BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service	)))	**Case No. ER-2018-0145**
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authorization to Implement A General Rate Increase for Electric Service	))))	**Case No. ER-2018-0146**

NOTICE

COME NOW Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO") (collectively, the "Company") and respectfully state as follows to the Missouri Public Service Commission ("Commission"):

1. On September 25, 2018, the Company filed a *Non-Unanimous Stipulation and Agreement Concerning Rate Design Issues* ("Rate Design-TOU Stipulation") which included an agreement between the Company, Staff, the Office of the Public Counsel ("OPC"), Missouri Division of Energy ("DE"), and Renew Missouri Advocates ("Renew MO") (collectively, the "Signatories") on Time of Use ("TOU") rates.[1]

2. On October 31, 2018, the Commission issued its *Order Approving Stipulations and Agreements* ("Order") which approved the various settlements between the Signatories in these dockets, including the Rate Design-TOU Stipulation referenced above.

[1] "e. When completed the Company will submit to the Commission the following documents on an ongoing basis: Customer research plan, business case for shadow billing, marketing and education plan, EM&V plan, Customer Feedback Mechanism, Customer Behavior Metrics, EM&V interim and final results and documentation shared at each stakeholder meeting." See Rate Design-TOU Stipulation, p. 6, Section 2(e).

3. Pursuant to the provisions of the Rate Design-TOU Stipulation the Company is filing the attached *Missouri Stakeholder Meeting—Time of Use* (presented on December 20, 2018) and designated as **Exhibit A**.

WHEREFORE, the Company respectfully request the Commission take notice of the attached.

Respectfully submitted,

|s| Robert J. Hack

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ATTORNEYS FOR KANSAS CITY POWER & LIGHT COMPANY AND KCP&L GREATER MISSOURI OPERATIONS COMPANY

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 11th day of January 2019.

Roger W. Steiner

Roger W. Steiner

Missouri Stakeholder Meeting
Time of Use

December 20, 2018

Safety Moment

Holiday Safety

Risk: Christmas Tree Fires

- ~300 Christmas tree fires occur nationally each year
  - Not common, but tend to be serious when they do occur

Tree Safety

- Keep tree at least 3 ft from all heat sources
  - Think fireplaces, radiators, heat vents
- Real trees need water
  - More dry = more flammable
- Don't overdo it on the lights & pay attention to safety labels
  - Unplug indoor lights when you leave

Agenda

KCP&L energizing life

- Shadow Billing Business Case
- Customer Research Plan
- Customer Feedback Mechanism
- Customer Behavior Metrics
- Time of Use (TOU) Tariff Revision Request
- Next Steps
- General Discussion + Action Item Summary

Draft

Discussion

Other

Shadow Billing Business Case Draft

Shadow Billing Business Case

Purpose

As part of the 2018 TOU settlement, KCP&L agreed to complete a business case for Shadow Billing feasibility.

Goal

The goal of this business case is to identify and evaluate Shadow Billing implementation options and present a recommendation.

Shadow Billing Team

- A cross-functional team comprised of over 30 subject matter experts from:
    - Energy Solutions
    - Information Technology
    - Billing
    - Metering
    - Customer Operations & Customer Service
    - Customer Insights
    - Marketing & Communications
    - Customer Experience

- Met over the course of 40+ hours
    - Review Shadow Billing industry definitions & implementations
    - Identify best practices

- Team evaluated potential options and timelines

Shadow Billing Research

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- **No common definition or implementation in industry**
- **But….Common Goals:**

1. **Educate customers on available rate and pricing options**
2. **Provide transparency around potential or actual savings achieved under an alternative rate**
3. **Reinforce the need for behavior change to drive savings**

- Oklahoma Gas and Electric
- Pacific Gas & Electric
- Southern California Edison
- San Diego Gas & Electric
- Baltimore Gas & Electric
- Hawaiian Electric
- Xcel
- American Public Power Assoc.
- Consumers Energy
- Rocky Mountain Institute

Shadow Billing Goals

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We reached out to DED and found that the research they provided support these goals…

(1) "…Shadow billing, where consumers receive full information about what billing under the full range of rate options would have been given existing usage level and timing of consumption…"

(2) "…Shadow billing gives customers a chance to understand how they will be affected…"

(3) "…Shadow bills allow the customer to see exactly how the dynamic rate will impact their bill, without creating a cash flow issue. Shadow billing also allows both the utility and regulator to identify each customer that might experience adverse bill impacts…"

(1) **Consumer Protection for Residential Customers**
Source document unknown

(2) **Guidance for Utilities Commissions on Time of Use Rates: A Shared Perspective from Consumer and Clean Energy Advocates Electricity Rate Design Review Paper No. 2 July 15, 2017**
https://votesolar.org/files/9515/0039/8998/TOU-Paper-7.17.17.pdf

(3) **LBL Smart Grid Guide**
https://emp.lbl.gov/sites/default/files/chapter5.pdf

Shadow Billing Criteria

- **Can the solution**
  - **Clearly present personalized long-term historical data**
    - Rate(s) and cost comparisons
  - **Clearly communicate significant information to educate customers**
    - Data + information = education
  - **Include multiple rate comparisons**
    - Consider future additions choice-based rate options
  - **Provide a clear call to action to customers**
- **Is the solution**
  - **Scalable**
    - Can it reach all residential customers
  - **Engaging**
  - **Interactive**
  - **Flexible**

Shadow Billing Options

Team identified 6 options:

1. On the bill rate/cost comparison
2. Sending a separate “bill” with “what if” TOU data
3. Bill Message on Current KCP&L Bill
4. Online Rate Analysis Tool
5. Rate Comparison and Education Reports
6. Post-Enrollment Engagement Reports

Shadow Billing Options

As we progressed through the development and research phase of the process, 3 options didn't meet our Shadow Billing Criteria.

These options include:

1. On the bill rate/cost comparison
2. Sending a separate TOU "bill"
3. Bill message on current KCP&L bill

	On the Bill Comparison	Separate Shadow "Bill"	Bill Message
Personalized			
Long-Term Data			
Educational			
Multi Rate Comparisons			
Scalable			
Clear CTA			
Engaging			
Interactive			
Flexible			

These implementation options lack the engagement, detail, education, and personalization required to effectively educate customers on rate options, rate and cost comparisons, and drive the behavior change required to achieve savings through a TOU rate.

Shadow Billing Options

The 3 additional options were identified as feasible and were recommended to be further evaluated for potential implementation.

These 3 options include:

1. Online Rate Analysis Tool
2. Rate Comparison & Education Reports
3. Post-Enrollment Engagement Reports

For each option we examined:

1. Cost
2. Resources required
3. Implementation timeline
4. Pros and cons of the option

	Online Rate Analysis Tool	Rate Education Reports	Post-Enrollment Reports
Personalized			
Long-Term Data			
Educational			
Multi Rate Comparisons			
Scalable			
Clear CTA			
Engaging			
Interactive			
Flexible			

Option 1: Online Rate Analysis Tool

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Interactive web tool that includes rate plan comparisons, rate details, and rate simulator

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Option 1: Online Rate Analysis Tool

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✓ How does this rate plan work?

✓ Is this the best rate plan for me?

Rates Details

‹ Back to all rates

Rate plan
Time of Use

Estimated cost
$500 /year

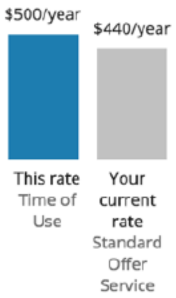
About this rate plan

The cost of electricity varies by time of day.

On this plan, customers are rewarded for reducing their energy use during periods of high demand. If your household shifts energy usage from the afternoon and early evening, this plan can can potentially help you save on your energy bills.

- Price highest: 10am-8pm

Last year, this rate plan would have increased your costs by $60.



Rate plan breakdown

Energy prices are highest during peak hours.

Summer weekdays

$ Off Peak 11pm - 7am

$$ Intermediate 7am - 10am, 8pm - 11pm

$$$ Peak 10am - 8pm

June - September Pricing

Weekdays	
Peak	10am - 8pm
Intermediate	7am - 10am, 8pm - 11pm
Off-Peak	11pm - 7am

Weekends and Holidays	
Off-Peak	All day

October - May Pricing

Weekdays	
Peak	7am - 11am, 5pm - 9pm
Intermediate	11am - 5pm
Off-Peak	9pm - 7am

Weekends and Holidays	
Off-Peak	All day

✓ How will this rate affect my bill?

Monthly estimated costs

Your highest bill on this rate plan: $59

	Jan 30	Feb 28	Mar 30	Apr 30	May 30	Jun 29	Jul 31	Aug 31	Oct 2	Oct 31	Nov 29	Dec 29	Annual Total
Time of Use	$43	$36	$42	$38	$45	$44	Lowest $27	Highest $59	$49	$43	$33	$41	$500
Current Rate Standard Offer Service	$38	$31	$37	$32	$40	$40	Lowest $22	Highest $54	$45	$37	$29	$36	$440

To switch rate plans you can email MyHomeRep@bge.com or call 1-800-685-0123 from 7 a.m. – 7p.m, Monday through Friday.

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Option 2: Rate Education Reports

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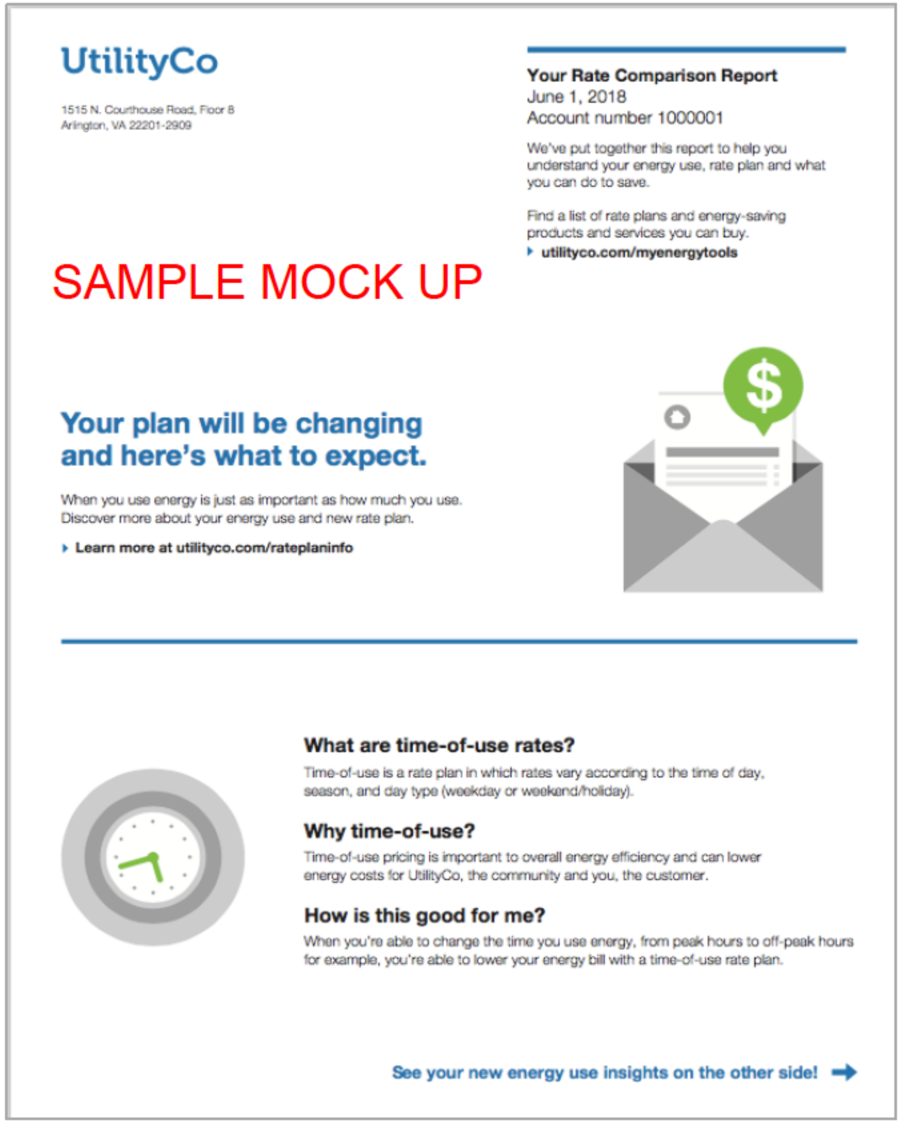
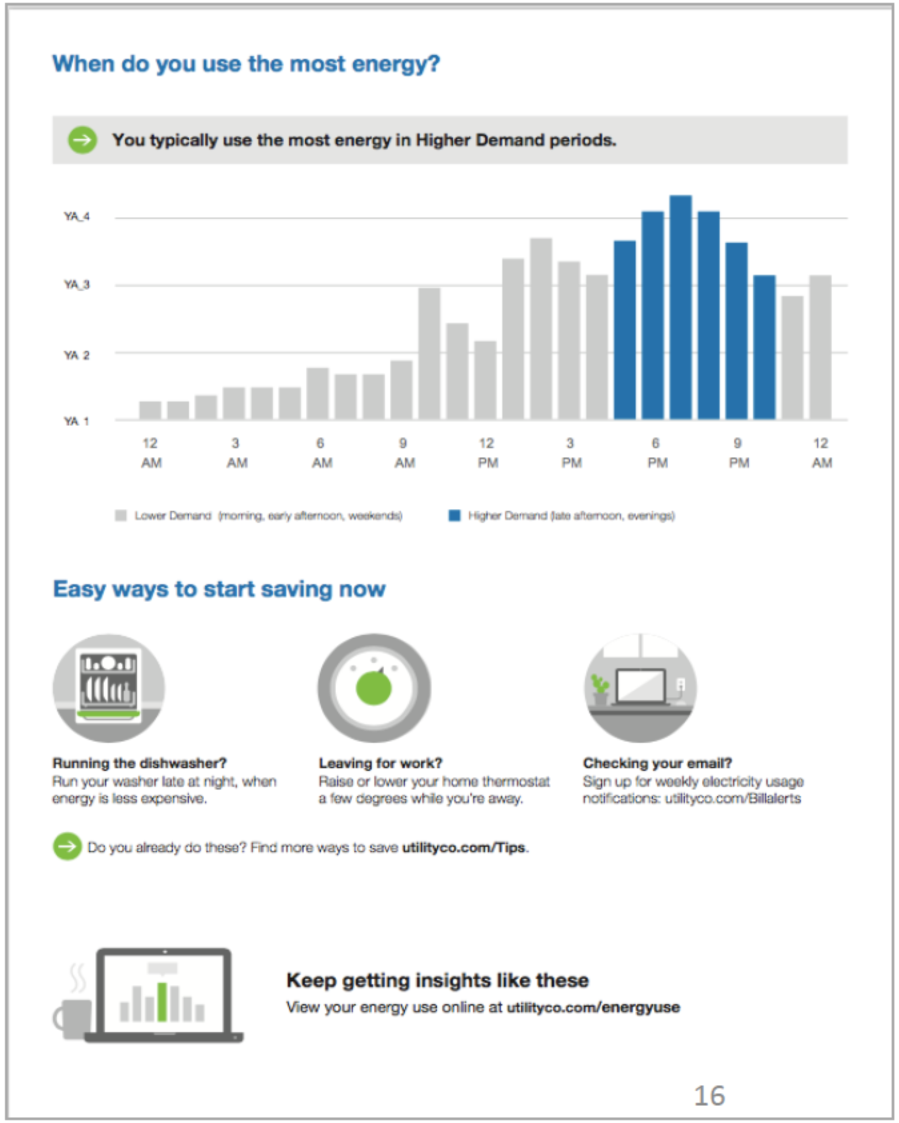
Rate Education Report

- Personalized paper and/or email reports
- Educates all residential customers on TOU
  - Shows customers what they could save on a TOU rate
  - Provides rate education and tips on how to save even more on a TOU rate
  - CTA ⟶ enroll in TOU





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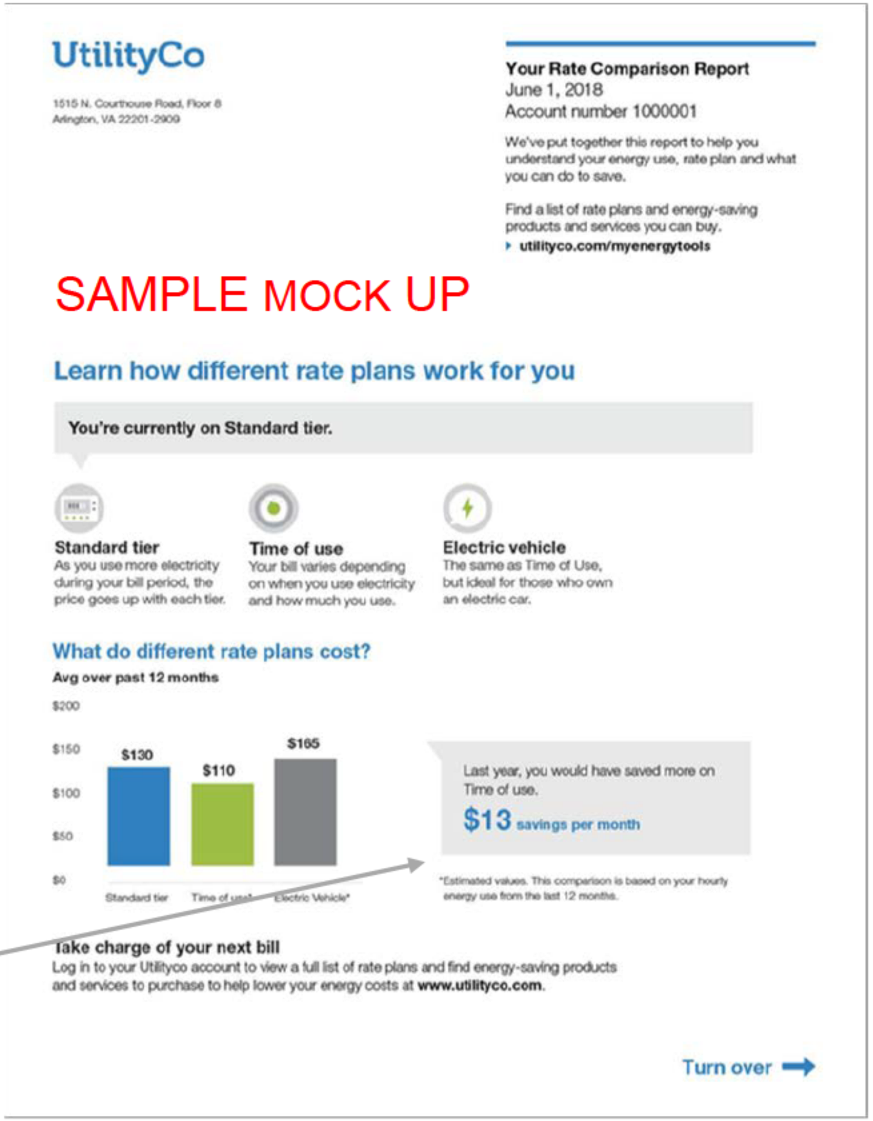
Option 2: Rate Education Reports

Rate Education Report



UtilityCo

1515 N. Courthouse Road, Floor 8
Arlington, VA 22201-2909

Your Rate Comparison Report
June 1, 2018
Account number 1000001

We've put together this report to help you understand your energy use, rate plan and what you can do to save.

Find a list of rate plans and energy-saving products and services you can buy.
- **utilityco.com/myenergytools**

SAMPLE MOCK UP

Learn how different rate plans work for you

You're currently on Standard tier.

Standard tier
As you use more electricity during your bill period, the price goes up with each tier.

Time of use
Your bill varies depending on when you use electricity and how much you use.

Electric vehicle
The same as Time of Use, but ideal for those who own an electric car.

What do different rate plans cost?

Avg over past 12 months

Last year, you would have saved more on Time of use.
$13 savings per month

*Estimated values. This comparison is based on your hourly energy use from the last 12 months.

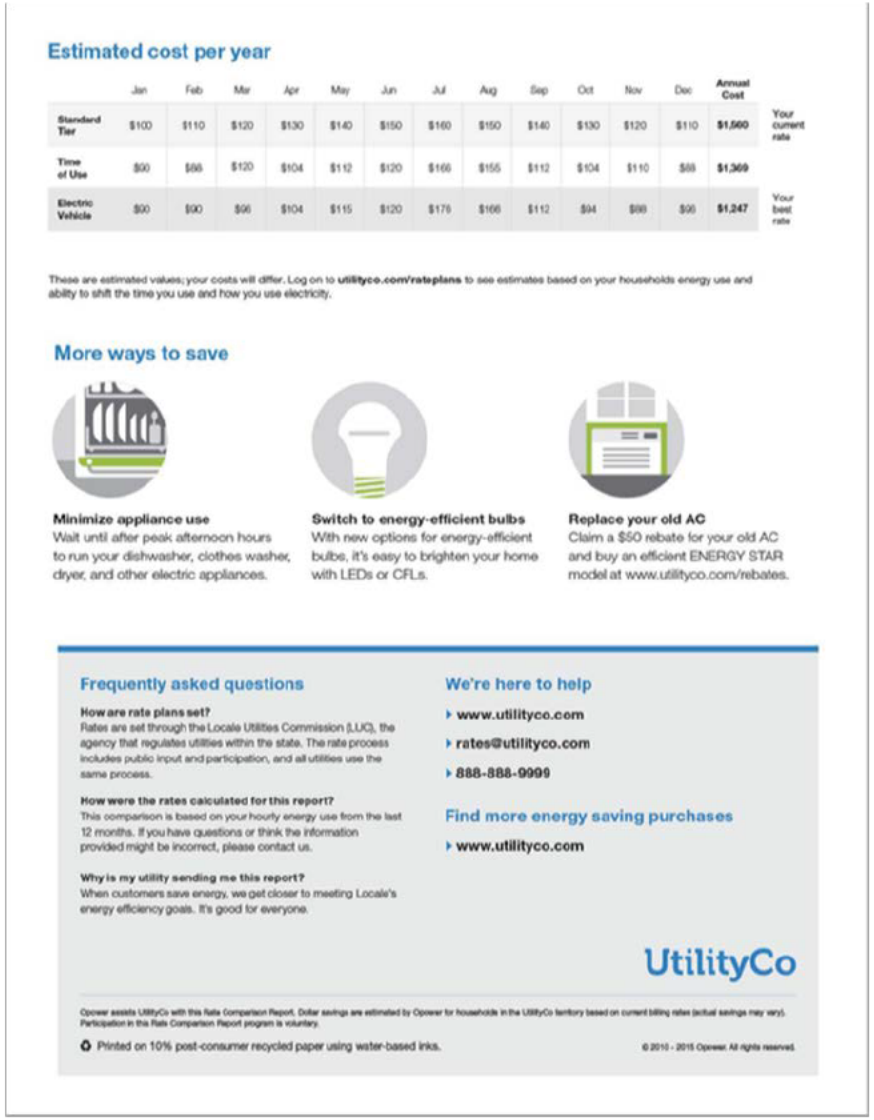
Take charge of your next bill
Log in to your Utilityco account to view a full list of rate plans and find energy-saving products and services to purchase to help lower your energy costs at **www.utilityco.com**.

Turn over

Overview of the different rates available

Personalized cost comparison of rates customer is eligible for

TOU cost savings



Estimated cost per year

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Cost	
Standard Tier	$100	$110	$120	$130	$140	$150	$160	$150	$140	$130	$120	$110	**$1,560**	Your current rate
Time of Use	$90	$88	$120	$104	$112	$120	$166	$155	$112	$104	$110	$88	**$1,369**	
Electric Vehicle	$90	$90	$96	$104	$115	$120	$176	$166	$112	$94	$88	$96	**$1,247**	Your best rate

These are estimated values; your costs will differ. Log on to **utilityco.com/rateplans** to see estimates based on your households energy use and ability to shift the time you use and how you use electricity.

More ways to save

Minimize appliance use
Wait until after peak afternoon hours to run your dishwasher, clothes washer, dryer, and other electric appliances.

Switch to energy-efficient bulbs
With new options for energy-efficient bulbs, it's easy to brighten your home with LEDs or CFLs.

Replace your old AC
Claim a $50 rebate for your old AC and buy an efficient ENERGY STAR model at www.utilityco.com/rebates.

Frequently asked questions

How are rate plans set?
Rates are set through the Locale Utilities Commission (LUC), the agency that regulates utilities within the state. The rate process includes public input and participation, and all utilities use the same process.

How were the rates calculated for this report?
This comparison is based on your hourly energy use from the last 12 months. If you have questions or think the information provided might be incorrect, please contact us.

Why is my utility sending me this report?
When customers save energy, we get closer to meeting Locale's energy efficiency goals. It's good for everyone.

We're here to help

- **www.utilityco.com**
- **rates@utilityco.com**
- **888-888-9999**

Find more energy saving purchases

- **www.utilityco.com**

UtilityCo

Opower assists UtilityCo with this Rate Comparison Report. Dollar savings are estimated by Opower for households in the UtilityCo territory based on current billing rates (actual savings may vary). Participation in this Rate Comparison Report program is voluntary.

Printed on 10% post-consumer recycled paper using water-based inks.

12 mo rate compare

Tips

Call to Action: enroll in TOU

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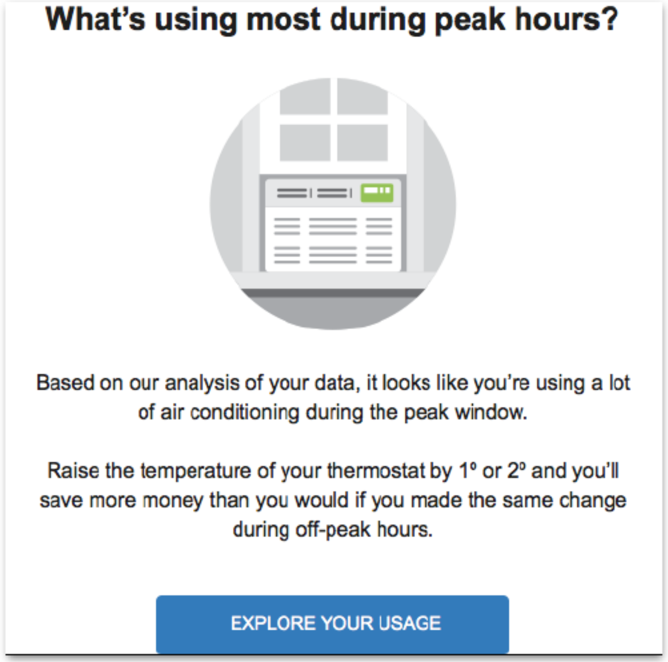
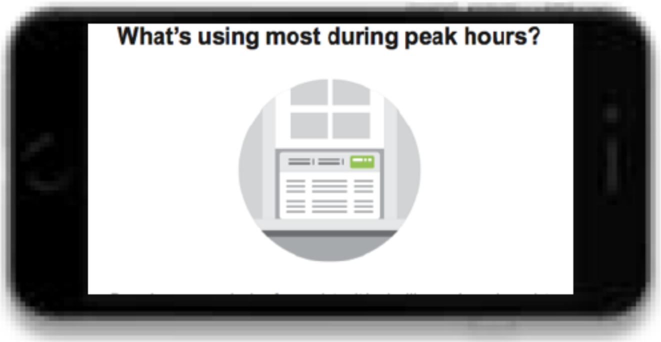
Option 3: Post-Enrollment Reports

Post-Enrollment Reports

- Personalized weekly email report sent to TOU customers to educate them on new rate
- Proactive reminder to customers of key TOU information
- Hourly breakdown of costs, overlaid with "On Peak" hours, reveals customers' consumption patterns
- Tips, powered by disaggregation, motivate customers to shift usage & save money





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Option 3: Post-Enrollment Reports

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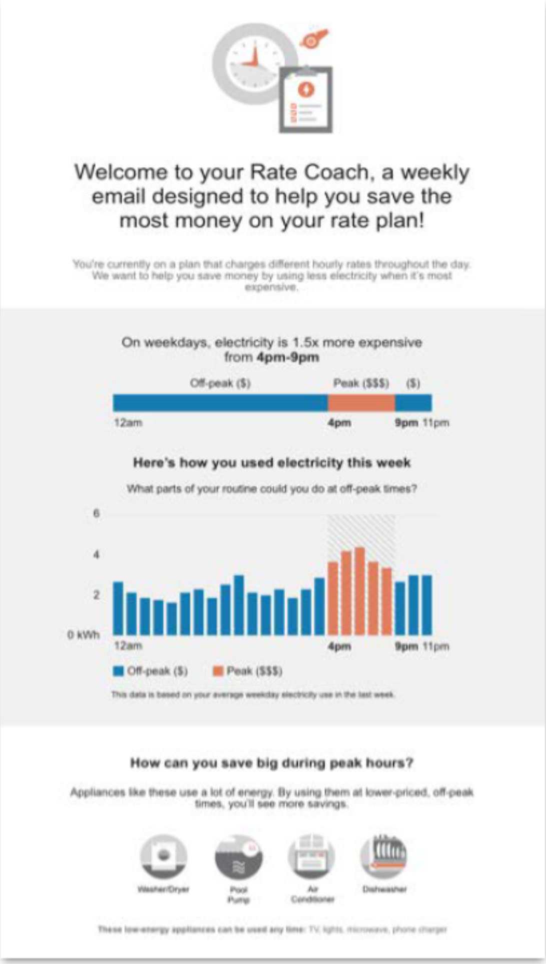
Post-Enrollment Reports

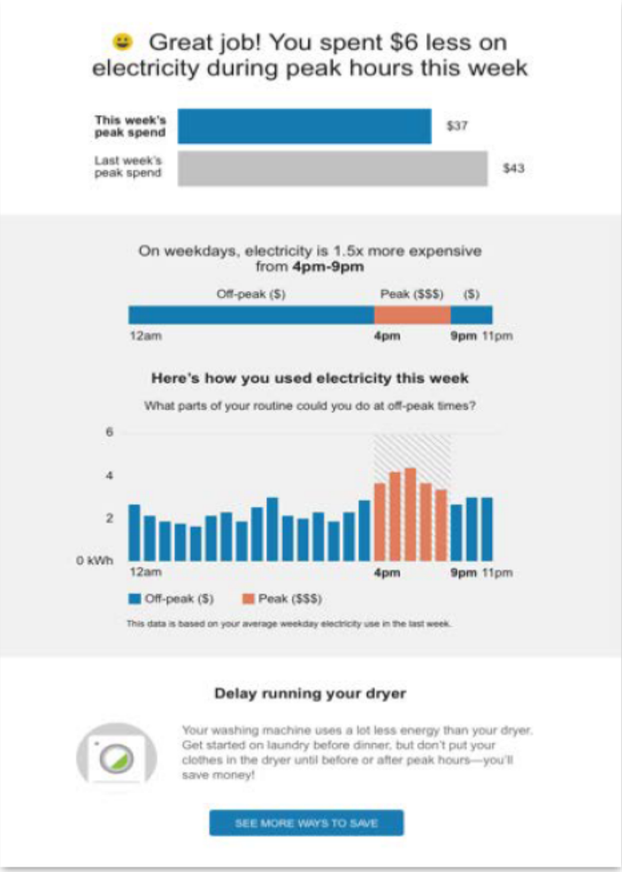
Communications Overview

Introduction email	
Summer Weekly Update	
Winter Transition	
Winter Weekly Update	
TOU Web Insights	

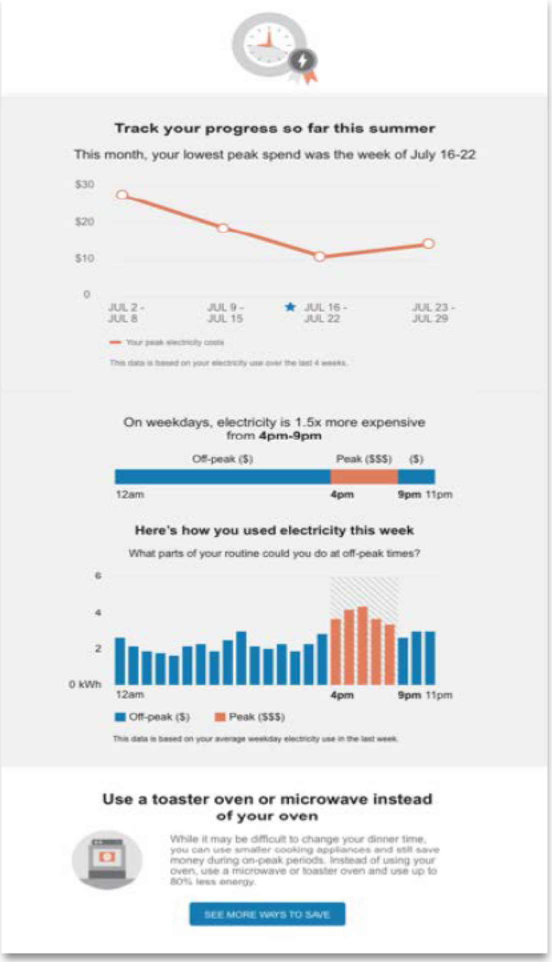
TOU Introduction Experience



Week over Week Coaching



Monthly Peak Usage Summary



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Recommendation

During the evaluation process, the team found that while each of the 3 options have individual strengths, a better customer and education experience can happen when the 3 recommendations are used together in steps.

The 3-step recommendation:

Step 1: Rate Comparison & Education Reports

- Sent 2-3 times a year by mail & email to all customers not enrolled
- Provides what a customer would have paid on an alternative rate with education

Step 2: Online Rate Analysis Tool

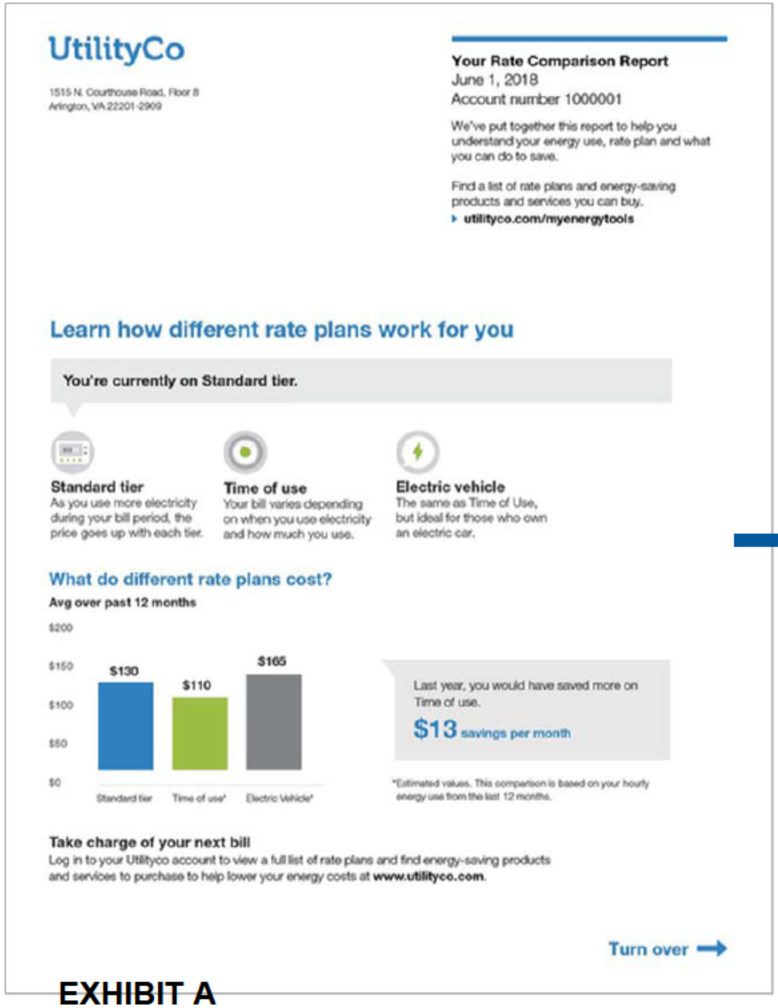
- Provides a deeper level of engagement using personalized data to make best decisions

Step 3: Post-Enrollment Reports

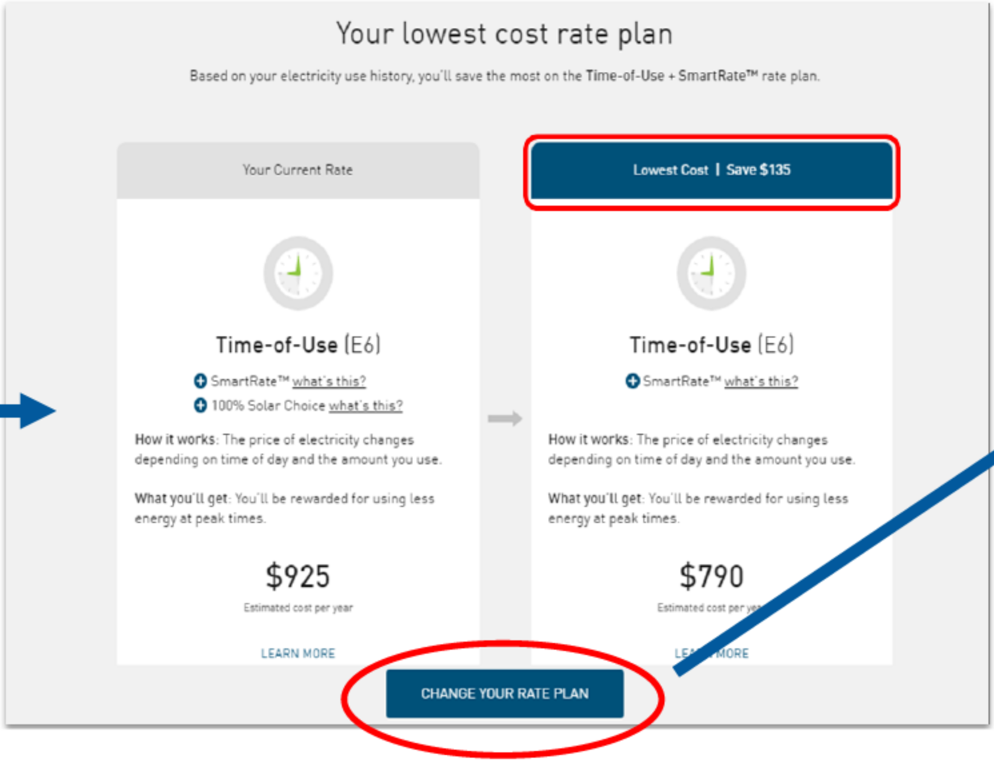
- Helps TOU customer stay engaged and have success on the new rate

Recommendation

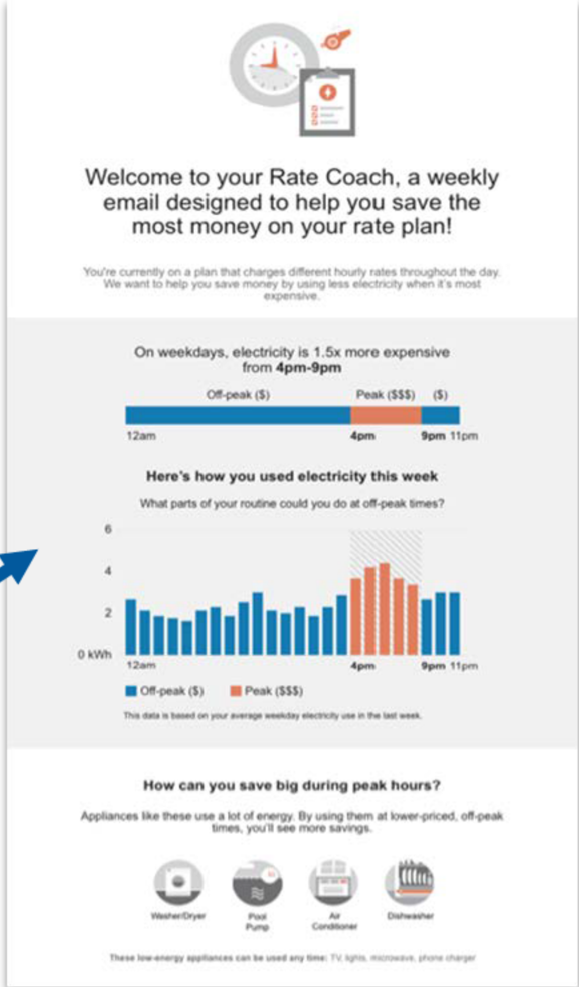
Step 1: Rate Education Reports



Step 2: Online Rate Analysis Tool



Step 3: Post-Enrollment Reports



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Evaluation Recommendation

Shadow Billing Options Recommendation				
		3 Year Cost Summary		
	Timeline	MO Total	GMO	KCP&L-MO
Online Rate Analysis Tool	*Yes	[redacted]	[redacted]	[redacted]
Rate Education Reports	*Yes	[redacted]	[redacted]	[redacted]
Post-Enrollment Reports	*Yes	[redacted]	[redacted]	[redacted]
Recommendation 3 Year Total		[redacted]	[redacted]	[redacted]

*Timeline can be met within 6-8 months from 10/1, need final decision in January to go live 10/1

*Costs are estimates and could scale up or down based on enrollment goals, achieved enrollments, quantity of mailings per year, etc.

Customer Research Plan Draft

Customer Research Plan Draft

Purpose

As part of the 2018 TOU settlement, KCP&L agreed to develop a comprehensive Customer Research Plan.

Goal

The goal of the Customer Research Plan is to capture and leverage customer feedback to help drive decision making processes related to all aspects of marketing, program design and continuous improvement opportunities.

What is Customer Research?

Part of market research in which the preferences, motivations, and buying behavior of the targeted customer are identified through direct observation, mail surveys, telephone or face to face interviews, and from published sources (such as demographic data).

Read more: http://www.businessdictionary.com/definition/consumer-research.html

Why do it?

1. **Understanding what our customers want and expect**
2. **Gauging their interest on products, services, etc.**
3. **Finding useable, actionable intelligence**
4. **Inform both product and marketing teams' decisions**

Research Objectives

1. Analyze Customer's peak time usage and behaviors
2. Understand Customer's reaction to the TOU rate offering
3. Identify Customers who are most likely to participate
4. Test Messaging
5. Get Feedback on tools, language, billing, etc.
6. Measure Customer Satisfaction post-enrollment
7. Study Opt-Out Customers
8. Assess Customers who were interested but didn't enroll
9. Monitor Behavior Changes

Customer Research Tools

Qualitative

- Focus Groups

Quantitative

- Online Panels
  - KCP&L's Customer Advisory Panel
  - Third-party panels
- Online Survey
  - Randomly Selected KCP&L Customers (with Email Address)
  - Participants/Opt-Outs
- Phone Survey
- Snail Mail Survey

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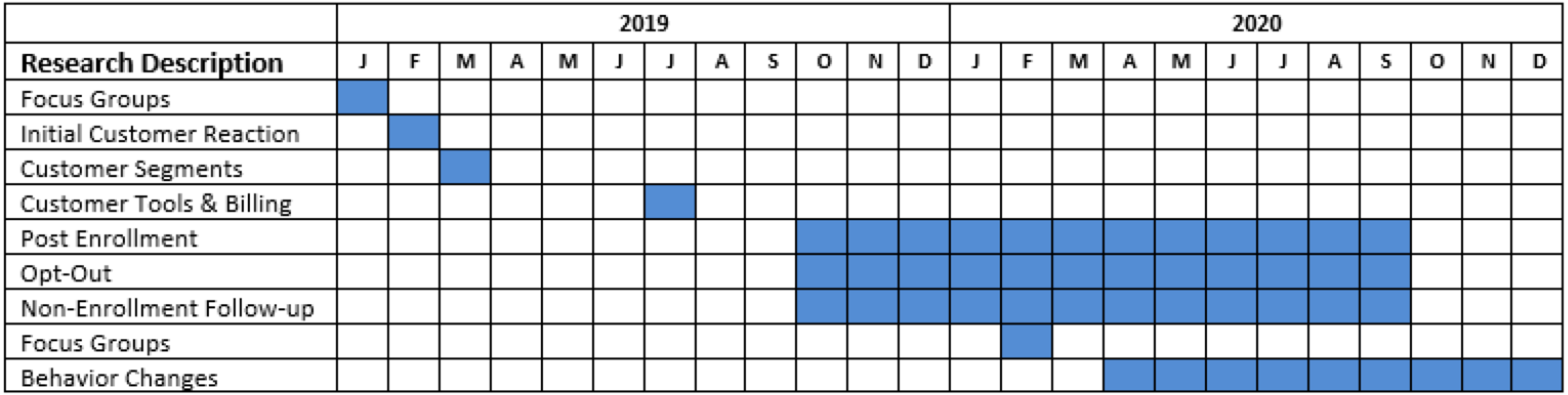
Proposed Timeline

TOU Rate

Customer Research Plan



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Understand Behavior

Objective: Understand peak usage behaviors.

Specifically:

1. **With Kids**
2. **No Kids**
3. **EV Owners**
4. **Low-Income**
5. **Elderly**
6. **Fixed Income**

Why: What can we expect our customers to shift?

Timing: Q1 of 2019

Method: Focus Groups

Cost: [redacted] per session

Gauge Reaction

Objective: Gauge initial reaction to program

Measure initial reaction to the TOU program, likes/dislikes, understanding, interest and potential changes.

Why: Revise TOU messaging based on feedback.

Timing: Q1 of 2019

Method: Online Panel

Cost: [redacted]

Customer Segments

Objective: **Identifying customer segments likely to participate in TOU.**

Measure likelihood of customers to participate in our program. Find out likes/dislikes. Messaging test. Identify customers most likely to monitor usage and change behavior.

Why: **Understand who to target.**

Timing: Q1 of 2019

Method: Online Survey

Cost: [redacted]

Tools and Billing

Objective: Testing enrollment tools for ease of use/understanding.

Measure customer reaction and understanding of any tools we may offer (ie rate calculators, sign up forms, etc.).

Why: Opportunity to make adjustments before we go live with the program to a larger audience.

Timing: Q3 of 2019

Method: Online Panel

Cost: [redacted]

Post-Enrollment

Objective: Determine customer satisfaction with program and enrollment.

Follow up 2-3 weeks after enrollment. Identify any pain points or needed improvements.

Why: Make any adjustments to the enrollment process. Additionally it will inform future strategy and TOU offerings.

Timing: Q4 2019 to Q4 2020

Method: Online Survey

Cost: [redacted]

Opt-Outs

Objective: **Determine why customers opt-out of TOU program.**

Follow up quickly after opting out of TOU program. Identify any pain points or needed improvements.

Why: **Make any adjustments to the enrollment process. Additionally it will inform future strategy and TOU offerings.**

Timing: Q4 2019 to Q4 2020

Method: Online Survey

Cost: [redacted]

Non-Enrollment

Objective: Determine why customers were interested, but did not enroll.

Follow up after a customer showed interest, but did not enroll. Understand what barriers kept them from enrolling.

Why: Make any adjustments to the enrollment process. Additionally it will inform future strategy and TOU offerings.

This research is geared toward understanding if customers are satisfied. It will also help us identify areas that need improvement and why some customers did not participate.

Timing: Q4 2019 to Q4 2020

Method: Online Survey

Cost: [redacted]

Behavior Change

Objective: **Understand satisfaction with TOU plan and identify what behaviors have changed.**

1. With kids
2. No kids
3. EV Owners
4. Low-Income
5. Elderly
6. Fixed Income

This research is focused on the TOU program, but also what behaviors changed and did and did not change.

Why: **Develop and improve future TOU programs.**

Timing: Q1 2020

Method: Focus Group

Cost: [redacted] per session.

Behavior Change

Objective: Understand satisfaction with TOU plan and identify what behaviors have changed.

This research is focused on the TOU program, but also what behaviors changed and did and did not change.

Why: Develop and improve future TOU programs.

This type of analysis can help us identify new segments for future program participation.

Timing: Q2 2020-End of year

Method: Online Survey

Cost: [redacted]

Estimated Budget

Research Activity	Three Year Cost Summary
Focus Groups- [redacted]	[redacted]
Online Advisory Panel	[redacted]
Email to Customers	[redacted]
Post-Enrollment Survey x 12 mos.	[redacted]
Opt-Out Survey x 12 mos.	[redacted]
Non-Enrollment x 12 mos.	[redacted]
Behavior Focus Groups x 6	[redacted]
Behavior Change Survey x 9	[redacted]
Total	[redacted]

Key Takeaways

- What messaging motivates customers to adopt TOU
- Which customers are likely to adopt TOU
- What behaviors customers will change and what they won’t
- Opportunities for a better TOU program and process

Customer Feedback Mechanism Discussion

Customer Feedback Mechanism

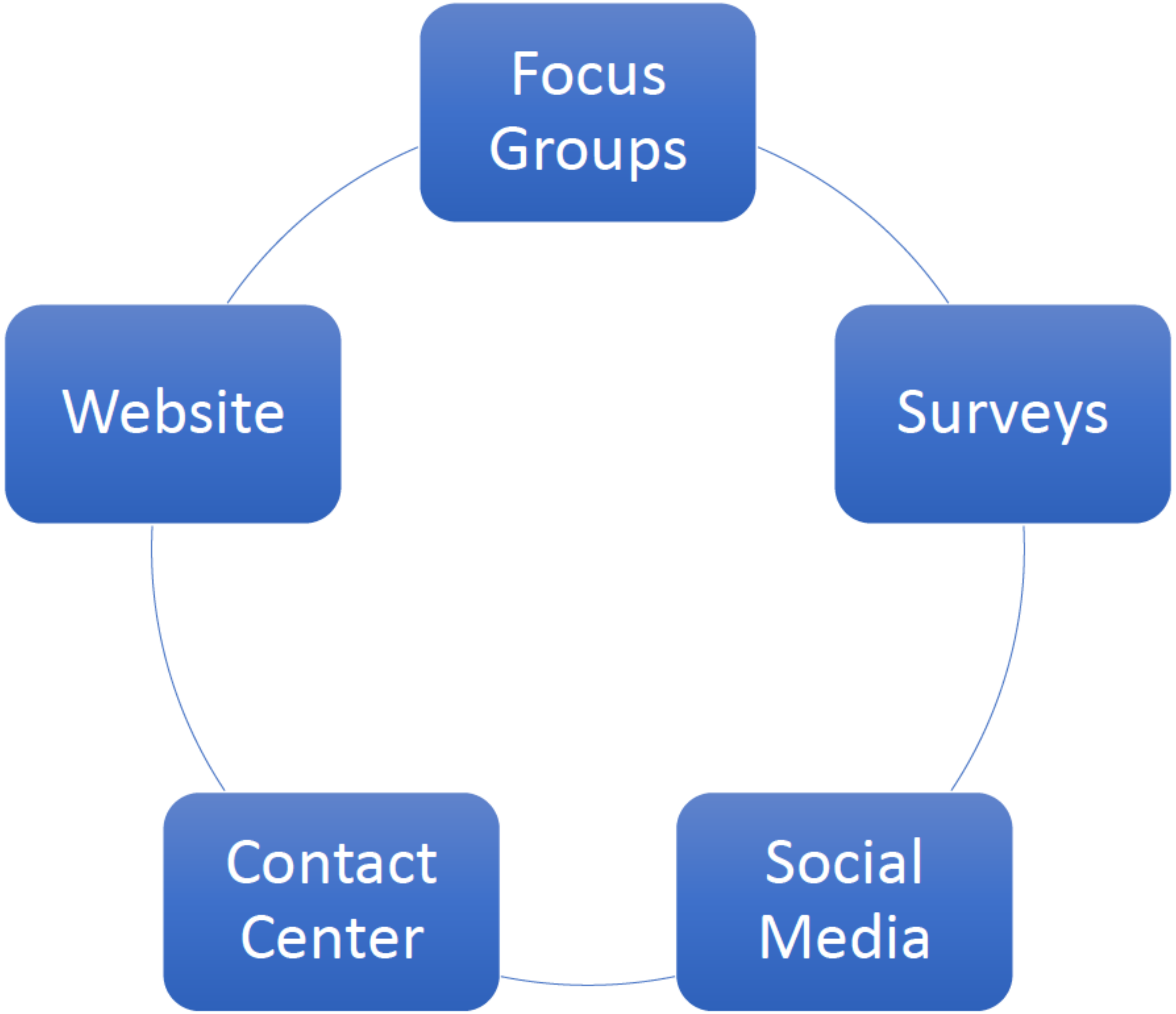
Purpose

As part of the 2018 TOU settlement, KCP&L agreed to develop a process to capture, track, and report on (upon request) customer feedback related to the TOU rate.

Goal

The goal of the Customer Feedback Mechanism is to leverage captured customer feedback to determine program success and identify continuous improvement opportunities.

Customer Feedback



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Customer Behavior Metrics Discussion

Customer Behavior Metrics

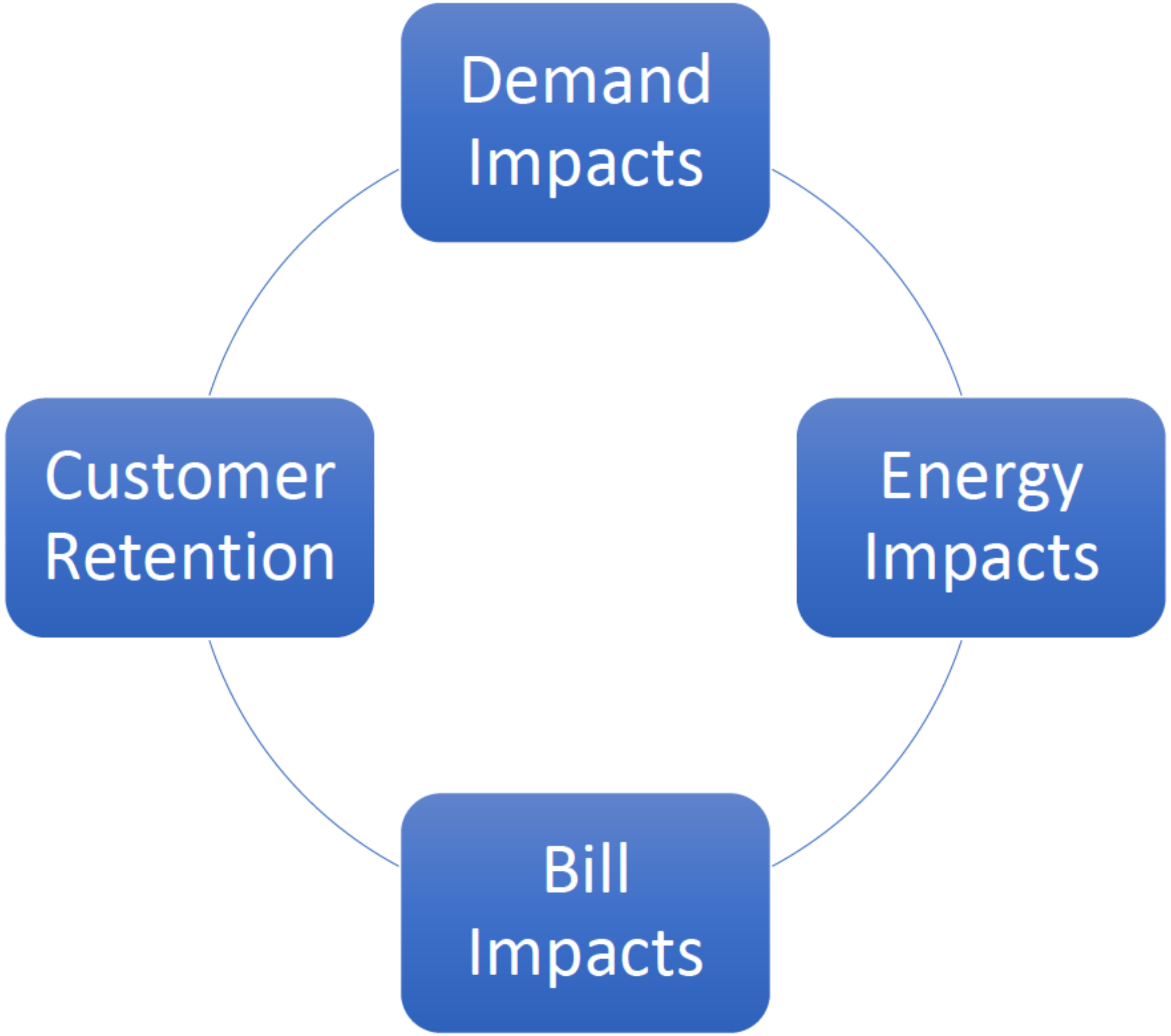
Purpose

As part of the 2018 TOU settlement, KCP&L agreed to develop metrics to gauge changes in customer behavior.

Goal

The goal of Customer Behavior Metrics is to gauge changes in customer behavior and identify impacts resulting from those behavior changes.

Customer Behavior Metrics



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TOU Tariff Revision Request

TOU Tariff Revision Request

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Request

- Make weekday holiday pricing off-peak and super off-peak only

Reasoning

- Inclusion of holidays as peak could deter participation and impact customer success on rate
- Most utilities with TOU rates exclude peak weekday holiday pricing

Sample of Utilities Excluding Peak Weekday Holiday Pricing			
Utility	TOU Rate	Weekend Off Peak	Holiday Off Peak
Empire	Optional TOU Adjustment	Y	Y
Westar	Time of Use Rate	Y	Y
Oklahoma Gas and Electric	SmartHours	Y	Y
Xcel	Time-of-Day	Y	Y
Idaho Power	Time of Day Plan	Y	Y
Colorado Springs Utilities	Time of Use Rate	Y	Y
Alectra Utilities	Time of Use Pricing	Y	Y
Arizona Public Service	Saver Choice	Y	Y
San Diego Gas and Electric	Time of Use	Y	Y
Fort Collins Utilities	Time of Day Pricing	Y	Y
Minnesota Power	Time of Day Rate	Y	Y

Next Steps

Next Steps

Begin Customer Research Plan In January

Shadow Billing Decision Needed

File Today's Presentation With The Commission

File For Requested Tariff Revision

General Discussion + Summary