Part 21 (PAR) Event # 48622

Rep Org: TENNESSEE VALLEY AUTHORITY

Supplier: POWER SERVICE SHOPS

Notification Date / Time: 12/21/2012 16:43 (EST)

Event Date / Time: 12/20/2012 (CST)

Last Modification: 12/21/2012

Region: 1 Docket #:

City: MUSCLE SHOALS Agreement State: Yes

County: License #:

State: AL

NRC Notified by: MARK COOK Notifications: BRIAN BONSER R2DO
HQ Ops Officer: HOWIE CROUCH PART 21 GROUP EMAİL

Emergency Class: NON EMERGENCY

10 CFR Section:

21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE

PART 21 REPORT - BELDEN WIRE USED ON ENVIRONMENTALLY QUALIFIED FORM-WOUND MOTORS NOT FULLY QUALIFIED

"Potential Condition: Tennessee Valley Authority (TVA) Power Service Shops (PSS) installed Belden EPDM lead wire in the rewind of Environmentally Qualified (EQ) safety-related motors utilizing EPRI Technical Report (TR) 1003481 and TR 1001036. EPRI informed PSS that the Belden EPDM lead wire had not been fully qualified in accordance with EPRI TR 1001036.

"Thirteen (13) motors are affected. Ten (10) Browns Ferry motors, one (1) Watts Bar Unit 2 motor, one (1) Progress Energy [Crystal River] and one (1) Florida Power & Light (FPL) [St. Lucie Plant]. All the customers have been notified of a potential Part 21 condition.

"Recommendation: Immediate Actions:

- 1.) Review PSS data to determine affected motors.
- 2.) Establish an Equivalency Evaluation (EE) for Belden EPDM lead wire for EPRI TR 1003481/1001036 utilizing a TVA qualified winding system that included Belden EPDM lead wire (Wyle Test Report 18070-1).
- 3.) Review Progress Energy and FPL EQ profiles.
- 4.) Perform a root cause investigation to determine how this issue occurred.

"Evaluation/Action Taken:

- 1.) Action 1 complete. 13 motors affected and all customers notified.
- 2.) Action 2 EE developed and currently being reviewed by affected TVA EQ engineers for approval.
- 3.) Action 3 FPL indicated that the FPL motor in question had undergone a recent rewind that replaced the lead. Progress Energy provided the EQ profile on 12/20/12 indicating a significant delta between the Wyle Test Report 18070-1 in Radiation (Normal), Radiation (Accident) and accident temperature (Max). Based on this information,



Part 21 (PAR)

Event # 48622

the PSS determination was made that defect in a basic component existed and NRC notification was required in accordance with 10 CFR Part 21, section 21.21(d)(1) and section 21.21(d)(3)(i).

"TVA PSS will provide a follow-up written notification within 30 days pursuant to Part 21.21(d)(3)(ii).

"Point of Contact- Mark E. Cook, (256) 314-7595"



FAX COVER

PSS1

Send To:					
Name:	NRC Operations Center	·	Date: _	12/21/12	
Company;	Nuclear Regulatory Commision	1	·		
Address:	Document Control Desk, U.S N	IRC, Washington, I	DC2055	5-0001	
Phone:	800-577-8510; 301-816-5100				
Fax Number:	301-816-5151				
Verification Number: 800-577-8510					
Number of pages (including cover): 2					
Subject:	Part 21 Notification - Belden W	ire used on EQ Qu	alified f	Form-Wound Motors	
From: Tennessee Valley Authority Name: Mark E. Cook					
Organization;	Power Support Services (PSS	}			
Address:	PO Box 1010 Reservation Ro				
Phone:	256-314-7595				
Fax Number:	256-386-2143				
Verification Number:					
Comments:					
NRC- 2 day notification of defect in a basic component pursuant with 10 CFR Part 21 section 21.21(d)(1) and 21.21.(d)(3)(i)					
Sent Bv: Ma	k E. Cook Time	Sent: <u>1545</u>	Da	ate Sent: <u>12/21/12</u>	

important! If you do not receive all pages, call us back immediately.

TVA 15536 (5-1999) [6-1999]





POTENTIAL 10CFR21 NOTIFICATION/EVALUATION REPORT

PART A (to be completed by the Sr Prog Mgr, QA/QC) Corrective Action Document No. 650071					
Reported by: Mark E. Cook Date: 12/21/12 Time: 0800					
Potential Condition: Tennessee Valley Authority (TVA) Power Service Shops (PSS) installed Belden EPDM					
lead wire in the rewind of Environmentally Qualified (EQ) safety related motors utilizing EPRI Technical					
Report (TR) 1003481 and TR 1001036. EPRI informed PSS that the Belden EPDM lead wire had not been					
fully qualified in accordance with EPRI TR 1001036.					
Thirteen (13) motors are affected. Ten (10) Browns Ferry Motors, One (1) Watts Bar Motor Unit 2, One (1)					
Progress Energy and One (1) Florida Power & Light (FPL). All the customers have been notified of a potential					
Part 21 condition.					
Recommendation: Immediate Actions:					
1.) Review PSS Data to determine affected motors.					
2.) Establish an Equivalency Evaluation (EE) for Belden EPDM lead wire for EPRI TR 1003481/1001036 utilizing					
a TVA qualified winding system that included Belden EPDM lead Wire (Wyle Test Report 18070-1).					
3.) Review Progress Energy and FPL EQ profiles.					
4.) Perform a root cause investigation to determine how this issue occurred.					
PART B (to be completed by the PSS General Manager)					
Evaluation/Action Taken: 1.) Action 1 complete, 13 motors affected and all customers notified.					
2.) Action 2 - EE developed and currently being reviewed by affected TVA EQ engineers for approval.					
3.) Action 3 - FPL indicated that the FPL motor in question had undergone a recent rewind that replaced the lead.					
Progress Energy provided the EQ profile on 12/20/12 indicating a significant delta between the Wyle Test Report					
18070-1 in Radiation (Normal), Radiation (Accident) and Accident temperature (Max). Based on this information,					
the PSS determination was made that defect in a basic component existed and NRC notification was required in					
accordance with 10 CFR Part 21, section 21.21(d)(1) and section 21.21(d)(3)(i).					
TVA PSS will provide a follow up written notification within 30 days pursuant to Part 21.21(d)(3)(ii).					
Point of Contact- Mark E. Cook 256-314-7595					
Confirmed Part 21 condition: ☐ Yes ☐ No					
PSS General Manager 12 40 Date: 12-21-12 Time: 15:40					
orm Q12.08-1 For Revely Wederington Retention Period: LIFETIME					