

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9903030171 DOC.DATE: 99/02/26 NOTARIZED: NO DOCKET #
 FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
 50-324 Brunswick Steam Electric Plant, Unit 2, Carolina Powe 05000324
 50-325 Brunswick Steam Electric Plant, Unit 1, Carolina Powe 05000325
 50-395 Virgil C. Summer Nuclear Station, Unit 1, South Carol 05000395

AUTH.NAME AUTHOR AFFILIATION
 SZARY,W.
 RECIP.NAME RECIPIENT AFFILIATION
 STRANSKY,B. NRC - No Detailed Affiliation Given

SUBJECT: Part 21 rept re deviation with certain 200 OHM duplex RTDs supplied to Robinsion,Brunswick & VC Summer Plants,by PYCO. Caused by using thin-film RTD sensors instead of wire-wound RTD sensors specified by assembly.Plants notified.

DISTRIBUTION CODE: IE19T COPIES RECEIVED:LTR 0 ENCL 1 SIZE: 9
 TITLE: Part 21 Rept (50 DKT)

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-1 PD	1 1	SUBBARATNAM	1 1
	TRIMBLE,D	1 1	PADOVAN,M	1 1
INTERNAL:	FILE CENTER 01	1 1	NRR/DRPM/PECB	1 1
	NRR/DRPM/PECB/B	1 1	PDR WARD, M.	1 1
	RES/DET/EIB	1 1	RGN1	1 1
	RGN2	1 1	RGN3	1 1
	RGN4	1 1		
EXTERNAL:	INPO RECORD CTR	1 1	NOAC SILVER,E	1 1
	NRC PDR	1 1	NUDOCS FULL TXT	1 1

THIS DOCUMENT
 HAS BEEN SCANNED

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 17 ENCL 17

General Information or Other (PAR)

Event # 35406

Rep Org: PYCO, INC.		Notification Date / Time: 02/25/1999 17:03 (EST)	
Supplier: PYCO, INC.		Event Date / Time: 02/25/1999 17:03 (EST)	
Last Modification: 02/25/1999			
Region: 1		Docket #:	
City: PENNDEL		Agreement State: No	
County:		License #:	
State: PA			
NRC Notified by: WILLIAM SZARY		Notifications: ROBERT HAAG	
HQ Ops Officer: BOB STRANSKY		VERN HODGE (via fax)	
Emergency Class: NON EMERGENCY		R2	
10 CFR Section:		NRR	
21.21		UNSPECIFIED PARAGRAPH	

10 CFR PART 21 REPORT REGARDING FAULTY RESISTANCE TEMPERATURE DETECTORS

The following text is a portion of a facsimile received from PYCO, Inc.:

"A deviation has been detected in that a limited number of 200 OHM DUPLEX RTD assemblies have been fabricated by PYCO using THIN-FILM RTD sensors instead of the WIRE-WOUND RTD sensors specified for the assembly. RTD assemblies fabricated using wire-wound sensors have been tested and qualified by PYCO for nuclear use under our nuclear qualification test program. RTD assemblies fabricated using thin-film sensors have not been tested by PYCO to IEEE-323 and IEEE-344 requirements."

"Externally, thin-film and wire-wound RTDs have the same physical appearance, shape, and electrical characteristics. Both the wire-wound and thin-film sensors meet the requirements of the International Industrial Standard IEC-75 1, 'Industrial Platinum Resistance Thermometer Sensors'."

These RTDs have been sold to Carolina Power and Light and South Carolina Electric and Gas for use at the Robinson, Brunswick, and Summer plants.

(Call the NRC Operations Center for a contact telephone number.)

9903030171 990226
PDR ADOCK 05000261
S PDR

IE 19 %

FAX

Date 02/25/99

Number of pages including cover sheet 8

TO: NRC OPERATIONS

FROM: PYCO Inc.
William Szary.
Quality Control Manager.
600 E. Lincoln Hwy.
Pennel, PA 19047

Phone 301-816-5100

Fax Phone 301-816-5151

Phone 215 757-3704

Fax Phone 215 757-3780

CC:

REMARKS: ☒ Urgent ☐ For your review ☐ Reply ASAP ☐ Please Comment

NRC OPERATIONS:

As required by 10 CFR PART 21, the attached information is to provide Notification of Deviation in connection with certain 200 ohm duplex Resistance Temperature Detectors (RTD's) supplied by PYCO Inc. to:

- a. Carolina Power & Light - Robinson Plant
- b. Carolina Power & Light - Brunswick Plant
- c. South Carolina Electric & Gas - V.C. Summer Station

PYCO is in the process of notifying the power utilities verbally, fax and hard copy.

Also as required, a copy of the attached document will be sent to the Document Control Desk, U.S. Nuclear Regulatory Commission, Washington DC 20555

William J. Szary

Quality Control Manager



PENNDel, PENNSYLVANIA 19047 | 215-757-3704

DATE : February 25, 1999

TO : NRC OPERATIONS
Tel: 301-816-5100 Fax: 301-816-5151

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington DC 20555

Carolina Power & Light
Attn: Troy Ellis - Purchasing
Robinson Plant
Highway 151 & SC 23
Hartsville SC 29550
Tel: 919-546-4340 Fax: TBD

Carolina Power & Light
Attn: James Burgess - Purchasing
Brunswick Steam Electric Plant
NC Highway 87 North
Southport, NC 28461
Tel: 919-546-7722 Fax: TBD

South Carolina Electric & Gas
Attn: John Parler - Supvr. Over Procurement Quality
V.C. Summer Station
Highway 215
Jenkinsville, SC 29065
Tel: 803-345-4318 Fax: 803-345-4270

FROM: PYCO Inc.
Mr. John V. Metzger Jr. - President & CEO
600 E. Lincoln Hwy.
Penndel, PA 19047
Tel: 215-757-3704 Fax: 215-757-3780

Re : 10 CFR PART 21 - Notification of Deviation



PENNDel, PENNSYLVANIA 19047 | 215-757-3704

As required by 10CFR Part 21, the following information is to provide notification of deviation in connection with certain 200 OHM duplex Resistance Temperature Detectors (RTD's) supplied to Carolina Power & Light - Robinson Plant and Brunswick Plant and South Carolina Electric & Gas - V.C. Summer Station:

1. Name and Address of individual informing Commission:

Mr. John V. Metzger Jr. - President & CEO - PYCO Inc.
600 E. Lincoln Hwy.
Penndel, PA 19047

2. Basic Component Supplied:

- . 200 OHM duplex Resistance Temperature Detector (RTD) Assemblies
- . PYCO Part Numbers/Customer Part Numbers - See Attachment A
- . Customer Purchase Order (PO) - See Attachment A
- . PYCO Serial Numbers (S/N) - See Attachment A
- . PYCO Shop Order (SO) - See Attachment A

3. Identification of the Firm supplying the basic component

PYCO Inc.
600 E. Lincoln Hwy.
Penndel, PA 19047



PENNDel, PENNSYLVANIA 19047 | 215-757-3704

4. Nature of Deviation

A deviation has been detected that a limited number of 200 OHM DUPLEX RTD assemblies have been fabricated by PYCO using THIN-FILM RTD sensors instead of the WIRE-WOUND RTD sensors specified for the assembly.

RTD assemblies fabricated using wire-wound sensors have been tested and qualified by PYCO for nuclear use under our nuclear qualification test program.

RTD assemblies fabricated using thin-film sensors have not been tested by PYCO to IEEE-323 and IEEE-344 requirements.

Externally thin-film and wire-wound RTD's have the same physical appearance, shape and electrical characteristics. Both the wire-wound and thin-film sensors meet the requirements of the International Industrial Standard IEC-751, "Industrial Platinum Resistance Thermometer Sensors".

5. Date Detected:

January 25, 1999 - Completion of Engineering Evaluation

Based on a query from our Purchasing Department to our supplier, it was identified that 200 OHM duplex Thin-Film RTD's were supplied for an open Purchase Order.

PYCO utilizes WIRE-WOUND RTD's for Nuclear use. Our Purchasing Department notified our Quality Assurance Department.

Quality requested an evaluation of the acceptability of the Thin-Film RTD's for nuclear use. The research was completed by our Engineering Department. PYCO High Reliability RTD's were qualified for nuclear applications through type testing in accordance with our nuclear qualification test program. All RTD assemblies qualified by the tests were fabricated using wire-wound RTD sensors. Thin-Film RTD assemblies have not been tested by PYCO in our nuclear qualification test program to equipment qualifications as defined in IEEE-323 and IEEE-344, therefore Engineering finds the Thin-Film RTD sensors unacceptable for use in fabrication of Nuclear RTD assemblies at PYCO.



PENNDel, PENNSYLVANIA 19047 | 215-757-3704

6. Location of Components:

A. Known locations of nonconforming assemblies:

1. Carolina Power & Light
H B Robins Steam Plant
Highway 151 and SC 23
Hartsville, SC 29550
2. Carolina Power & Light
Brunswick Steam Electric Plant
NC Highway 87 North
Southport, NC 28461

B. Potential locations of nonconforming assemblies :

1. South Carolina Electric & Gas
V.C. Summer Station
Highway 215
Jenkinsville, SC 29065

7. Corrective Action:

- A. Identify 200 OHM Duplex RTD assemblies supplied to nuclear utilities
Activity Completed 02/04/99
· Completed review of Nuclear QA Documents for all projects
· Attachment A identifies the "Known and Potential" assemblies
using the Thin-Film 200 OHM duplex RTD sensor.
- B. Review PYCO Purchase Orders to supplier and identify PO's with thin-film
RTD's by supplier part numbers.
Completed 01/27/99
- C. Notify nuclear utilities affected by the deviation.
- D. Contact nuclear utilities to identify existing status (stock, in-service, out-
of-service) of PYCO assemblies supplied with a 200 OHM Duplex RTD.



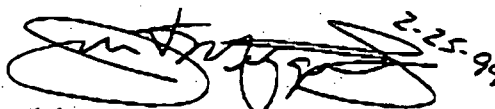
PENNDel, PENNSYLVANIA 19047 | 215-757-3704

- E. Generate a checklist to track replacement of nuclear utility stock and in-service 200 OHM duplex RTD elements manufactured by PYCO as identified in Attachment A.
- F. Review all applicable PYCO procedures for RTD sensors in connection with procurement, receiving and manufacturing.
- G. Generate Sales Orders for replacement of customer identified in-stock and in-service 200 ohm duplex RTD elements manufactured by PYCO as identified in Attachment A.

8. Advise Related to Deviation:

- A. The deviation identified is limited only to 200 OHM duplex RTD assemblies as identified in Attachment A, KEY-A. Assemblies identified in Attachment A, KEY-B indicate that a potential exists that the 200 OHM duplex RTD sensors used in the fabrication of the assemblies may be thin-film rather than wire-wound.
- B. All other RTD assemblies fabricated by PYCO, including 100 OHM platinum simplex and duplex RTD's, meet the requirements of IEEE-323 and IEEE-344.
- C. As per manufacturer's documentation, both the wire-wound and thin-film RTD sensors meet the requirements of International Industrial Standard IEC-751, "Industrial Platinum Resistance Thermometer Sensors".

Sincerely,


John V. Metzger Jr. - President & CEO
PYCO Inc.

Attachment

Y	PYCO SO#	CUST PO#	SHIP DATE	PYCO PART NUMBER	QTY	S/N or Tag#
CAROLINA POWER AND LIGHT - ROBINSON PLANT - Cust P/N 728-733-00						
	068780-00	8N103CM	08/08/97	122-4049-6-8	1	S/N 15770
	062674-00	8F6855CC	10/11/95	122-4049-6-8	1	S/N 15148
	057436-00	7M0012CC	03/31/94	122-4049-6-8	1	S/N 14749
	056873-00	7K6017CC	01/26/94	122-4049-6-8	1	S/N 14685
	056508-00	7K5775CC	11/01/93	122-4049-6-8	2	S/N 14661, 14662
	038668-00	616007CC	05/30/89	122-4049-6-8	1	S/N 13495
	037531-00	605637CC	01/13/89	122-4049-6-8	3	S/N 13358, 13359, 13360
	023175-00	HBR-12065	10/30/85	122-4049-6-8	5	S/N 11840 TAG# TE-423 S/N 11841 TAG# TE-433 SN 11842 TAG# TE-410 S/N 11851 TAG# TE-420 S/N 11844 TAG# TE-430
CAROLINA POWER AND LIGHT - BRUNSWICK PLANT - Cust P/N 738-841-24						
	70024-00	8P5516CM	11/10/97	122-1021-(08)-12.0	2	S/N 15831, 15832
	53301-00	7D0864CC	02/23/93	122-1021-(08)-12	20	S/N 14502 THRU 14521

KEY	PYCO SO#	CUST PO#	SHIP DATE	PYCO PART NUMBER	QTY	S/N or Tag#
SOUTH CAROLINA ELECT & GAS - V.C. SUMMER STATION						
1	002805-00	SN-10231-SR	10/01/80	122-3006	9	TAG# TE410 S/N 7404, TAG# TE423 S/N 7405, TAG# SPARE S/N 7406, TAG# TE420 S/N 7407, TAG# TE433 S/N 7408, TAG# TE413 S/N 7409, TAG# SPARE S/N 7410, TAG# TE430 S/N 7411, TAG# SPARE S/N 7412
	010380-00	Q312667	07/30/82	122-3006-04-12-B-240	6	TAG# 1TE410, 413, 420, 423, 430, 433 S/N 9545, 9546, 9547, 9548, 9549, 9550
	012142-00	Q-326094	02/24/83	122-3006-04-12-B-240	6	TAG# 1TE410, 413, 420, 423, 430, 433 S/N 10089, 10090, 10093, 10095, 10096, 10097
	012142-01	Q-326094	03/22/83	122-3006-04-12-B-240	6	TAG# 1TE410 S/N 10087 TAG# 1TE410 S/N 10088 TAG# 1TE420 S/N 10091 TAG# 1TE420 S/N 10092 TAG# 1TE423 S/N 10094 TAG# 1TE433 S/N 10098
	021225-00	A390598	06/24/85	122-3006-04-12-B-240	6	TAG# 1TE-0410 S/N 11706, 11707, 11708, 11709, 11710, 11711

DOC:NC0199A

2/25/99

PAGE 2 of 2

KEY-A Cust. Orders with 200 OHM duplex Thin-Film RTD's. KEY-B Cust. Orders with POTENTIAL thin-film 200 OHM duplex RTD's.