



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-15-082

April 30, 2015

10 CFR 50.4

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3  
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68  
NRC Docket Nos. 50-259, 50-260, and 50-296

Sequoyah Nuclear Plant, Units 1 and 2  
Facility Operating License Nos. DPR-77 and DPR-79  
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Unit 1  
Facility Operating License No. NPF-90  
NRC Docket No. 50-390

Subject: **The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report**

- Reference:
1. TVA letter to NRC, "Additional Information Regarding March 28, 2013, Public Meeting With NRC Regarding The Tennessee Valley Authority's (TVA) Commercial Grade Dedication Recovery Project," dated April 30, 2013 (ML13123A163)
  2. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project Plan - July 2013 Status Report," dated July 31, 2013 (ML13220A102)
  3. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - October 2013 Status Report," dated October 31, 2013 (ML13309A747)

4. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - January 2014 Status Report," dated January 31, 2014 (ML14038A139)
5. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2014 Status Report," dated April 30, 2014 (ML14126A843)
6. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - July 2014 Status Report," dated July 31, 2014 (ML14212A748)
7. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - October 2014 Status Report," dated October 31, 2014 (ML14304A724)
8. TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - January 2015 Status Report," dated January 30, 2015 (ML15030A485)

The purpose of this letter is to provide the Nuclear Regulatory Commission (NRC) staff with the April 2015 Commercial Grade Dedication (CGD) Recovery Project Status Report. Previous status reports were provided in References 2 through 8.

In Enclosure 2 of the Reference 1 letter, TVA provided the NRC with a TVA Nuclear Power Group CGD Recovery Project Action Plan Summary that included two commitments. In Commitment 1, TVA committed to complete a comprehensive evaluation of commercial grade dedicated items installed between September 1995 and November 2011 for the operating fleet, and correct any identified deficiencies by December 31, 2014. In Commitment 2, TVA committed to provide the NRC with periodic written updates regarding progress of the project by the last day of July, October, January, and April of each year until the project is completed, beginning with the first written report to be filed by July 31, 2013.

As discussed with the NRC during a teleconference on December 15, 2014, and documented in Reference 8, TVA has changed the completion date for the CGD Recovery Project from December 31, 2014, to May 31, 2015. Additionally, TVA committed to continue with quarterly updates until the CGD Project is completed.

No issues have been identified that resulted in declaring plant equipment to be inoperable.

The enclosure to this letter provides the TVA Nuclear CGD Recovery Project - April 2015 Status Report.

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There are no new regulatory commitments contained in this letter. Should you have any questions, please contact Tom Hess at (423) 751-3487.

Respectfully,

A handwritten signature in black ink, appearing to read "J. W. Shea". The signature is stylized with a large, sweeping "A" and a cursive "J" and "W".

J. W. Shea  
Vice President, Nuclear Licensing

Enclosure: Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade  
Dedication Recovery Project - April 2015 Status Report

cc (Enclosure):

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant  
NRC Senior Resident Inspector - Sequoyah Nuclear Plant  
NRC Senior Resident Inspector - Watts Bar Nuclear Plant  
NRR Project Manager - Browns Ferry Nuclear Plant  
NRR Project Manager - Sequoyah Nuclear Plant  
NRR Project Manager - Watts Bar Nuclear Plant

## ENCLOSURE

### Tennessee Valley Authority Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report

#### INTRODUCTION:

During a public meeting with the Nuclear Regulatory Commission (NRC) staff on March 28, 2013, Tennessee Valley Authority (TVA) described a broad set of actions being taken by the TVA Nuclear Power Group to address commercial grade dedication (CGD) program issues identified by the NRC in Watts Bar Unit 2 construction-related Integrated Inspection Report 05000391/2011607, dated September 30, 2011, and Integrated Inspection Report 05000391/2011610, dated February 3, 2012. To further address commercial grade dedication program issues, TVA made a commitment to complete a comprehensive evaluation of commercial grade dedication items installed between September 1995 and November 2011 for the operating fleet, and correct any identified deficiencies by December 31, 2014. On December 15, 2014, TVA representatives from Engineering and Licensing contacted the NRC staff via telephone to discuss TVA's plans to formally change the completion date for the CGD Recovery Project commitment in the next update, scheduled for the end of January 2015, and acknowledged that TVA will continue with quarterly updates until the CGD Project is completed. As discussed, the completion date for the CGD Recovery Project is now May 31, 2015.

In a letter to the NRC dated July 1, 2013,<sup>1</sup> TVA informed the staff that TVA Nuclear Power Group Commercial Grade Dedication Recovery Project Plan was approved for implementation and briefly described the plan. The CGD Recovery Project Plan describes the evaluation process being used to determine whether an adequate basis exists, is documented, and provides reasonable assurance that a commercial grade item to be used as a basic component will perform its intended safety function. The plan establishes the scope of the project, identifies the number of specific items that must be evaluated, and describes the grouping of items for evaluation by type, supplier, and time frame of procurement. The plan also describes documentation that TVA will generate during the evaluation process for items that are installed and/or currently in inventory; for items that are obsolete and through regular preventive maintenance are no longer installed in safety related applications; and for inventory items that have not been purchased or installed since Part 21, Reporting of Defects and Noncompliance, of Title 10 of the *Code of Federal Regulations* (CFR) was amended in 1995.

From April 2013 to April 2014, the CGD Recovery Project Team identified 22,340 unique Catalog Identifiers (CATIDs) that have been generated for CGD items across the TVA Nuclear Power Group Fleet since September 1995. Of this population, 17,343 unique CATIDs have been identified to be either not purchased or not installed. Therefore, the remaining 4,997 unique CATIDs have been either purchased or installed in a TVA nuclear plant and require evaluation, as described in the CGD Recovery Project Plan.

The CGD Recovery Project is evaluating the unique CATIDs in groups where possible. In many cases, several CGD packages have been generated for the same unique CATID due to the number of years of plant operations under evaluation.

The status provided below documents the progress to date based on accounting for the applicable number of unique CATIDs.

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<sup>1</sup> TVA letter to NRC, "The Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project Plan," dated July 1, 2013 (ML13189A133)

## ENCLOSURE

### Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report

#### PROGRESS TO DATE:

As of April 4, 2014, the TVA CGD Recovery Project Weekly Report indicated that from a population of 17,343 CATIDs that were either not purchased or not installed, all 17,343 CATIDs have been verified via an additional data search to not exist in inventory or in the operating units. This completes the verification and documentation of CATIDs that were either not purchased or not installed.

As of April 15, 2015, from a population of 4,997 CATIDs that were purchased and are either in inventory or installed, all 4,997 CATIDs have been assessed against project plan review criteria, including the critical characteristics for acceptance (CCA). 4,991 CATIDs were found to be acceptable. The testing strategy for the remaining six CATIDs is being revised. A total of 431 seismic CATIDS have been evaluated. A total of 309 seismic CATIDS are acceptable. Preliminary results for the remaining 122 seismic CATIDs are acceptable pending final validation of installed locations and/or component configuration.

During the effort to evaluate commercially dedicated parts against the applicable CCA, an additional gap was identified where critical characteristics to confirm seismic qualification/suitability were not adequately documented. This gap can be characterized as failing to adequately document the equipment seismic/structural qualification of the replacement items in accordance with TVA Nuclear Engineering Department seismic procedures and design standards. The assessment of seismic CCA information for seismic sensitive CATIDs is ongoing. Additional actions and resources are being applied to address the additional scope of seismic CCA information.

Based on progress made to date, the TVA Nuclear Power Group Commercial Grade Dedication Recovery Project is on track to meet the extended May 31, 2015, commitment date for project completion.

#### UPDATE ON PREVIOUSLY IDENTIFIED ISSUES:

The status of previously identified testing failures is summarized in the Table below. A testing failure is initially documented in a Service Request (SR), then further documented and evaluated in a Problem Evaluation Report (PER), under the corrective action program.

PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
July 31, 2013	SR 755044 (PER 762570)	CAE345C	Overload Heaters	Failed current carrying due to incorrect test current	Purchased new heaters for testing to revised criteria. All items passed testing.	Closed
July 31, 2013	SR 755092 (PER 762593)	BKG441M	1-1/4 Inch Copper Couplings	Failed dimensional test - use of single measurement point	Used three point measurement technique & additional analyses to accept items.	Closed

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## Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report

PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
October 31, 2013	PER 793398 PER 826788	BDH517E	Fuses 20A, 250V Time Delay	Failed current clearing testing by 25% longer than criteria	Based on EPRI TR-017218, Revision 1, <i>Guideline for Sampling in the Commercial-Grade Item Acceptance Process</i> , the remaining inventory was scrapped. No record of safety-related application was identified. However, if installed in SR application, the 25% longer clearing time would not degrade the component function during accident scenarios. PER 885910 to address additional 10 CFR 21 considerations.	Closed
October 31, 2013	PER 794799 PER 821184	BXA282G	Pressure Switch	Failed acceptance criteria for configuration, operating response, repeatability, and weight	Defective pressure switch was scrapped. PER 885910 to address additional 10 CFR 21 considerations.	Closed
October 31, 2013	PER 793399 PER 821992	CKA398K	Brass Tubing Tee Fittings	Failed threading testing	Installed fitting acceptable based on completed conditional dedication. PER 885910 to address additional 10 CFR 21 considerations.	Closed
October 31, 2013	PER 784385 PER 793529 PER 828658	CKJ806N	Hydraulic Fluid	Failed flash point test	Revised flash point criteria to lower value. Material acceptable for end use applications.	Closed
January 31, 2014	PER 827195	CRE543B	Breather Caps	Failed testing criteria for material type	Material dispositioned as acceptable with no effect on operability.	Closed
January 31, 2014	PER 827194	CRF195B	Vent Caps	Failed testing criteria for material and dimension	Material dispositioned as acceptable with no effect on operability. Additional dimensional inspection designated for this item.	Closed
January 31, 2014	PER 821151	BJV743J	Overload Heaters	Failed testing criteria for resistance and dimensions	Failed criteria inconsequential to overload heater operation. Pre-installation testing verifies proper operation. PER 885910 to address additional 10 CFR 21 considerations.	Closed

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PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
January 31, 2014	PER 826067	BVT390J	Cable Splices	Failed testing criteria for wire size dimensions	Deficient parts would have been self-revealing during installation. Material will be scrapped. PER 887333 to address additional 10 CFR 21 considerations.	Closed
January 31, 2014	PER 826791	AWT096Y	Fuses 0.125A	Failed testing criteria for current carrying capacity	1 of 30 fuses tested did not meet current carrying capability - fuse opened before thermal stability was reached. If installed, this fuse would have likely failed during normal operation and/or surveillance testing. PER 885910 to address additional 10 CFR 21 considerations.	Closed
January 31, 2014	PER 828735	BAG502L	Fuses 1.6A	Failed testing criteria for current clearing time	Test results reviewed and accurate. No record of safety-related application was identified. Work orders initiated to replace non safety-related applications. Remaining inventory scrapped per EPRI TR-017218, Revision 1, guidance. PER 932364 to address additional 10 CFR 21 considerations.	Closed
January 31, 2014	PER 830725	BVC946R	Terminal Lugs	Failed testing criteria for material type	Based on new information, item meets manufacturer's specifications. Manufacturing process involves copper barrel material and brass spade material. Mixed material manufacturing was not apparent based on initial review of product data sheets. New PER 905272 was generated to review test results and revise procurement documents to correct material type.	Closed
January 31, 2014	PER 830726	BYB188W	Terminal Lugs	Failed testing criteria for material type	Test method revised based on manufacturer's specifications. Material retested and verified to meet criteria. Material acceptable to revised package.	Closed

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PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
January 31, 2014	PER 823813	BYM865Q	Terminal Lugs	Failed testing criteria for material type	Revised material attributes for copper concentration and item found acceptable.	Closed
January 31, 2014	PER 825115	CFF597C	Polyethylene Tubing	Failed testing criteria for pressure integrity	Retested tubing to proper test pressure and found acceptable.	Closed
January 31, 2014	PER 826424	BYL296B	Insulating Tape	Failed testing criteria for tensile strength	Initial criteria not critical. Revised criteria and retested for tape thickness and di-electric strength. Item found acceptable.	Closed
January 31, 2014	PER 820855	CCA611R	Pulley Bushings	Failed testing criteria for material type	Incorrect material specified based on current manufacturing. Material acceptable to originally supplied material type.	Closed
January 31, 2014	PER 825131	BQX704E	Mandrel Pop Rivets	Failed testing criteria for material type	Incorrect material specified for mandrel. Revised material type and tested additional samples for acceptance.	Closed
January 31, 2014	PER 823816	CPV360D	Cable Splices	Failed testing criteria for material type	Package revised to test material to the applicable ASTM standard versus providing minimum copper content for material type. Material tested to more specific criteria and found acceptable.	Closed
January 31, 2014	PER 828659	CEH294T	Pressure Switch	Failed testing criteria for weight	Incorrect data sheet in package. Revised package to include correct data sheet.	Closed
January 31, 2014	PER 823818	BRN013X	Resistors	Failed testing criteria for dimensions	Incorrect dimensional tolerances applied. Revised CGD package and amended dimensional test report for acceptance.	Closed
January 31, 2014	PER 824184	CFP436V	Brass Tubing Unions	Failed testing criteria for material type	Revised criteria to brass alloy. A brass alloy plus pressure testing supported acceptance.	Closed
January 31, 2014	PER 821083	CGX850P	Brass Tubing Unions	Failed testing criteria for material type	Revised criteria to brass alloy. A brass alloy plus pressure testing supported acceptance.	Closed



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PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
April 30, 2014	PER 845971	CFB485C	HFA Relay	Failed seismic criteria	Evaluate and document resolution of the non-conformance of 18 HFA relays. An additional relay from the lot tested to application specific criteria and passed seismic criteria, resolving the non-conformance issue.	Closed
April 30, 2014	PER 842727	BVT503M	Resistor	Failed dimensional criteria	Error occurred when selecting the critical characteristic dimension for resistor length and lead length. Resistors passed revised criteria.	Closed
April 30, 2014	PER 842713	BLA352D	30 Amp Fuse	Failed current clearing time	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
April 30, 2014	PER 842712	BLA345A	200 Amp Fuse	Failed current clearing time.	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
April 30, 2014	PER 842728	CFD755Y	35 Amp fuse	Failed current clearing time	Incorrect criteria initially specified. PEG Package revised. Additional testing provided acceptable results.	Closed
April 30, 2014	PER 842703	BWA522W	1.8 microfarad Capacitor	Failed leakage current and working voltage	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the capacitor lot.	Closed
April 30, 2014	PER 853916	CAC064M	Resistor	Failed dimensional criteria	Incorrect tolerance revised. Test report amended resulting in acceptance of the resistor lot.	Closed
April 30, 2014	PER 842702	APD135T	Access Valve	Failed dimensional criteria	Dimensional criteria revised based on end use considerations. Re-inspection of entire lot to revised criteria resulted in acceptance of the lot.	Closed
April 30, 2014	PER 860042	ADM954A	35 Amp Fuses	Failed current clearing time	No material installed. Remaining material scrapped to prevent issue to the plant. PER 887333 to address additional 10 CFR 21 considerations.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
April 30, 2014	PER 845579	BLN398N	#22 AWG to #14 AWG Splice	Failed measurement indicating a mixed bin (reducing 22 AWG to 14 AWG splice and non-reducing 14 AWG to 14 AWG splice mixed together)	Inspection verified a mixed bin of material. 100% inspection performed to remove deficient material and scrap. Remaining material sent to lab for physical inspection. PER 885910 to address additional 10 CFR 21 considerations.	Closed
April 30, 2014	PER 842128	CVD369R	Exhaust Valves	Failed volumetric flow rate criteria	10CFR21 Failure Reportability was evaluated and determined that conditions identified in PER 887333 are not reportable. No operability impact exists for the four valves (1-FCV-001-0004, -0011, -0022, and -0029) since CATID CVD369R was never installed	Closed
April 30, 2014	PER 862599	CFM395R	Sleeve Fitting	Failed dimensional criteria	Incorrect dimensional tolerances specified and dimensions recorded beyond significant digits. Material re-inspected to correct dimensional tolerances and accepted. PER 932364 to address additional 10 CFR 21 considerations.	Closed
April 30, 2014	PER 844628	CAA979N	Overload Relay	Failed contact resistance – open circuit	The failure occurred during testing and failed as “open” contact, therefore, the relay is no longer viable for use. This condition would be self revealing during the installation and testing process. Initially, a quantity of 10 relays from the lot of 19 were tested, with one resulting failure. Based on the one failure, the entire lot will be tested. PER 932364 to address additional 10 CFR 21 considerations.	Closed
April 30, 2014	PER 841713 PER 892013	CGJ609B	Resistor	Failed dimensional criteria	The resistor length and lead length dimensional deficiencies were found acceptable.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
April 30, 2014	PER 848255	BYL400P	8 Amp Fuse	Failed dimensional criteria	Material found acceptable based on new tolerance information. CGD documents revised and material accepted. PER 885910 to address additional 10 CFR 21 considerations.	Closed
April 30, 2014	PER 845243	CBB278A	Resistor	Failed power rating of resistor	The resistors are normally used in panel light indicators, where the resistors drop the circuit voltage to a value appropriate for the indicating lamp. Failed lots were scrapped and one lot found acceptable. Procurement documents found acceptable for future purchases. PER 887333 to address additional 10 CFR 21 considerations.	Closed
April 30, 2014	PER 867205	BVA247Y	7.5 Amp Fuse	Failed current clearing time	Expanded sample testing, per EPRI TR-017218-R1, resulted in an additional fuse failing acceptance criteria. PER 891992 was issued to document and evaluate issue. Issue history evaluated for installed applications. Inventory material not acceptable and scrapped. Testing criteria and procurement documents determined to be acceptable for new procurement.	Closed
April 30, 2014	PER 867221	BDL448P	700 Amp Fuse	Failed current clearing time	New acceptance criteria established based on UL 248-1. Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
April 30, 2014	PER 867220	BYF689H	15 Amp Fuse	Failed current clearing time	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
April 30, 2014	PER 863778	BYV699G	0.5 Amp Fuse	Failed current clearing time	Inventory material not acceptable and scrapped. Testing criteria and procurement documents determined to be acceptable for new procurement. PER 885910 to address additional 10 CFR 21 considerations.	Closed
July 31, 2014	PER 842729	CHB326L	Check Valve	Failed material type	Host component determined to be QA-3 and material downgraded and scrapped.	Closed
July 31, 2014	PER 882147	BLR987K	4 Amp Fuse	Failed current clearing time	Initial failure due to incorrect criteria. Additional sample testing to revised criteria resulted in acceptable results.	Closed
July 31, 2014	PER 899140	ARB566W	200 Amp Fuse	Failed current carrying capacity	Material not acceptable for plant use. History search identified no material installed in safety-related components.	Closed
July 31, 2014	PER 896388	CGJ885H	Resistor	Failed resistance and power rating	Material not acceptable for plant use and scrapped. No changes identified for procurement documents.	Closed
July 31, 2014	PER 882153 PER 901153	CFJ418P	10 Amp Fuse	Failed dimensional criteria	Fuse diameter measuring 0.001" too small requires final review and material disposition.	Closed
July 31, 2014	PER 882164 PER 899964	CBT088Q	1 Amp Fuse	Failed dimensional criteria	History search identified no material installed in safety-related components. No changes required to procurement documents.	Closed
July 31, 2014	PER 882141 PER 899965	ADM954A (SQN Site)	35 Amp Fuse	Failed current clearing time	PER 932364 addressed 10 CFR 21 considerations and determined to NOT be reportable. History search identified no material installed in safety-related components. No changes required to procurement documents.	Closed
July 31, 2014	PER 880803	CDC572Q	50 Amp Fuse	Failed voltage rating	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
July 31, 2014	PER 880819	BLA425C	1 Amp Fuse	Failed current carrying capacity and cracked ferrules	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot. Material with cracked ferrules dispositioned to be scrapped.	Closed
July 31, 2014	PER 882129 PER 898433	BLA414H	1.25 Amp Fuse	Failed current clearing time	Expanded sample resulted in additional material failure. Material has been scrapped. Procurement documents have been cancelled and Item is designated as obsolete.	Closed
July 31, 2014	PER 900197	BYL598T (BFN Site)	30 Amp Fuse	Failed dimensional criteria	Fuse diameter measuring 0.001" too large requires final review and material disposition. Based on review and application of revised tolerance, the material is acceptable	Closed
July 31, 2014	PER 885235 PER 896391	BKY581W	1 Amp Fuse	Failed current clearing time	Expanded sample resulted in additional material failure. Material not acceptable for plant use and scrapped. No changes identified for procurement documents.	Closed
July 31, 2014	PER 895583	AEY065C	1.25 Amp Fuse	Failed current clearing time	History search identified no material installed in safety-related components. No changes required to procurement documents.	Closed
July 31, 2014	PER 882169	BHQ577Y	0.25 Amp Fuse	Failed current clearing time	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
July 31, 2014	PER 882149	BRE028R	20 Amp Fuse	Failed current clearing time	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
July 31, 2014	PER 882150	CET176J	1.6 Amp Fuse	Failed current clearing time	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
July 31, 2014	PER 882168	BBR516K	5 Amp Fuse	Failed current carrying capacity	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
July 31, 2014	PER 885242 PER 900219	CJD815L	60 Amp Fuse	Failed current carrying capacity and commercial failure	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot. Remaining PER actions to review procurement requirements and dispositions failed material from a commercial perspective.	Closed
July 31, 2014	PER 895584	CHQ955H	1100 Amp Fuse	Failed current clearing time	History search identified no material installed in safety-related components. PER 956198 identifies CGD testing and procurement documents acceptable.	Closed
July 31, 2014	PER 885244 PER 896395	BKY793D	60 Amp Fuse	Failed current clearing time	Material not acceptable for plant use and scrapped. No changes identified for procurement documents.	Closed
July 31, 2014	PER 880809	BTT498Q	50 Amp Fuse	Failed voltage rating	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
July 31, 2014	PER 888324 PER 912990	BEE283N	30 Amp Fuse	Failed current carrying capacity	Material not acceptable for plant use. History search identified no material installed in safety-related components. No changes required to procurement documents.	Closed
July 31, 2014	PER 899963	BYL598T (SQN Site)	30 Amp Fuse	Failed current carrying capacity and dimensional criteria	PER 932364 addressed 10 CFR 21 considerations and determined to NOT be reportable. History search identified no material installed in safety-related components. PER 966136 for Procurement Engineering to enhance CGD criteria.	Closed
July 31, 2014	PER 886874	CEP098J	30 Amp Fuse	Failed current carrying capacity	Expanded sample testing per EPRI TR-017218, Revision 1, resulted in acceptance of the fuse lot.	Closed
October 31, 2014	PER 920903	ADM954A (BFN Site)	35 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use and scrapped. No material installed in safety-related applications.	Closed
October 31, 2014	PER 920910	CME546X	2.25 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use in safety-related applications and scrapped. No material installed in safety-related applications.	Closed

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Tennessee Valley Authority (TVA) Nuclear Power Group  
Commercial Grade Dedication Recovery Project - April 2015 Status Report

PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
October 31, 2014	PER 924650	CEN006Q	1.6 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use in safety-related applications and scrapped. No material installed in safety-related applications.	Closed
October 31, 2014	PER 924138	BLA422J	12 Amp Fuses	Failed current carrying capacity	History search identified no material installed in safety-related components. Re-test of inventory material prior to acceptance and release from Hold status as a conservative measure.	Closed
October 31, 2014	PER 925152	CFN093V	7 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use in safety-related applications and scrapped. No material installed in safety-related applications.	Closed
October 31, 2014	PER 918351	BLD150M	10 amp fuses	Failed current carrying capacity	Passing material lots accepted. Failed lots scrapped. Fuses installed in safety-related applications evaluated as acceptable.	Closed
October 31, 2014	PER 924148	CPA432M	3600 $\mu$ F Capacitors	Incorrect dimensional criteria	Items re-inspected to revised criteria. One of 10 items failed and Scrapped. All remaining items acceptable. Installed safety-related applications acceptable.	Closed
October 31, 2014	PER 926791	BPQ794H	8 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use and recommended to be scrapped. No material installed in safety-related applications.	Closed
October 31, 2014	PER 926998	CAA223F	6.25 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use and scrapped. No material installed in safety-related applications. Procurement documents in Cancelled status.	Closed
October 31, 2014	PER 937329	BLD276K	8 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use in safety related applications and scrapped. No material installed in safety-related applications. Procurement documents acceptable.	Closed

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Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
October 31, 2014	PER 940584	BAV418F	2.5 Amp Fuses	Failed current carrying capacity	Material not acceptable for plant use in safety related applications and recommended to be scrapped. Issued material not installed in safety-related applications.	Closed
October 31, 2014	PER 937330	CAA069M	4 Amp Fuses	Failed current carrying capacity	Material from failed lot sent for additional testing. Material in passed lot found acceptable. No material installed in safety-related applications.	Closed
October 31, 2014	PER 922302	CBD738P	0.10 $\mu$ F Capacitors	Failed capacitance criteria	Material identified as failed. No material installed in safety-related systems. Enhancement PER 977758 written to test remaining material before releasing item from Hold status to determine if failure is within normal sampling failure rate. Additional enhancement PER 991884 written to enhance testing method.	Closed
October 31, 2014	PER 922301	AFM357G	10 amp fuse	Failed Current Carrying Capacity	Material identified as failed. No material installed in safety-related systems and system would be adequately protected, if installed. No enhancements to the test method identified.	Closed
October 31, 2014	PER 937305	ACM855J	2 Amp Fuses	Failed Current Clearing Time	Material identified as failed, as a result of initial and supplemental testing. No material installed in safety-related applications. Remaining material scrapped to prevent issue to the plant.	Closed
October 31, 2014	PER 940682	BYE634G	25 Amp Fuses	Failed Current Clearing Time	Material identified as failed. No material installed in safety-related applications. Remaining material scrapped to prevent issue to the plant.	Closed



# ENCLOSURE

## Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report

PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
October 31, 2014	PER 940658	BVN393M	15 Amp Fuses	Failed Current Clearing Time	Material identified as failed. Material installed in safety-related applications evaluated and operability is maintained. Material from the failed lot scrapped to prevent issue to the plant. Remaining lots designated for additional testing before acceptance.	Closed
January 31, 2015	PER 953283	AEM751J	40 Amp Fuses	Failed Current Clearing Time	Material installed in safety-related applications evaluated and components remain operable. Item was not reportable and all material was scrapped to prevent issue to the plant.	Closed
January 31, 2015	PER 953270	BBN835J	2 Amp Fuses	Failed Current Clearing Time	Material installed in safety-related applications and evaluation concluded that operability is maintained and fuses are both functional and not degraded/non-conforming. Material from the failed lot has been scrapped and remaining tested lots were found acceptable and removed from Hold status.	Closed
January 31, 2015	PER 959240	BKY962G	45 Amp Fuses	Failed Current Clearing Time	Material identified as failed. No material installed in safety-related applications. Material from the failed lot designated to be scrapped. Material from passed lots found acceptable and released from Hold status.	Closed
January 31, 2015	PER 963444	BFJ723R	60 Amp Fuses	Failed Current Clearing Time	Material identified as failed. No material installed in safety-related applications. Test criteria was determined to be adequate. All previous material was destructively tested; therefore, no additional disposition required.	Closed

# ENCLOSURE

## Tennessee Valley Authority (TVA) Nuclear Power Group Commercial Grade Dedication Recovery Project - April 2015 Status Report

PREVIOUSLY IDENTIFIED TESTING FAILURES						
Initial Status Report Date	SR/PER Number	CATID	Item Description	Failure Description	Disposition	Status (Open/Closed)
January 31, 2015	PER 963436	BVA249T	4 Amp Fuses	Failed Current Carrying Capacity	Material identified as failed. No material installed in safety-related applications. All remaining fuses were designated to be tested for current carrying capacity, with any failed items to be scrapped. Material Hold status will be removed from fuses passing the test.	Closed
January 31, 2015	PER 956205	BBJ158P	15 Amp Fuses	Failed Current Clearing Time	Material identified as failed. No material installed in safety-related applications. Item failure was identified as not reportable.	Closed
January 31, 2015	PER 968055	CAE073A CHG399Y CGT041L CGT119J	1600 Amp 1200 Amp 2000 Amp 2500 Amp High Current Fuses	Failed Current Clearing Time and Voltage Rating	Test equipment limitations and restraints generated predictable test failures due to either low energy clearing, resulting in failure of voltage rating, or failure to clear due to overheating equipment at higher currents. Items are under evaluation to determine a suitable testing strategy.	Open
January 31, 2015	PER 965252	CQH798A CJN746Y	1 Amp 450 Amp High Voltage Fuses	Failed Voltage Rating	Test equipment limitations and restraints generated predictable test failures due to low energy clearing, resulting in failure of voltage rating. Items are under evaluation to determine a suitable testing strategy.	Open
January 31, 2015	PER 963720	AXM024C	Fitting Nut	Failed Dimensions Configuration	Material installed in safety-related applications evaluated and operability is maintained. Material configuration received evaluated as acceptable and procurement documents revised to accept both potential configurations and dimensions.	Closed
January 31, 2015	PER 965852	CQM152 W	700 Amp High Current Fuses	Failed Current Clearing Time	Material identified as failed. No material installed in safety-related applications. Test criterion was determined to be adequate. Any remaining material was designated to be scrapped.	Closed