PPPL ENGINEERING CHANGE NOTICE (ECN) ECN # 5064R1

COGNIZANT INDIVIDUAL: D. Williamson

ECN TITLE: Revisions to Improve MCWF Machining/Inspection

ASSOCIATED ECP: None

CC/WP/Job: 1403 AREA OR PROJECT: NCSX

LIMITATION OF SCOPE - NOTE: A Work Planning Form is NOT required if the total change to be accomplished (ENG-032):

- Is not large or complex or does not represent a new installation into a usable space
- Does not have a significant ES&H impact
- Does not involve tritium or other radioactive contaminated or activated equipment
- Does not impact multiple projects, systems, or groups

OR does not change the scope or intent of the original design.

Responsible Line Manager CONCURRENCE: _________(Signature indicates that no Work Planning form is required.)

If non-concurrence or associated with a work planning form, enter the WP Number:

DRAWING(S) AFFECTED NUMBER:	NEW Revision	TITLE
SE141-114	6	PRODUCTION WINDING FORM TYPE-A
SE141-115	6	PRODUCTION WINDING FORM TYPE-B
SE141-116	8	PRODUCTION WINDING FORM TYPE-C
Continued on Back		

DESCRIPTION OF CHANGE: (State Drawing No., Zone/Group, or List Attachments)

Drawing changes reflect discussions held at Major Tool, Jan 4-6, 2006. See attachment for meeting summary and action items. Some changes were implemented through RFD-14-012 and -013. This ECN incorporates those changes also.

Item #2b, Wing Surfaces Machining -References dwg SE141-114, -115, -116, SHT-1, G-2 References SE141-114/SHT-10/D5, SE141-115/SHT-11/C3, SE141-116/SHT-10/C4 Action is to change wing surface tolerance from +/-.125 to -.12/-.25-in. Item #3b, Flange Holes – References SE141-114/SHT4-5, SE141-115/SHT4-5, SE141-116/SHT4-5 Action is to change cylindrical zone tolerance from .01 to .06 and diam from 1.88+/-.01 to 1.885+/-.003-in.

Item #4b, Tee Holes – References SE141-114/SHT2, SE141-115/SHT2, SE141-116/SHT2, DETAIL-C Action is to change cylindrical zone tolerance from .01 to .06-in.

Item #5, Tee Profile-

References SE141-114/SHT2, SE141-115/SHT2, SE141-116/SHT2, DETAIL-A Action is to change profile tolerance on top of tee web to .100-in total, change profile tolerance below VPI groove from .100 to .200-in. Leave "L" surface profile tolerance as is.

Item #6, Tee Base Grinding-

References SE141-114/SHT2, SE141-115/SHT2, SE141-116/SHT2, DETAIL-A Add note, "GRIND BASE OF TEE TO GIVE ACCESS FOR STUD WELDING. CLEARENCE DEFINED BY TEMPLATE, SE141-130, OVER ENTIRE LENGTH OF COIL."

Item #12, Port Openings

References SE141-114/SHT7-8, SE141-115/SHT7-8, SE141-116/SHT7-8 Revise geometry to match hole cuts made using a single setup, change dimensions to reference or increase tolerance to be greater than drawing sheet tolerance.

Item #13, Spherical Seats

References SE141-114/SHT4-5, SE141-115/SHT4-5, SE141-116/SHT4-5 Change feature to conical seat, 1.38 diam x 1.25 dp, chamfer 1.88 diam x 90-deg. Change position tolerance from .01 to .06-in.

Item #1, RFD-14-012, Flange Profile Tolerance References SE141-114/SHT10, SE141-115/SHT11, SE141-116/SHT10 Eliminate profile tolerance note for flanges, or change to .030-in total.

T. Brown, PPT Slide, "added_chamfer_to_type-c_wing.ppt", 12/16/05 References SE141-116/SHT1/C3 Add chamfer, 1. x .38 x ~9 LG to improve mod coil clearance at assembly.

PPPL ENGINEERING CHANGE NOTICE (ECN) ECN #5064

REASON FOR CHANGE:

Improve machining operations and overall schedule.

ENGINEERING CHANGE PROPOSAL: N/A DATE: 2/7/06

COGNIZANT INDIVIDUAL MAKING THE CHANGE: D. Williamson

RESONSIBLE LINE MANAGER: B. Nelson