_				-	,	1 1/ 1			
-	Α	В	С	D		K	N	0	P
2		Pacific Gas and					Legend		
3	Dr. de	Electric Company®						ble/Modifiable	
5	1 Max. 16.00 TV	XXXXIII AAAA AAAAA AAAAAAAAAAAAAAAAAAAA				10000000	Overwr	ritten datable	
	Annlicat	ion Development Project Complexity and Sizing Worksheet					Default		
7	пррисис	ion bevelopment roject complexity and cizing workeneet				ESSENSE			
8									
9		Date Checklist Completed:	4/2/2009						
10		ITWR # (if applicable):							
11		Proposal Description:			Regulatory License Compliance				
12		Client Portfolio Lead:	Guldemon						
13		Anticipated Start Date of Project (MM/DD/YYYY):	1/1/2010						
14		Anticipated End Date of Project (MM/DD/YYYY):	12/31/2010						
15									
16	Please pr	rovide a response for ALL criteria! The responses provided impact t	he Total Score for the prop	osed projec	t, which helps determine the Preliminary Project Cost.				
17	#	CRITERIA	RESPONSE		ASSUMPTIONS	SCORE			
18	1	Expected duration of the project (in weeks):	52		(Calculated Based on Anticipated Start/End Dates, above)	2			
19	2	Anticipated ISTS Application Development Labor Days	220		(Please Enter An Assumption)	3			
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?	Yes		(Please Enter An Assumption)	6			
22	5	How well are the Requirements for this proposal known by the Business (have the Requirements been documented)?	High		(Please Enter An Assumption)	3			
23	6	Is there a pre-existing PG&E support group to maintain/support the application?	Yes		(Please Enter An Assumption)	2			
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.)?	Yes		(Please Enter An Assumption)	6			
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?	Please Select			6			
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?	1		(Please Enter An Assumption)	3			
30					TOTAL SCORE	51			

Pacific Gas and Electric 3/30/2010

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: C2:

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?

Cally Cod

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: C2

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: C2

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.

Pacific Gas and Electric 3/30/2010

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

Pacific Gas and Electric 3/30/2010

# Application Development Preliminary Project Costing Checklist

		Legend	8
		Enterable/Modifiable	_
		Overwritten	
	8.92	Not Updatable	
		Default Value	
			_
4/2/2009			
0			
	Regul	latory License Compliance	
Guldemon			
1/1/2010			
12/31/2010			
	0 Guldemon 1/1/2010	4/2/2009 0 Regul	Enterable/Modifiable Overwritten Not Updatable Default Value  4/2/2009  0  Regulatory License Compliance  Guidemon  1/1/2010

		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%

### APPLICATION DEVELOPMENT LABOR

APPLICATION DEVELOPMENT LABOR								
			P	RELIMINARY EFFORT (DA	YS)		PRELIMINARY COST	
PRIMARY COST CRITERIA	CC	MMENTS / ASSUMPTIONS	LOW	MID	HIGH	LOW	MID	HIGH
ISTS APPLICATION DEVELOPMENT								
STS Application Development Labor Days (Project Management through Service ntroduction/Deployment), including Middleware, Integration, Configuration, etc.	(You	Must Enter An Assumption)	165	220	275	\$182,039	\$242,719	\$303,399
		Default Calculated Labor Days:	165	220	275	\$182,039	\$242,719	\$303,399
PG&E BUSINESS	% of App Dev Labor	January 1						
PG&E Business Labor	20%	(Default = 20% of App Dev Labor)	33	44	55	\$41,073	\$54,764	\$68,455
TECHNICAL ARCHITECTURE	% of App Dev Labor	MODES					1	
Fechnical Architecture Labor Days (Analyze/Design/Build/Test) for Development, Execution, and Operations environments necessary to support the Application.	20%	(Default based on Number of Users Impacted)	33	44	55	\$36,408	\$48,544	\$60,680
USER TRAINING & PERFORMANCE SUPPORT	% of App Dev Labor	Follows	allinir internation (777 the authorite and a succession (1777)	a kanan mahari (77 kanun mahari hakan ma) (77 mahan ma)				
Jser Training and Performance Support Labor Days (Analyze/Design/Build/Test) for he effort to create Training Material and Communications Plan to support the Application rollout.	10%	(Default based on Anticipated Amount of Formal User Training)	17	22	28	\$18,204	\$24,272	\$30,340
		LABOR DAYS SUBTOTAL:	248	330	413	\$277,724	\$370,298	\$462,873
		Project Complexity and Size Factor:	25	33	41	\$27,772	\$37,030	\$46,287
		TOTAL LABOR DAYS:	272	363	454	\$305,496	\$407,328	\$509,160

RegulatoryLicenseCompliance Page4 of6

# Application Development Preliminary Project Costing Checklist

			Default Value
Date Checklist Completed:	4/2/2009		
ITWR # (if applicable):	a a constant of the constant o		
Proposal Description:		Regulato	ory License Compliance
Client Portfolio Lead:	Guldemon		

### HARDWARE LABOR, MATERIALS, AND OTHER COSTS

TARDWARE LABOR, MATERIALS, AND OTHER COSTS		STG1 SI	PRELIMINARY COST	
PRIMARY COST CRITERIA	COMMENTS / ASSUMPTIONS	LOW	MID	HIGH
INFRASTRUCTURE				
ardware, Network, etc Costs (includes Labor)	(Default based on User Impact)	\$780,000	\$1,000,000	\$1,200,000
/stem/Data Availability and Recovery	(Default Based on System Criticality and Data Protection/Retention Requirements)	\$780,000	\$1,000,000	\$1,200,000
USER TRAINING				
ser Training Materials Costs	(Default Based on Anticipated Amount of Formal User Training)	\$8,500	\$14,875	\$21,250
MISCELLANEOUS COSTS	100			
iscellaneous/Additional Costs (Licensing, Overheads - Facilities Costs, Telephony, c)	(You Must Enter An Assumption)	\$0	\$0	\$0
The state of the s	COST SUBTOTAL:	\$1,568,500	\$2,014,875	\$2,421,250
	Project Complexity and Size Factor:	\$156,850	\$201,488	\$242,125
	TOTAL HARDWARE, MATERIALS, AND OTHER COSTS:	\$1,725,350	\$2,216,363	\$2,663,375

	LOW MID HIGH	
TOTAL PRELIMINARY PROJECT COST:	\$2,031,000 \$2,624,000 \$3,173,000	

RegulatoryLicenseCompliance Page5 of 6

l	SB	
	GT&S	
I	0760086	

11/17/2010	Test	Build	Design	Analyze	Plan	Project Mgmt		Stage			/1/2010	Project Start Date	ı
10		5/19/2010			1/1/2010	1/1/2010		Start Date			12/31/2010	Project End Date	  - 
12/31/2010	11/17/2010	9/5/2010	5/19/2010	3/7/2010	1/30/2010	12/31/2010		End Date			454	work effort duration in in days days	
3-5%	10-25%	25-60%	15-35%	5-10%	1-5%			Typical Work Allocation Percentage by Stage			364	duration in days	
12%	20%	30%	20%	10%	8%			% of stage effort (do not change)			10%	PM %	
12%	20%	30%	20%	10%	8%			Override stage effort (override Col C)			45	PM Days	
49	82	123	82	41	33	45		Stage Work Days			408	Deploy Days	thru
12%	20%	30%	20%	10%	8%			% stage duration					
44	73	109	73	36	29			Duration in days					
33	53	78	53	25	21	261		Net Work Days					
Same		ł		bosse	Laine		1		pools:	resource			
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		Percentage Total			Roles		
49	82	123	82	41	33	45	454	Workday Total			Vorkday		
	1	-	•	0.5	1.0	-	1.0	Business Analyst	various				
	ı		1		1		ı	Project Manager	various				
	1		0.5				0.5	Application Designer	various				
	ı	-	ı	-			r	Configuration Manager	Env CoE				
	1	0.5		-	1	-	0.5	Programmer	Services	App	Via Più		
	1.0		1		1		1.0	Test Lead & Tester	Q	Software			
-			1				1	Database Administrator/ Data Architect	CoE	DBA			
	ı		1		0.5		0.5	Technical Architect	SP&A		ŋ		
	1	-			1			Technical Architect	cture		FTE's		
-	1	-	•	-	,	-		Technical Architect	Services	App	300		
	1	-	•		,	-	ı	Technical Architect	Env CoE				
-	1	-	1	-	1	-		Technical Operations Support Specialist	CoE	Env			
-	1		1		•			Integration Solution Architect & Designer	various				
	0.5	0.5	0.5	0.5	1		0.5	Human Performance Architect Training Administrator	Business				
1.0	1	-		-		-	1.0	Deployment Lead & Specialist Service Introduction Lead Max FTE's	CoE	Deployment			