


Project Complexity and Sizing

	A	B	C	D	I	K	N	O	P
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2		<b>Pacific Gas and Electric Company</b>							
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6		<b>Application Development Project Complexity and Sizing Worksheet</b>							
7									
8									
9		Date Checklist Completed:	8/25/2009						
10		ITWR # (If applicable):	36235						
11		Proposal Description:	Enterprise Mobile (2 of 2)						
12		Client Portfolio Lead:	Sameh Ali						
13		Anticipated Start Date of Project (MM/DD/YYYY):	3/1/2009						
14		Anticipated End Date of Project (MM/DD/YYYY):	8/31/2010						
15									
16		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.							
17	<b>#</b>	<b>CRITERIA</b>	<b>RESPONSE</b>	<b>ASSUMPTIONS</b>	<b>SCORE</b>				
18	1	Expected duration of the project (in weeks):	78	(Calculated Based on Anticipated Start/End Dates, above)	4				
19	2	Anticipated ISTS Application Development Labor Days	8774	(Please Enter An Assumption)	6				
20	3	How many 3rd party vendor firms will provide services for this project?	1-2	(Please Enter An Assumption)	4				
21	4	If the technology is known, has it been successfully implemented before at PG&E?	No	(Please Enter An Assumption)	9				
22	5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Medium	(Please Enter An Assumption)	6				
23	6	Is there a pre-existing PG&E support group to maintain/support the application?	No	(Please Enter An Assumption)	3				
24	7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Low	(Please Enter An Assumption)	1				
25	8	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	No	(Please Enter An Assumption)	4				
26	9	What is the level of criticality of the system to the users and PG&E customers?	Business Critical	(Please Enter An Assumption)	12				
27	10	How many internal PG&E users will be impacted by this project?	>500	(Please Enter An Assumption)	9				
28	11	What is the anticipated amount of formal training that will be required for PG&E users?	Low	(Please Enter An Assumption)	3				
29	12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	(Please Enter An Assumption)	9				
30					<b>TOTAL SCORE:</b>	<b>70</b>			

## Project Complexity and Sizing

**Cell:** B18

**Comment:** Duration is calculated based on the above start and end project dates.

**Cell:** B19

**Comment:** High level estimate of application development labor days (project management through service introduction/deployment) including middleware, integration, configuration, etc.

**Cell:** B20

**Comment:** This indicates the number of 3rd-party vendor firms, NOT individual contributors and is intended to reflect potential additional project management effort to manage external vendors

**Cell:** B21

**Comment:** Has the technology to be implemented during the project been previously implemented at PG&E? How familiar are the project resources with the technology?

**Cell:** C21

**Comment:** Yes = The technology has been successfully implemented before at PG&E. Resources are very familiar with the technology.

No = The technology has not been attempted or implemented successfully previously. Resources have little or no familiarity with the technology.

**Cell:** B22

**Comment:** Does the Business fully understand their needs in completing the project? Have their needs been agreed to and documented?

**Cell:** C22

**Comment:** Low = The Business has no knowledge of the Requirements for the proposal; no Requirements have been discussed or documented.

Medium = The Business has minimal knowledge of the Requirements for the proposal; some of the Requirements have been discussed and documented.

High = The Business has a good understanding of the Requirements for the proposal; many of the Requirements have been discussed and documented.

**Cell:** B23

**Comment:** Can the proposed project/application be maintained and supported by an existing PG&E support group (Help Desk, Operations Group, System Administrators, etc)?

**Cell:** C23

**Comment:** Yes = The project/application can be maintained and supported by an existing PG&E support group

No = The project/application cannot be maintained and supported by an existing PG&E support group

**Cell:** B24

**Comment:** Are any of the proposed project's resources, deliverables, processes, or technology dependent on any other project or initiative?

**Cell:** C24

**Comment:** Low = The proposed project has little or no dependency on other projects or initiatives

Medium = The proposed project has some dependency on other projects or initiatives

High = The proposed project is highly dependent on other projects or initiatives

**Cell:** B25

**Comment:** Is data being passed through the PG&E firewall? May impact project risk and complexity.

**Cell:** C25

**Comment:** No = No data will be passed through the PG&E firewall

Yes = Data will be passed through the PG&E firewall

**Cell:** B26

**Comment:** A measure of the criticality of the system to users and PG&E customers

**Cell:** C26

**Comment:** Business Critical: requires the highest possible availability; outage/failure recovery time is minutes or hours (e.g., SCADA systems)

Business Important: requires high availability; outage/failure recovery time is less than 24 hours

Business Standard: default category, most systems will fit this category; does not require high availability; outage/failure recovery time is less than 2 days

Business Historical: does not require high availability; outage/failure recovery time is 2-5 days (e.g., storage systems)

**Cell:** B27

**Comment:** Measures the degree of change/impact to the organization. Higher numbers imply greater need for change management, training, and number of new/modified business processes.

**Project Complexity and Sizing**

**Cell:** B28

**Comment:** A measure of the total effort required to formally train all users, considering that multiple users may be trained concurrently (e.g., classroom)

**Cell:** C28

**Comment:** Low = <7 Hours of Deliverable Content  
Medium = 8-14 Hours of Deliverable Content  
High = >14 Hours of Deliverable Content

**Cell:** B29

**Comment:** The PG&E Lines of Business are:

- Energy Delivery
- Engineering & Operations
- Customer Care
- Generation
- Energy Procurement
- Finance
- HR
- Risk & Audit
- Shared Services



Legend	
	Enterable/Modifiable
	Overwritten
	Not Updatable
	Default Value

**Application Development Preliminary Project Costing Checklist**

Date Checklist Completed:	8/25/2009
ITWR # (if applicable):	36236
Proposal Description:	Enterprise Mobile (2 of 2)
Client Portfolio Lead:	Sameh Ali
Anticipated Start Date of Project (MM/DD/YYYY):	3/1/2009
Anticipated End Date of Project (MM/DD/YYYY):	8/31/2010

		Weight
PG&E ISTS Labor Blended Daily Rate per Resource	\$941.16	55%
External ISTS Labor Blended Daily Rate per Resource	\$1,481.62	45%
<b>COMBINED ISTS BLENDED DAILY RATE PER RESOURCE</b>	<b>\$1,184.32</b>	
		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%
<b>COMBINED BUSINESS BLENDED DAILY RATE PER RESOURCE</b>	<b>\$1,244.63</b>	

**APPLICATION DEVELOPMENT LABOR**

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY EFFORT (DAYS)			PRELIMINARY COST		
		LOW	MID	HIGH	LOW	MID	HIGH
<b>ISTS APPLICATION DEVELOPMENT</b>							
ISTS Application Development Labor Days (Project Management through Service Introduction/Deployment), including Middleware, Integration, Configuration, etc.	(You Must Enter An Assumption)	6,581	8,774	10,968	\$7,793,431	\$10,391,241	\$12,989,052
	Default Calculated Labor Days:	6,581	8,774	10,968	\$7,793,431	\$10,391,241	\$12,989,052
<b>PG&amp;E BUSINESS</b>							
PG&E Business Labor	20% of App Dev Labor (Default = 20% of App Dev Labor)	1,316	1,755	2,194	\$1,638,061	\$2,184,081	\$2,730,101
<b>TECHNICAL ARCHITECTURE</b>							
Technical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	30% of App Dev Labor (Default based on Number of Users Impacted)	1,974	2,632	3,290	\$2,338,029	\$3,117,372	\$3,896,715
<b>USER TRAINING &amp; PERFORMANCE SUPPORT</b>							
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.	10% of App Dev Labor (Default based on Anticipated Amount of Formal User Training)	658	877	1,097	\$779,343	\$1,039,124	\$1,298,905
<b>LABOR DAYS SUBTOTAL:</b>		10,529	14,038	17,548	\$12,548,864	\$16,731,819	\$20,914,774
Project Complexity and Size Factor:		3,159	4,212	5,264	\$3,764,659	\$5,019,546	\$6,274,432
<b>TOTAL LABOR DAYS:</b>		<b>13,687</b>	<b>18,250</b>	<b>22,812</b>	<b>\$16,313,523</b>	<b>\$21,751,364</b>	<b>\$27,189,206</b>

**Application Development Preliminary Project Costing Checklist**

Default Value

Date Checklist Completed:	8/25/2009
ITWR # (if applicable):	38235
Proposal Description:	Enterprise Mobile (2 of 2)
Client Portfolio Lead:	Sameh Ali

**HARDWARE LABOR, MATERIALS, AND OTHER COSTS**

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY COST		
		LOW	MID	HIGH
<b>INFRASTRUCTURE</b>				
Hardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	\$800,000	\$1,050,000	\$1,300,000
System/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	\$800,000	\$1,050,000	\$1,300,000
<b>USER TRAINING</b>				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	\$8,500	\$14,875	\$21,250
<b>MISCELLANEOUS COSTS</b>				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	(You Must Enter An Assumption)	\$0	\$0	\$0
<b>COST SUBTOTAL:</b>		\$1,608,500	\$2,114,875	\$2,621,250
Project Complexity and Size Factor:		\$482,550	\$634,463	\$786,375
<b>TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:</b>		<b>\$2,091,050</b>	<b>\$2,749,338</b>	<b>\$3,407,625</b>

<b>TOTAL PRELIMINARY PROJECT COST:</b>	<b>LOW</b>	<b>MID</b>	<b>HIGH</b>
	<b>\$18,405,000</b>	<b>\$24,501,000</b>	<b>\$30,597,000</b>

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy
3/17/2009	8/31/2010	22,812	548	10%	2,281	20,531

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	3/1/2009	8/31/2010				2281			392
Plan	3/1/2009	4/13/2009	1-5%	8%	8%	1642	8%	44	31
Analyze	4/13/2009	6/7/2009	5-10%	10%	10%	2053	10%	55	40
Design	6/7/2009	9/25/2009	15-35%	20%	20%	4106	20%	110	80
Build	9/25/2009	3/8/2010	25-60%	30%	30%	6159	30%	164	117
Test	3/8/2010	6/26/2010	10-25%	20%	20%	4106	20%	110	80
Deploy	6/26/2010	8/31/2010	3-5%	12%	12%	2464	12%	66	47
				100%	100%	22812.4	100%	548	

Roles	Workday Total	Percentage Total
2,281	100.0%	22,812
1,642	100.0%	1,642
2,053	100.0%	2,053
4,106	100.0%	4,106
6,159	100.0%	6,159
4,106	100.0%	4,106
2,464	100.0%	2,464

Resource Pools	FTE's		Max FTE's (rounded to the nearest .5 fte)
various	Business Analyst	26.5	26.5
various	Project Manager	5.5	5.5
various	Application Designer	9.0	9.0
Env CoE	Configuration Manager	0.5	0.5
App Services	Programmer	16.0	16.0
Software QA	Test Lead & Tester	25.5	25.5
DBA CoE	Database Administrator/Data Architect	2.5	2.5
SP&A	Technical Architect	10.5	10.5
Infrastru	Technical Architect	7.0	7.0
App Services	Technical Architect	7.0	7.0
Env CoE	Technical Architect	3.0	3.0
Env CoE	Technical Operations Support Specialist	5.0	5.0
various	Integration Solution Architect & Designer	1.5	1.5
Business	Human Performance Architect Training Administrator	16.0	16.0
Deployment CoE	Deployment Lead & Specialist Service Introduction Lead	28.5	28.5
			5.5
			26.5
			15.5
			15.5
			16.0
			25.5
			28.5
			28.5