

NATIONAL COMPACT STELLARATOR PROJECT

Engineering Change Proposal (ECP)

COVER PAGE

(TO BE COMPLETED BY SYSTEMS ENGINEERING SUPPORT MANAGER)

Originator: Ron Strykowski

Date: January 31, 2005

ECP No: 021

ECP Title: Close Out of Jobs & Contingency Draw

Required Reviewers

Required Reviewers for this ECP:

W. Reiersen, R. Strykowski, Brad Nelson, J. Malsbury, R. Simmons, J. Levine, M. Zarnstorff, D. Williamson, P. Heitzenroeder

ECP Approval Level

Expedited ECP? ☐ Yes ☒ No

Change Level: 2 Federal Project Director

Approving Official: 2 Federal Project Director

Actions

- (1) Close Out Jobs and Draw Down on Contingency by January 31, 2005
- (2) Revise Master Resource Loaded Schedule to reflect ECP021 by January 31, 2005

APPROVALS

(TO BE COMPLETED BY APPROVING OFFICIALS)

Change Level	Approving Official	Approval?	Signature
3	NCSX Project Manager	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3a (Expedited ECP)	NCSX Engineering Manager	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	NCSX Federal Project Director	<input checked="" 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: Ron Strykowski

Date: January 31, 2005

Overview of Change

Type of ECP: ☐ EXPEDITED ☒ STANDARD

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

(Check all that Apply)

Reason for Change:

- (1) WBS 142 (Job 1406 – Modular Coil Winding R&D Preparations) – Additional estimated costs of \$239K for close-out of the winding R&D and Testing. Baseline budget underestimated the extent of required material testing (e.g., fatigue testing, conductor keystone testing, etc.) and fabrication of components for the twisted race track coil tests.
- (2) WBS 84 (Jobs 8401 and 8402 – PPPL and ORNL Project Physics) – Additional \$58K for close-out of the project physics work scope, which was completed in FY2004. Cost growth was driven by additional physics effort required to support Title II design in FY2004 (e.g., the redesign of the vacuum vessel shell geometry and port configuration).
- (3) WBS 12 and 14 – re-optimized fabrication schedules for VVSA and MCWF to better reflect latest schedule projections of Major Tool and EIO – no cost impact. There is no impact on Level 1 or Level 2 milestones, or on the critical path.

Impacts of Change (Briefly Describe):

- Budget: Requesting contingency draw down of \$297K, reducing remaining contingency from \$13,053K to \$12,756K.
- Schedule: There are no impacts on Level 1 or Level 2 milestones, or on the critical path.

Assessment of Other Options: None

List Attachments, Impacted Documents, etc.

- (1) ECP-018 to ECP-021 Reconciliation
- (2) Update Master Resource Loaded Schedule for ECP-021

Description of Change:

We are reflecting the estimated costs at completion of several jobs that are being closed or near the end of their period of performance. These final costs will require a contingency draw of \$297K. There is no schedule impact to Level 1 or Level 2 milestones, or to the critical path.

In addition, several jobs have been re-optimized to better reflect supplier schedules and revised plans. These re-optimized jobs have no budget or schedule impacts.