Princeton University

Plasma Physics Laboratory

James Forrestal Campus P.O. Box CN17 Princeton, N.J. 08543

17 February 2005

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

SUBJECT: Specification Addendum Letter No. 6-1 to Subcontract S005242-

F's NCSX Product Specification, Modular Coil Winding Forms

NCSX-CSPEC-141-03-06

Dear Ms. Horton:

National Compact Stellarator Experiment (NCSX) Project PRODUCT SPECIFICATION, MODULAR COIL WINDING FORMS, NCSX-CSPEC-141-03-06 (Revision 6), dated 14 January 2005, was transmitted to EIO as an attachment to proposed Amendment No. 2 to Subcontract S005242-F. Transmittal of the Amendment and the Specification was by e-mail on 17 January 2005. The Specification was effective for execution upon receipt.

In the interest of clarity and immediate communication to EIO of NCSX Project comments on EIO requests and recommendations that will either directly or indirectly impact on the Subcontract Specification and or drawings, the Project will issue periodically, as appropriate, serial numbered Specification Addendum Letters. Specification and drawing errors or omissions identified by the NCSX Project and the Project "fix" will also be addressed in these letters.

This **Specification Addendum Letter No. 6-1** (first Addendum Letter issued for Revision 6 of the Specification) provides the following information reported by NCSX Project Management. This information is effective immediately and where appropriate will be formally incorporated in the next revision of the Specification, now projected to be issued before 16 May 2005.

Charpy V – Notch Energy

SUBJECT: Specification Addendum Letter No. 6-1 to Subcontract

S005242-F's NCSX Product Specification, Modular Coil

Winding Forms NCSX-CSPEC-141-03-06

In response to an EIO request for a deviation from the Charpy V-notch requirements for weld wire, NCSX has revised the requirements of NCSX-CSPEC-141-03 Table 3-2 to the values shown below. This revision is effective for implementation immediately.

EIO is authorized to proceed with welding on the C1 casting based on this guidance.

 Temperature
 77K
 293K

 Elastic Modulus
 21 Msi (144.8 Gpa)
 20 Msi (137.9 Gpa)

 0.2% Yield Strength
 72 ksi (496.4 Gpa)
 34 ksi (234.4 Gpa)

 Tensile Strength
 95 ksi (655 Gpa)
 78 ksi (537.8 Gpa)

 Elongation
 32%
 36%

Table 3-2 Minimum Mechanical Properties

EIO is to provide within 30 days (by no later than Monday 21 March 2005) the actual material test data for both the cast alloy and weld material to validate these values.

35 ft. lbs. (47.4 J)

Please sign and return by telefax the acknowledgment of receipt certificate on the following page.

If there are any questions pertaining to these matters, I may be contacted at (609) 243-2441, telefax (609) 243-2021, or by e-mail lsutton@pppl.gov.

wy , a

Senior Subcontract Administrator

50 ft-lbs (67.8 J)