ARCHITECTING THE FUTURE OF DYNAMIC PRICING

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As many as 80% of low income customers may be over-paying for electricity today.
The price of flat-rate pricing

• Under flat rate pricing, inter-customer subsidies may amount to $3 billion/year

• Collectively, all customers may be overpaying for electricity by about $7 billion/year
  – Using the FERC Staff estimate of 92 GW saved under universal dynamic pricing, and valuing demand response at $75/kW-year

• But will customers respond?
Yes, as seen in scores of pricing experiments during the past decade.
And as also seen in the PURPA pilots with TOU rates three decades ago

Arc of Price Responsiveness (1982 + current price-only)

- Hot climate, all major electric appliances
- Price Only
- Average Household
- Cool climate, no major electric appliances
Of course, dynamic pricing requires smart meters

- 33% of the nation’s 114 million households are already on smart meters
- 50% are expected to be on smart meters in another five years
- Dynamic pricing is expected to roll out in the Mid-Atlantic region, followed by the Midwest and California
- In Arizona, TOU pricing has been rolled out successfully
The power of choice

Potential Reward (Discount from Flat Rate)

- Flat Rate
- Inclining Block Rate
- Seasonal Rate
- TOU
- Super Peak TOU
- CPP
- RTP
- VPP

Less Risk, Lower Reward

More Risk, Higher Reward

Risk (Variance in Price)

Increasing Risk

Increasing Reward

Potential Reward (Discount from Flat Rate)
Making the transition to dynamic pricing

Pilot Dynamic Pricing → AMI Business Case → Deploy AMI

Opt-in Rate
- Leave Flat Rate Unchanged
- Change Flat Rate
  - Provide Shadow Bills
  - Don’t Provide Shadow Bills

Opt-out Rate
- Offer Two-Part Rate
  - Set First Part Equal to Historic Load Shape
  - Customer Buys First Part as a Forward Market Transaction
- Offer Single-Part Rate
  - Offer Bill Protection
  - Don’t Offer Bill Protection

Conduct Measurement and Verification

Understand Customer Preferences → Segment the Market → Create Segment-Specific Messages → Get the Word Out → Educate and Answer Questions

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Source documents
(Dynamic pricing bibliography available on request)


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