Pacific Gas and Electric Company®

Application Development Project Complexity and Sizing Worksheet

Legend
Enterable/Modifiable
Overwritten
Not Updatable
Default Value

Date Checklist Completed:	8/24/2009
ITWR # (if applicable):	44568
Proposal Description:	Enterprise Mobile (1 of 2) (EM Rel 3 will further enhance the mobile and dispatch platform deployed in EM Rel 2, including additional functionality)
Client Portfolio Lead:	Sameh Ali
Anticipated Start Date of Project (MM/DD/YYYY):	7/1/2010
Anticipated End Date of Project (MM/DD/YYYY):	6/30/2011

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):	52	(Calculated Based on Anticipated Start/End Dates above)	2
2	Anticipated ISTS Application Development Labor Days	4,481	(Please Enter An Assumption)	6
3	How many 3rd party vendor firms will provide services for this project?	0	(Please Enter An Assumption)	2
4	If the technology is known, has it been successfully implemented before at PG&E?	Yes	(Please Enter An Assumption)	6
5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	High	(Please Enter An Assumption)	3
6	Is there a pre-existing PG&E support group to maintain/support the application?	Yes	(Please Enter An Assumption)	2
7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Medium	(Please Enter An Assumption)	2
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
9	What is the level of criticality of the system to the users and PG&E customers?	Business Critical	(Please Enter An Assumption)	12
10	How many internal PG&E users will be impacted by this project?	>500	(Please Enter An Assumption)	9
11	What is the anticipated amount of formal training that will be required for PG&E users?	Low	(Please Enter An Assumption)	3
12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	(Please Enter An Assumption)	9
			TOTAL SCORE:	60

Pacific Gas and Electric Company®

Application Development Preliminary Project Costing Checklist

Legend
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Default Value

Date Checklist Completed:	4/24/2009
ITWR # (if applicable):	44888
Proposal Description:	Enterprise Mobile (1 of 2)(EM Rel 3 will further enhance the mobile and dispatch platform deployed in EM Rel 2, including additional functionality)
Client Portfolio Lead:	Samah Ali
Anticipated Start Date of Project (MM/DD/YYYY):	7/1/2010
Anticipated End Date of Project (MM/DD/YYYY):	6/30/2011

		Weight
PG&E ISTS Labor Blended Daily Rate per Resource	$941.16	55%
External ISTS Labor Blended Daily Rate per Resource	$1,431.52	45%
COMBINED ISTS BLENDED DAILY RATE PER RESOURCE	$1,184.32	

		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)	3,361	4,481	5,601	$3,980,210	$5,306,947	$6,633,684
		Default Calculated Labor Days:	3,361	4,481	5,601	$3,980,210	$5,306,947	$6,633,684
PG&E BUSINESS	% of App Dev Labor							
PG&E Business Labor	20%	(Default = 20% of App Dev Labor)	672	896	1,120	$836,580	$1,115,440	$1,394,300
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.	30%	(Default based on Number of Users Impacted)	1,008	1,344	1,680	$1,194,063	$1,592,084	$1,990,105
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.	10%	(Default based on Anticipated Amount of Formal User Training)	336	448	560	$398,021	$530,695	$663,368
		LABOR DAYS SUBTOTAL:	5,377	7,170	8,962	$6,408,874	$8,545,166	$10,681,457
		Project Complexity and Size Factor:	1,076	1,434	1,792	$1,281,775	$1,709,033	$2,136,291
		TOTAL LABOR DAYS:	6,453	8,604	10,754	$7,690,649	$10,254,198	$12,817,748

Cost Planning CoE
Preliminary Application Development Project Cost Checklist

Application Development Preliminary Project Costing Checklist

Default Value

Date Checklist Completed:	8/24/2009
ITWR # (if applicable):	44998
Proposal Description:	Enterprise Mobile (1 of 2)(EM Rel 2 will further enhance the mobile and dispatch platform deployed in EM Rel 2, including additional functionality)
Client Portfolio Lead:	Sameh Ali

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)	$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
USER TRAINING				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	$8,500	$14,875	$21,250
MISCELLANEOUS COSTS				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	(You Must Enter An Assumption)	$0	$0	$0
	COST SUBTOTAL:	$1,608,500	$2,114,875	$2,621,250
	Project Complexity and Size Factor:	$321,700	$422,975	$524,250
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	$1,930,200	$2,537,850	$3,145,500

TOTAL PRELIMINARY PROJECT COST:	LOW	MID	HIGH
	$9,621,000	$12,792,000	$15,963,000

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy Days
7/1/2010	6/30/2011	10,754	364	10%	1,075	9,679

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	7/1/2010	6/30/2011				1075			281
Plan	7/1/2010	7/30/2010	1-5%	8%	8%	774	8%	29	22
Analyze	7/30/2010	9/4/2010	5-10%	10%	10%	968	10%	36	28
Design	9/4/2010	11/16/2010	15-35%	20%	20%	1938	20%	73	52
Build	11/16/2010	3/5/2011	25-60%	30%	30%	2904	30%	109	79
Test	3/5/2011	5/17/2011	10-25%	20%	20%	1936	20%	73	52
Deploy	5/17/2011	6/30/2011	3-5%	12%	12%	1161	12%	44	33
				100%	100%	10754.4	100%	364	

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 Administrator/ Data Architect	Technical Architect	Technical Architect	Technical Architect	Technical Architect	Technical Operations Support Specialist	Integration Solution Architect & Designer	Human Performance Architect Training Administrator	Deployment Lead & Specialist Service Introduction Lead	Max FTE's (rounded to the nearest .5 fte)
	10,754	17.5	4.0	6.5	-	11.0	18.5	2.0	7.0	6.0	6.0	2.0	3.5	1.0	11.0	19.0	
100.0%	1,075	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0
100.0%	774	17.5	-	-	-	-	-	-	7.0	-	3.0	-	-	-	3.5	4.0	17.5
100.0%	968	7.5	-	2.0	-	-	1.0	1.0	-	5.0	5.0	2.0	-	1.0	11.0	0.5	11.0
100.0%	1,936	4.5	-	6.5	-	1.5	2.0	1.0	-	4.5	4.5	-	-	1.0	11.0	0.5	11.0
100.0%	2,904	-	-	2.0	-	11.0	4.5	2.0	-	2.5	2.5	1.0	-	-	11.0	-	11.0
100.0%	1,936	0.5	-	0.5	-	3.5	18.5	-	-	2.0	2.0	-	-	-	9.5	-	18.5
100.0%	1,161	-	-	3.0	-	1.5	1.5	2.0	-	-	2.0	-	3.5	-	3.5	19.0	19.0

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Pacific Gas and Electric Company®

Application Development Project Complexity and Sizing Worksheet

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Date Checklist Completed:	8/25/2009
ITWR # (if applicable):	36235
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

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):	78	(Calculated Based on Anticipated Start/End Dates, above)	4
2	Anticipated ISTS Application Development Labor Days	8774	(Please Enter An Assumption)	6
3	How many 3rd party vendor firms will provide services for this project?	1-2	(Please Enter An Assumption)	4
4	If the technology is known, has it been successfully implemented before at PG&E?	No	(Please Enter An Assumption)	9
5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	Medium	(Please Enter An Assumption)	6
6	Is there a pre-existing PG&E support group to maintain/support the application?	No	(Please Enter An Assumption)	3
7	What is the level of dependency on other projects (e.g. resources, deliverables, etc)?	Low	(Please Enter An Assumption)	1
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
9	What is the level of criticality of the system to the users and PG&E customers?	Business Critical	(Please Enter An Assumption)	12
10	How many internal PG&E users will be impacted by this project?	>500	(Please Enter An Assumption)	9
11	What is the anticipated amount of formal training that will be required for PG&E users?	Low	(Please Enter An Assumption)	3
12	How many PG&E Lines of Business (LOBs) will be impacted by the project?	4 or More	(Please Enter An Assumption)	9
			TOTAL SCORE:	70

Cost Planning CoE
Preliminary Application Development Project Cost Checklist

Pacific Gas and Electric Company®

Application Development Preliminary Project Costing Checklist

Legend
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Default Value

Date Checklist Completed:	5/25/2009
ITWR # (if applicable):	38236
Proposal Description:	Enterprise Mobile (2 of 2)
Client Portfolio Lead:	Bameh 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	$1,481.52	45%
COMBINED ISTS BLENDED DAILY RATE PER RESOURCE	$1,184.32	

		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)	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
PG&E BUSINESS	**% of App Dev Labor**							
PG&E Business Labor	20%	(Default = 20% of App Dev Labor)	1,316	1,755	2,194	$1,638,061	$2,184,081	$2,730,101
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.	30%	(Default based on Number of Users Impacted)	1,974	2,632	3,290	$2,336,028	$3,117,372	$3,896,716
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.	10%	(Default based on Anticipated Amount of Formal User Training)	658	877	1,097	$779,343	$1,039,124	$1,298,905
		LABOR DAYS SUBTOTAL:	10,529	14,038	17,548	$12,546,864	$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
		TOTAL LABOR DAYS:	13,687	18,250	22,812	$16,313,523	$21,751,364	$27,189,206

Cost Planning CoE
Preliminary Application Development Project Cost Checklist

Application Development Preliminary Project Costing Checklist

Default Value

Date Checklist Completed:	8/28/2009
ITWR # (If applicable):	38238
Proposal Description:	Enterprise Mobile (2 of 2)
Client Portfolio Lead:	Samer Ali

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)	$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
USER TRAINING				
User Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	$8,500	$14,875	$21,250
MISCELLANEOUS COSTS				
Miscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, etc)	(You Must Enter An Assumption)	$0	$0	$0
	COST SUBTOTAL:	$1,608,500	$2,114,875	$2,621,250
	Project Complexity and Size Factor:	$482,550	$634,463	$786,375
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	$2,091,050	$2,749,338	$3,407,625

TOTAL PRELIMINARY PROJECT COST:	LOW	MID	HIGH
	$18,405,000	$24,501,000	$30,697,000

Project Start Date	Project End Date	work effort in days	duration in days	PM %	PM Days	Plan thru Deploy Days
3/1/2009	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	orkdays	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 Administrator/ Data Architect	Technical Architect	Technical Architect	Technical Architect	Technical Architect	Technical Operations Support Specialist	Integration Solution Architect & Designer	Human Performance Architect Training Administrator	Deployment Lead & Specialist Service Introduction Lead	Max FTE's (rounded to the nearest .5 fte)
	22,812	28.5	5.5	9.0	0.5	18.0	25.5	2.5	10.5	7.0	7.0	3.0	5.0	1.5	16.0	28.5	
100.0%	2,281	-	5.5	-	0.5	-	-	-	-	-	-	-	-	-	-	-	5.5
100.0%	1,642	28.5	-	-	-	-	-	-	10.5	-	5.0	-	-	-	5.5	6.0	28.5
100.0%	2,053	10.5	-	3.0	-	-	1.5	1.5	-	7.0	7.0	3.0	-	1.5	15.5	0.5	15.5
100.0%	4,106	6.0	-	9.0	-	2.0	2.5	1.5	-	6.0	6.0	-	-	1.5	15.5	0.5	15.5
100.0%	6,159	-	-	3.0	-	16.0	6.5	2.5	-	3.5	3.5	1.5	-	-	16.0	-	16.0
100.0%	4,106	1.0	-	0.5	-	5.0	25.5	-	-	3.0	3.0	-	-	-	13.0	-	25.5
100.0%	2,464	-	-	4.0	-	2.0	2.0	2.5	-	-	2.5	-	5.0	-	5.0	28.5	28.5