

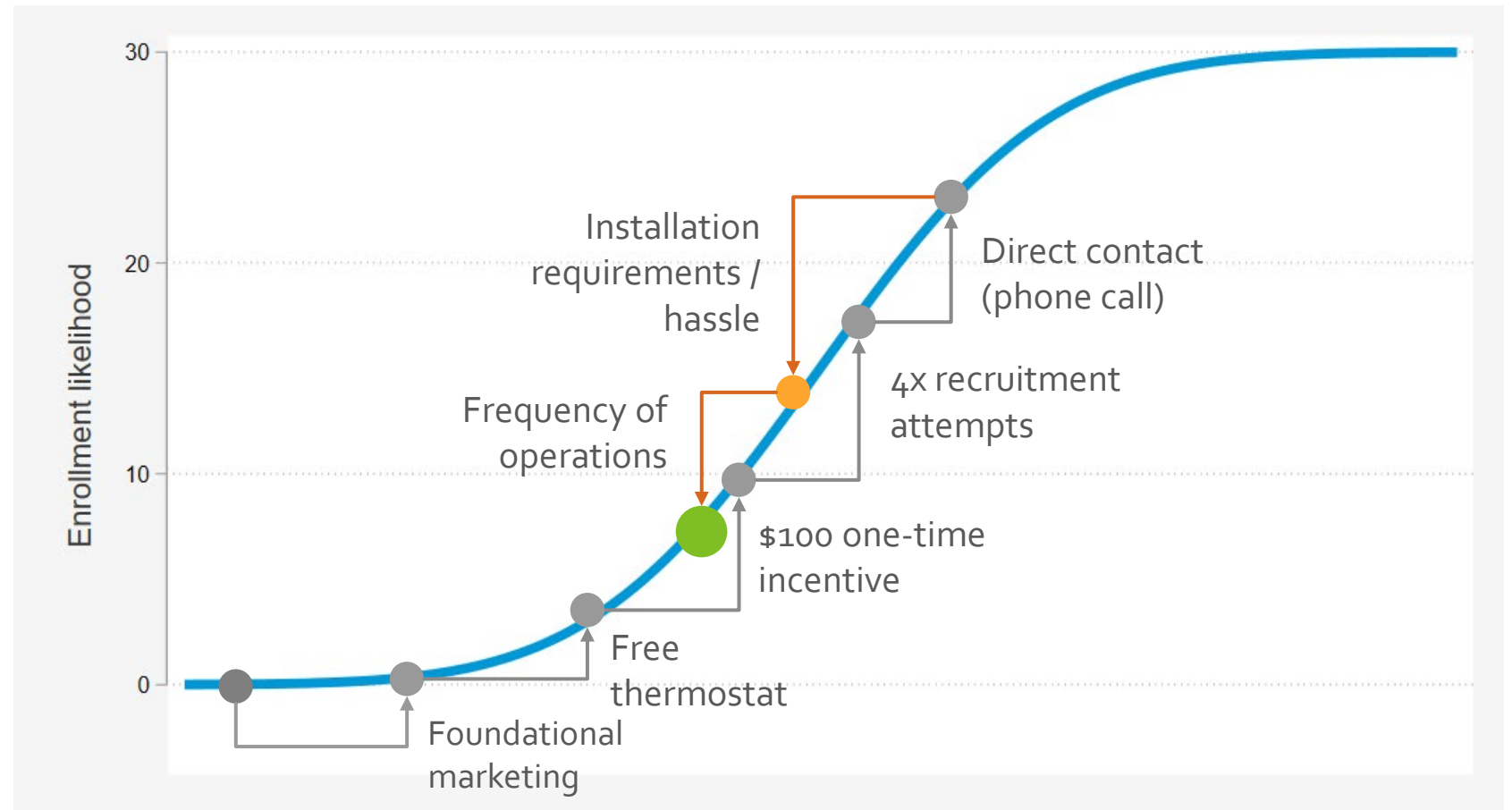
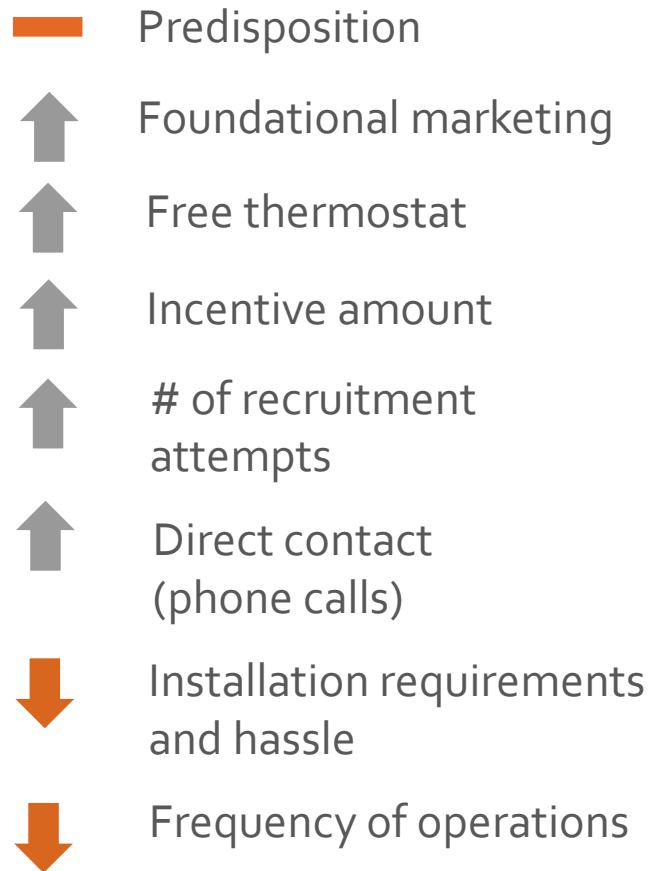
VERMONT PUBLIC SERVICE DEPARTMENT RATE DESIGN INITIATIVE / DER STUDY

APRIL 17, 2020 WORKSHOP

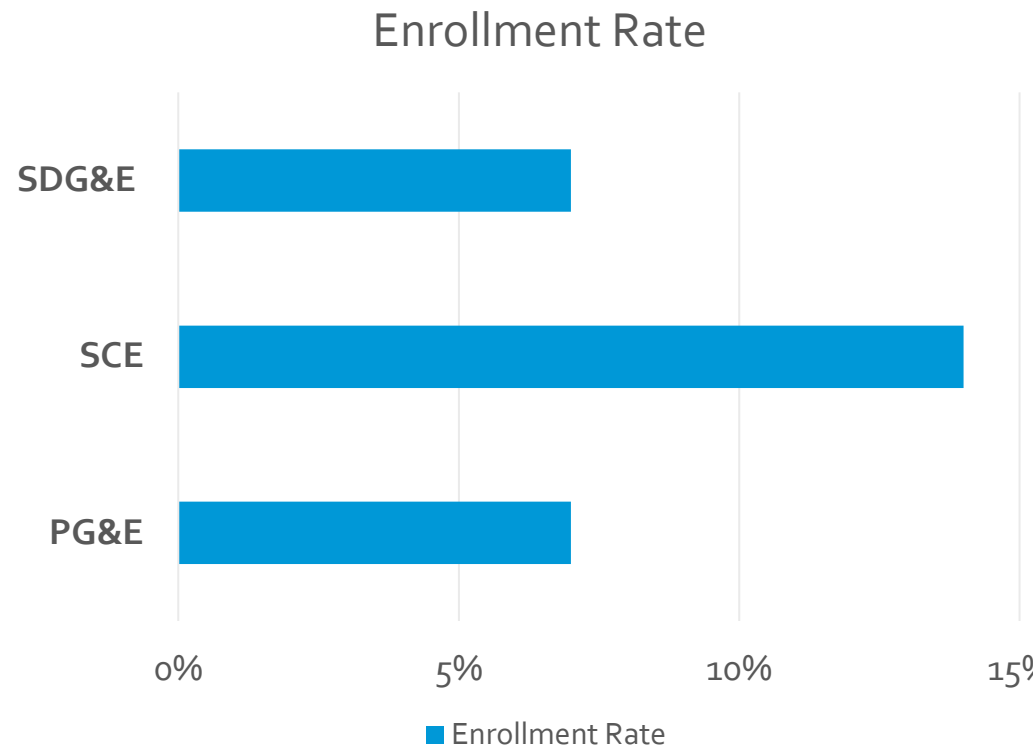


PROPENSITY TO ADOPT AND MARKETING STRATEGIES

- Each customer has a different starting point based on their characteristics



OPT-IN ENROLLMENT RATES CALIFORNIA PILOTS



Source data: California Statewide Opt-in Time-of-Use Pricing Pilot Interim Evaluation

SMUD

Recruitment Approach	Rate	IHD Offer	Acceptance Rate
Opt-in	CPP	No	18.8%
		Yes	18.2%
	TOU	No	16.4%
		Yes	17.5%
Default	CPP	Yes	95.9%
	TOU	Yes	97.6%
	TOU-CPP	Yes	92.9%

Source data: SMUD SmartPricing Options Pilot Evaluation

- All pilots recruited over one summer
- Tactics and incentives varied
- Higher recruitment rates at SCE and SMUD due mostly to use of phone recruitment

CONEDISON INNOVATIVE PRICING PILOT

TESTING THE IMPACT OF RATE ATTRIBUTES ON ACCEPTANCE RATES

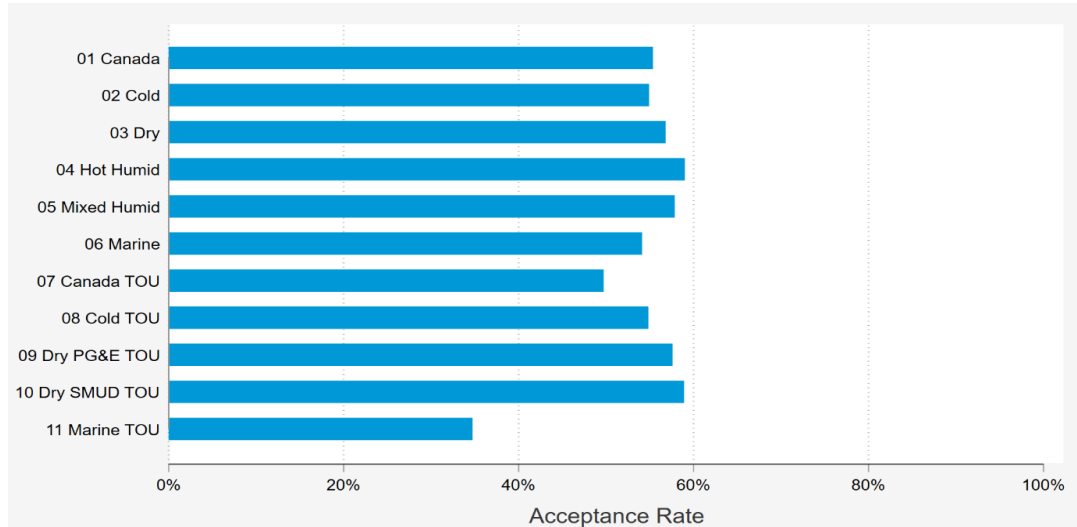
Rate I		Rate III	Rate V	Rate VI
1. Rate I Base Case Content (1,600) 0.56%		Rate III Base Case Content (1,600) 0.69%	Rate V Base Case Content (1,600) 2.07%	Rate VI Base Case Content (1,600) 1.71%
2. Rate I Base Case + No Explicit Bill Protection (1,600) 1.06%	5. Rate I Base Case + Business Reply Card (1,600) 0.88%	<p>All offers were compared to the Base Case:</p> <ul style="list-style-type: none"> ▪ Daily Peak Demand Charge ▪ 2 DM offers ▪ All offers made between October 15, 2019 and November 22, 2019 (enrollment deadline) 		
3. Rate I Base Case + Structural Benefitters (3,200) 0.95%	6. Rate I Base Case + 1 Direct Mail (1,600) 1.31%			
4. Rate I Base Case + Sign-Up Incentive (1,600) 1.81%	7. Rate I Base Case + 1 Email (1,600) 1.69%			

- Customer preferred subscription rates
 - Rate V – Subscription without overages
 - Rate VI- Subscription with overages
- Tactics that yielded the highest results were:
 - + 1 Email
 - + Sign-up incentive
 - + 1 Direct mail

Source: Innovative Pricing Pilot Quarterly Report (Q4 2019)

Statistically significant results in blue

ECOBEE ECO+ EXPERIMENT: PAIRING TECH WITH TIME VARYING RATES



Rate	Price Ratio (Peak: Off-Peak)	Climate Region	Average kW Savings During Peak Period	Peak Duration (hours)	Average On-Peak Percent Savings (kWh)	Average Total Energy Savings (kWh)	Percent Savings On Cooling Energy (\$)
Hydro One Res TOU	2.0	Canada	0.18	6	36%	3.4%	8%
FPL RTR-1	5.8	Hot Humid	0.22	9	13%	5.0%	10%
SMUD Res TOD	2.4	Hot Dry	0.25	3	23%	3.5%	8%
PG&E EV-A	3.7	Mixed Dry	0.18	6	28%	8.8%	19%
PG&E EV-A	3.7	Marine	0.10	6	20%	4.0%	11%

- Randomized Encouragement Design. Customer are made the offer and decide whether or not to enroll.
- 240,000 customers – 120k control, 120k invited (encouraged) to participate
- Three algorithms:
 - Energy efficiency
 - DR
 - TOU price response
- Acceptance rate of 54.8%
- All offers made via push notifications/app

Source: Eco+ Thermostat Optimization Pilot

QUESTIONS?



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