

NCSX Work Approval Form (WAF)

WBS Number: 56

WBS Title: Central Safety Interlock Systems

Job Number: 5601

Job Title: Central Safety Interlock Systems

Job Manager: Paul Sichta

Description:

The Central Safety Interlock System will provide system-wide coordination of personnel and hardware interlocks. Its primary man machine interface will be EPICS. The Central Safety Interlock System will be a fail-safe, hybrid system. Mechanical components and hardwired devices will provide primary protective functions. Each NCSX high-energy subsystem will interface with the Central Safety Interlock System. An access control system will be incorporated to grant access to the Test Cell for only authorized/trained personnel. UPS and Standby power will be used for critical components.

Schedule:

See Attached

Approvals:

Job Manager

Date

Responsible Line Manager

Date

Project Manager

Date

Engineering Department Head

Date

**NCSX June 2007 ETC
TABLE I - DESIGN LABOR**

WBS Number: 56													
WBS Title: Central Safety Interlock Systems													
Job Number: 5601													
Job Title: Central Safety Interlock Systems													
Job Manager: Paul Sichta													
Description:													
<i>Title I and</i>													
FY07\$K													
Activity ID	Activity Description	41MS	43MS/CC	48MS	37STK	35TRVL	ECEM	ECTB	EMTB	EASB	EEEM	EETB	Basis of Estimate
We need to know what you are buying, the basis of that estimate, & the basis of your labor hours													
56-10	Requirements, Codes&Standards						40						
56-20	Preliminary Design						40						
56-30	PLC Training		\$2K			\$2K	80						
56-40	Final Design						140						
56-40	Procurement	\$20K	\$12K		\$8K		40						
56-50	PLC Programming						120						
56-60	Installation						60	80	480	240			
56-70	Test						80	40					
Subtotal Job 5601		\$20K	\$14K	\$0K	\$8K	\$2K	600	120	480	240	0	0	

NCSX June 2007 ETC
TABLE II - Materials and Subcontracts

WBS Number: 56							
WBS Title: Central Safety Interlock Systems							
Job Number: 5601							
Job Title: Central Safety Interlock Systems							
Job Manager: Paul Sichta							
Materials and Subcontracts (M&S)						Basis of Estimate	
Description:							
See Table I							

NCSX June 2007 ETC
TABLE III - Fabrication/Assembly Installation

WBS Number: 56										
WBS Title: Central Safety Interlock Systems										
Job Number: 5601										
Job Title: Central Safety Interlock Systems										
Job Manager: Paul Sichta										
In-house Fabrication and Assembly and Installation										
See Table I										

Activity ID	MILE-stones (level 2 & 3)	Activity Description	Duration (work days)	Baseline Start	Baseline Finish	Shifts	Total Float	% cmplt	Proposed Budgeted							
										FY07	FY08	FY09	FY10	FY11	FY12	
56 - Central Safety and Interlock Systems																
Job: 5601 - Central Safety & Interlock Sys-SICHTA																
R56-10		Requirements, Codes&Standards	60	01JUN09*	24AUG09		39		6,203.60							
R56-20		Preliminary Design	30	25AUG09	06OCT09		39		6,231.71							
R56-21		PDR	0		06OCT09		39		0.00							
R56-30		PLC Training	60	07OCT09	12JAN10		159		15,374.80							
R56-35		Final Design	30	07OCT09	17NOV09		39		22,450.40							
R56-36		FDR	0		17NOV09		39		0.00							
R56-40		Procurement	60	18NOV09	23FEB10		39		49,062.40							
R56-50		PLC Programming	90	24FEB10	30JUN10		39		19,243.20							
R56-60		Installation	70	24FEB10	02JUN10		59		87,412.00							
R56-70	2	Test	30	01JUL10	12AUG10		39		15,947.20							
Subtotal			300	01JUN09	12AUG10		39		221,925.31							

