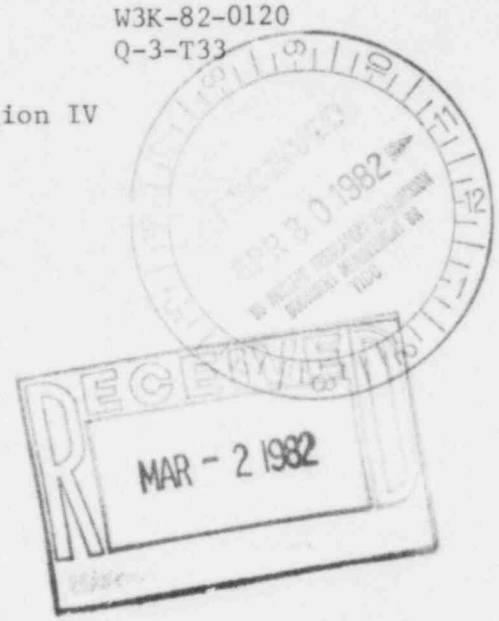
LOUISIANA POWER & LIGHT / 142 DELARONDE STREET
P. O. BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345
MIDDLE SOUTH UTILITIES SYSTEM

February 26, 1982

W3K-82-0120
Q-3-T33



Mr. John T. Collins, Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Mr. John Woodward
Factory Mutual Engineering
12 Perimeter Center East, Northwest
Suite 1200
Atlanta, GA 30346

Mr. J. W. Morvant
Louisiana Department of Labor
P. O. Box 44063
Baton Rouge, LA 70804

Subject: Waterford SES Unit #3
Repair Program for the Steam Generator Tube Plugging

Re: 1) Docket No. 50-382
2) LP&L Letter W3K-82-0092

Gentlemen:

The purpose of this letter is to further clarify the reasons for plugging the three (3) steam generator tubes as described in the enclosure attached to the letter in reference 2. In addition, this letter describes the reasons for plugging two (2) additional tubes which had reportable through wall discontinuity indications. Also a revised traveler is attached for your information.

A preservice multifrequency eddy current examination of Steam Generators #1 and #2 were performed in October and November 1981 at the Waterford Steam Electric Station, Unit #3. The examination was requested by Ebasco Services, Incorporated, an agent for Louisiana Power & Light Company, to provide information on the preservice condition of the tubing and establish a baseline for future inservice examinations in these steam generators.

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The u-tube steam generator bundle consists of 9,350 three-quarter inch (3/4") outside diameter, .048" average wall thickness nickel-chromium-rion (inconel) alloy tubes. The examination was performed with the steam generators installed in the containment building in their designed operational (vertical) position using remote fixturing and probe pushing equipment.

In steam generator #1 there was one (1) tube, Row 1 Line 173; and two (2) tubes in steam generator #2; Row 1 Line 165 and Row 1 Line 169 which were obstructed in the u-bend area and could not be examined. The examination was originally from the inlet tube sheet and those tubes were re-examined from the opposite end to the obstruction in the u-bend. These three (3) tubes will be plugged as no baseline inspection could be established in this area.

One (1) tube in steam generator #1, Row 90 Line 34, had a 21% through wall discontinuity indication originating on the outside diameter of the tube. The indication was located at the fifth egg crate up from the tube sheet on the outlet side minus one (1) inch. All other tubes examined in steam generator #1 were acceptable under the provisions of the United States Regulatory Commission Regulatory Guide 1.83.

One (1) tube in steam generator #2, Row 91 Line 61, had a 32% through wall discontinuity indication originating on the outside diameter of the tube. The indication was located at the seventh egg crate up from the tube sheet on the outlet side minus eighteen (18) inches. All other tubes examined were acceptable under the provisions of the United States Regulatory Commission Regulatory Guide 1.83.

Louisiana Power & Light has evaluated the conditions described above and has decided to plug the two (2) additional tubes with reportable through wall discontinuities as dispositioned on nonconformance report W3-3179. If there are any questions regarding this activity, please advise.

Yours very truly,

T. F. Gerrets

T. F. Gerrets
Quality Assurance Manager

TFG:RAH:grf

cc: L. L. Bass W. M. Morgan, J. Woods, L. A. Stinson, L. V. Maurin, D. B. Lester, R. K. Stampley, P. V. Prasankumar, F. J. Drummond, Central Records, Nuclear Records

E-3078 A

DATE 2-5-82

FIELD ENGINEERING SERVICES
TRAVELER

PAGE	CONTRACT	JOB AND CONTROL NUMBER	TRAV. REV.
1 of 3	74270	99729515-001	2

CUSTOMER	PROC. ENG.	CHECKED BY	Q.A. ENG.	TYPE MATERIAL
LP&L - WATERFORD III SES	E. Wennerstrom		R.T. Johnson 2/9/82	

PART NAME	MATERIAL CODE	DRAWING NUMBERS
STEAM GENERATOR #1 & #2	J4753	TUBESHEET LAYOUT FOR CONTRACT No. 74270

TRAVELER CONTENTS	CONTINUE FROM
STEAM GENERATOR TUBE PLUGGING	N/A

OPER NO.	SEQ. NO	INSP.	SIGN OFF	OPERATION DESCRIPTION
				FAR NO. 9270-239

* Tubes ADDED PER SUPP 234A TO Referenced FAR. R.T. Johnson 2-18-82 E. Wennerstrom 2-18-82

ANY MATERIAL IDENTIFICATION NUMBERS REMOVED DURING FABRICATION MUST BE REPLACED IMMEDIATELY

REF.: ENGINEERING PROCEDURE # EP-74270-100 REV. 0

10 — ESTABLISH WORK AREA AND EQUIPMENT NECESSARY TO INSTALL AND WELD TUBE PLUGS.

L.P.&L.: QC-H.P
A.N.I.-H.P — Review of documentation - Ken R Pay ANII 2/18/82

15 # — VERIFY LOCATION OF TUBES TO BE PLUGGED:

	HOT LEG	COLD LEG
S/G #1 TUBE # L-173/R1		
S/G #2 TUBE # L-165/R1		
S/G #2 TUBE # L-169/R1		
*S/G #1 TUBE # L-34/R 90		
*S/G #2 TUBE # L-61/R 91		

20 — BRUSH I.D. OF SUBJECT TUBES ON BOTH HOT & COLD LEG SIDE OF STEAM GENERATOR USING CE-FES SUPPLIED WIRE BRUSH AND AIR MOTOR:

	HOT LEG	COLD LEG
S/G #1 TUBE # L-173/R1		
S/G #2 TUBE # L-165/R1		
S/G #2 TUBE # L-169/R1		
*S/G #1 TUBE # L-34/R 90		
*S/G #2 TUBE # L-61/R 91		

NOTE: All completed operations must be signed off, dated and closed out by designated personnel

E-3075 B

FIELD ENGINEERING SERVICES TRAVELERS

CONTINUATION SHEET	DRAWING NO.	PAGE	CONTRACT	JOB AND CONTROL NUMBER	TRAV. REV.
	SEE PAGE #1	2 OF 3	74270	99729515-001	1

OPER NO.	SEQ. NO	INSP.	SIGN OFF	OPERATION DESCRIPTION
				FAR NO. 9270-239 * Tubes Added Per Supp 239A To Referenced FAR. RT Johnson 2-18-82 E Wennerstrom 2/18/82
				ANY MATERIAL IDENTIFICATION NUMBERS REMOVED DURING FABRICATION MUST BE REPLACED IMMEDIATELY
	25			ROLL I.D. OF SUBJECT TUBES TO SIZE THEM FOR THE TUBE PLUGS ON BOTH HOT & COLD LEG SIDE OF STEAM GENERATOR USING CE-FES SUPPLIED TUBE ROLLER & AIR MOTOR:
				S/G #1 TUBE # L-173/R1 HOT LEG ______ COLD LEG ______
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/R91
	30	#		INSPECT I.D. SIZING AND CLEANING:
				S/G #1 TUBE # L-173/R1 HOT LEG ______ COLD LEG ______
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/R91
	35			INSERT TUBE PLUGS INTO SUBJECT TUBES ON BOTH HOT & COLD LEG SIDE OF STEAM GENERATOR AND DRIVE THEM INTO TUBES USING CE-FES SUPPLIED SEATING HAMMER ~~& AIR POWERED DRIVER~~:
				S/G #1 TUBE # L-173/R1 HOT LEG ______ COLD LEG ______
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/R91
	40	#		VERIFY INSTALLATION & LOCATION - RECORD S/N & MATERIAL CODE #:
				S/G #1 TUBE # L-173/R1 HOT LEG ______ COLD LEG ______
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R 90

VOID RT Johnson 2-11-82 E Wennerstrom 2-11-82

NOTE: All completed operations must be signed off, dated and closed out by designated personnel

FIELD ENGINEERING SERVICES
TRAVELERS

E-3073 B

CONTINUATION SHEET	DRAWING NO. SEE PAGE #1	PAGE 3 OF 3	CONTRACT 74270	JOB AND CONTROL NUMBER 99729515-001	TRAV REV. 1

OPER NO.	SEQ NO	INSP.	SIGN OFF	OPERATION DESCRIPTION
				FAR NO. 9270-239

* Tubes ADDED PER Supp. # 239A TO Referenced FAR. R.T. Johnson 2-18-82 E. Wennerstrom 2-18-82

ANY MATERIAL IDENTIFICATION NUMBERS REMOVED DURING FABRICATION MUST BE REPLACED IMMEDIATELY

OPER NO.	SEQ NO	INSP.	SIGN OFF	OPERATION DESCRIPTION
	40			*S/G #2 TUBE # L-61/R91 HOT LEG ____ COLD LEG ____
	45			MANUALLY WELD TUBE PLUGS USING QUALIFIED WELDER, CERTIFIED WELD WIRE AND PROCEDURE NO. NEW-GTA-43,43-03-4 :
				S/G #1 TUBE # L-173/R1 HOT LEG ____ COLD LEG ____
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/R91
	50	#		WIF (WELD INSPECTION FORM) *S/G #1 L-34/R90 H.L. ____ C.L. ____ *S/G #2 L-61/R91 H.L. ____ C.L. ____
				S/G #1 TUBE # L-173/R1 HOT LEG ____ COLD LEG ____
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
	53			WIRE BRUSH TO CLEAN TUBES LISTED IN SEQ. NO. 45.
	55	#		VISUALLY INSPECT TUBE PLUG TO TUBE AND TUBESHEET WELDS
A.N.I.I-		H.P.		PER SECTION XI OF THE CODE AND ENGINEERING PROCEDURE NO. EP-74270-100 REV. 0 :
				S/G #1 TUBE # L-173/R1 HOT LEG ____ COLD LEG ____
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/R91
	60	#		VERIFY THAT INSTALLATION IS COMPLETE :
				S/G #1 TUBE # L-173/R1 HOT LEG ____ COLD LEG ____
				S/G #2 TUBE # L-165/R1
				S/G #2 TUBE # L-169/R1
				*S/G #1 TUBE # L-34/R90
				*S/G #2 TUBE # L-61/ R91

NOTE: All completed operations must be signed off, dated and closed out by designated personnel