

Part 21 (PAR)

Event # 48622

<b>Rep Org:</b> TENNESSEE VALLEY AUTHORITY	<b>Notification Date / Time:</b> 12/21/2012 16:43 (EST)
<b>Supplier:</b> POWER SERVICE SHOPS	<b>Event Date / Time:</b> 12/20/2012 (CST)
	<b>Last Modification:</b> 12/21/2012
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> MUSCLE SHOALS	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> AL	
<b>NRC Notified by:</b> MARK COOK	<b>Notifications:</b> BRIAN BONSER R2DO
<b>HQ Ops Officer:</b> HOWIE CROUCH	PART 21 GROUP EMAIL
<b>Emergency Class:</b> NON EMERGENCY	
<b>10 CFR Section:</b>	
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,

IE19  
NRR

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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"

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**FAX COVER****Send To:**

Name: NRC Operations Center Date: 12/21/12  
Company: Nuclear Regulatory Commission  
Address: Document Control Desk, U.S NRC, Washington, DC20555-0001  
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 Wire used on EQ Qualified Form-Wound Motors

**From: Tennessee Valley Authority**

Name: Mark E. Cook  
Organization: Power Support Services (PSS)  
Address: PO Box 1010 Reservation Road  
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)(l)

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Sent By: Mark E. Cook Time Sent: 1545 Date Sent: 12/21/12

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



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

*[Signature]*  
for Randy Waterington  
QA Record

Date: 12-21-12

Time: 15:40

Form Q12.08-1

Retention Period: LIFETIME