RAP® Energy solutions for a changing world

Current Rate Designs Reflecting *Smart Rate Design* Concepts

RAP's 2015 publication *Smart Rate Design for a Smart Future* identifies three key rate design principles for an evolving industry.

- **Principle 1**: A customer should be able to connect to the grid for no more than the cost of connecting to the grid.
- **Principle 2**: Customers should pay for grid services and power supply in proportion to how much they use these grid services and how much power they consume.
- **Principle 3**: Customers who supply power to the grid should be fairly compensated for the full value of the power they supply.

Many utilities across the United States operate with rate designs that generally follow these principles. This document provides a few examples of utilities, representing every region in the country, with currently effective rate designs that reflect these smart rate design concepts.[1]

Austin Energy (Texas)

Key Features:

- Inclining block/seasonal rate
- Value of solar credit for PV exceeds initial block rate

		Summer	Winter
Customer Charge	$/month	$10.00	$10.00
Usage Charges	$/kWh		
0 - 500 kWh		$0.087	$0.072
500 - 1,000 kWh		$0.134	$0.110
1,000 - 1,500 kWh		$0.145	$0.126
1,500 - 2,500 kWh		$0.164	$0.138
Over 2,500 kWh		$0.168	$0.150
Value of Solar Credit	$/kWh	($0.107)	($0.107)

[1] Note: All rates derived from online tariffs as of 11/2/2015; many rates have tariff riders that may not be fully reflected.

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Customer Charge	$/month	$7.11
Service Size Charge	$/month	
Multi-Family		$1.40
Single-Family		$2.80
Large Single-Family		$8.40
Energy Charge	$/kWh	
First 300 kWh		$0.1153
Over 300 kWh		$0.1672

Burbank Water and Power (California)

Key Features:

- Service size charge equates to transformer cost
- Utility planning to change to default time-of-use (TOU) by 2018

Excel Energy (Colorado)

Key Features:

- Moderate customer charge
- Seasonal inclining block rate with summer rate reflecting cost of new, clean energy resources

Customer Charge	$/month	$7.63
Energy Charge	$/kWh	
Winter		$0.099
Summer		
First 500 kWh		$0.099
Over 500 kWh		$0.149

National Grid (Massachusetts)

Key Features:

- Low customer charge
- Seasonal rate
- Mild inclining block rate

		Summer	**Winter**
Customer Charge	$/month	$4.00	$4.00
Energy Charge	$/kWh		
First 600 kWh		$0.174	$0.211
Over 600 kWh		$0.180	$0.218

Rocky Mountain Power (Utah)

Key Features:

- Low customer charge
- Seasonal inclining blocks
- Simple TOU overlay
- Minimum bill

		Summer	Winter
Customer Charge	$/month	$6.00	$6.00
Energy Charge	$/kWh		
First 400 kWh		$0.0885	$0.0885
Next 600 kWh		$0.1154	$0.1071
Over 1,000 kWh		$0.1445	$0.1071
Optional TOU Element	$/kWh		
On-Peak Surcharge		$0.0436	N/A
Off-Peak Discount		(0.0163)	N/A
Minimum Bill	$/month		$8.00

Customer Charge	$/Month	$0.93

Energy Charge:	**Summer**	**Non-Summer**
On-Peak	$0.4634	$0.3623
Off-Peak	$0.2960	$0.2570
Super Off-Peak	$0.1133	$0.1133
Less Baseline Credit (baseline quantity varies by climate zone)	$(0.1035)	$(0.1035)
Peak-Time Rebate	$(0.75)	$(0.75)
Minimum Bill	$10.00	$10.00

Southern California Edison TOU-D (Optional)

Key Features:

- Low customer charge
- Minimum bill
- TOU
- Critical peak
- Baseline credit creates inclining block rate

Minnesota Power and Light

Key Features:

- Moderate customer charge
- Inclining block rate to bring incremental usage price close to long-run marginal cost

Customer Charge	$/month	$8.00
Energy Charge	$/kWh	
First 300 kWh		$0.0510
301 - 500 kWh		$0.0674
501 - 750 kWh		$0.0817
751 - 1,000 kWh		$0.0845
Over 1,000 kWh		$0.0894

City of Tallahassee (Florida)

		Standard	**Optional TOU**
Customer Charge	$/month	$7.34	$7.34
Energy Charge	$/kWh		
On-Peak		$0.1072	$0.2156
Off-Peak		$0.1072	$0.0628

Key Features:

- Moderate customer charge
- Steep TOU rate

RAP's Rate Design Papers:

- Smart Rate Design for a Smart Future
  - Dividing the Pie: Cost Allocation, The First Step in the Rate Design Process
  - Rate Design for Vertically Integrated Utilities: A Brief Overview
  - Restructured States, Retail Competition, and Market-Based Generation Rates
  - The Specter of Straight Fixed/Variable Rate Designs and the Exercise of Monopoly Power
- Electric Utility Residential Customer Charges and Minimum Bills: Alternative Approaches for Recovering Basic Distribution Costs
- Designing Distributed Generation Tariffs Well