

**NCSX Work Approval Form (WAF)**

**WBS Number: 134**  
**WBS Title: Conventional Coils I&C**  
**Job Number: 1355**  
**Job Title: Conventional Coils I&C**  
**Job Manager: Mike Kalish**

**Description:**

This WBS element provides the manufacturing design and fabrication of the local I&C components required by the WBS elements under Conventional Coils (WBS 13). Local I&C requirements will be determined in the design of these WBS elements, and may include strain gages, RTDs, and voltage taps.

**Schedule:**

See Attached

**Approvals:**

_____	_____
Job Manager	Date
_____	_____
Responsible Line Manager	Date
_____	_____
Project Manager	Date
_____	_____
Engineering Department Head	Date







NCSX June 2007 ETC

TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

WBS Number: 134  
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**Uncertainty of the Estimate**

	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Uncertainty Range (%)</u>	<u>Comments/Other Considerations</u>
Design Maturity		X		-10%/+15%	Requirements in early development, but relatively simple design based on previous experience.
Design Complexity			X		Simple off-the-shelf thermocouples attached to coil

Note: High/Medium/Low uncertainty assessment from Job Manager. Uncertainty range based on ACEI recommended practice 18R-97 as amended for NCSX.

**Residual Impacts**

	<u>Risk</u>	Likelihood of Occurring	<u>Mitigation Strategies</u>	<u>Consequence if Occurs</u>	
				<u>Cost</u>	<u>Schedule</u>
NONE					

Activity ID	MILE-stones (level 2 & 3)	Activity Description	Duration (work days)	Baseline Start	Baseline Finish	Shifts	Total Float	% cmlpt	Proposed Budgeted							
										FY07	FY08	FY09	FY10	FY11	FY12	
<b>Job: 1355 - WBS 13 I&amp;C Proc and Coil Assy-KALISH</b>																
<b>TF/PF Load I&amp;C</b>																
1355-101		Design, and Review	60	01FEB08*	24APR08		86		11,145.60							
1355-103		Prepare Installation Procedures	20	25APR08	22MAY08		86		3,715.20							
1355-105		FDR	1	23MAY08	23MAY08		86		1,486.08							
1355-107		Prep req,bid,award T/C and wire	20	27MAY08	23JUN08		86		2,229.12							
1355-109		Deliver of T/C and wire	40	24JUN08	19AUG08		86		13,080.00							
1355-111		Installation on PF4,5,6 Coils upon delivery	20	15JAN09	11FEB09		15		9,745.80							
1355-112		Installation on TF Coils upon delivery	45	01OCT08*	04DEC08		57		29,046.19							
1355-113		Installation on PF1a Coils upon delivery	3	15MAR10	17MAR10		101		1,561.87							
<b>Subtotal</b>			<b>529</b>	<b>01FEB08</b>	<b>17MAR10</b>		<b>101</b>		<b>72,009.86</b>							

■ EA/EM =60hr ;  
 ■ EA/EM =20hr ;  
 | EA/EM =08hr ;  
 ■ ea/em=12  
 ■ 41=10Sk ;  
 ■ EA/EM =10hr ; EM/TB =95hr ;  
 ■ EA/EM =29hr ; EM/TB =285hr ;  
 | EA/EM =1hr ; EM/TB =16hr ;