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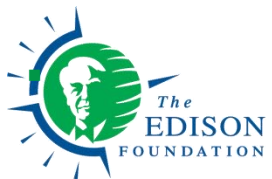
The Impact of Dynamic Pricing on Low Income Customers – IEE Whitepaper, June 2010

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ERE Committee
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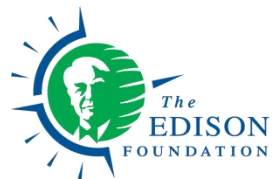
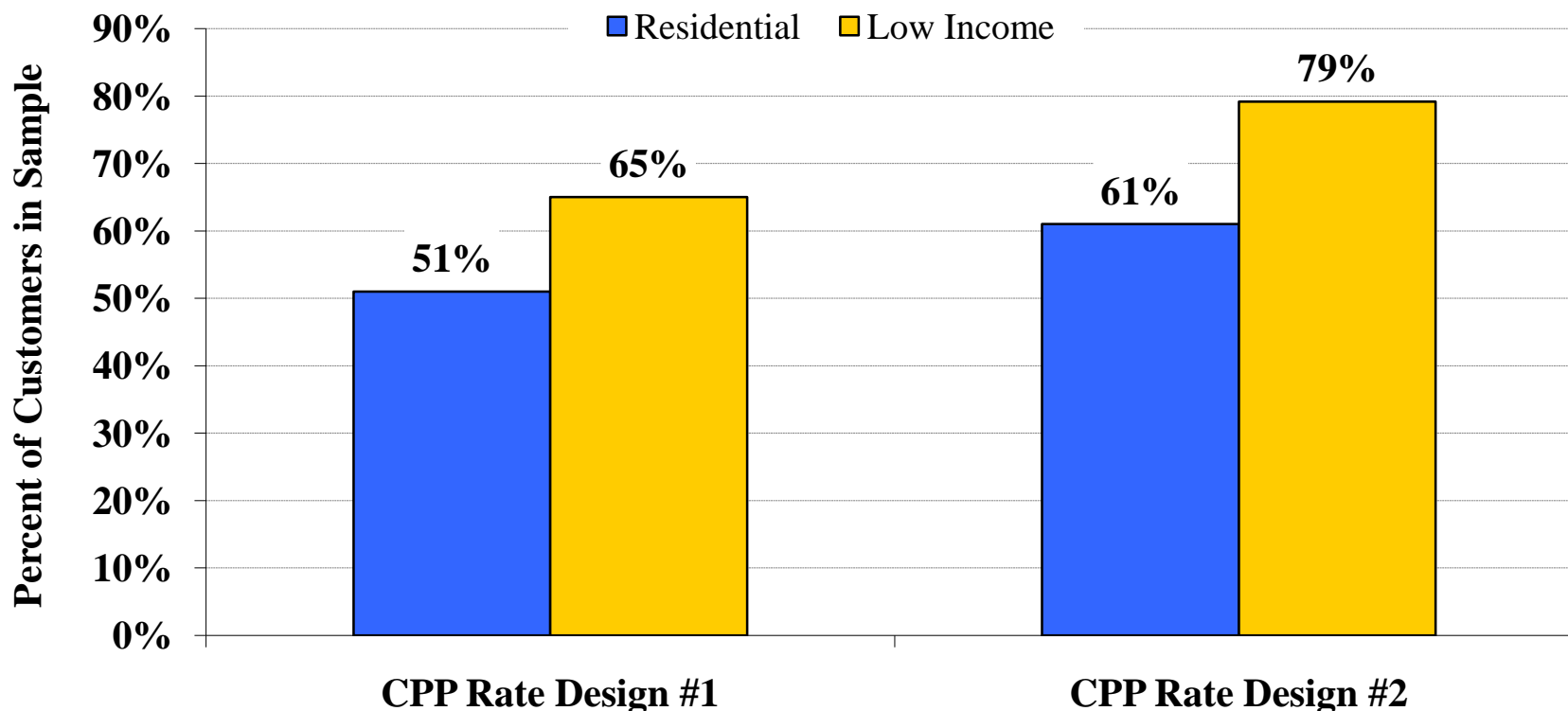
Low income customers and dynamic pricing – Two viewpoints

- Low income customers have flatter load shapes than average residential customers so would immediately benefit from dynamic pricing.
- Low income customers use less energy and therefore have limited ability to shift load from peak to off peak hours so would be harmed from dynamic pricing.
- Empirical evidence from five studies shows the following:
 - Many low income customers can benefit from dynamic prices even without shifting load
 - Low income customers do shift their energy usage in response to price signals



Low income customers benefit from smart prices even without shifting load

**Percent of Sample with Immediate Bill Decreases on CPP Rates
(Even with No Load Shifting – i.e., No Demand Response)**



Low income customers do respond to smart prices – more than, the same as, or less than other customers

Program Results	Low Income Peak Reduction	Average Peak Reduction	Low Income vs. Average
BGE 2008: Known Low Income vs. Known Average Customer	<i>Varies depending on rate type; low income customers respond similarly to average customer</i>		100%
CL&P's PWEF Program: Known Low Income vs. Known Average Customer	<i>Varies depending on rate type; low income customers respond similarly to average customer</i>		100%
CL&P's PWEF Program (PTP high): Hardship vs. Average	13%	20%	67%
Pepco DC (price only): Low Income vs. Average Residential ¹	10%	5%	200%
Pepco DC (price + thermostat): Low Income vs. Average Residential ¹	15%	7%	214%
PG&E SmartRate 2008: CARE vs. Average	11%	17%	66%
PG&E SmartRate 2009: CARE vs. Average	8%	15%	50%
California SPP: Low Income vs. Average	11%	13%	84%
California SPP: CARE vs. Average	3%	13%	22%

Note: For the PepcoDC pilot, the average residential response excludes low income customers that qualify for the RAD program



How do dynamic prices affect low income customers: Conclusions based on 5 studies plus a load research sample

- Dynamic prices are not harmful to low income customers. In fact, just the opposite is true
 - *65-79% are instant winners* even without load shifting due to flatter-than-average load shapes.
 - All five studies cited found that *low income customers do respond to dynamic prices*; evidence on the magnitude of their responsiveness is mixed.
- The vast majority of low income customers are likely to benefit from dynamic pricing. *Restricting access to dynamic rates may, in fact, be harmful to a large percentage of low income customers.*

