

PPPL NONCONFORMANCE REPORT NO: 3639		Open Date 03/21/06		Rev #: 2 , 4/16/2007	
Status	2 - Disposition Needed		Trend	01-Deviation From Doc/Proc	
Department	NCSX		Division	WBS 114	
Source/Org	FABRICATION, OPERATIONS & MAINTENANCE				
Item Dwg/Part#	SE142C-270 Rev. 0	Procurement #	Cost Center		
RAP# 3234	Job Doc # D-NCSX-MCF-004	Vendor	VARIOUS		
RAP Title Modular Coil Fabrication - Post VPI Activities					
<input type="checkbox"/> HoldTag Applied					

**Nonconforming Condition (include requirement(s) violated):**

The following additional parts for the NCSX modular coil final winding clamp assemblies exhibit a magnetic permeability higher than the maximum allowed per NCSX-ASPEC-GRD-03 paragraph 3.3.1.1 (permeability shall not exceed 1.02). See NCR 3634 for list of additional final winding clamp parts that are over the magnetic permeability limit.  
PART #s 3 AND 6 (SEE ATTACHED FOR DETAILS.)

The following parts were found to be acceptable.  
PART #9 (SEE ATTACHED FOR DETAILS.)

REV 1: ADDITIONAL PARTS RECEIVED AND INSPECTED. SEE ATTACHMENT.

REV 2: Final winding clamp assembly redesigned, see attachment for revision details. Also see NCR 3634 as it deals with this same issue.

Lot Size Recd	0	Sample Size Insp	0	<input type="checkbox"/> Lot Rejected	# Rejected	0
Reported By	Phelps C	Validated By	Boscoe J	Validated Date	04/16/07	

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

Awaiting test results from outside laboratory to determine whether the permeability of the 316ss parts can be used as is without further work.

*Please use p. 2 for disposition and approvals .*

~~For rework or repair of vendor supplied equipments, fill in information below:~~

#Hours	\$Est Labor	\$G&A
\$Material	\$Burden	\$Total

Disposition By	Date
Supervisor's Concur	Date
Eng. Dept. Head Concur	Date
WCO/Other	Date

PQA/QC Mgr Dispos Concur	Date
QC Field Verification By	Date

**Distribution**

**Cog** J. Chrzanowski  
**Insp** C. Phelps  
Proj. Doc Control (when closed)  
QC Files  
Malsbury J  
Boscoe J  
T. Meighan  
Dudek L  
Williams M  
Tyrrell M

Disposition: Rework\_\_\_\_ Repair \_\_\_\_ Use As Is\_\_\_\_ Return to Vendor\_\_\_\_ Scrap\_\_\_\_

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For rework or repair of vendor supplied equipment, fill in information below:

# Hours \_\_\_\_\_ \$ Est Labor \_\_\_\_\_ \$ G&A \_\_\_\_\_  
\$ Material \_\_\_\_\_ \$ Burden \_\_\_\_\_ \$ Total \_\_\_\_\_

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Disposition by \_\_\_\_\_

~~Supervisor's Concurrence~~ \_\_\_\_\_

Eng. Dept. Head Concurrence \_\_\_\_\_

Other (i.e., WCO/FPE) Concurrence \_\_\_\_\_

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PQA/QC Mgr Disposition Concurrence \_\_\_\_\_

QA Field Verification by \_\_\_\_\_

**NCR 3639 ATTACHMENT, R2 (p. 1 of 1)**

The following additional parts for the NCSX modular coil final winding clamp assemblies exhibit a magnetic Permeability higher than the maximum allowed per NCSX-ASPEC-GRD-03 paragraph 3.3.1.1 (permeability shall not exceed 1.02). See NCR 3634 for a list of additional final winding clamp parts that are over the magnetic permeability limit.

<u>Part #</u>	<u>Part Type</u>	<u>Quantity</u>	<u>Sample Size</u>	<u>Results</u>
3	Bushing Spacer (silver plated 316)	805	30	(5) >1.06, <1.08 (23) >1.08, <1.09 (2) >1.09, <1.10
6	Keeper Screw (silver plated 316)	1756	40	(21) >1.02, <1.03 (7) >1.03, <1.04
		1464	80	(4) <1.02 (36) >1.02, <1.03
		(2nd shipment)		(24) >1.03, <1.04 (14) >1.04, <1.05 (1) >1.05, <1.06

The following parts were found to be acceptable:

<u>Part #</u>	<u>Part Type</u>	<u>Quantity</u>	<u>Sample Size</u>	<u>Results</u>
9	Flat Washer (316)	1980	40	(40) <1.02

**REV 2:** The final winding clamp has been redesigned requiring new Part 3, the new shipment of Part 3 are below 1.02 Mu (see sampling results below). Part 6 remains unchanged and cannot be annealed due to the silver plating. See results above and NCR 3634 for additional permeability readings on the balance of Part 6.

<u>Part #</u>	<u>Part Type</u>	<u>Quantity</u>	<u>Sample Size</u>	<u>Results</u>
New - 3	Bushing Spacer	910	72	(72) <1.02 Mu