Residential Dynamic PricingDiscussion

January 9, 2012



PERE Current Residential Dynamic Pricing Proceedings

- PG&E filed its PTR proposal in the 2010 Rate Design Window (RDW), but recommended that consideration of PTR be consolidated with the Default Residential Rate Program (DRRP) proceeding
 - Provides an opportunity to consider a holistic vision for residential electric rates (dynamic pricing, time variant pricing and inclining block rates)
 - Avoids moving forward with single projects (like PTR) that may or may not be consistent with a longer term vision
- In response, DRA and TURN have proposed that PTR be consolidated with the 2012 RDW instead of the DRRP proceeding; PG&E's reply comments raised the following points:
 - The 2012 RDW does not provide an appropriate forum to consider a longer term residential rate vision
 - The DRRP was filed to consider dynamic pricing in the context of a future vision of rates (D.08-07-045)
 - The DRRP provides for consideration of dynamic pricing and its costs, and would be an appropriate forum to also consider default PTR and its costs (or other initiatives as appropriate)
- The DRRP also has framed the legal issues that must be addressed for residential default programs and that must be considered as part of any vision of future rates

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PRS: Future Vision and Principles for Dynamic Rate Design

PG&E's vision for customer rates 10 years from now embraces the following:

Guiding Vision

All customers can choose from rate options that deliver customer satisfaction while simultaneously motivating sustained behavior that reduces overall system costs through a combination of price signals and improved understanding of their own energy use and rate plans

Key Principles

- A limited set of relevant customer choices for each customer class, all of which can be effectively explained
- Demand response rate options selected by a subset of customers are designed to provide significant, reliable, predictable load reduction when called, especially through deployment of enabling technology
- Time of use rates for most customers will more closely link prices and costs and promote economically efficient utilization of assets
- Residential rates will include a conservation price signal embedded in ways that are more meaningful and easier to explain than the current tiered price system
- Changes to customer rates must consider tolerance for amount of change at any given time and focus on continuous participation on the path toward the long term vision

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Preliminary Draft Residential Load Impact (LI) Estimates

	450 J 410				
	400 - 35	0			
	350 -	310		Default PDP - 85% Retention Rate	
	300 -				
MW ²⁵⁰ - 200 - 170				 Default PDP - 75% Retention Rate Opt-in CPP/TOU - High Participation Opt-in CPP/TOU - Moderate Participation 	
100 -				Opt-in CPP/TOU - Low Participation Peak Time Rebate	
	50 -				
C	Default PDP Opt-In CPP				
Opt-In PDP/TOU	ed Representation of MW Calculation	Enrolled/Notified	Avg. LI/Cust (kW)	Agg. LI (MW)	Notes Avg. per customer load impacts are derived from PG&E SmartRate and Residential TOU evaluations, with adjustments to reflect rate differences and presumed population differences. For reference, the average SmartRate non-CARE per customer LI is .39 kW. Default reduces average engagement and LI. Enrollment estimate considered aggressive.
	CPP Only - High Participation	13% of Total Pop.	0.34	220	
	TOU Only - High Participation	19% of Total Pop.	0.08	70	
	CPP+TOU - High Participation	3 % of Total Pop.	0.39	60	
	CPP Only - Moderate Participation	12% of Total Pop.	0.36	210	
	TOU Only - Moderate Participation	13% of Total Pop.	0.08	50	
	CPP+TOU - Moderate Participation	2% of Total Pop	0.36	40	
	CPP Only - Low Participation	3% of Total Pop.	0.30	50	
	TOU Only - Low Participation	15% of Total Pop.	0.08	60	
	CPP+TOU - Low Participation	1% of Total Pop.	0.24	20	
	Default PDP - 85% Retention	85% of Non-CARE	0.15	410	
	Default PDP - 75% Retention	75% of Non-CARE	0.15	370	
PTR	Peak Time Rebate	45% of Total Pop.	0.15	310	Carrot only reduces avg. response.

Note: Given the nascent development of residential time varying pricing, all estimates are derived from limited data and/or based upon material assumptions about customer participation, responsiveness, etc. Each estimate has a wide range of uncertainty. Sources used for modeling include, but are not limited to, PG&E's SmartRate and Residential TOU LI evaluations and the ComEd Default CPP pilot.

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