

PPPL NONCONFORMANCE REPORT NO: 3624 **Open Date 11/29/05**

Status	9 - Closed NCR	Trend	01-Deviation From Doc/Proc
Department	ENGRG AND TECHN I/S	Division	FABRICATION, OPERATIONS
Source/Org	FABRICATION, OPERATIONS & MAINTENANCE		
Item Dwg/Part#	SE142-050 Rev. 0	Procurement #	NCSX-ASPEC-GRD-03
RAP#	3214	Job Doc #	NCSX-ASPEC-GRD-0
RAP Title	Modular Coil Lead Block Assy - Magnetic Permeability Issue		

HoldTag Applied

Nonconforming Condition (include requirement(s) violated):

Some of the studs and hardware for the modular coil lead block assembly exhibits a magnetic permeability higher than the maximum allowed per NCSX-ASPEC-GRD-03 paragraph 3.3.1.1 (permeability shall not exceed 1.02). Some of this hardware is installed on the C1 coil while the rest is in stock at the coil shop. All of the lead block hardware is intended to remain on the coil during operation. Except for the weld studs, all hardware is labeled type 316, weld studs are labeled 316L. See page 2 for details.

Lot Size Recd	0	Sample Size Insp	0	<input type="checkbox"/> Lot Rejected	# Rejected	0
Reported By	Phelps C	Validated By	Malsbury J	Validated Date	11/29/05	

Disposition: Rework*__ Repair*__ Use As Is*__ Return To Vendor*__ Scrap*__ **Use As Is**

Magnetic permeability of C1 hardware was analyzed and approved for use by EAD (Art Brooks), memo attached. This acceptance is for C1 only. Balance of coils will be evaluated separately. Lower permeability hardware will be obtained.

For rework or repair of vendor supplied equipments, fill in information below:				Distribution	
#Hours	_____	\$Est Labor	_____	\$G&A	_____
\$Material	_____	\$Burden	_____	\$Total	_____
Disposition By	Chrzanowski J	Date	01/23/06	Cog Chrzanowski J Insp Phelps C Proj. Doc Control (when closed) QC Files Malsbury J Boscoe J Phelps C Heitzenroeder P Reiersen W Williams M Tyrrell M Meighan T	
Supervisor's Concur	Dudek L	Date	01/23/06		
Eng. Dept. Head Concur	Williams M	Date	01/25/06		
WCO/Other	N/A	Date	_____		
PQA/QC Mgr Dispos Concur	Boscoe J	Date	01/30/06		
QC Field Verification By	Phelps C	Date	01/30/06		

NCR 3624 Details

On C1 Coil:

- 2 – Lead Block Adjustment Studs (pt. 12 SE141-123 Rev. 0) – Both studs >1.02, <1.2
- 4 – Lead Block Terminal Lug Mounting Bolts (pt. 23 on SE141-050 Rev. 0) – 2 of 4 >1.02, <1.05
- 4 – Lead Block Mounting Bolts (1/2-13x1" allen head cap screws) – 1 of 4 >1.02, <1.05

All other hardware on lead block assembly at this time, assembly not complete, is below the 1.02 maximum.

In stock at coil shop

<u>Part #(SE142-050 Rev. 0)</u>	<u>Part Type</u>	<u>Lot Size</u>	<u>Sample Size</u>	<u>Results</u>
23	3/8"-16x1" allen hd cap scws	400	40	36 of 40 >1.02, <1.05
18	" flat washers	750	40	31 of 40 >1.02, <1.05
Not on above dwg.	"-13x3/4" allen hd cap scws	200	20	8 of 20 >1.02, <1.2
Not on above dwg.	"-13x1" allen hd cap scws	40	10	7 of 20 >1.02, <1.05
Not on above dwg.	G-11 Keyed Thread Inserts	111	12	12 of 12 >1.02, <1.2

All other lead block hardware in stock was sampled and was found below 1.02 maximum. Increments of permeability measurement of Severn gauge used (#5111) are 1.02, 1.05, and 1.2.

James H. Chrzanowski

From: Arthur W. Brooks
Sent: Monday, January 23, 2006 9:16 AM
To: James H. Chrzanowski
Cc: Bob Simmons
Subject: RE: NCR Request

Jim,

Regarding the intalled C1 Coil Studs and Bolts, I would recommend "use as is", recognizing the small amount of material involved and citing previous analysis of the "Hockey Pucks" on C1 which should negligible field errors.

As for the uninstalled stock at the coil shop, we should make every effort to find material which meets spec. I am reluctant to give a blanket acceptance or to relax the spec at this point.

Art

-----Original Message-----

From: James H. Chrzanowski
Sent: Friday, January 20, 2006 2:37 PM
To: Arthur W. Brooks
Subject: NCR Request

Art

Per our conversation, attached is an NCR that requires input from you. It deals with permeability levels for the hardware that is used to secure the lead components outside of the casting. The hardware exceeds the project set permeability of <1.02. If possible we need a release on C1 so that we can continue on with the assembly of the lead hardware. We will make a serious effort to improve the permeability for the remaining 17 coils.

Jim