

Dynamic Pricing-System & Operational Readiness

Significant Impact on Our Customers

- The transition to dynamic pricing represents the largest change to how our customers are billed for their energy use since their first bill was issued.
 - All business customer classes, who have not already done so, will be defaulted onto time-varying pricing.
 - Most customers' new rates will include an additional event-driven Peak-Day Pricing (PDP) adder for the 9-15 hottest days of the year. Small Ag will not be defaulted onto the PDP rate.
 - All residential customers will also be defaulted onto Peak-Day Pricing.
- Significantly changes the status quo and creates "Winners" and "Losers" with significant bill increases for customers in warmer climate zones.
- On a monthly basis, introduces potential for large bill volatility, which creates cash-flow issues for customers.
- PG&E will be the first major IOU to roll out this type of pricing on such scale with little history for such rates.

We are defaulting customers to this radically new rate structure at a time when our customer satisfaction is low and our customers are already hurting from the economy.

Many Potential Benefits

- In response to the Energy Crisis of 2000-2001, California policy regarding implementation of SmartMeters was driven by the desire, to implement time-varying rates to align the wholesale and retail price of electricity more broadly across the customer base.
- The goal for both PG&E and for the CPUC is to better align individual customer interests with those of California's economy, environment, and energy infrastructure.
- Potential Benefits of PDP/Dynamic Pricing include:
 - Reduced overall cost of energy supply
 - Greater stabilization of the energy grid
 - Reduced power interruptions
 - Reduced demand for power plant load capacity during high demand periods
 - Reduced greenhouse gases
 - Potential for customers to reduce energy costs and enhance control of energy usage (put SmartMeter to use)
 - Opportunity to create partner relationship with customers as their advisor

The default of our customers to this new rate creates a unique opportunity for us to standardize, simplify and rationalize our overall rate structure and to streamline our 300+ current rates.

PRAFE Dynamic Pricing Components

- In total there are currently several regulatory proceedings dealing with dynamic pricing in addition to the two dynamic pricing decisions.
- One of these decisions orders PG&E to implement default Dynamic Pricing and TOU rates for all customers with a defined timetable and specific rate design guidelines:
 - Time of Use (TOU) rates with additional Peak Day Pricing Event incremental overlay rate.
 - Decision provides for a form of Bill Protection not protection in traditional sense, but rather, a oneyear guarantee that a customer's bill will be the lesser of the default PDP and the opt-out TOU.
 - All customer classes must default to this rate. Trigger is when customers accumulate 12 months of interval data (post transition) at their latest premise.

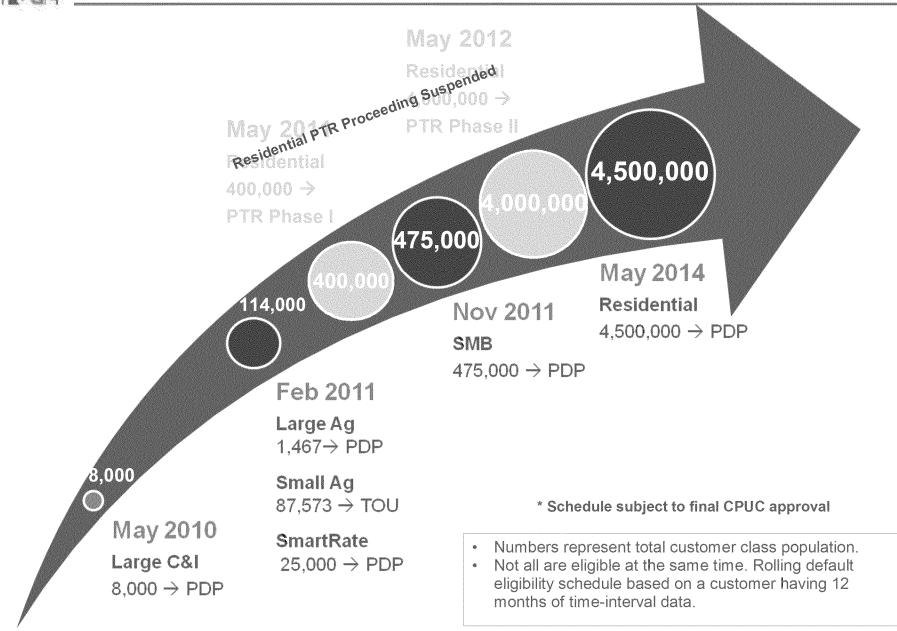
This is not the introduction of just one, but rather two rates concurrently:

Time of Use (TOU) = charge customers based on when they use power; begin to more closely align retail rates to actual cost (fully loaded) of energy (focus: M-F, May-Oct)

Critical Peak Pricing (CPP) = incremental adder or credit on top of TOU to further link retail rates to the cost of energy on the most costly days.

- <u>Peak Day Pricing (PDP)</u>: adder on top of TOU rate that places a significant cost premium for use during key hours on 9-15 Event days. Current rate calls for additional \$0.50-\$1,.20 per kWh.
- <u>Peak Time Rebate (PTR)</u>: credit/incentive model that provides credit for voluntary participation on Event days.

PRAFE Dynamic Pricing Transition is Accelerating





PGSE Large Ag Default Eligibility (as of Feb 2011)

Population			1,4	67
Exception Criteria			Eligible 1,157	DR Program 310
Meter Type		im ar Meter 57	Legacy Interval	Legacy 516
Interval Meter Transition	Yes 57	No 0	Yes No 130 454	
Billing System	CC&B	ABS (CC&B ABS	
Data Compliance (12 months)	Yes No		Yes No 130 0	
Tools	Yes No		Yes No 130 0	



PGGE Small Ag Default Eligibility (as of Feb 2011)

Population		57,	\$73	
Exception Criteria		Eigible 87,442	DR Program	
Current Rate Schedule	TOU 46,995		Flat 40,747	
Meter Type	SmartMeter Legacy TOU	Smar Weter 15,338	Legacy Interval BIR 228 21,399	Legacy TOU 5,782
Interval Meter Transition	Yes No Yes No 588 0 0 46,107		es No Yes No 0 228 0 21,399	Yes No 0 3/82
Billing System	CC&B ABS CC&B 588 0 46,107	ABS CC&B ABS	CC&B ABS CC&B ABS	CC&B ABS 3,782 0
Data Compliance (12 months)	Yes No Yes No 588 0 46,107 0	Yes No Y 15,338 0	es No Yes No 0 228 0 21,399	Yes No 0 3,782
Tools	Yes No Yes No 0 588 0 46,107	Yes No Yes	No Yes No	Yes No

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3	Meter Deployment (cumulative million)		6 <u>6</u> 9	53	5.8	5.9	63-	÷.	6.9 13	1.5	0 19	8.1											
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8	Meter Application & Firmware Deployments and Upgrades				1						-		-		Concerned								
9	Release I - ABS Migration (NEMS, Non-NEMS to CC&B)		Analy		A DECEMBER OF STREET, S		a she i pin she i s	Contraction of the second	ng & AB	920			Net E	nerg	y Mete	ering							
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21	Field Delivery - Initiatives																						
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23	Field Delivery - Office Closures											-	1										
24	Metering Services				Meter	Plant In	nprove	ement	Initiative	s							*********						
25	Customer Outreach / Change Management					Supp	ort Ini	tiative	IS														
26	PEAK DAY PRICING																						
27	PDP Enrollment	1	.g C&I					Ag								Sm/Me	d Bus	•					
28	Peak Time Rebate (PTR)			Plan	> De					<u>.</u>	Buil	d> C	eploy	•									
29	MyAccount Re-Architecture (MARA)					Re	lease	State State															
30	CC&B v2.3 Upgrade		Fit	/Gap				Carl Concernence and	sign>	Depl	loy												
31	Real Time Pricing	81					TBC	3 - 19 S. M.		<u> </u>			-										
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38	LIB - On Bill Financing - on hold																TBD						
39	Gas Interval Data Collection DC2000 Replacement																						
40	Residential Tiering - GRC Phase 2														TE	3D		31-36					
41	CARE Tiering - GRC Phase 2														TE	3D							
42	GRC Phase 2 Rate Changes														TE	a							
43	Residential Tiering - Generation Component						твр)															
44	Discontinuance of 15-Day Notices - on hold														TE	30		Dep	loy				
45	Payment Channel Consolidation									IBD													
46	Contact Center Automation Initiative									Nonements.					TE	Sec. 20 12 12							
47	Local Office Automation Initiative									MANAGEMENT OF					TE	Sec. 1							
48	Rate and Bill Calculation Simplification Initiative														TE	1.5.5.2.55							
49	Cogeneration Departed Load Initiative		10100000000			000.05.07.000.00.00.00.00						CONTRACTOR OF			TE	30	unananah).						
50	CC&B Minor Enhancements				E)esign -	-> Dep	oloy M	ultiple SI	F is													



The MARA project is similar in scope and scale to an enterprise-class system implementation due to its business and technology footprints and associated impacts

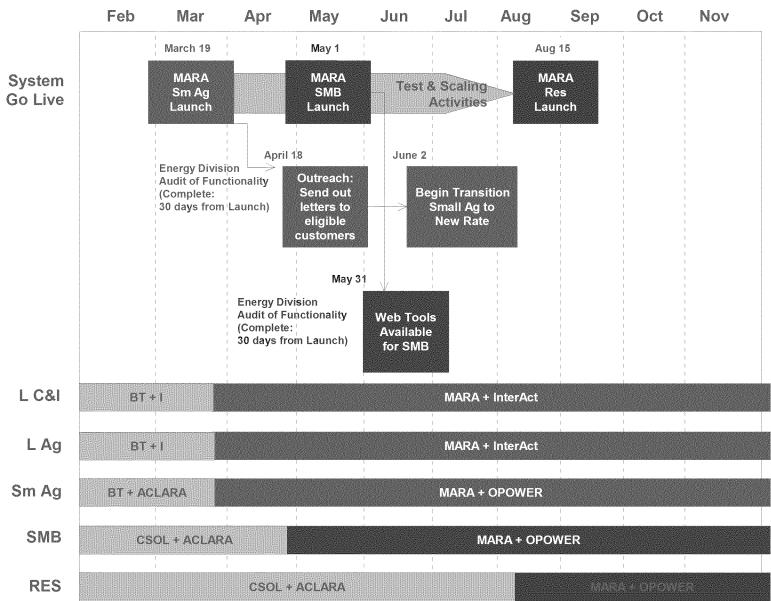
- Requires complete rewrite/revamp of the current customer-information application
- Given the complexity,tangential internet/intranet functionality was packaged within the MARA delivery model to capitalize on SME, PM and testing synergies

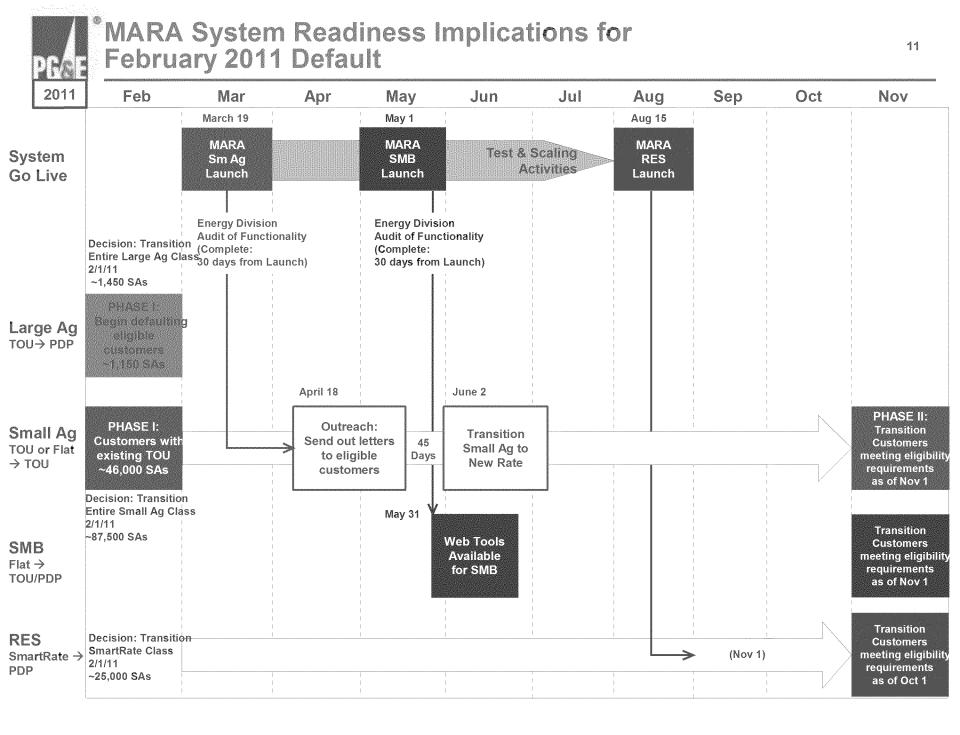
To meet the objectives of the future state platform, a number of key technology enablers are required to be implemented:

- WebLogic Portal Platform
 - To enable deployment of streamlined user interface as portlets
 - To enable enhanced self service
- WebLogic Enterprise Integration Platform
 - To enable re-usable integration of data across multiple sources to be presented to the user interface
- CA Siteminder
 - To enable secure access with authentication and authorization of users
 - To enable CSR support on the web for user assistance
- Oracle Database
 - To enable flexible data organization, management and access to all users
- Infrastructure Deployment
 - Servers/physical infrastructure
 - Scalability and Reliability for projected number of users and transactions
- · Re-architecture of the user experience
 - Bottoms-up revamp of user interface and user experience through re-designed page flows
- · Re-architecture of the data services
 - Bottoms-up revamp of all data services (Interfaces from multiple systems to pull data)



MARA System Go Live Schedule

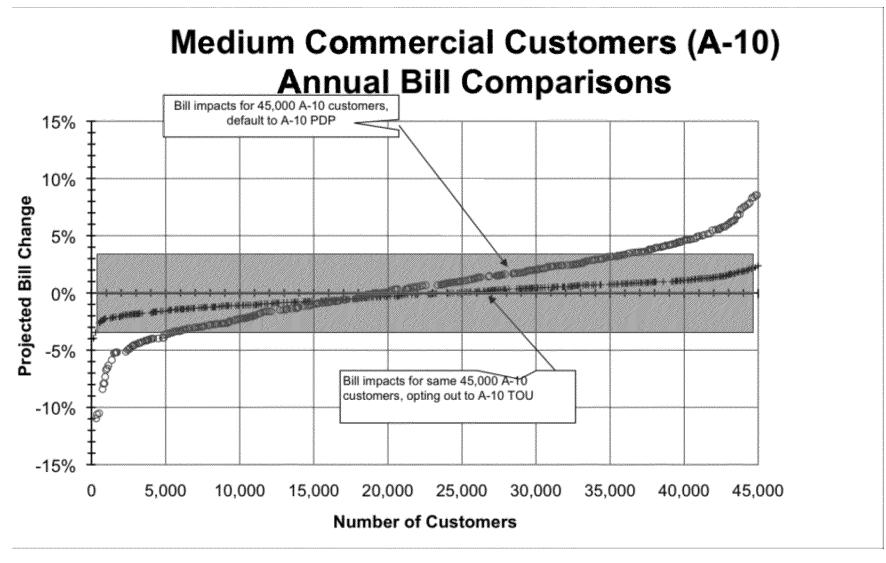






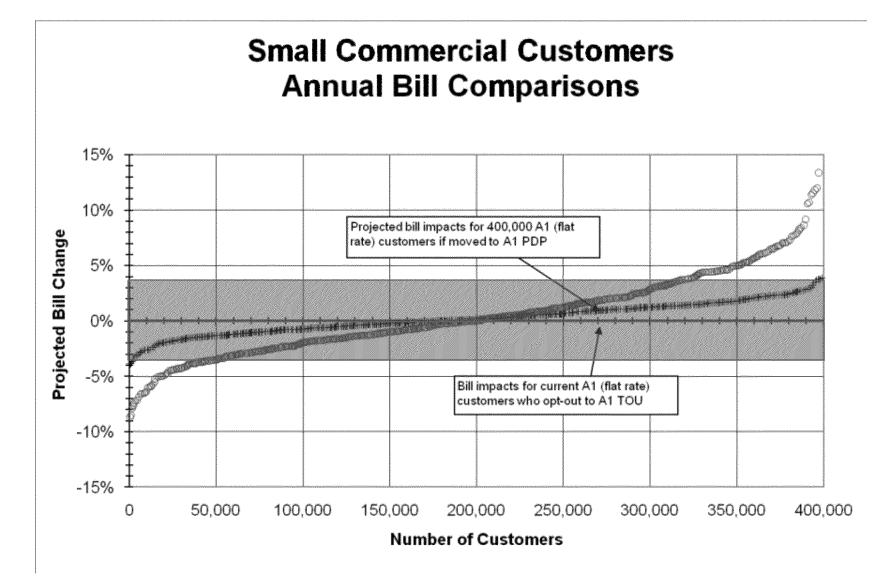
Appendix

Customer Impact Analysis – Annual View ¹³



*A-10 is a business rate, flat with no tier structure.





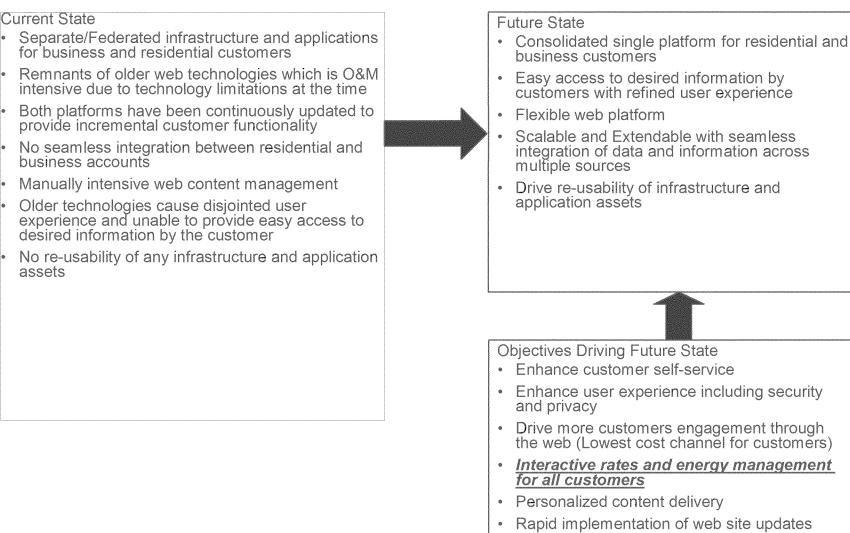


PGS: Customer Care Technology Roadmap

	2009 2010	2011	2012	2013			
Logical Architecture Areas	& Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4			
Business Milestones	<u>SM</u> <u>6M</u> <u>7M</u> <u>8M</u>	9M 10M 11M (15) 3 HAN 75K (RC Approval USSM Cont Ctr CIS for DSM Rolled out (28)	SmartMeter 40 Support 4.4MM	Universal Energy Audit			
Enterprise	Enterprise Enrolliment	Ent. Support 1 MM opt-in/opt-out Notification int Billing	Customer Information Architecture	NOC Established			
Meters and Head Ends (TNG, UIQ, MV90x1, ITRON)	UIQ Upgrade Layer 42 data center	Call Center Refresh Ph 1	Call Center Refresh Ph 2				
	Multiple CC&B releases	CC&B 2.3 Upgrade	CC&B Industrialization	* nRAF!			
customer contact	Customer AT&T Voice access to Tone IVR Impl	MARA Rei 3	Advanced Bill analysis in the Home 44				
	SmartRate CPP	MBCDW Compression 10, 1, 1, 1, 1, 1, 1, 2, 2, Consolidate Via 11G					
Meter Data Mgmt System (EA MDMS, EVEE, PlowCal)	V2.8 MV90 Thru upgrade EA MDM 5 P6 server (Rel I)	Net Metering Mint an exercise (22)	Distribute MDMS Streaming MDM data Annotions	Configurable Rules Engine			
HAN and PEV	1.54.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	Real Time HAN Alpha Pricing	HAN mass Smartport Rollout	IHD and CC&B 48 Reconciliation			
Demand Response (Interact, PDP, PTR)	PDP Billing Enrollment	Peak Time 23	Advanced DR Functions				
CRM / IDSM	1	IDSM Phase 11 IDSM Phase	IDSM Phase MDSS	Customer CRM			
Outage Management (015, 0MT)	SM-OMT	SM-Outage Restoration Validation	37 SM-Outage SM Identify & 32 Momentary Scope	49			
Work Management / Field (SAP, FAS)	Complete R3 Design	CREATER CONTRACT	Integration 36 Enhancements Deploy R3 Rel 2 (SAP- SAP, CEDSA, FAS, Mobile G(S) CC&B				
Energy Procurement / MRTU (PDR, SLAP)	PDR Phase 1	PDR Phase 2 Sub LAP	36				
Asset Management (SAP, CEDSA)		Meter Inventory & Tracking	1 1 1				
Capability Descriptions	UIQ scalable to 6 million meters Increase in call volume capabilities Financed view of SmartMeter restorations in OMT/ODT Ability to sell DR in market Consolidate and standardize VEE process Pilot of Home Area Networking capabilities Enhance MyAccount capabilities for customers	Befine strategy for improving DSM capabilities Improve capacity and reliability of MBCDW GR Capproval for Customer by Design Program Improve meter inventory & tracking capabilities Provide enhanced CC&B functions Ability to sell DR to market for additional cust. MAN deployment available for all customers	Cut. data warehouse, op data store, & master data mgm SmartMeter Rollout Complete Move non-MDM functions aut from MDMS Momentary outage reporting with SM meter event logs Advanced demand response functions Refresh of call center tech. and enable home agents Industrialization of CC&B	Establish a network operations center for management of real-time SmartMeter and SmartGnd traffic Configurable MDM to meet multiple business needs Ability to provide energy audits to customers Reconciliation of in-home devices in CC&B Improved targeting of customer (sales, mktg, billing etc.)			
entrestone Univer entrestone Univer entrestone University entrestone Uniteratione University entrestone University entrestone	Enterprise enrollment solution Enhance web experience with Electronic Bill Presentment / Payment Complete design of Mobile R3 Simplify access to energy information	Automated validation of outage restorations Consolidate solution for outage restorations Consolidate solution for outbound notifications to consolidate solution for outbound notifications Ingrove billing for customers with micro generation Bill credit for peak time demand response improve cust. relationship for CIS and DSM functions Real time pricing demand response Consolidate meter consumption rptg. sources Submit/forecast data to ISO by segments HAN rolled out to 75K customers	Improve integration with asset mgmt systems Deploy Mobile R3 with adv functionality Utent. and accoping of oursens with SmartMeter Enhance cust. relationship management Rollout of PHEV Smartport capability Enhanced Peak time demand response capabilities Replace MOSS Streaming of meter reads from field to MDM CSR / Cust. able to complete bill analysis				



MARA – Current and Future State



• Platform for web 2.0



