NCSX RFID	Number: 14-016	<b>RFD Description:</b> Bearing Plate Material
IPairí I		Change

Initiator: Nancy Horton/PhilOrganization: EIO/PPPLHeitzenroeder

List of Impacted Documents: (*Specification, MIT/QA Plan, SOW, drawing, etc.*): SE141-137-R2, SE141-138-R2, SE141-139-R1, SE141-140-R1, SE141-141-R1, & SE141-142-R1

Cost Impact: (*If none, so state*): Approximately \$35K cost increase to obtain Stellalloy plates for bearing plates.

Schedule Impact: (If none, so state: NONE

Quality Impact: (If none, so state): Improved permeability will result in lower field errors.

State Requirement Deviation is Requested For: (Specification, MIT/QA Plan, SOW, drawing, etc.): Change bearing plate material from 316 Stainless Steel to Stellalloy of castings C4 through C6, all A castings (A1-A6), and all B castings (B1-B6).

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.)

In an e-mail Larry Sutton to Nancy Horton (dated March 22, 2006, "Use of Stellalloy Bearing Plates") – copy attached, PPPL agreed to change the bearing plate material from 316 Stainless Steel to Stellally for modular coil winding forms C4 through C6, all of the type A winding forms, and all the type B winding forms. The reason for this change is to improve the magnetic permeability.

PPPL recognized that it might not be possible for EIO/MTM to incorporate these changes immediately into the next 2-3 winding forms, but that EIO/MTM would identify those castings shipped with 316 Stainless Steel bearing plates, would initiate NCRs for those so shipped, and mark the bearing plates of 316 Stainless Steel to facilitate PPPL identifying and replacing these plates.

Attachments: E-mail Larry Sutton to Nancy Horton dated March 22, 2006, "Subcontract S—5242\_& - Use of Stellalloy Bearing Plates"

Initiator Signature: <u>Nancy Horton/Phil Heitzenroeder</u>

From: Larry L. Sutton
Sent: Wednesday, March 22, 2006 5:58 PM
To: 'NKHFlowen@aol.com'
Cc: Phil Heitzenroeder; royjratc-aol-com-offsite; Frank A. Malinowski
Subject: Subcontract S005242-F - Use of Stellalloy Bearing Plates

Nancy:

Phil directed I dispatch to you the following information.

"This is to confirm the telephone conversation between Nancy Horton, Phil Heitzenroeder, and Larry Sutton on 3/17 and a phone conversation with Phil on 3/22. NCSX is changing the material for the bearing plates to Stellalloy for modular coil winding forms C4-C5, A1-A6, and B1-B6. We realize that implementing this change will not be possible for the next 2-3 winding forms. For those winding forms where the Stellalloy bearing plates are not available at shipment, we would ask that they be shipped with the 316 stainless steel bearing plates currently on hand which have high magnetic permeability. NCR's should be issued to document those shipped with the high permeability bearing plates. These will be replaced with Stellalloy bearing plates when the studs and nuts are replaced with the A286 versions at PPPL. MTM kindly agreed in a telephone conversation this morning which involved Roy to put paint dots on the hardware and bearing plates which will need to be replaced at PPPL."

Regards,

Larry

NCSX RFD	Number: 14-016		<b>RFD Description: Bearing Plate Material</b> Change	
Part III			Change	
RLM: Brad Nelson		Organiz	Organization: ORNL	
Impact on Interfaces with Other WBS Elements/Items: (If none, so state): NONE				
RLM Recommendation:				
Approve Do Not Approve				
Additional remarks:				
ECN-5105 being prepared to document change in bearing plate material for all winding forms following C3.				
Does this Change Impact Material Already Procured or Parts/Assemblies Already Assembled/Manufactured using this Material: X Yes No				
If "Yes", what is the recommended disposition of this material/part/assembly? Accept C1-C3 winding forms "as is." After analysis of bearing plates of C1, C2, & C3 winding forms, it was determined that the field errors from these first three already have on-site were acceptably small. MTM will provide Stellalloy bearing plates replacements for those castings sent with SS316 bearing plates (e.i., next 2-3 winding forms).				
RLM Signature:				
Project Disposition:				
Approved. No ECP required.				
$\bigotimes$ Approved. ECP will be assigned and processed within 30 days.				
NCSX Systems Engineering Support Manager				
Not Approved. Reason(s) for disapproval:				