


Project Complexity and Sizing

	A	B	C	D	I	K	N	O	P
1									
2		<b>Pacific Gas and Electric Company</b>							
3									
4									
5									
6	<b>Application Development Project Complexity and Sizing Worksheet</b>								
7									
8		ITWR # (if applicable):	tbd						
9		Proposal Description:	Gas Trading Systems Replacement Project						
10		IT Business Partner:	Gavin Fong						
11		Date Checklist Completed:	6/15/2009						
12									
13	A response must be selected or entered for ALL criteria! The responses provided impact the Total Score for the proposed project, which helps determine the Preliminary Project Cost.								
14	#	CRITERIA	RESPONSE	ASSUMPTIONS	SCORE				
15	1	What is the expected duration of the project (in weeks)?	156	3 year	6				
16	2	What is the expected size of the team during the majority of the project?	10	(You Must Enter An Assumption)	3				
17	3	How many 3rd party vendor firms will provide services for this project?	1-2	(You Must Enter An Assumption)	4				
18	4	If the technology is known, has it been successfully implemented before at PG&E?	No	unknown	9				
19	5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Medium		6				
20	6	Is there a pre-existing PG&E support group to maintain/support the application?	Yes	Yes, AS supports current systems	2				
21	7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Low		1				
22	8	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	Yes		6				
23	9	What is the level of criticality of the system to the users and PG&E customers?	Business Important		9				
24	10	How many internal PG&E users will be impacted by this project?	1-100	approx 50 employees	3				
25	11	What is the anticipated amount of formal training that will be required for PG&E users?	Medium	(You Must Enter An Assumption)	6				
26	12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	(You Must Enter An Assumption)	9				
27					<b>TOTAL SCORE: 64</b>				

## Project Complexity and Sizing

**Cell:** B15

**Comment:** The expected duration of the project, between 1 and 192 weeks

**Cell:** B16

**Comment:** The average number of total IT resources (Employees and Contractors) working on the project at any given time

**Cell:** B17

**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:** B18

**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:** C18

**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:** B19

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

**Cell:** C19

**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:** B20

**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:** C20

**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:** B21

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

**Cell:** C21

**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:** B22

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

**Cell:** C22

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

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

**Cell:** B23

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

**Cell:** C23

**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:** B24

**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.

**Cell:** B25

**Project Complexity and Sizing**

**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:** C25

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

**Cell:** B26

**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**

ITWR # (if applicable):	tbd
Proposal Description:	Gas Trading Systems Replacement Project
IT Business Partner:	Gavin Fong
Date Checklist Completed:	6/15/2009
	<b>Weight</b>
PG&E ISTS Labor Blended Daily Rate per Resource	\$1,007.19 70%
External ISTS Labor Blended Daily Rate per Resource	\$1,478.96 30%
<b>COMBINED ISTS BLENDED DAILY RATE PER RESOURCE</b>	<b>\$1,148.72</b>
	<b>Weight</b>
PG&E Business Labor Blended Daily Rate per Resource	\$957.00 75%
External Business Labor Blended Daily Rate per Resource	\$1,916.00 25%
<b>COMBINED BUSINESS BLENDED DAILY RATE PER RESOURCE</b>	<b>\$1,196.75</b>

**APPLICATION DEVELOPMENT LABOR**

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY LABOR ESTIMATE (DAYS)		PRELIMINARY COST ESTIMATE	
		LOW	HIGH	LOW	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)	5,850	9,750	\$6,720,018	\$11,200,030
	Default Calculated Labor Days:	5,850	9,750	\$6,720,018	\$11,200,030
<b>PG&amp;E BUSINESS</b>					
	<b>% of App Dev Labor</b>				
PG&E Business Labor	20% (Default = 20% of App Dev Labor)	1,170	1,950	\$1,400,198	\$2,333,663
<b>TECHNICAL ARCHITECTURE</b>					
	<b>% of App Dev Labor</b>				
Technical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	10% (Default based on Number of Users Impacted)	585	975	\$672,002	\$1,120,003
<b>USER TRAINING &amp; PERFORMANCE SUPPORT</b>					
	<b>% of App Dev Labor</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.	20% (Default based on Anticipated Amount of Formal User Training)	1,170	1,950	\$1,344,004	\$2,240,006
	<b>LABOR DAYS SUBTOTAL:</b>	<b>8,775</b>	<b>14,625</b>	<b>\$10,136,221</b>	<b>\$16,893,701</b>
	Project Complexity and Size Factor:	2,633	4,388	\$3,040,866	\$5,068,110
	<b>TOTAL LABOR DAYS:</b>	<b>11,408</b>	<b>19,013</b>	<b>\$13,177,087</b>	<b>\$21,961,812</b>

**Application Development Preliminary Project Costing Checklist**

 Default Value

ITWR # (if applicable):	tbd
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IT Business Partner:	Gavin Fong
Date Checklist Completed:	6/15/2009

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

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY COST ESTIMATE	
		LOW	HIGH
<b>INFRASTRUCTURE</b>			
Hardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	\$50,000	\$80,000
System/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	\$37,500	\$60,000
<b>USER TRAINING</b>			
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	\$14,875	\$27,625
<b>MISCELLANEOUS COSTS</b>			
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	3rd party software license fees	\$2,000,000	\$2,000,000
<b>COST SUBTOTAL:</b>		\$2,102,375	\$2,167,625
Project Complexity and Size Factor:		\$630,713	\$650,288
<b>TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:</b>		\$2,733,088	\$2,817,913

<b>TOTAL PRELIMINARY PROJECT COST:</b>	<b>LOW</b>	<b>HIGH</b>
	\$15,910,000	\$24,780,000