

## Appendix 9: Review of Alternative Rate Structures

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# Alternative Rate Structures

- ✓ Evaluated ALL Existing KCP&L Time-Based Rates
- ✓ Researched Studies From External Sources
- ✓ Compared Time-Based Rates From Other Utilities
- ✓ Designed A Simple Rate Structure and Marketing Theme to Maximize Participation
- ✓ Added a Peak Shaving Option
- ✓ PHEV Rate
- ✓ Easier to Manage Off-Peak Rider for C&I

# KCP&L and GMO Program Menu

		<u>Customer</u>			
	<u>Tariff</u>	<u>Count</u>	<u>Tariff #</u>	<u>Sheet</u>	<u>Territory</u>
1	Large Power Service	72	MO Tariff No. 1	Sheets 31 - 33	L&P
2	Residential TOU Tariffs				
	Residential Time-of-Day Service	54	KS Tariff Schedule 16	Sheets 1 & 2	KCP&L
	Residential Time-of-Day	40	MO Tariff No. 7	Sheet 8	KCP&L
	Residential Service Time-of-Day	0	MO Tariff No. 1	Sheet 66	GMO
3	Large Power Service - Off-Peak Rider	11	MO Tariff No. 7	Sheet 15	KCP&L
4	RTP and RTP Plus				
	Real-Time Pricing	3	MO Tariff No. 7	Sheet 26	KCP&L
	Real-Time Price Program	3	MO Tariff No. 1	Sheet 73	GMO
	Real-Time Pricing	0	KS Tariff Schedule 79	Sheets 1 - 5	KCP&L
	Real-Time Pricing Plus	0	KS Tariff Schedule 80	Sheets 1 - 5	KCP&L
	Real-Time Pricing Plus	0	MO Tariff No. 7	Sheet 26	KCP&L
5	Two Part Time-of-Use	4	MO Tariff No. 7	Sheet 20	KCP&L
6	Thermal Storage Programs				
	Thermal Storage Rider	1	KS Tariff Schedule 77	Sheet 1	KCP&L
	Thermal Energy Storage Pilot Program FROZEN	1	MO Tariff No. 1	Sheet 70	GMO
	Thermal Storage Rider	0	MO Tariff No. 7	Sheet 22	KCP&L
7	Optional Time-of-Use Adjustment Rider	1	MO Tariff No. 1	Sheet 35	L&P
8	Incremental Energy Rider	0	MO Tariff No. 7	Sheet 24	KCP&L
9	General Service Time-of-Day	0	MO Tariff No. 1	Sheet 67	GMO

# **Conclusion: RTP Is Not Working TOU More Effective, But Limited Participation**

**17 Separate Tariffs (KCP&L and GMO)**

**We Studied The Behavior of All Time-Based Customers**

**Historically, The 7 RTP Customers Have Not Managed Load or  
Monitored Prices (1 Exception)**

**C&I Time-of-Use Customers Are Better Participants**

**But TOU Participation Rates Don't Approach 1%**

**Residential Customers DO Benefit \$\$**

# Successful Time-of-Use Programs

**Make it possible for the customer to win**

**Have Pricing that make sense intrinsically**

**Prices That Aren't Scary**

**Keep it Simple (set it and forget it)**

**(Programmable Thermostat)**

# **KCP&L and GMO Territories**

## **Alternative Rates We Are Examining**

**Residential 9 to 5 TOU**

**Residential Peak Time Rebate Program**

**Residential Off-Peak Rate for PHEVs**

**C&I Customer Peak Period Option (3 p.m. 5 p.m.)**

# The 9 to 5 TOU Rate

- Participants Get a Programmable Communicating Thermostat
  - Thermostats Manage Most Load Shifting
  - Consumers Can Override Programmed Settings
  - 3 Tiered Rate Structure
  - Revenue Neutral / Rate Neutral Pricing
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- ✓ Optimizer Participants Are All Potential TOU Customers
  - ✓ Optimizer Eliminates the need for CPP
  - ✓ Largest Potential Impact MWs
  - ✓ Puts an Infrastructure in Place to Handle PHEVs, SmartGrid

# Peak Time Rebates

(Similar to Pilot Programs in Place at BG&E, WE Energies)

- Customers Earn Rebate \$\$ If They Reduce kWh on Peak-Event Days
- Weekdays 2 p.m. to 6 p.m. Up To 25 Times May - September
- 35-cent per kWh Reduction vs. Baseline
- Rebate is Paid With a Cash Card at Season's End (eliminates billing complication)
- No Cost / No Risk



# Experimental Rate for PHEVs

- Encourage Adoption of Low Emission Vehicles
- Reduced Charge for kWh Consumption Above Baseline Between 9 p.m. and 5 a.m. (6 to 8 hours is typical charge time at 110 volts)
- Fuel a PHEV for Less Than a Penny per Mile

# Offer C&I Customers an Off-Peak Rider That is Less Exclusive Than 11am – 7pm

**In Summer, Peak Demand Occurs Between 3pm & 5pm  
Offer Narrow and Flexible Off-Peak Riders To Manage Daily Peaks**

