall the subject of the conversation between MIRIELLO and the other individual, but that he probably told TEMPLE to step outside the office and tell them to take their conversation elsewhere, or else hold down the volume of their voices, so that his (BROMBACH's) conversation with TEMPLE and Kleinsorge would not be disturbed.

BROMBACH advised that he did not know what TEMPLE told MIRIELLO and the other individual on that occasion, but that he (BROMBACH) had never threatened to fire MIRIELLO, nor had he harassed, intimidated, or discriminated against her in any way. He advised that he had never observed, or had any indication that Phil TEMPLE would threaten or intimidate MIRIELLO, either.

BROMBACH advised that he has never, and would have never, instructed MIRIELLO not to go to the NRC with problems. He stated that he did instruct her that if she did have a problem, to bring it to him first for possible resolution before it became necessary to go to the NRC with it. He advised that, at some point in time, he probably had a conversation with Phil TEMPLE about his (BROMBACH's) instructions to MIRIELLO.

BROMBACH stated that Phil TEMPLE had left CP&L over a year ago, and that he (BROMBACH) thought that TEMPLE was somewhere in Ohio, but that he was not sure if TEMPLE was

EXHIBIT 10
Page 1 of 2 Pages

still in the Nuclear industry and that he did not have a definite location for TEMPLE.

This Results of Interview was prepared on September 24, 1986.

Larry L. Robinson, Investigator

EXHIBIT 10
Page 2 of 2 Pages

January 1, 1986

Atomic Safety & Licensing Board (Appeals)
U.S. Nuclear Regulatory Commission
Washington, D.C. 20552

Dear Mr. Kelley,

I have turned over more names of the drug abusers at the Shearon Harris Nuclear Power Plant who have been involved in nuclear safety related work to the Attorney General's Office of the State of North Carolina. Drug abusers are breaking the law and the law is the law even for people working in nuclear power. The U.S.N.R.C was not formed with the intent to act as a shield for an industry with criminal activites overtly present.

I am very shocked to be aware that Larry Robinson of the U.S.N.R.C Office of Investigation has not gotten back to me over the concerns I voiced in September of 1986. These concerns included:

1. Problems with the inservice/preservice inspection of welds at the Shearon Harris Nuclear Power Plant;
2. Weld documentation of both construction and inservice/preservice inspections. These are QA records,
3. Radiation control at the Brunswick Steam Electric Plant,
4. Integrity of supervisory personnel in Health Physics at both the Shearon Harris Nuclear Power Plant and the Brunswick Steam Electric Plant,
5. Overexposure cover up at the Brunswick Steam Electric Plant.

In this letter I will add to the above list and I hope you

EXHIBIT 2 –
Page 1 of 11 Pages

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will help me get some answers / get something done about these matters.

As you may or may not know I have offered to submit to a polygraph, PSE, or truth serum concerning the drug information and the information I gave to Larry Robinson of the U.S.N.R.C. OI. I also believe that the results of such an exam should be made public to the rate payer so that they see what they are contributing to in the way of corruption.

I will now state once again my knowledge of problems at Carolina Power & Light's nuclear plants. This is a partial knowledge, since I can certainly go into further detail and make it more complete.

(1). Improper inservice inspection, ultrasonic inspection, of welds on safety-related piping at the Shearon Harris Nuclear Power Plant. A copy of attachment #3 to this letter was provided to Larry Robinson with the above indication of wrong doing. Note please, that attachment #1 describes a weld of 0.172" thickness on a 6" nuclear service line. This is a serious matter. Two Level III NES (Nuclear Energy Services) NDE inspectors argued over these ultrasonic results. They had conflicting opinions. Ultrasonic exams are a back up to radiography. Hopefully, the ultrasonic exam catches what the x-ray exam misses.

Inspection sheet A was turned into me and was an official document which could only be changed through a revision process according to plant procedures. Ron Saunders, the NES lead Level III ultrasonic inspector at Shearon Harris decided it didn't look right. He took the sheet back. He then argued with the Level III ultrasonic inspector (NES corporate) about what was on the sheet. When it looked "right" the terminology that is; Ron Saunders returned it to me as sheet B which is attachment #2.

Mr. Berry ←

Note, that the mentioning of a weld or repair weld was eliminated from page 4 of the original Mr. Berry turned in.

EXHIBIT 2
Page 2 of 11 Pages

2-A

reso umor was the listings of ur alions in this weld, referring specifically to indications #9 & #10.

This is questionable. This is in violation of the ASME Boiler and Pressure Vessel Code, Section XI, Article IWB-3000, 'Acceptance Standards for Flaw Indications'. This is the law as indicated in the Code of Federal Regulations. A direct quote:
(1980 Edition for the Shearon Harris Preservice Inspection)

IWB-3112 Acceptance

(a) Components whose examination either confirms the absence of or reveals flaw indications that do not exceed the stand of Table IWB-3410-1 shall be acceptable for service, provided the verified flaw indications are recorded in accordance with the requirements of IWA-1400(k) and IWA-6220 in terms of location, size, shape, orientation, and distribution within the component.

IWA-1400(k) Owner's Responsibility

(k) recording of examination and test results that provide a basis for evaluation and facilitate comparison with the results of subsequent examinations;

Please look at this also:

IWA-1400(l) Owner's Responsibility

(l) retention of all inspection, examination, test, and repair and replacement records for the service life of the component or system

even though IWA-6000, Records and Reports, is written more with the preservice inspection of an operating plant in mind; it is still emphasized that conditions be (reported) recorded. indications found during a preservice inspection are conditions that must be faithfully recorded.

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3-1-1

A file was kept by Ron Saunders of NES of all the inservice inspection records that were changed on the side without a revision as required by procedure to be made. All of this is under CP&L's so called quality assurance program. The third party authorized nuclear inservice inspector, Jim Hart; raised hell about this revision pocess and that it shouldn't be circumvented. Jim Hart and I both raised hell and we both felt pressure and intimidation from CP&L, Namely Brombach and Temple. (Phil Temple was a CP&L engineer in Inservice Inspection

I requested in Sept. 1985 that the U.S.N.R.C. OI obtain the file of the orginal reports that were replaced by other inservice reports (in the permanent plant record) and compare what was orginally written about weld conditions with what was actually in the permanent plant QA records. This was never done.

I want to know why, Mr Kelley? I am an engineer with credentials, integrity, and evidence. Why is this being ignored? Are the orginals in that file going to disappear? All I am asking is that the file be thoroughly examined. How much time does it take to look at a 100 sheets? Not much.

The USNRC is supposed to be looking at safety concerns, fairly. I have offered to submit to a polygraph, PSE or truth serum. I felt unjust discrimination by CP&L during the hearing with that revengeful lover crap. Would a man have been called a revengeful lover? I'll take a polygraph concerning the engineering facts and the law. Will anyone from NES, CP&L or CANTON do that? See Attachment # 3.

... question I presented to Mr. Robinson was:

2./ Overt negligence in health physics practices at the Brunswick nuclear plant with jeopardized the safety of employees. Intimidation in the way of watching my movements and contacts at the plant. Falsification of health physics records.

I also discussed with Mr. Robinson this matter:

3/ That I was asked to lie about my dose, by Health physics supervision, at Shearon Harris on the NRC form 4 which is concerned with Occupational Radiation Exposure. The nuclear engineering department at the North Carolina State University had lost my exposure records. After requesting an estimate several times and having gotten no where; my supervision stated that I drop the matter and state (lie) on the form that I had no exposure at the university. I called Mr. Prevatte the U.S.N.R.C inspector on site at Shearon Harris and asked him what I should do with this ridiculous order by manageme

I also dicussed with Mr. Robinson this matter:

4/ That I was told to handle U.S.N.R.C inspectors on the Pre-service Inspection the right way by primarily Tom Brombach. That is to make sure that everything was or looked right, in so many words. During one visit by the U.S.N.R.C to Tom Brombach; the inspector and Tom Brombach were in a discussion with the office door open. The authorized nuclear in-service inspector and I (Mr Stark was the ANII) were discussing CP&L's policy of stating when pre-service inspection of a weld was complete. Mr. Stark, I believe, was stating that if construction documentation indicated that a weld had been re-surfaced after the pre-service inspection that it would require another pre-service inspection and that both construction and pre-service inspection documentation must agree. Sometimes these documents didn't agree

The U.S.N.R.C. inspector, I was later told by Tom Brombach; had been listening to the ANII and I while Tom said

that he was hyper to convince the U.S.. N.C. inspector that there were no problems. Phil Temple, second in command to Tom Bernback, told me afterward that I had pissed Tom Bernback off so did the ANII by the discussion in front of the U.S.NRC. Mr. Temple said that if it happened again that I would probably be fired. Tom Bernback afterward told both me and Jim Stark to keep our discussions to ourselves when the U.S. NRC was around.

5./ I also told Larry Robinson that Bernback said one morning around 7:30 AM that an NRC inspector was coming and that everything was or was to look right before he arrived in an hour or so. I questioned Bernback as to how he knew about the USNRC visit. It sounded as though it might have been an unannounced visit and that Tom Bernback might have been tipped off. Tom Bernback went further and said that he knew the head man in Atlanta and that he had been called by him. I want to know if that was an unannounced visit. A simple Yes or No will do. There is no inspection report in the Wake County Public Library (for the last couple of years the reports aren't there) I would appreciate knowing if the visit was unannounced and a copy of the report. I gave Mr. Robinson the approximate time of the visit and I described the inspector. Mr. Robinson recognized who I was discussing. How much effort is needed by the U.S.N.R.C. to clear the air on this concern I brought into the open? There were only a few U.S.N.R.C. visits to the Shearon Harris inspection at Shearon Harris while I was on Shearon Harris inspection at Shearon Harris.

EXHIBIT 2
Page 1 of 11 Pages

To the best of my knowledge, I have presented you with the truth. During the Oct. ASLB hearing both you, Mr. Kelley, and I were aware of CP&L beating a dead horse over and over again. I am referring to the statement that I have a Master's degree. Well I am still saying that. It's accepted practice even according to the U.S.O.P.M. to do so. The OPM will give an individual credit for having a Masters degree completed if it is within 6 months of completion. That is directly printed on the attached documentation to the federal register application to help clarify the basis for different GS levels. Beside it being accepted practice; I did allow my resume to become part of the USNRC ASLB hearing record. It states in black and white on the resume that the thesis was in review.

Since CP&L was so concerned with what I said, There is a copy of Mr Bomback's testimony on attachment #4 which includes problem areas with Mr Bomback's testimony. Throughout the testimony there are notations indicating problems with the truthfulness & lack of truthfulness of Tom Bomback

I have been informed by an executive of a nuclear firm concerned with Unit 1 at Three Mile Island in the last month that Unit 1 has steam generator problems. Mr. Kelley, Conam did all of Unit 1's steam generator eddy current inspections. Are there leaks in areas of tubes which CONAM has just inspected in late 1984 and early 1985? Was anything missed because people were high? I'm curious, aren't you? Or was I misinformed

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I also believe that the ASLB judges may have missed something which occurred during my testimony and questioning by the CP&L attorney: Thomas Baxter. I believe Mr. Baxter was covering up and I allege he was doing so which is in conflict with his being an officer of the court. It can also be considered an obstruction of justice, since this was a hearing before representatives of the United States and the State of N. Carolina being a participant.

To explain more fully to the best of my recollection; Mr. Baxter initiated a line of questing concerning what I saw at lunchtime in the Daniel or construction parking lot (over lunchtime, I guess from somewhere in 11:30 to about 12:30) Mr. Baxter stated that Daniel construction workers couldn't go out to the parking lot at lunch time. I replied or asked him, "then who did I see?" He immediately afterward changed the subject and I believe he started to question me about something else. At that point I realized that he didn't want anymore to come out. He knew Daniel construction workers who were CP&LFT couldn't be there in the lot at lunchtime, I allege. But, contractor engineers like myself could go out to the lot as could CP&L personnel who also parked in the construction lot. I think I am correct in stating that Daniel construction engineers, Westinghouse, (E.base?), T&B and other contractor and supervisory personnel were permitted to go to their cars at lunch. I believe the questioning line was changed to keep that out of the record. It was probably engineers and supervisory personnel out in the lot getting high at lunch and not the Daniel Craft...

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since I have received no results from the U.S.N.R.C. OI in Atlanta; I request that you seek to have the following matter investigated.

6.) During the Sept. 1985 ASLB (appeals) hearing and in your presence I was questioned by Thomas Baxter the CP&L legal representative. He asked me about attending graduate school in nuclear engineering at the North Carolina State University (NCSU). I did let it slip that I would be working on a thesis project with Dr. Nusty. That is in the hearing record.

In October of 1985, directly after the ASLB hearing on drug abuse; I went to see Dr. Nusty who is the graduate student admissions administrator in nuclear engineering at NSCU. I asked when I would be given admission once again in writing. He said that he didn't know if I would be re-admitted. He said that CP&L called him after/during the hearing and cancelled a research contract with him. (It was I believe Dr. Ballard from CP&L he said) Dr. Nusty also stated that Dr. Turinsky had corrected some slander that I had cursed him profusely over a bad reference that he had given about me.

This was incredibly embarassing and unprofessional. Immediately, I went next door to Dr. Turinsky's office and I asked him what was going on. I brought up the subject of my testimony at the ASLB hearing the previous week. He said that it would come out in time that I was lying according to what he had learned. I said, I had offered to take a polygraph. He then, to the best of my knowledge, went on to say that nobody in the industry would hire me. He said that I shouldn't come back into graduate school in nuclear engineering and that he would not work with me on a thesis topic and that he doubted that any other professors would have anything to do with me. I said then that N. Carolina has a blacklist law and that the honest people should remain in the industry.

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In 1983 Dr. Turinsky gave a negative reference to Knolls Atomic Power Lab concerning me. Prior to that reference I had no conversation with Dr. Turinsky (the NCSU nuclear engineering department head) except for the welcome for a new student. Since I was informed by KAPL as to the content of the reference, (this is documented) I requested that Dr. Turinsky not give any more negative references out based on hearsay. I stated that if he couldn't agree to that he had better cease until that nonsense since it cost me an opportunity to work for the United States and $30,000 year salary. Dr. Turinsky was never cursed. I allege that he decided to correct this slander after conferring with CP&L in retaliation for my testimony at the ASLB. He had agreed the matter would be dropped in 1983. Most conveniently for CP&L it should reappear and disrupt my educational goal. I believe it is retaliation by CP&L, your licensee, in collusion with the NCSU nuclear engineering department another USNRC licensee to harass a witness at a federal hearing from giving further testimony and from backing up what has been given. It was also convenient for CP&L to drop Dr. Burty's research contract.

I hope that the U.S.N.R.C will look into this matter and get it stopped. I can't return to graduate school and take this kind of treatment. Oh, yes; Dr. Turinsky also stated that I was emotionally disturbed. My only reply is that I am not emotionally disturbed to the extent that I must abuse drugs at a nuclear facility, ignore the abuse as CP&L does in its worthless drug abuse measures, or to condone the abuse at a nuclear plant.

Attachment #5 plainly shows that harassment/intimidation doesn't seem to affect me. I just ask more questions. Isn't it cheaper for the U.S.N.R.C to clean up the nuclear business with a strict policy of regulation rather than what is currently going on?

Sincerely
Patty Stucki

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SUMMARY OF INQUIRY

On May 23, 1986, at the request of the U.S. Nuclear Regulatory Commission (NRC), Regional Administrator, Region II, the NRC Office of Investigations Field Office, Region II (OI:RII) initiated an inquiry into allegations brought forth by a former Carolina Power and Light Company (CP&L) employee, to wit: (1) A CP&L Health/Physics (H/P) supervisor at the Shearon Harris Nuclear Power Plant (SHNPP) had allegedly instructed the alleger to falsify an NRC Form 4 (Occupational External Radiation Exposure History); (2) A CP&L employee had allegedly threatened the alleger with being fired if the alleger talked about problems at SHNPP within earshot of NRC Inspectors; (3) A CP&L representative allegedly threatened to terminate a financial research grant to North Carolina State University (NCSU) if NCSU officials admitted the alleger into the graduate program in Nuclear Engineering at NCSU; and (4) CP&L allegedly routinely falsifies the NRC Form 4s of CP&L employees at SHNPP who have had exposure histories at CP&L's Robinson and Brunswick Nuclear Plants.

OI:RII analysis of, and inquiry into, the aforementioned allegations determined that, with respect to allegation (1), the alleger's H/P supervisor at SHNPP had received written notification from NCSU that the alleger had not been monitored for radiation exposure while at NCSU. Therefore, an entry of 0.00R dose was made on an initial NRC Form 4, pertaining to the alleger's period of enrollment at NCSU. When the alleger protested, the H/P supervisor told the alleger that she might as well sign the Form 4 as it was, because if CP&L went back again to NCSU for a re-check of their records, the result would probably be the same. However, the H/P supervisor agreed to another request, by CP&L, for NCSU to search their records again. This time NCSU found that the alleger had been monitored, on a visitor's thermoluminescent dosimeter (TLD), as opposed to a student's TLD, and NCSU reported recording a [redacted] exposure for the alleger. A new Form 4 was prepared, reflecting the alleger's [redacted] dose at NCSU.

Allegation (2): The CP&L employee who allegedly directly threatened the alleger with being fired was no longer a CP&L employee and was unable to be located for interview. However, the immediate supervisor of this employee, while the employee was still working at CP&L, stated that he had never observed this employee threatening, harassing, or intimidating the alleger in any way. The supervisor stated that he, himself, had never threatened or intimidated that alleger in any way. The supervisor knew the alleger, and stated that this allegation probably stemmed from an incident where the alleger was immediately outside the supervisor's office, engaging in a loud, disruptive conversation that was interfering with the supervisor's simultaneous conversation, in his office, with an NRC inspector and the employee who allegedly directly threatened the alleger. The supervisor stated that he told this employee to go out and tell the alleger to either hold down the volume of her discussion, or to take the discussion elsewhere, so that she would not be interrupting the supervisor's discussion. The supervisor stated he did not know what the employee said to the alleger, but that incident, which was precipitated by the alleger in the first place, was probably the basis of the alleger's allegation. The supervisor stated that he had instructed the alleger to come to him first if she had any problems at SHNPP, since he was her second line supervisor at the time of this incident, in order to try to resolve the problem at that level. However, he stated that he never instructed her that she could not go

to the NRC with her concerns, and again, that he never threatened to fire her if she talked about problems at SHNPP within earshot of NRC inspectors.

Allegation (3): The NCSU Nuclear Engineering Department head and another professor were interviewed by OI and both denied that the alleger's admission, or non-admission, to the graduate program in 1985 had any effect whatsoever on any CP&L research grant to NCSU. Both these NCSU officials stated that no CP&L employee or representative ever stated or indicated any any that a CP&L grant would be terminated if the alleger was admitted to graduate school. The grant that was scheduled to expire at the end of December 1985 was extended through June 1986. Also, although the head of NCSU's Nuclear Engineering Department did not want the alleger re-admitted to his department because of two separate altercations within the department involving the alleger back in 1983, he stated that a letter of admission was sent to the alleger but she did not show up for classes.

Allegation (4): In view of the general, non-specific nature of this allegation, no investigation was conducted by OI. General, overall NRC staff review of H/P records at SHNPP revealed no major discrepancies.

DETAILS OF INQUIRY

Purpose of Inquiry

This Inquiry was initiated on May 23, 1986, at the request of the Regional Administrator, Region II (Exhibit 1), to investigate alleged wrongdoing as follows: (1) A Carolina Power and Light Company (CP&L) Health Physics Supervisor allegedly instructed Patty MIRIELLO to falsify her NRC Form 4, entitled Occupational External Radiation Exposure History, (2) CP&L employee Phil TEMPLE allegedly intimidated MIRIELLO by telling her that she would probably be fired if she talked about possible problems within earshot of NRC Inspectors, (3) CP&L employee Dr. BULLARD was allegedly "blackballing" MIRIELLO to admission officials at North Carolina State University's (NCSU) graduate school by allegedly threatening to terminate a financial grant if these officials admitted MIRIELLO to NCSU, (4) CP&L allegedly routinely falsifies the NRC Form 4s of CP&L employees working at Shearon Harris Nuclear Power Plant (SHNPP), who have had exposure histories at CP&L's Robinson and Brunswick Nuclear Plants.

Background

The alleger, Patty MIRIELLO, is a former CP&L employee who was terminated by CP&L on August 30, 1985, for not working in cooperation with her co-employees. MIRIELLO was interviewed by OI:RII on September 11, 1985, regarding her allegations of falsification of Pre-Service Piping Inspection Documentation by Nuclear Energy Services, Inc. (NES) at SHNPP (OI Case No. 02-85-021). Subsequent to this interview, MIRIELLO wrote a letter to the Atomic Safety Licensing Board (ASLB), explaining and documenting, in detail, the allegations that are the subject of this inquiry. MIRIELLO has testified before the ASLB regarding additional allegations that she has brought forth, pertaining to the use of controlled substance (drugs) on site at SHNPP.

Results of Inquiry

Allegation No. 1: CP&L Health Physics Supervisor Allegedly Directed MIRIELLO to Falsify NRC Form 4

In her January 1, 1986, letter to the ASLB (Exhibit 2), MIRIELLO alleged that her HP Supervision, not further identified, asked her to lie about her dose on the NRC Form 4, regarding her Occupational Radiation Exposure.

OI interviews and record checks at SHNPP and NCSU determined the following:

Steve M. FROST (Exhibit 3) and Vera POE (Exhibit 4), CP&L co-workers of MIRIELLO, in the Dosimetry Section at SHNPP, were interviewed by OI at SHNPP on July 1, 1986. Both advised that they had initialed Section 10 of an NRC Form 4 signed "Patty S. Miriello," and dated May 20, 1985 (Exhibit 5). POE stated that her initials indicated that the information on that Form 4 had been entered into the CP&L computerized Radiological Information Management System (RIMS). FROST advised that he had filled out the Form 4, in its entirety, before MIRIELLO signed it.

INVESTIGATOR'S NOTE: This Form 4 showed that MIRIELLO had received [redacted] dose while at NCSU during the period September 12, 1983 and December 1, 1983.

FROST advised that MIRIELLO's supervisor in Dosimetry at SHNPP while she was there was John O'HALLORAN.

O'HALLORAN was interviewed by OI on July 2, 1986, at SHNPP (Exhibit 6). He advised that he was MIRIELLO's supervisor in dosimetry for approximately a six-month period in early 1985. He stated that, because of the dissension being caused in the Dosimetry Section by MIRIELLO, she was in the process of being transferred to the Radwaste Section, and the necessary paperwork, to include the preparation of an NRC Form 4, was being done in order to obtain a Thermoluminescent Dosimeter (TLD) for her. O'HALLORAN advised that the initial Form 4 on MIRIELLO was filled out by Dosimetry Technician John DEESE, and that this Form 4 showed a [redacted] dose for MIRIELLO while she was at NCSU. O'HALLORAN advised that he recalled getting a letter from the Radiation Monitoring Section at NCSU, stating that MIRIELLO had not been monitored while she was at NCSU, so he (O'HALLORAN) had no problem with the fact that [redacted] dose was entered on the initial Form 4 that had been filled out on MIRIELLO. O'HALLORAN could not produce a copy of this letter from NCSU.

O'HALLORAN advised that MIRIELLO objected strongly to this statement from NCSU that she had not been monitored while she was a student there, and that she stated that she had worn a TLD while at NCSU. O'HALLORAN stated that he had no reason to doubt that MIRIELLO probably wore a TLD at NCSU, because people tend to remember things like that, but he also told MIRIELLO that even if CP&L went back to NCSU with another request for Radiation Monitoring Date on MIRIELLO, that NCSU would probably come back with the same answer as before. O'HALLORAN stated that that comment was the only thing he said that MIRIELLO could have possibly interpreted as him directing her to sign a falsified Form 4.

O'HALLORAN advised that he did eventually receive a second letter from NCSU, stating that MIRIELLO had received [redacted] dose while at NCSU. He stated that another Form 4 (Exhibit 5) was prepared, showing the [redacted] dose MIRIELLO received at NCSU, and that MIRIELLO was satisfied with this Form 4. He stated that he destroyed the initial Form 4 when he received the second letter from NCSU.

On July 2, 1986, D. W. MORGAN, Radiation Protection Officer, NCSU, was interviewed by OI (Exhibit 7). MORGAN stated that when his office received the first request for Radiation Monitoring Data on MIRIELLO while she was a student at NCSU, he checked his records of student TLDs for the period indicated on the request, and found no record of MIRIELLO being monitored for that period. He advised that his office advised CP&L of this fact by letter dated April 18, 1985 (Exhibit 8). MORGAN stated that, upon receiving a second request from CP&L, and a letter from MIRIELLO explaining that she had both a temporary and permanent TLD at NCSU, he again searched his records, this time including a search of visitor TLDs as well as student TLDs, and found that MIRIELLO had received [redacted] dose while at NCSU. He stated that his office advised CP&L of this fact by letter dated May 13, 1985 (Exhibit 9).

Allegation No. 2: CP&L Employee Allegedly Intimidated MIRIELLO by telling her that she would probably be fired if she talked about SHNPP problems within earshot of NRC

On September 23, 1986, Thomas W. BROMBACH, Project Specialist/Inservice Piping, CP&L, at SHNPP, advised (Exhibit 10) that he recalled one occasion when he was talking to an NRC Inspector in his (BROMBACH's) office when their conversation was disturbed by some loud conversation between MIRIELLO and someone else, possibly the Authorized Nuclear Inspector (ANI). BROMBACH stated that he instructed Phil TEMPLE, his CP&L Assistant, to tell MIRIELLO, and to whoever she was talking, to hold down the volume of their voices or take their discussion elsewhere, so that his (BROMBACH's) discussion with the NRC Inspector would not be interrupted. BROMBACH advised that he did not know exactly what TEMPLE told MIRIELLO on that occasion. BROMBACH stated that neither he, nor to his knowledge, TEMPLE had ever threatened to fire MIRIELLO if she talked about problems at SHNPP within earshot of NRC Inspectors. BROMBACH stated that he had told MIRIELLO that he preferred for her to bring any problems to him first, for possible resolution, before going to the NRC, but that he had never told MIRIELLO that she could not express her concerns to the NRC. BROMBACH stated that TEMPLE no longer was employed by CP&L, having left about a year ago to go to work for a contractor up North somewhere.

INVESTIGATOR'S NOTE: Efforts to locate and interview TEMPLE were negative.

Allegation No. 3: CP&L Allegedly "Blackballed" MIRIELLO by Threatening to Terminate Financial Grant to NCSU if NCSU Admitted MIRIELLO to Graduate School

On July 1, 1986, Doctors Paul TURINSKY (Exhibit 11) and K. Linga MURTY (Exhibit 12), Nuclear Engineering Department, NCSU, were interviewed by OI. Both TURINSKY and MURTY stated that MIRIELLO's admission, or non-admission, to the Graduate School at NCSU had absolutely nothing to do with any CP&L decision to award, or not to award, Grant money to NCSU. TURINSKY advised that in May 1985, CP&L committed $100,000 to NCSU's Electric Power Research Center. TURINSKY stated that because of this commitment, he did not expect CP&L to renew or extend a two-year, $25,000 per year Grant (No. XT 300000083) that was due to expire December 31, 1985. He advised, however, that this Grant was extended from January 1, 1986 to June 30, 1986, but it had nothing whatsoever to do with MIRIELLO.

MURTY stated that Jerry PHILLIPS, from CP&L had already told MURTY, in the summer of 1985, that CP&L would probably not have any money for a new project when the Grant expired in December 1985. MURTY advised that CP&L did, in fact, extend the existing Grant for six months, on the basis of a student stipend only, but that this extension had nothing whatsoever to do with MIRIELLO.

TURINSKY stated that when MIRIELLO was a student in the Nuclear Engineering Department back in 1983, she caused problems on two separate occasions during her short tenure in the Department. He advised that she was only in the program for a month or so, but during that time, she had altercations with another graduate student and a Technical Assistant. TURINSKY admitted that when MIRIELLO applied for admission to NCSU again in 1985, he did not want her

in the program. He advised that he refused to be her advisor, which he had a perfect right to do, and that, eventually, a letter of admission was issued to MIRIELLO, but that she never showed up for classes.

TURINSKY and MURTY both stated that Dr. BULLARD, from CP&L, have never threatened either one of them with termination of a CP&L Grant if they were to admit MIRIELLO to NCSU. They advised that no one from CP&L had ever made any such threat or insinuation to either of them.

Allegation No. 4: CP&L Allegedly Routinely Falsifies the NRC Form 4s of their employee at SHNPP

In view of: (1) The general, non-specific nature of this allegation, (2) Region II staff inspection of H/P records at both SHNPP and Brunswick Steam Electric Plant which revealed no discrepancies, and (3) The fact that there have been no complaints, other than MIRIELLO's received by NRC, Region II, from CP&L employees at SHNPP regarding falsification of Form 4s or H/P records of any type, OI investigation into this allegation was considered counterproductive and was not conducted.

This Inquiry is CLOSED.

LIST OF EXHIBITS

1. Memorandum of Request for Investigation, dated May 7, 1986
2. Handwritten letter from MIRIELLO to the ASLB (Judge KELLEY), dated January 1, 1986
3. Results of Interview of Steve M. FROST
4. Results of Interview of Vera POE
5. NRC Form 4, dated May 20, 1985
6. Results of Interview of John O'HALLORAN
7. Results of Interview of D. W. MORGAN
8. Letter from NCSU to CP&L, dated April 18, 1985
9. Letter from NCSU to CP&L, dated May 13, 1985
10. Results of Interview of Thomas W. BROMBACH
11. Results of Interview of Dr. Paul TURINSKY
12. Results of Interview of Dr. K. Linga MURTY