

# NATIONAL COMPACT STELLARATOR PROJECT

## Engineering Change Proposal (ECP)

### COVER PAGE

*(TO BE COMPLETED BY SYSTEMS ENGINEERING SUPPORT MANAGER)*

**Originator:** PL Goranson

**Date:** 7/29/04

**ECP No:** ECP-04-013

**ECP Title:** Modification to seals on Spool Piece and End Piece for Vacuum Vessel Joint R&D

### Required Reviewers

**Required Reviewers for this ECP:**

**P. Heitzenroeder**

### ECP Approval Level

**Expedited ECP?** ☒ Yes ☐ No

**Change Level:** 0 Under Secretary

**Approving Official:** 0 Under Secretary

### Actions

Update drawings SE1203-001 through SE1203-008, SE1203-11, SE1203-12, SE1203-15, SE1203-16, and SE1203-17 to reflect vendor recommendations.

Update statement of work NCSX-SOW-121-02-01 to remove procedures obsoleted by changes in the design.

### APPROVALS

*(TO BE COMPLETED BY APPROVING OFFICIALS)*

Change Level	Approving Official	Approval?	Signature
3	NCSX Project Manager	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3a (Expedited ECP)	NCSX Engineering Manager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2	NCSX Federal Project Director	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1	Associate Director OFES	<input type="checkbox"/> Yes <input type="checkbox"/> No	
0	Under Secretary of Energy	<input type="checkbox"/> Yes <input type="checkbox"/> No	

# NATIONAL COMPACT STELLARATOR PROJECT

## Engineering Change Proposal (ECP)

### *PART I* *(TO BE COMPLETED BY ORIGINATOR)*

Originator:

Date:

#### Overview of Change

Type of ECP: ☒ EXPEDITED ☐ STANDARD

Type of Change: ☒ TECHNICAL ☒ COST ☐ SCHEDULE ☐ EDITORIAL

(Check all that Apply)

**Reason for Change:** Vendor recommendation to relax contour tolerances and change the seal from a welded wire to a compliant seal material (Grafoil), resulting in looser tolerance requirements and less distortion in the seal plates.

**Impacted WBS Elements:** None Impacted.

#### **Impacts of Change (Briefly Describe):**

The change will reduce fabrication cost of the assembly and result in a better fitup due to reduction in distortion. The change in design also eliminates the need for dry fitup and pressure testing of the assemblies as required in the SOW.

**Assessment of Other Options:** None

# **NATIONAL COMPACT STELLARATOR PROJECT**

## **Engineering Change Proposal (ECP)**

### ***PART I***

#### ***(TO BE COMPLETED BY ORIGINATOR)***

**Originator:**

**Date:**

#### **Detailed Description of the Change:**

(Use Continuation Sheets and/or Attach Information/Sketches, As Needed)

#### **List Attachments, Impacted Documents, etc.**

Drawing package SE1203, Revision A incorporates these changes.

#### **Description of Change:**

SE1203-001 Updated to show changes

SE1203-002 Mating grooves changed, fillet weld removed, views updated, vent hole details added to sheet 3.

SE1203-003 Mating grooves changed, views updated

SE1203-004 Fillet weld removed, added note 7

SE1203-005 Fillet weld removed, added note 7.

SE1203-006 Update sections

SE1203-007 Update sections, remove fillet weld

SE1203-008 Removed

SE1203-0011 Added contour tolerance

SE1203-0012 Removed

SE1203-0015 Tolerances changed

SE1203-0016 Changed dimensions

SE1203-0017 Changed dimensions