

FIELD MAPPING															FY02 rates		
WBS 38	RRM	EEEM	ECEM	EMEM	ERSM	EESM	ECTB	EETB	D*DM	EMSM	TRAVEL	STKRM	M&S	Unloaded	Loaded		
<b>e-Beam Probe, Fluor. Screen, CCD camera</b>	230	60	40	280	0	80	0	0	100	170	0	0	114000	182,838.20	257,096.45		
<b>Preliminary design (Title I)</b>																	
preliminary design	60			40					20					9,497.80	15,837.04		
														0.00	0.00		
<b>Final design (Title II)</b>																	
design mesh, support	10			40					20					4,997.80	8,356.92		
design e-beam probe interface flange				20					20					2,529.20	4,265.45		
design e- beam probe support				20					40					3,489.80	5,935.45		
<b>Lab Fab/Assembly/Installation (Title III)</b>																	
specify cooled, long exp. CCD camera, control computer	40													3,600.00	5,984.10		
specify e-gun, power supply		60												4,536.60	7,540.96		
specify probe drive with R and theta motion, readout	20			40										4,937.20	8,182.94		
														0.00	0.00		
														0.00	0.00		
procure cooled CCD camera, lens, control PC, acc.													\$40,000	40,000.00	50,000.00		
procure registration camera, PC, etc													\$5,000	5,000.00	6,250.00		
procure e-beam probe drive													\$40,000	40,000.00	50,000.00		
procure e-gun, power supply													\$25,000	25,000.00	31,250.00		
procure lenses													\$3,000	3,000.00	3,750.00		
procure phosphor coating on mesh													\$1,000	1,000.00	1,250.00		
														0.00	0.00		
fab mesh and support										20				2,071.00	3,434.77		
fab mounts										40				2,110.00	3,507.35		
install mounts in VV										30				1,524.00	2,521.65		
metrology on mounts										20				2,584.60	4,276.54		
test camera and control computer in lab	40		40											8,559.20	14,249.26		
lab test probe drive, e-gun on existing chamber	40			40										8,847.20	14,682.34		
														0.00	0.00		
install interface flange, e-beam probe				20						20				2,584.60	4,276.54		
install mesh				20						20				2,584.60	4,276.54		
install camera	20			20						20				4,384.60	7,268.59		
<b>Total PPPL Resources</b>																	
	230	60	40	280	0	80	0	0	100	170	0	0	\$114,000	182,838.20	257,096.45		
												<b>FY02 RATES</b>					
												<b>DEMOG</b>		<b>Base</b>	<b>Loaded</b>	<b>DEMOG</b>	
Assumptions												E A Div Engineer		EAEM	\$76.28	132.61	LEAEM
1) Assumes use of dedicated, reentrant view for registration												Computer Div Engineer		ECEM	\$71.23	118.95	LECEM
2) Assumes need for long exposure, cooled CCD camera to improve dynamic range for DC measurements												Computer Div SL&S		ECSM	\$50.18	83.79	LECSM
3) Assumes use of a fluorescent rod with a large 1-D array of vacuum compatible fibers with phosphor at input end												Computer DivTech		ECTB	\$36.18	60.42	LECTB
4) Assumes new probe drive for e-gun capable of precision motion on line through nominal plasma x-section												EE Div Engineer		EEEM	\$75.61	125.68	LEEEM
5) Probe head must be rotatable to orient e-gun axis along local field.												EE Div SL&S		EESM	\$52.75	87.68	LEESM
6) Assumes e-gun and associated power supply can be purchased off the shelf												EE DivTech		EETB	\$37.43	62.22	LEETB
7) Assumes rod on an articulated arm to scan x-section												physics		RRM	\$90.00	149.60	LEREM
												RF SL&S		ERSM	\$50.18	83.41	LEERSM
												RF Tech		ERTB	\$36.18	60.14	LERTB
												ME Engineer		EMEM	\$78.43	129.77	LEMEM
												ME Machinist		EMNB	\$50.80	84.05	LEMNB
												ME SL&S		EMSM	\$50.80	84.05	LEMESM
												ME Tech		EMTB	\$33.49	55.41	LEMTB

										Drafting Monthly	D_DM	\$48.03	83.50	LD_DM
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										M&S Purchases	MS(41)	M&S \$\$	1.25	MSGA
										Stockroom Withdrawals	STKR(37)	STKR\$\$	1.19	SRGA
										Travel	TVL(35)	TVL\$\$	1.19	TVLGA
										Des & Anlys Div Burden	EABUR	14.00%		
										Comp Sys Div Burden	ECBUR	9.50%		
										Tech Sys Div Burden	EEBUR	9.00%		
										Fab Eng Div Burden	EMBUR	8.50%		
										Operating G&A	G_A	52.50%		
										Operating G&A: M&S	G_A_M	19.00%		
										Escalation Multiplier from FY01	ESC	1.0000		