Pacific Gas and Electric Company®

Application Development Project Complexity and Sizing Worksheet

Legend	
	Enterable/Modifiable
	Overwritten
	Not Updatable
	Default Value

Date Checklist Completed:	6/29/2009
ITWR # (if applicable):	
Proposal Description:	Electric Distribution Maintenance (Program 2)
Client Portfolio Lead:	
Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2011
Anticipated End Date of Project (MM/DD/YYYY):	12/31/2013

Please provide a response for ALL criteria The responses provided impact the Total Score for the proposed project, which helps determine the Preliminary Project Cost.

#	CRITERIA	RESPONSE	ASSUMPTIONS	SCORE
1	Expected duration of the project (in weeks):	156	(Calculated Based on Anticipated Start/End Dates, above)	6
2	Anticipated ISTS Application Development Labor Days	329	Significant IT effort	3
3	How many 3rd party vendor firms will provide services for this project?	3 or More	Numerous efforts with various vendors	6
4	If the technology is known, has it been successfully implemented before at PG&E?	Yes	Existing Technology	6
5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Medium	Business Requirements known, but formal requirements have not yet been developed	6
6	Is there a pre-existing PG&E support group to maintain/support the application?	Yes	Addition to current support teams	2
7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	High	Shared IT resources	3
8	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	No	Generally internal to PG&E	4
9	What is the level of criticality of the system to the users and PG&E customers?	Business Important	Reliability	9
10	How many internal PG&E users will be impacted by this project?	>500	Multiple ED maintenance departments will be affected	9
11	What is the anticipated amount of formal training that will be required for PG&E users?	Medium	Changes to technology and business processes	6
12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	1	ED Maintenace	3
			TOTAL SCORE:	63

Additional Notes & Assumptions:

Engineering & Operations Maintenance IT efforts

Pacific Gas and Electric Company

Application Development Preliminary Project Costing Checklist

	LEGEND
	Enterable/Modifiable
	Overwritten
	Not Updatable
	Default Value

Date Checklist Completed:	8/28/2009
ITWR # (if applicable):	0
Proposal Description:	Electric Distribution Maintenance (Program 2)
Client Portfolio Lead:	0
Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2011
Anticipated End Date of Project (MM/DD/YYYY):	12/31/2014

		Weight
PG&E ISTS Labor Blended Daily Rate per Resource	$941.16	70%
External ISTS Labor Blended Daily Rate per Resource	$1,481.52	30%
COMBINED ISTS BLENDED DAILY RATE PER RESOURCE	$1,103.27	

		Weight
PG&E Business Labor Blended Daily Rate per Resource	$995.28	75%
External Business Labor Blended Daily Rate per Resource	$1,992.69	25%
COMBINED BUSINESS BLENDED DAILY RATE PER RESOURCE	$1,244.63	

APPLICATION DEVELOPMENT LABOR

PRIMARY COST CRITERIA			PRELIMINARY EFFORT (DAYS)			PRELIMINARY COST		
ISTS APPLICATION DEVELOPMENT	COMMENTS / ASSUMPTIONS		LOW	MID	HIGH	LOW	MID	HIGH
ISTS Application Development Labor Days (Project Management through Service Introduction/Deployment), including Middleware, Integration, Configuration, etc.	(You Must Enter An Assumption)		246	329	411	$271,818	$362,424	$453,029
	Default Calculated Labor Days:		246	329	411	$271,818	$362,424	$453,029
PG&E BUSINESS	% of App Dev Labor							
PG&E Business Labor	20%	(Default = 20% of App Dev Labor)	49	66	82	$61,329	$81,772	$102,215
TECHNICAL ARCHITECTURE	% of App Dev Labor							
Technical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	50%	(Default based on Number of Users Impacted)	123	164	205	$135,909	$181,212	$226,515
USER TRAINING & PERFORMANCE SUPPORT	% of App Dev Labor							
User Training and Performance Support Labor Days (Analyze/Design/Build/Test) for the effort to create Training Material and Communications Plan to support the Application rollout.	20%	(Default based on Anticipated Amount of Formal User Training)	49	66	82	$54,364	$72,486	$90,606
	LABOR DAYS SUBTOTAL:		466	624	780	$523,419	$697,892	$872,365
	Project Complexity and Size Factor:		140	187	234	$157,026	$209,368	$261,710
	TOTAL LABOR DAYS:		609	811	1,014	$680,445	$907,260	$1,134,075

Application Development Preliminary Project Costing Checklist

	Default Value

Date Checklist Completed:	6/29/2009
ITWR # (if applicable):	0
Proposal Description:	Electric Distribution Maintenance (Program 2)
Client Portfolio Lead:	0

HARDWARE LABOR, MATERIALS, AND OTHER COSTS

PRIMARY COST CRITERIA INFRASTRUCTURE	COMMENTS / ASSUMPTIONS	PRELIMINARY COST		
		LOW	MID	HIGH
Hardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	$3,000,000	$4,000,000	$6,000,000
System/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	$2,250,000	$3,000,000	$3,750,000
USER TRAINING				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	$100,000	$250,000	$400,000
MISCELLANEOUS COSTS				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	Multiple system upgrades	$1,950,000	$2,325,000	$2,700,000
	COST SUBTOTAL:	$7,300,000	$9,575,000	$11,850,000
	Project Complexity and Size Factor:	$2,190,000	$2,872,500	$3,555,000
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	$9,490,000	$12,447,500	$15,405,000

	LOW	MID	HIGH
TOTAL PRELIMINARY PROJECT COST:	$10,170,000	$13,355,000	$16,539,000

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy Days
1/1/2011	12/31/2013	1,014	1,095	10%	101	913

Stage	Start Date	End Date	Typical Work Allocation Percentage by Stage	% of stage effort (do not change)	Override stage effort (override Col C)	Stage Work Days	% stage duration	Duration in days	Net Work Days
Project Mgmt	1/1/2011	12/31/2013				101			782
Plan	1/1/2011	3/29/2011	1-5%	8%	8%	73	8%	86	62
Analyze	3/29/2011	7/17/2011	5-10%	10%	10%	91	10%	110	79
Design	7/17/2011	2/21/2012	15-35%	20%	20%	183	20%	219	157
Build	2/21/2012	1/14/2013	25-60%	30%	30%	274	30%	329	235
Test	1/14/2013	8/21/2013	10-25%	20%	20%	183	20%	219	158
Deploy	8/21/2013	12/31/2013	3-5%	12%	12%	110	12%	131	95
				100%	100%	1014.24	100%	1,095	

Roles	Workdays	FTE's															
resource pools:		various	various	various	Env CoE	various App Services	Software QA	DBA CoE	SP&A	Infrastructure	various App Services	Env CoE	Env CoE	various	Business	Deployment CoE	
Percentage Total	Workday Total	Business Analyst	Project Manager	Application Designer	Configuration Manager	Programmer	Test Lead & Tester	Database Administration/Data Architect	Technical Architect	Technical Architect	Technical Architect	Technical Architect	Technical Operations Support Specialist	Integration Solution Architect & Designer	Human Performance Architect/Change Administrator	Deployment Lead & Source Introduction Lead	Max FTEs (related to the resource pool)
	1,014	0.5	-	-	-	0.5	0.5	-	-	-	-	-	-	-	0.5	0.5	-
100.0%	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100.0%	73	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5
100.0%	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5
100.0%	183	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5
100.0%	274	-	-	-	-	0.5	-	-	-	-	-	-	-	-	0.5	-	0.5
100.0%	183	-	-	-	-	-	0.5	-	-	-	-	-	-	-	0.5	-	0.5
100.0%	110	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5