

**NCSX Fabrication Project Cost and Schedule Estimating Form
(Attachment 1c - FAB)**

WBS: 231 GDC (9450)

Activity Title	Manhours	FY2003 \$\$	Labor Type	Start Date Month/Year	End Date Month/Year	Comments
Glow Discharge Cleaning System						
<i>Labor</i>						
Preliminary Design (Title I)						
Eng. Work Planning and Design	40		EME*EM	10/1/02	9/30/03	Cog: W. Blanchard
Final Design (Title II)						
Eng. Work Planning and Design	80		EME*EM	10/1/04	9/30/05	Cog: W. Blanchard
Design 3 fixed wall anodes	40		EME*SM	10/1/04	9/30/05	Cog: T. Provost
Design 3 Preionization Filaments	40		EME*SM	10/1/04	9/30/05	Cog: T. Provost
Design 3 Pwr Supplies	80		EED*SM	10/1/05	9/30/06	Cog: R. Gernhardt
Design PLC Controls	80		EED*SM	10/1/05	9/30/06	Cog: R. Gernhardt
Elec. Design	120		EADD*DM	10/1/05	9/30/06	Cog: F. Jones
Drafting	120		EADD*DM	10/1/05	9/30/06	Cog: T. Brown
Lab Fab/Assembly/Installation (Title III)						
Eng. Work Planning and Design	24		EME*EM	10/1/05	3/31/07	Cog: W. Blanchard
Fab 3 fixed wall anodes	80		EME*SM	10/1/04	9/30/05	Cog: T. Provost
Fab 3 Preionization Filaments	60		EME*SM	10/1/04	9/30/05	Cog: T. Provost
Fab, Install 3 Pwr Supplies	160		EED*SM	10/1/05	9/30/06	Cog: R. Gernhardt
Install PLC Controls	160		EED*SM	10/1/05	9/30/06	Cog: R. Gernhardt
Fabrication/installation	120		EM*SM	10/1/05	9/30/06	Cog: J. Winston/S. Kemp
Fabrication/installation	200		EM*TB	10/1/05	9/30/06	Cog: S. Kemp/J. Winston
Integrated Systems Testing/Eng	24		EME*EM	10/1/06	3/31/07	Cog: W. Blanchard
Integrated Systems Testing/Tech Support	24		EED*SM	10/1/06	3/31/07	Cog: R. Gernhardt
NOTE: This system will not be installed for first plasma						
Level of Effort						
FY2003						
FY2004						
FY2005						
FY2006						
FY2007						

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Activity Title	Manhours	FY2003 \$\$	Labor Type	Start Date Month/Year	End Date Month/Year	Comments
Glow Discharge Cleaning System						
M&S Costs						
Manufacturing Development						
Purchased Design Services						
Procured Hardware/Material						
		\$22,500.00			2003\$	
Procured Hardware/Material						
Purchased Design Services						
Procured Installation/Assembly Costs						
Other Costs						
Travel						
Allocations (WBS 81 only)						

Identify each procurement over \$100K individually

Instructions for Completing Form

- (1) One form for each 3 digit WBS element (e.g., 111, 121, 452, etc.) => if no 3 digit WBS, use 2 digit WBS (e.g., 81, 82, 84)
- (2) For Lab labor, provide estimate in manhours => provide estimate by specific labor type.
- (3) For M&S, provide estimate in FY2002 direct dollars if procured by PPPL, or in fully loaded dollars if procured by ORNL
- (4) Start and end date provided in month/year format => March/2003