November 14, 2006

Mr. Rodney Templon
Princeton University
Plasma Physics Laboratory
Procurement Division
US Route 1 North at Sayre Drive
PO Box CN17
Princeton, NJ 08543
609.243.2443 phone
609.243.2021 fax
rtemplon@pppl.gov

Subject: Request for Modification to Subcontract #S006639-A, Torodial Field Coil Assemblies

Mr. Templon,

I would like to request a modification to the subject subcontract to address the following issues. The requested changes do not have a cost or schedule impact to the subcontract.

Request #1 – Modification to the proposed payment schedule
Everson Tesla would like to change the payment schedule in Article III of the subcontract. We would like to change item #2 and item #3 into a single item with a value of $360,000.00. The remaining dollars left from items #2 and #4 will be spread across the coils in items #5 through #22.

The requested change is the result from change in the raw material for the wedge construction. The original proposal wedge material was a solid stainless steel plate construction method. We have changed the construction method to a casting. The change has resulted in a more consistent method for achieving the required magnetic permeability specification. The costs associated in the milestone payment are for the raw material to make the castings. The foundry uses ingots of the constituent components to mix the correct chemistry to yield the specific material specified. There are additional costs for engineering associated with casting pattern fabrication, computer simulations for the pouring of the casting, pattern fabrication, machine programming for the rough cut machining, shipping crate design, and project planning. There are engineering costs for the machining and drilling for the finished machined wedge assembly. This finished machined wedge has additional material that is machined off once the wedge is vacuum pressure impregnated to the coil.

The proposed payment schedule is below.

Performance Milestone	Payment	Delivery Date
Tooling	$186,345.00	8/15/2006
Wedge Material & Engineering	$360,000.00	10/31/2006
Tooling (Climax)	$75,000.00	
Coil 1 Accepted	$42,630.64	2/5/2007
Coil 2 Accepted	$42,630.64	2/26/2007
Coil 3 Accepted	$42,630.64	2/28/2007
Coil 4 Accepted	$42,630.64	3/9/2007
Coil 5 Accepted	$42,630.64	3/23/2007
Coil 6 Accepted	$42,630.64	4/6/2007
Coil 7 Accepted	$42,630.64	4/20/2007
Coil 8 Accepted	$42,630.64	5/4/2007
Coil 9 Accepted	$42,630.64	5/18/2007
Coil 10 Accepted	$42,630.64	6/1/2007
Coil 11 Accepted	$42,630.64	6/15/2007
Coil 12 Accepted	$42,630.64	6/29/2007
Coil 13 Accepted	$42,630.64	7/13/2007
Coil 14 Accepted	$42,630.64	7/27/2007
Coil 15 Accepted	$42,630.64	8/10/2007
Coil 16 Accepted	$42,630.64	8/24/2007
Coil 17 Accepted	$42,630.64	9/7/2007
Coil 18 Accepted	$42,630.62	9/21/2007
Tooling & Res. Material	$84,983.50	9/28/2007
Total	$1,473,680.00	

Request #2 – Drawing changes to the wedge assembly.
The proposed change is to allow for safe handling and machine fixture hold down points of the wedge assemblies. The requested drawing changes are to call out tapped holes. The requested changes have been discussed with and accepted by the PPPL Technical Representative. An overview of the requested drawing changes is provided below.

Add Notch to the front edge of the Wedge Casting to make the glass tape wrap underflush on dwg SE131-085
Notch added to make tape on wedge under flush in VPI mold to enhance manufacturability

Add .406dia x .50deep tooling holes to front and back of wedge on dwg SE131-085
Tooling holes .406dia added to hold wedge assembly during final machining of wedge angle

Remove 3/8-16 tooling holes in four places on dwg SE131-085
Tooling holes 3/8 dia not required by Everson so removed

Add 1/8" radius at the top and bottom edges of the Wedge Casting sheet 1 of SE131-085, K4 and B4.
External radius added to wedge to enhance manufacturability of mold which needs an inside radius

Update the assembly SE131-003 drawing to show the boot at the top and the bottom of the Wedge Casting Blended-in.
The epoxy glass boot which pins the wedge structure in place will be feathered into the ground wrap instead of having a step to enhance manufacturability of the VPI mold

Add 1" wide .040" deep fly cut on front surface of wedges at 6 inspection locations on final assembly drawing SE131-003.
Added at the inspection points to provide a precise surface for the inspection fixture

Please review these modification requests and let me know if there is any additional information that is needed. I appreciate your consideration to these requests.

Regards,

Bill Umbenhaur
Everson Tesla, Inc.