Pacific Gas and Electric Company

Application Development Project Complexity and Sizing Worksheet

Date Checklist Completed:	6/29/2009
ITWR # (if applicable):	
Proposal Description:	Gas and Electric Mapping (Program 16)
Client Portfolio Lead:	
Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2011
Anticipated End Date of Project (MM/DD/YYYY):	12/31/2012

Legend
- Enterable/Modifiable
- Overwritten
- Not Updatable
- Default Value

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):	104	(Calculated Based on Anticipated Start/End Dates, above)	4
2	Anticipated ISTS Application Development Labor Days	219	Significant IT participation for GIS effort	3
3	How many 3rd party vendor firms will provide services for this project?	3 or More	ESRI, SAP, CEDSA etc	6
4	If the technology is known, has it been successfully implemented before at PG&E?	Yes	Continuation of Automated Mapping/Facility Management (AM/FM) Program	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	Dependant on corporate systems, IT resource participation, third party vendors	3
8	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	Yes	CEDSA/Outage data	6
9	What is the level of criticality of the system to the users and PG&E customers?	Business Important	Presents PG&E asset information in a GIS format	9
10	How many internal PG&E users will be impacted by this project?	>500	Estimating, mapping, construction, land workforce	9
11	What is the anticipated amount of formal training that will be required for PG&E users?	High	New technology and changes to business process	9
12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	Enterprise solution	9
			TOTAL SCORE:	72

Additional Notes & Assumptions:

Spacial database, landbase, data QC and raster facilities to achieve geometric information for all equipment types. Fully integrate new AM-FM system with SAP, CC&B and other Corporate Systems.

Pacific Gas and Electric Company®

Application Development Preliminary Project Costing Checklist

Legend
Enterable/Modifiable
Overwritten
Not Updatable
Default Value

Date Checklist Completed:	8/20/2009
ITWR # (if applicable):	0
Proposal Description:	Gas and Electric Mapping (Program 16)
Client Portfolio Lead:	0
Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2011
Anticipated End Date of Project (MM/DD/YYYY):	12/31/2012

		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	COMMENTS / ASSUMPTIONS	PRELIMINARY EFFORT (DAYS) LOW	MID	HIGH	PRELIMINARY COST LOW	MID	HIGH
ISTS APPLICATION DEVELOPMENT							
ISTS Application Development Labor Days (Project Management through Service Introduction/Deployment), including Middleware, Integration, Configuration, etc.	(You Must Enter An Assumption)	164	219	274	$181,212	$241,616	$302,020
	Default Calculated Labor Days:	164	219	274	$181,212	$241,616	$302,020
PG&E BUSINESS	% of App Dev Labor						
PG&E Business Labor	20% (Default = 20% of App Dev Labor)	33	44	55	$40,886	$54,516	$68,144
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)	82	110	137	$90,606	$120,808	$151,010
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.	30% (Default based on Anticipated Amount of Formal User Training)	49	66	82	$54,364	$72,486	$90,606
	LABOR DAYS SUBTOTAL:	329	438	548	$367,067	$489,423	$611,779
	Project Complexity and Size Factor:	99	131	164	$110,120	$146,827	$183,534
	TOTAL LABOR DAYS:	427	569	712	$477,188	$636,250	$795,313

Cost Planning CoE
Preliminary Application Development Project Cost Checklist

Application Development Preliminary Project Costing Checklist

Default Value

Date Checklist Completed:	6/29/2009
ITWR # (If applicable):	0
Proposal Description:	Gas and Electric Mapping (Program 16)
Client Portfolio Lead:	0

HARDWARE LABOR, MATERIALS, AND OTHER COSTS

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY COST LOW	MID	HIGH
INFRASTRUCTURE				
Hardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	$5,000,000	$6,000,000	$7,000,000
System/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	$3,750,000	$4,500,000	$5,250,000
USER TRAINING				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	$21,250	$27,625	$34,000
MISCELLANEOUS COSTS				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	Vectorization, EI, ERP configuration efforts, vendor participation	$23,600,000	$30,250,000	$36,900,000
	COST SUBTOTAL:	$32,371,250	$40,777,625	$49,184,000
	Project Complexity and Size Factor:	$9,711,375	$12,233,288	$14,755,200
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	$42,082,625	$53,010,913	$63,939,200

TOTAL PRELIMINARY PROJECT COST:	LOW	MID	HIGH
	$42,560,000	$53,647,000	$64,735,000

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy Days
1/1/2011	12/31/2012	712	730	10%	71	641

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	12/31/2012				71			521
Plan	1/1/2011	2/28/2011	1-5%	8%	8%	51	8%	58	41
Analyze	2/28/2011	5/12/2011	5-10%	10%	10%	64	10%	73	54
Design	5/12/2011	10/5/2011	15-35%	20%	20%	128	20%	146	105
Build	10/5/2011	5/11/2012	25-60%	30%	30%	192	30%	219	158
Test	5/11/2012	10/4/2012	10-25%	20%	20%	128	20%	146	105
Deploy	10/4/2012	12/31/2012	3-5%	12%	12%	77	12%	88	63
				100%	100%	711.75	100%	730	

Roles			FTE's																
resource pools:			various	various	various	Env CoE	various App Services	Software QA	DBA CoE	SP&A	Infrastr ucture	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 Administrator/ Data Architect	Technical Architect	Technical Architect	Technical Architect	Technical Architect	Technical Operations Support Specialist	Integration Solution Architect & Designer	Human Performance Assistant Or Training Administrator	Deployment Lead & Specialist	Mid-FTE's (inserted to increase FTE)
		712	0.5	-	-	-	0.5	0.5	-	-	-	-	-	-	-	-	0.5	0.5
	100.0%	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	100.0%	51	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	100.0%	64	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	128	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	192	-	-	-	-	0.5	-	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	128	-	-	-	-	-	0.5	-	-	-	-	-	-	-	0.5	-	0.5
	100.0%	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5