


Project Complexity and Sizing

	A	B	C	D	H	J	M	N
1								
2		<b>Pacific Gas and Electric Company</b>						
3								
4								
5								
6	<b>Application Development Project Complexity and Sizing Worksheet</b>							
7								
8	Proposal Description:		Document Management Efficiency (Contract Management System. Providing: Contract Templates, Contract Repository, Interface with IT Infrastructure, Automated)					
9	IT Business Partner:		TBD					
10	Date:		3/19/2008					
11								
12	A response must be selected or entered for ALL criteria! The responses provided affect the total score for the proposed project, which determines the preliminary project cost.							
13	#	CRITERIA	RESPONSE	ASSUMPTIONS	SCORE			
14	1	What is the expected impact to the IT Infrastructure?	New Infrastructure	New Infrastructure needed for Contract Management System. This is not currently implemented in our existing environment.	9			
15	2	What is the expected duration of the project, in months?	12	Expected duration of 12 months for Complex application, system interface, user interface, BEA, Business warehouse, and Documentum.	4			
16	3	What is the expected <u>average</u> IT project team size?	7	BEA consultant, SAP, SRM consultant, Business Warehouse, Documentum and two external CMS consultant)	3			
17	4	How many 3rd party vendor firms will provide services for this project?	3 or More	Contract Management System, SAP, SAP SRM, business warehouse and Document Management System	6			
18	5	If the technology is known, has it been successfully implemented before at PG&E?	No	BW, SAP, SRM, and documentum are part of our existing application, but we have not utilized them for contract management systems.	9			
19	6	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Low	High Level Requirements are identified via Sourcing and PRTM team. Overall effort is high. Further requirement gatherings are needed to	9			
20	7	Is there a pre-existing PG&E support group to maintain/support the application?	No	No existing CMS system installed, new support personnel will be needed.	3			
21	8	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	High	Human Resource and System Resource will be a major impact to this project. For example: SAP and SRM other concurrent project may	3			
22	9	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?	Yes	Yes, RFQ and RFQ information will be exchanged between PG&E and vendors.	6			
23	10	How many internal PG&E users will be impacted by this project?	150-1000	Approximately 300 users	6			
24	11	How many internal PG&E users will require formal training?	150-1000	Approximately 300 users	2			
25	12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	Sourcing and All LOBs	9			
26				TOTAL SCORE:	69			
27								
28	The Project Complexity and Size Factor cannot be changed and is 10%, 20%, or 30% based on the Total Score from the Project Complexity and Sizing Worksheet. These percentages are added to the Preliminary Labor and Cost figures to account for potential unknowns and higher project complexity.							
29								
30			TOTAL SCORE	Project Complexity Factor				
31			33 - 49	10%				
32			50 - 63	20%				
33			64 - 81	30%				

## Project Complexity and Sizing

**Cell:** B14

**Comment:** A measure of the expected impact on the existing PG&E IT Infrastructure

**Cell:** D14

**Comment:** None = Existing Infrastructure will not need to be modified. Assumes existing capacity can be utilized.

Enhancements = Additional capacity required on existing standard Infrastructure, such as additional servers, storage, etc.

New Infrastructure = New non-standard Infrastructure will need to be deployed and utilized.

**Cell:** B15

**Comment:** The expected duration of the project, between 1 and 36 months

**Cell:** B16

**Comment:** The AVERAGE number of total IT resources (Employees and Contractors) between 1 and 50 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:** D18

**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:** D19

**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:** D20

**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:** D21

**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:** D22

**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:** 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:** B24

**Comment:** A measure of Training effort in terms of training preparation and delivery

**Project Complexity and Sizing**

**Cell:** B25

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

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



**Application Development Preliminary Project Costing Checklist**

PROPOSAL DESCRIPTION:	Document Management Efficiency (Contract Management System. Providing: Contract Templates, Contract Repository, Interface with IT Infrastructure, Automated	
IT Business Partner:	TBD	
DATE:	3/19/2008	
		Weight
PG&E ISTS Labor Blended Daily Rate per Resource	\$947.60	70%
External ISTS Labor Blended Daily Rate per Resource	\$1,266.59	30%
COMBINED ISTS BLENDED DAILY RATE PER RESOURCE	\$1,043.30	
		Weight
PG&E Business Labor Blended Daily Rate per Resource	\$957.00	75%
External Business Labor Blended Daily Rate per Resource	\$1,916.00	25%
COMBINED BUSINESS BLENDED DAILY RATE PER RESOURCE	\$1,196.75	

**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.	Configuration in Inventory Management and development for the interface	1,260	2,100	\$1,314,554	\$2,190,924
	Default Calculated Labor Days:	1,260	2,100	\$1,314,554	\$2,190,924
<b>PG&amp;E BUSINESS</b>					
PG&E Business Labor	20% of Application Development Labor	252	420	\$301,581	\$502,635
<b>TECHNICAL ARCHITECTURE</b>					
Technical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	13% of Application Development Labor	164	273	\$170,892	\$284,820
<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.	15% of Application Development Labor	189	315	\$197,183	\$328,639
	<b>LABOR DAYS SUBTOTAL:</b>	<b>1,865</b>	<b>3,108</b>	<b>\$1,984,210</b>	<b>\$3,307,017</b>
	Project Complexity and Size Factor:	559	932	\$595,263	\$992,105
	<b>TOTAL LABOR DAYS:</b>	<b>2,424</b>	<b>4,040</b>	<b>\$2,579,474</b>	<b>\$4,299,123</b>

**Application Development Preliminary Project Costing Checklist**

PROPOSAL DESCRIPTION: **Document Management Efficiency (Contract Management System. Providing: Contract Templates, Contract Repository, Interface with IT Infrastructure, Automated**

IT Business Partner: **TBD**

DATE: **3/19/2008**

**HARDWARE, MATERIALS, AND OTHER COSTS**

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY COST ESTIMATE	
		LOW	HIGH
<b>LICENSING</b>			
Vendor Software Licensing Costs	300 users at 2k/user (From PRM Est)	\$600,000	\$0
Operating System, Application Server(s), and Database Licensing Costs	No new licensing cost.	\$80,000	\$0
Security/Monitoring Licensing Costs	No new licensing cost.	\$80,000	\$0
<b>INFRASTRUCTURE</b>			
Hardware, Network, etc Costs	Prod 57, Test 57, Deve, 26 (From PRM)	\$140,000	\$0
<b>USER TRAINING</b>			
User Training Materials Costs		\$150,000	\$0
<b>MISCELLANEOUS COSTS</b>			
Miscellaneous/Additional Costs (Overheads - Facilities Costs, Telephony, etc)	no new facilities or overhead costs.	\$0	\$0
COST SUBTOTAL:		\$1,050,000	\$0
Project Complexity and Size Factor:		\$315,000	\$0
TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:		\$1,365,000	\$0

Total Preliminary Project Cost [EXCLUDING O&M]:	LOW	HIGH
	\$3,944,474	\$4,299,123

**OPERATE & MAINTENANCE**

O&M Labor Factor: **20%**

Default O&M Labor Factor: **20%**

PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	PRELIMINARY O&M LABOR ESTIMATE (DAYS)		PRELIMINARY O&M COST ESTIMATE	
		LOW	HIGH	LOW	HIGH
Annual Operate & Maintenance Labor	(You Must Enter An Assumption)	485	808	\$459,586	\$765,661
Annual Licensing and Hardware & Materials O&M Cost (Default = 20% of Total Licensing and Hardware & Materials)	(You Must Enter An Assumption)	N/A	N/A	\$273,000	\$0
TOTAL ANNUAL O&M COST:				\$732,586	\$765,661

**TOTAL PRELIMINARY PROJECT COST (INCLUDING ONE YEAR OF O&M):**

	LOW	HIGH
	\$4,677,060	\$5,064,783

Project Complexity and Sizing

Application Development Project Complexity and Sizing Descriptions				
		POSSIBLE RESPONSES		
#	Criteria	1	2	3
1	What is the expected impact to the IT Infrastructure?	None	Enhancements	New Infrastructure
	Rich N - criteria to determine complexity, enhancement vs new Infra?	Existing Infrastructure will not be modified. Assumes existing capacity can be utilized.	Additional capacity required on existing Infrastructure, such as additional servers, storage, etc. - standard supported Infra	New Infrastructure, not currently supported
2	What is the expected duration of the project, in months?	1-9 Months	10-17 Months	18+ Months
		--	--	--
3	What is the expected average ISTS Application Development project team size (both PG&E employees and contractors)?	1-10 People	11-20 People	21+ People
	Average number of resources working on the project at any given time - not total team size	--	--	--
4	How many 3rd party vendor firms will provide services for this project?	0-1	2	3 or More
	Not individual resources, only vendor firms; potential additional project management effort to manage external vendors	--	--	--
5	If the technology is known, has it been successfully implemented before at PG&E?		Yes	No
	Has the technology to be implemented during the project been previously implemented at PG&E? How familiar are the project resources with the technology?		The technology has been successfully implemented before at PG&E. Resources are very familiar with the technology.	The technology has not been attempted or implemented successfully previously. Resources have little or no familiarity with the technology.
6	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	High	Medium	Low
	Does the Business fully understand their needs in completing the project? Have their needs been agreed to and documented? Has the Business prioritized the project and their needs? Does the Business understand what is needed in order to complete the project?	The Business has a good understanding of the Requirements for the proposal; many of the Requirements have been discussed and documented.	The Business has minimal knowledge of the Requirements for the proposal; some of the Requirements have been discussed and documented.	The Business has no knowledge of the Requirements for the proposal; no Requirements have been discussed or documented.
7	Is there a pre-existing PG&E support group to maintain/support the application?		Yes	No
	Can the proposed project/application be maintained and supported by an existing PG&E support group (Help Desk, Operations Group, System Administrators, etc)?		The project/application can be maintained and supported by an existing PG&E support group	The project/application cannot be maintained and supported by an existing PG&E support group
8	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Low	Medium	High
	Is the proposed project dependent on any other projects or initiatives? Are any of the proposed project's resources, deliverables, processes, or technology dependent on any other project or initiative?	The proposed project has little or no dependency on other projects or initiatives	The proposed project has some dependency on other projects or initiatives	The proposed project is highly dependent on other projects or initiatives

Project Complexity and Sizing

#	Criteria	1	2	3
9	Will the system exchange or provide data to any entities outside of PG&E (suppliers, customers, regulatory agencies, etc)?		No	Yes
	Is data being passed through the PG&E firewall? May impact project risk and complexity.		No data will be passed through the PG&E firewall	Data will be passed through the PG&E firewall
10	How many internal PG&E users will be impacted by this project?	<150	150-1000	1001 or More
	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.	--	--	--
11	How many internal PG&E users will require formal training?	<150	150-1000	1001 or More
	A measure of Training effort in terms of training preparation and delivery.	--	--	--
12	How many PG&E Lines of Business (LOBs) will be impacted by the project (Customer Care, Energy Delivery, ISTS, Generation, Shared Services)?	1	2-3	4 or More