

Bill Protection Introduction



Together, Building
a Better California

Agenda

1. Review Decision Parameters & Principles
2. TOU Bill Protection vs. SJV Bill Protection

SJV DAC Pilots Decision Guidance

The IOU bill protection workshop proposals and the IOU's Bill Protection and Affordability advice letters:

- Should **incorporate monthly bill protection, and, as appropriate, annual true-up, mechanisms and must aim to avoid any monthly “bill shock” for participants;**
- Should **consider all pre- and post- pilot implementation energy costs** (propane, wood, as feasible; and, as appropriate, natural gas and electricity costs);
- May **consider a higher baseline allowance and/or a waiver of the Super User Electric Surcharge;**
- Must be **standardized across PG&E and SCE, who must collaborate and propose the same approach and present this in nearly identical advice letters;**
- Will not require presentation of individual customer propane and/or wood bills as an eligibility criteria, but rather **will be based on modeled customer costs and generalized assumptions, which may be reviewed and updated periodically to adjust the approach, as needed;**
- Will be **offered for an initial period of three years to each household receiving appliance upgrades, with a cost of \$500 per household as a starting point;** and
- Will **consider likely rebound effects and comfort needs, particularly amongst the poorest households that may have severely curtailed propane usage for water and/or space heating due to high costs.**

Bill Protection Comparison

Time of Use Bill Protection

- Purpose: Offered to enable customers to try a new rate design and choose the rate that works best for them
- Duration: Offered for 12 months
- Frequency: One annual True-up Credit
- Basis: Electric bills under two rate options

SJV Pilot Bill Protection

- Purpose: Enable customers to transition off of propane without concern of paying higher energy cost
- Duration: Initial period of 3 years
- Frequency: Monthly bill protection
- Basis: All energy, including propane/wood costs
 - Based on Modeled customer costs/generalized assumptions
 - Adjusted as pilot proceeds
 - Consider rebound effect & comfort needs

PG&E & SCE

Initial Bill Protection Proposal



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1. Joint IOU Guiding Principles
2. Initial Joint IOU Proposal
3. Data Elements & Examples
4. SCE Model & Assumptions
5. PG&E Pilot Cost Analysis
6. Risks & Mitigation Plan of Proposal
7. Administrative & Customer burdens
8. Open Questions
9. Appendix

Joint IOU Guiding Principles

1. Should be simple to understand, quick, and easy to implement uniformly across IOUs in a cost effective manner
2. Should be adjusted as data is collected throughout the course of the Pilot
3. Be responsive to customers in the targeted communities and advocacy groups
4. Inform subsequent rollout in Phase 3
5. Comply with Commission rules & expectations
6. Target bill protection to customers whose post electrification energy costs are higher than their pre-electrification energy costs.

Initial Joint IOU Proposal

1. Collect all available pre pilot non-electric energy costs
2. Make informed assumptions where necessary
3. Estimate pre-pilot energy costs for all pilot participants
4. Provide a bill protection credit to participants whose post pilot energy costs exceed pre-pilot energy costs
5. Maintain High-Usage Charge and the existing all-electric baseline allowance
6. Use the \$500/household to define the budget cap for all participants, and not as a per household cap

Data Elements

	Pre Electrification Data	Post Electrification Data
Electric	Customer Electric bills	Customer Electric bills
Non electric (propane, wood)	Propane/wood bills Informed Assumptions	Propane/wood bills <ul style="list-style-type: none"> • <i>Potential Residual propane/wood true-up</i> Informed Assumptions

$$\begin{aligned} & \sum \text{Post Electrification energy costs} \\ & - \underline{\sum \text{Pre-Electrification energy costs}} \\ & = \Delta \text{ of Energy costs} \end{aligned}$$

Positive Δ of Energy costs = Credit

OR

Negative Δ of Energy costs = Savings/No Credit

Examples of NON Electric Pre-Pilot

Example 1 (Expected CARE Customer)

Current Annual Energy Services	Pre-Electrification Energy Cost	Post Electrification *Discounts included
Electric bill	\$1,000	\$1,300
Propane	\$1,400	\$0
Total Energy Cost	\$2,400	\$1,300

$\$1,300 - \$2,400 = -\$1,100 \rightarrow$ Savings/No Credit

Example 2 (CARE Propane Curtailer)

Current Annual Energy Services	Pre-Electrification Energy Cost	Post Electrification *Discounts included
Electric bill	\$1,000	\$1,300
Propane	\$250	\$0
Total Energy Cost	\$1,250	\$1,300

$\$1,300 - \$1,250 = \$50 \rightarrow$ \$50 Credit

Model

- Pull up model

Model Assumptions

- Follow same assumptions for customers that keep propane stoves
 - Require CBOs to interact with these customers to obtain monthly propane costs
- Any customer identified as a low consuming propane customer at enrollment
 - Will be flagged in the database
 - Total post-electrification energy bill will be monitored
 - May require bill protection above and beyond the \$500 allocated in the Decision

PG&E Pilot Cost Analysis

- **Most customers will see a net decrease in overall annual energy costs** as a result of the removal of propane appliances (at minimum space & water heating)
- PG&E finds that for customers that go **ALL** Electric & are on an all Electric baseline
 - 85% will see an electric bill increase
 - 15% will see an electric bill decrease
- Electric bill increase will be offset by propane bill savings
- Propane curtailers will likely see a net increase in their energy costs

Risks & Mitigation of Proposal

Risk	Mitigation
Data availability	Leverage CEN/CBO relationships with community to collect accurate data
Manual error	IOUs will establish checks & balances processes to identify and correct errors
Customers in arrears	IOUS will work with CEN /CBO to get customers in good standing
Provision of data is voluntary	IOUs will make informed assumptions
Post electric usage is more than estimated	IOUs will leverage the Community Energy Navigators to educate customers
Runaway Energy Costs	Establish appropriate household cap and red flags if customers trend significantly higher than expected

Administrative Burden

Identify Administrative Burden	Mitigation
Collection of pre-pilot energy cost data	IOUs will leverage CBOs and the Community Energy Navigator
Billing system IT costs	IOUs will explore cost effective alternative means
Manual Error	IOUs will implement checks & balance processes to identify and correct manual errors
Defining when Bill Protection starts	IOUs will allow flexibility in the bill protection implementation

Customer Burdens

Identify Customer Burden	Mitigation
Comprehension of bill protection approach	Customer education via Community Energy Navigator, CBOs, Outreach
Provision of pre-pilot non-electric energy cost data	IOUs will work with the Community Energy Navigator
Arrearages	IOUs will use existing programs to help eliminate customer arrearages.
Bill Protection Application lag	IOUs will use True-up mechanism as needed

Workshop Questions

Communication & Coordination

- How to explain methodology to customers?
- Should Bill protection credits be applied monthly/quarterly?
- How do PA's approach customers in arrears?
- How should PAs approach customers who have recently purchased propane appliances?
- How should PAs approach private builders active in the community?
- Should customers that reject home heating and water heating electric appliances receive Bill protection?

Analysis Refinements

- Should the Bill Protection approach compare post pilot electric bills to 2019 pre-pilot energy bills for the entire 3 years?
- Should we account for potential changes in weather, or price of energy (electric & non electric) from year to year?
- Should we track/account for household changes (ex. # of occupants)

Appendix: Super User Surcharge

With an all-electric baseline, very few residents would hit 400+% of baseline.

Community	% of Residents with Super User Surcharge	Low Case (HVAC + DHW)		High Case (HVAC, DHW, Clothes Dryer, Oven/Range)	
		Post-Electrification	All-Electric Baseline	Post-Electrification	All-Electric Baseline
Allensworth	26%	28%	0%	46%	2%
Alpaugh	11%	12%	1%	27%	3%
Cantua Creek	7%	10%	0%	21%	1%
Fairmead	16%	19%	8%	29%	10%
La Vina	7%	8%	1%	19%	2%
Lanare	20%	22%	7%	36%	9%
Le Grand	9%	11%	2%	19%	5%
Seville	14%	15%	1%	30%	3%
Overall	13%	15%	3%	26%	5%

Appendix: Model

- **Decision:** “Emphasize how the approach minimizes administrative barriers and undue burden for pilot participants while providing reliable protection against energy cost increases” (11.2,pg. 77)
- Leverage SCE Model with dummy customer data to quantitatively define
 - “Reliable protection”
 - Customer Education
 - “Appropriate Energy cost increase”
 - What is Bill shock for customers?
 - What is a sufficient increase in energy cost?
 - Post-pilot costs \leq Pre-pilot costs
 - “Customer Affordability”

Appendix: Examples of NON Electric Pre-Pilot Customer Bills

Example 1 (Expected Customer)

Propane Deliveries	Wood Delivery	Cost \$	Gallons
December 2018	None	\$300	?
March 2019	None	\$279	?
November 2019	None	\$616	?

Example 2 (Mixed Fuel)

Propane Delivery	Wood Delivery	Cost \$	Gallons
None	November 10 2018	\$150-\$250	N/A
January 30 th 2019	None	\$600	?

Example 3 (Propane Curtailer)

Propane Delivery	Wood Delivery	Cost \$	Gallons
December 10 2018	None	\$425	?

Example 4 (No Data/ Usage?)

Propane Delivery	Wood Delivery	Cost \$	Gallons
None	None	\$0	0