NCSX Work Approval Form (WAF)

WBS Number: 826
WBS Title: Plant Design
Job Number: 8215
Job Title: Plant Modeling
Job Manager: Erik Perry

Description:

Allocate space within the NCSX Facility which includes the Test Cell and adjacent areas. Develop models and drawings to define the routing and location of equipment in the Test Cell.

Schedule: See Attachment

Approvals:

Erik Perry
Digitally signed by Erik Perry
DN: cn=Erik Perry, c=US, email=eperry@pppl.gov
Date: 2007.07.18 15:35:31 -04'00'

Job Manager _____ Date _____

Wayne Reiersen
Digitally signed by Wayne Reiersen
DN: cn=Wayne Reiersen, c=US, o=PPPL
Date: 2007.07.19 08:24:00 -04'00'

Responsible Line Manager _____ Date _____

James L Anderson
Digitally signed by James L Anderson
DN: cn=James L Anderson, c=US, o=PPPL, ou=NCSX, email=jlanders@pppl.gov
Reason: I am approving this document
Date: 2007.07.19 10:56:26 -04'00'

Project Manager _____ Date _____

Mike Williams
Digitally signed by Mike Williams
DN: cn=Mike Williams, o=PPPL, ou=Engineering, email=williams@pppl.gov, c=US
Date: 2007.07.19 13:52:54 -04'00'

Engineering Department Head _____ Date _____

NCSX June 2007 ETC
TABLE I - Design Labor

WBS Number: 826
WBS Title: Plant Design
Job Number: 8215
Job Title: Plant Modeling
Job Manager: Erik Perry

Job	WBS	Function	Resource Requirements	Basis of Estimate
8215 - Plant modeling (Perry)				
	826 - Plant Modeling			
		Updating of NCSX test cell general arrangement drawings and distribution of them to all NCSX WBS managers on a monthly basis. This will include negotiating all real estate allocations in the test cell.	10 days for a mechanical designer (Morris) and 5 days for E. Perry to become acqauinted with the plant model and bring it up to date starting in August 2007. One man-day per month for E. Perry, one half man-day per month for A. Langella, and one man-day per month for a mechanical designer (Morris) through CD-4.	Based on the labor required to update NSTX general arrangement drawings up until their first plasma.

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TABLE II - Materials and Subcontracts

Description:	**None**											

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TABLE III - Fabrication and Assembly

Fabrication and Assembly		**None**								

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TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

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Uncertainty of the Estimate

	High	Medium	Low	Uncertainty Range (%)	Comments/Other Considerations
Design Maturity		X		-10%/+15%	
Design Complexity			X		

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

Residual Impacts

Job	Risk Description	Likelihood of Occurring	Mitigation Plan	Basis of estimate	Cost Impact Low	Cost Impact High	Schedule Impact Low	Schedule Impact High
8215	None							

Notes:
[1] Low cost and schedule impacts are considered the minimum (0-percentile) impacts should the event occur.
High cost and schedule impacts are considered the maximum (100-percentile) impacts should the event occur
[2] Cost impacts should be entered as loaded costs
Cost impacts should NOT include standing army costs which are separately calculated from the schedule impact
[3] The schedule impacts should be entered as the min and max impacts on the critical path.
If there is no critical path impact then the schedule entries should be zero.
[4] Likelihood of occurrence should be entered consistent with our risk classification methodology, i.e.
VL= Very Likely (P>80%), L=Likely (80%>P>40%), U=Unlikley (40%>P>10%), VU=Very Unlikely (P<10%), NC=Non-credible (P<1%

Activity ID	MILE-stones (level 2 & 3)	Activity Description	Duration (work days	Baseline Start	Baseline Finish	Shifts	Total Float	% cmplt	Proposed Budgeted
Job: 8215 Plant Design									
FY07 Rebaseline Exercise									
8210-07		Update plant model	42*	01AUG07*	28SEP07		1,249		15,029.60
8210-08		Plant Design FY08	826	01OCT07*	31JAN11		423	LOE	105,719.02
Subtotal			868	01AUG07	31JAN11		423		120,748.62