

# NATIONAL COMPACT STELLARATOR PROJECT

## Engineering Change Proposal (ECP)

### COVER PAGE

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

Originator: Dave Williamson

Date: April 26, 2004

ECP No: 04-007

ECP Title: Twisted Racetrack VPI Groove Depth

#### Required Reviewers

Required Reviewers for this ECP:

P. Heitzenroeder, L. Dudek

#### ECP Approval Level

Expedited ECP?  Yes     No

Change Level: 3 Project

Approving Official: 3a Expedited ECP - Engineering Manager

#### Actions

- (1) Prepare ECN to incorporate changes approved by this ECP
- (2) Revise Sheet-2 of Drawing SE140-084, Rev-1 to reflect change approved
- (3) Revise Twisted Racetrack Coil contract to reflect change
- (4) Revise WAF 1406 as appropriate to reflect change

### 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: Dave Williamson

Date: April 26, 2004

Overview of Change

Type of of ECP:         EXPEDITED         STANDARD

Type of Change:      TECHNICAL     COST     SCHEDULE     EDITORIAL

(Check all that Apply)

**Reason for Change:**

R&D indicates that VPI groove depth should be increased from 0.22-in to 0.32-in  
This is shown in Detail-2, Sheet-2 of Drawing SE140-084, Rev-1

**Impacted WBS Elements:**

WBS14 Modular Coil R&D Activities, Job #1406

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

Potential increase in machining time, however the fabricator does not see a significant impact.

**Assessment of Other Options:**

None have been assessed. It is desired to make the twisted racetrack features prototypical.

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

**Originator:** Dave Williamson

**Date:** April 26, 2004

**Detailed Description of the Change:**

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

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

Drawing SE140-084, Rev-1 incorporates this change.

**Description of Change:**

Increase depth of VPI groove, shown in Detail-2, Sheet-2 from 0.22-in to 0.32-in

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*PART I*  
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**Originator: Dave Williamson**

**Date: April 26, 2004**

**Continuation Sheet:**

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

N/A