Princeton University **Plasma Physics Laboratory**
James Forrestal Campus
P.O. Box CN17
Princeton, N.J. 08543

21 December 2005

Ms. Nancy Horton
Energy Industries of Ohio
6100 Oak Tree Boulevard, Suite 200
Independence, Ohio 44131

SUBJECT: Dispositioned Request for Deviation (RFD) 14-011
Subcontract S005242-F

Dear Ms. Horton:

Attached for appropriate action is NCSX dispositioned Request for Deviation 14-011, Subject: Change in Magnetic Permeability Requirements, initiated by Kevin Bowling on 23 November 2005.

Regards,

Larry L. Sutton
Senior Subcontract Administrator

Attachment: As stated

NCSX RFD Part II	Number: 14-011	RFD Description: Change in Magnetic Permeability Requirements
RLM: Brad Nelson	Organization: ORNL	

Impact on Interfaces with Other WBS Elements/Items: ***(If none, so state):*** **NONE, WBS 14 only**

RLM Recommendation:

☒ **Approve** ☐ **Do Not Approve**

Additional remarks:

No impact on quality will result from using this material. Analysis shows that if material used at all six locations on each Type C casting, the resultant field errors will be negligible. It is anticipated that analysis of Type A and Type B castings will show similar results.

Does this Change Impact Material Already Procured or Parts/Assemblies Already Assembled/Manufactured using this Material: ☒ **Yes** ☐ **No**

If "Yes", what is the recommended disposition of this material/part/assembly?

Accept as is for the Type C castings. Analysis at PPPL has confirmed that the effects of using this 1.03μ material will have a negligible impact and that if similar results for Type A and Type B castings result, the effects will likewise be negligible.

RLM Signature: Brad Nelson Digitally signed by Brad Nelson DN: cn=Brad Nelson, c=US, o=ORNL, ou=FED, email=nelsonbe@ornl.gov Date: 2005.12.20 14:37:33 -05'00'

Project Disposition:

☐ **Approved. No ECP required.** _____

NCSX Systems Engineering Support Manager

☒ **Approved. An ECP will be assigned when Section 3.1.1.5.2 is revised accordingly (by end of January).**

Bob Simmons Digitally signed by Bob Simmons DN: CN = Bob Simmons, C = US Reason: I am approving this document Date: 2005.12.20 12:43:29 -05'00'

☐ **Not Approved. Reason(s) for disapproval:**

NCSX RFD Part I	Number: 14-011	RFD Description: Change in Magnetic Permeability Requirements
Initiator: Kevin Bowling	**Organization: Major Tool**	
List of Impacted Documents: ***(Specification, MIT/QA Plan, SOW, drawing, etc.)*** **NCSX-CSPEC-141-3, MTM MIT/QA Plan, SE141-103**		
Cost Impact: ***(If none, so state):*** **NONE**		
Schedule Impact: ***(If none, so state):*** **NONE**		
Quality Impact: ***(If none, so state)):*** **Unknown to MTM.**		
State Requirement Deviation is Requested For*: (Specification, MIT/QA Plan, SOW, drawing, etc.):* **MTM requests permission to change the CSPEC section 3.1.1.5.2 magnetic permeability requirements for all remaining MCWF bearing plates from 1.02μ to 1.03μ.**		
Full Description of the Deviation Requested: ***(Use continuation pages, e-mails, letter, sketches, etc. as needed and include amplifying information as appropriate to support deviation request):*** **MTM ordered the material for several C castings, but receipt tests revealed that the 316ST annealed hot rolled bar from supplier did not meet the CSPEC Section 3.1.1.5.2 requirements. The entire material lot received from the supplier did meet the suggested permeability requirements of this RFD. It is anticipated that follow-on orders will made to the same supplier and that similar magnetic permeability results can be expected.**		
Attachments: MTM-RFD-003 dated November 23, 2005		
Initiator Signature: Kevin Bowling Date: November 23, 2005		

Request for Deviation

MCWF Type A, B, and C

Serial Number: All remaining MCWF winding form parts

Number: MTM-RFD-003

RFD Description:

1. MTM requests permission to change the magnetic permeability requirement for the Bearing Plate details to be less than or equal to 1.03μ.

Initiator: Kevin Bowling

Organization: Major Tool and Machine, Inc.

List of Impacted Documents:
NCSX-CSPEC-141-03, MTM MIT/QA Plan, SE141-103.

Quality Impact: Unknown to MTM. 316SST annealed hot rolled bar from supplier meets the requirements listed in the RFD description above.

Customer Approval

Signature: _____ **Date:**_____