Oracle Utilities Opower Load Shifting Cloud Service, Rate Coach

Load Shifting Rate Coach Configuration Guide

Latest Release

G11388-08

ORACLE

Oracle Utilities Opower Load Shifting Cloud Service, Rate Coach Load Shifting Rate Coach Configuration Guide, Latest Release

G11388-08

Contents

1

Getting Started

This guide is used during the Oracle Utilities Opower launch process to provide product design information, collect utility configuration preferences for the products being launched, and track the finalization of these preferences. The preferences are then used to set up your Oracle Utilities Opower products and platform.

This guide focuses on configuration preferences for the Oracle Utilities Opower Load Shifting, Rate Coach program. Note: This HTML documentation is for reference only. Your Delivery Team will give you an editable PDF or DOCX version of the document to capture your inputs.

> **Note**
>
> Once submitted to Oracle Utilities, all utility inputs recorded in the configuration guides are final and cannot be modified. Ensure that all configuration inputs are accurate before submitting them.

Product Overview

The Load Shifting Cloud Service, Rate Coach provides multiple features that facilitate peak hour and demand reduction and educate customers about electric plans with Time of Use (TOU) or demand rates. These features deliver load shifting insights to customers that educate them about how they are using electricity, and provide them with recommendations on how to shift or reduce their electric use in order to save money. By educating customers about their plans, these insights help customers reduce their spending and lower their monthly bills.

The Load Shifting Cloud Service, Rate Coach focuses on helping customers with interval data save money on their electric plans by providing them with insights specific to their rate plans. Customers with TOU electric plans are encouraged to shift their usage to off-peak hours. Customers with demand rate electric plans are encouraged to lower their demand. Utilities use TOU and demand rate plans to recover their costs, integrate distributed energy resources, and create a more equitable grid.

In a TOU plan, electricity costs fluctuate depending on the time of day, and how the utility defines peak, partial-peak, and off-peak hours. For example, peak hours might be defined as weekdays between 1:00 PM and 7:00 PM from May through September.

In a demand rate plan, customers typically have peak periods and pricing that are similar to a TOU plan, but they also incur a demand charge for their highest hour of peak usage during the billing period.

Additional Load Shifting Insights Available

These additional Load Shifting insights are available:

- **Digital Self Service - Energy Management Cloud Service:** Load Shifting insights are also available within the Data Browser and the Bill Comparison components of the Digital Self Service - Energy Management Cloud Service. These insights are available to customers with TOU energy plans. Utilities are not required to have the Load Shifting

Cloud Service, Rate Coach to provide this information to their customers. See the Digital Self Service - Energy Management Cloud Service Overview for more information.

- **Energy Efficiency Cloud Service:** Load Shifting insights are also available in the Home Energy Report v2 and the Email Home Energy Report v2. For customers on a Time of Use rate plan, you can insert the Time of Use Daily Peak module into these communications to encourage utility customers to shift their energy usage to off-peak times. Utilities are not required to have the Load Shifting Cloud Service, Rate Coach to provide this information to their customers. See the Energy Efficiency Cloud Service Overview for more information.

For an overview of all cloud services available from Oracle Utilities, see the Oracle Energy and Water Cloud Service Descriptions online at Oracle Contracts - Cloud Service Descriptions.

Your utility might not have all of the products or features described in this document. Contact your Delivery Team if you have any questions.

Disclaimer

Your utility might not have all of the products or features described in this document. Contact your Delivery Team if you have any questions.

2

Design and Configuration

The Oracle Utilities Opower platform allows for product configurations and customizations to meet the needs of each utility. A *configuration* is a simple change that can be made with no coding required. There are required configurations and optional configurations. A *customization* is a change that requires more in-depth technical work, design, or coding to alter the appearance or behavior of the product, or to create something new within the product.

This guide only provides a summary of configuration options. Customization options may be available for your program at cost as an Oracle Utilities Opower professional service offering. Ask your Service Delivery Manager how customization options could enhance your program.

> **Note**
>
> If an element is not listed as a configuration, you should assume that it cannot be configured and would require a customization.

Contact your Delivery Team if you have questions about this process or would like to make a customization request.

Design and Configuration: Time of Use Rate Coach

This section discusses the design, configuration options, and the user experience variations that are specific to the Time of Use (TOU) Rate Coach emails.

TOU Rate Coach emails are designed to encourage AMI customers on a TOU electricity rate plan to shift their electricity use to off-peak hours. TOU Rate Coach emails include rate plan details, personalized energy use insights, and actionable load shifting tips to help customers save money on their electric bills.

Customers receive one of the following TOU Rate Coach emails each week:

- Introduction emails
- Weekly Coach emails
- Peak Usage Summary emails or Post-Bill Report emails

Each of these emails is comprised of a specified set of Load Shifting modules that are intended to help customers understand their TOU rate plan and educate them on how to save electricity and money.

Note: Each email is comprised of individual modules. It is strongly recommended that you use the default order of the modules, as the emails were designed to be read from top to bottom, to provide the reader with an easy-to-understand message about their energy use. The default order of the modules for each email is listed in the appropriate section below.

Configuration and user variation details are provided for each individual module and are included in the Module Appendix. Alternatively, you can access the details by clicking the module names in the following sections.

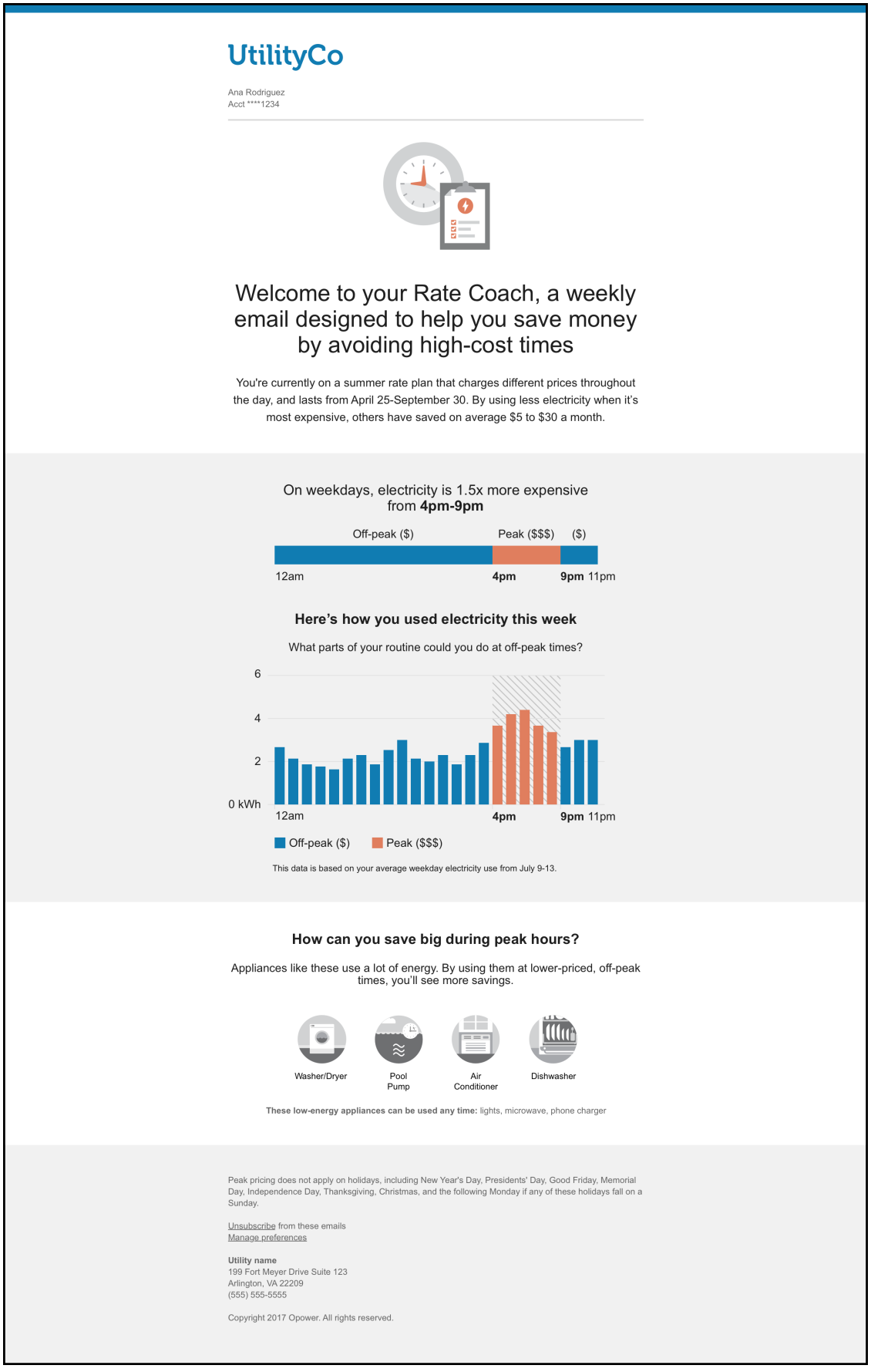
Introduction Emails

The Introduction email is the first weekly email customers receive as part of the program. This email is designed to welcome customers to the program, provide peak hour energy use insights, and offer tips on how to reduce energy use during peak hours. The email also encourages customers to use less during peak hours by including information about the average savings of other utility customers who have shifted their use to off-peak hours.

The Introduction email contains the following modules, in the order listed:

- Email Header and Subject Lines Module
- Welcome Message Module
- TOU 101 Module
- Hourly Usage Module
- Big Appliances Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-1 Introduction Email



Weekly Coach Emails

The Weekly Coach email is delivered to customers at the end of each week. It provides peak hour energy use insights as well as a comparison between peak hour electricity spending during the current week and the previous week. Customers begin receiving the Weekly Coach email after they receive their Introduction email, and do not receive the Weekly Coach email in weeks when they receive the Peak Usage Summary email or Post-Bill Report Email.

The Weekly Coach email experience varies depending on whether or not the customer was selected for the peak disaggregation experience.

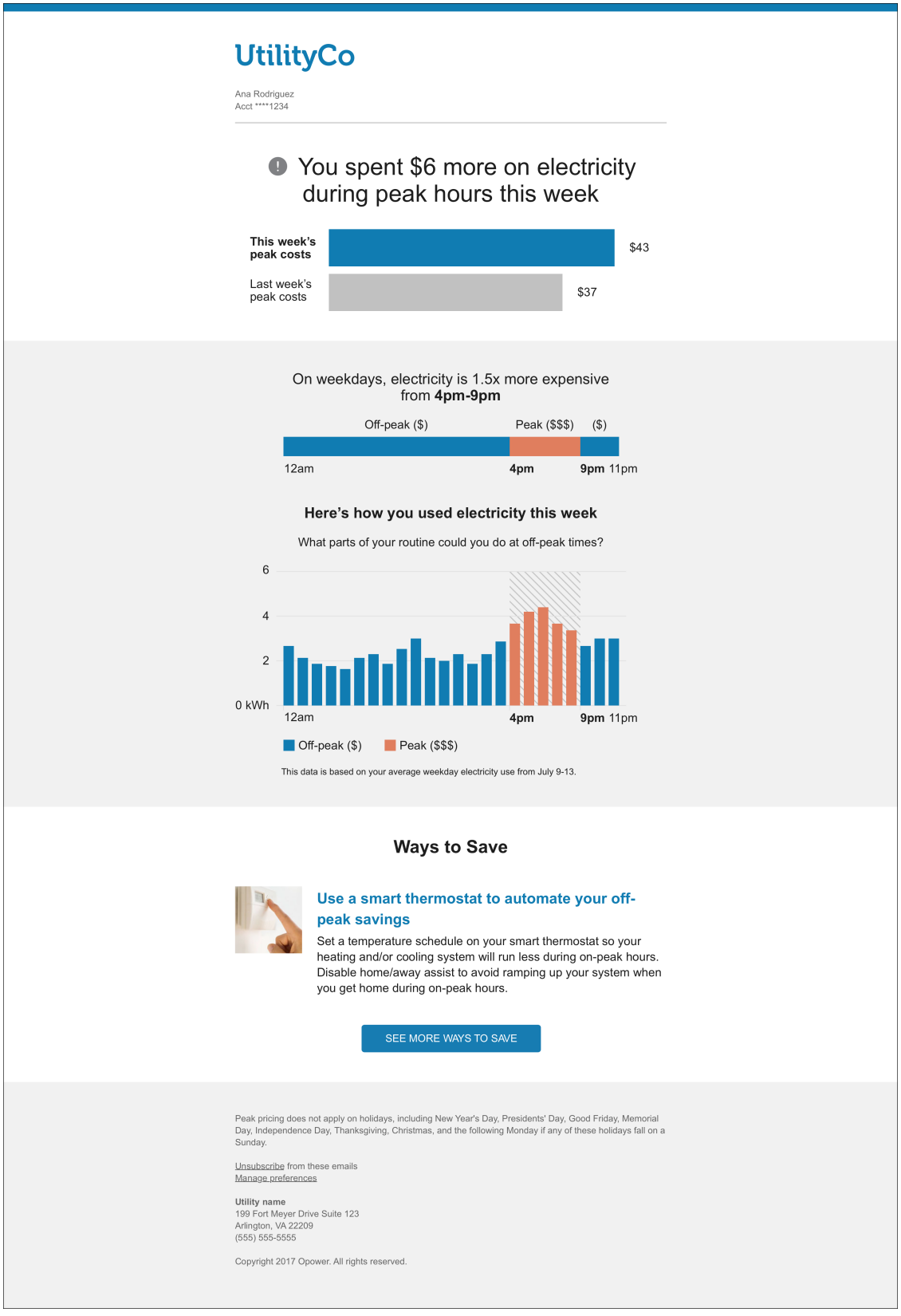
Weekly Coach Email

The Weekly Coach email provides peak hour energy use insights as well as a comparison between peak hour electricity spending during the current week and the previous week for customers without peak period disaggregation.

The Weekly Coach emails contain the following modules, in the order listed:

- Email Header and Subject Lines Modules
- Season Transition Module (Included during seasonal transition periods only.)
- Weekly Comparison Module
- TOU 101 Module
- Hourly Usage Module
- Tips Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-2 Weekly Email



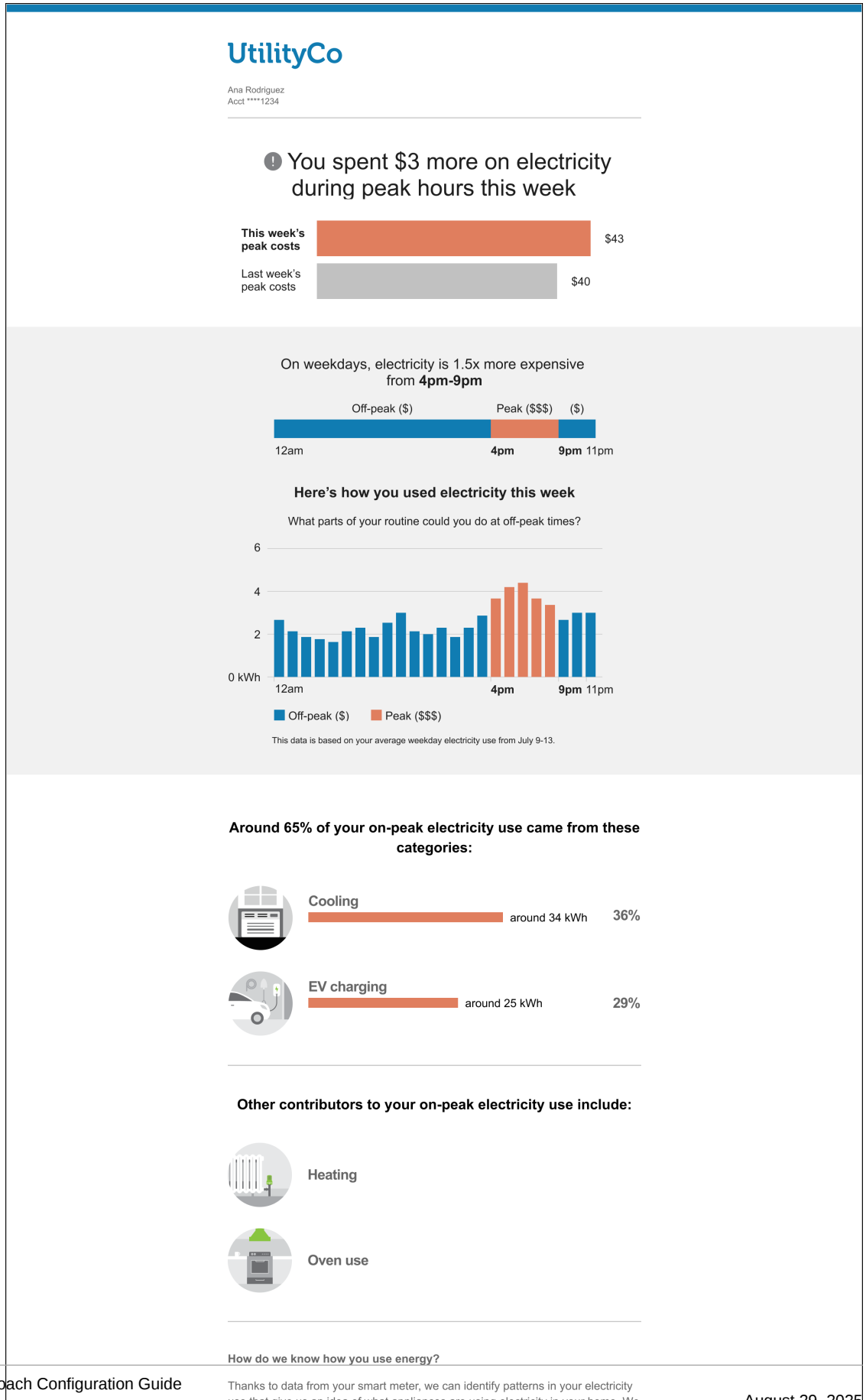
Weekly Coach Email with Peak Period Disaggregation

The Weekly Coach email with peak period disaggregation is sent to customers selected for the peak disaggregation experience. The email provides peak hour energy use insights, a comparison between peak hour electricity spending during the current week and the previous week, and a breakdown of up to three appliances that were used during peak hours.

The Weekly Coach email with weekly peak period disaggregation contains these modules, in the order listed:

- Email Header and Subject Lines Modules
- Season Transition Module (Included during seasonal transition periods only.)
- Weekly Comparison Module
- TOU 101 Module
- Hourly Usage Module
- Weekly Peak Period Disaggregation Module
- Tips Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-3 Weekly Email with Disaggregation



Peak Usage Summary Emails

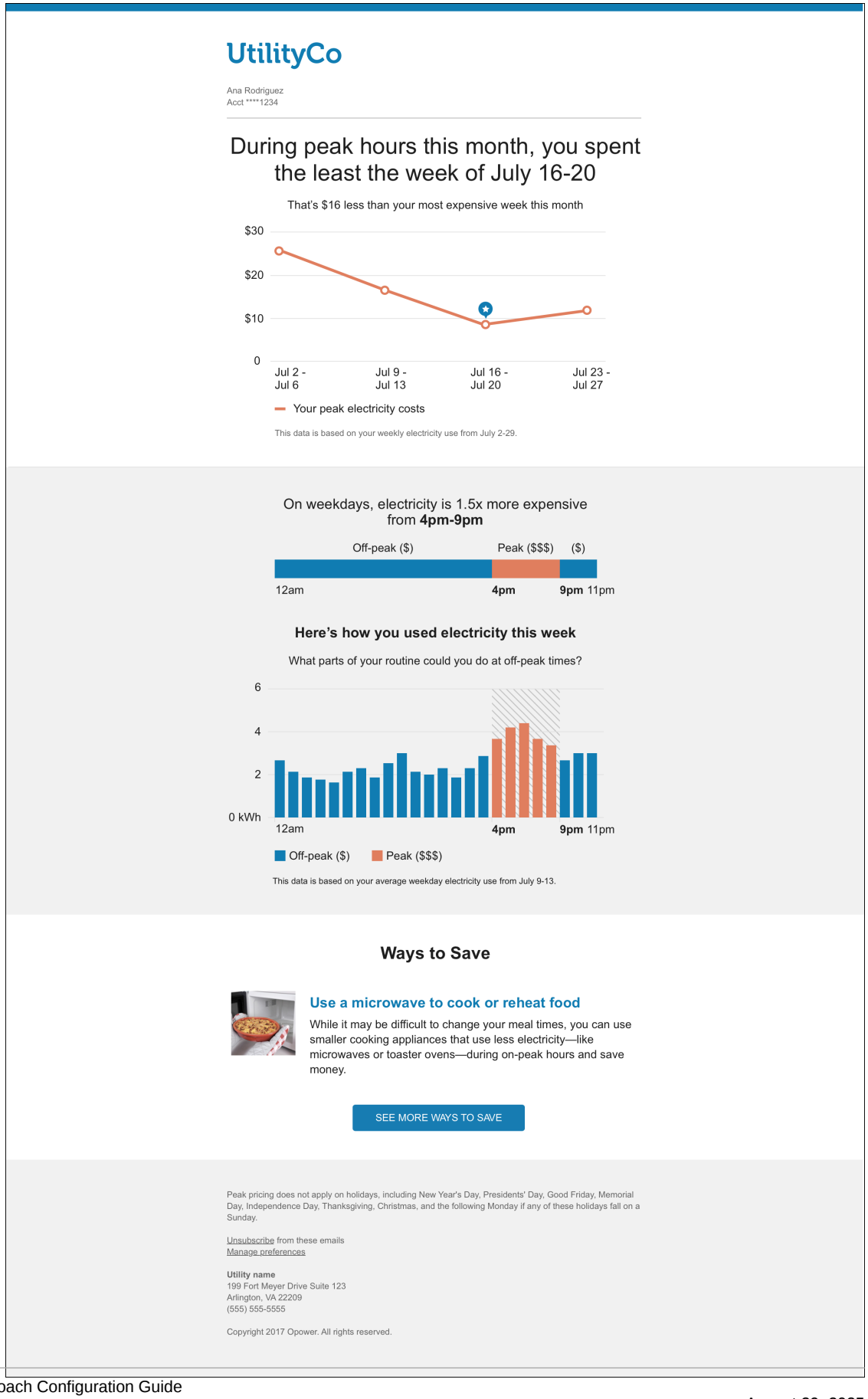
The Peak Usage Summary email is delivered every four weeks to customers participating in the standard TOU Rate Coach email experience. The Peak Usage Summary email includes details about how the customer's electricity costs during peak hours changed throughout the month. It also lists the week during which peak hour electricity costs were lowest, and highlights the cost difference between this week and the week during which peak hour electricity costs were highest.

> **Note**
>
> Customers selected for the peak disaggregation experience receive the Post-Bill Report email instead of a Peak Usage Summary email.

The Peak Usage Summary emails contain these modules:

- Email Header and Subject Lines Modules
- Season Transition Module (Included during seasonal transition periods only.)
- Peak Usage Summary Module
- TOU 101 Module
- Hourly Usage Module
- Tips Module
- Easy Open Module (optional)
- Load Shifting Collective Benefit Module
- Email Footer Module

Figure 2-4 Peak Usage Summary Emails



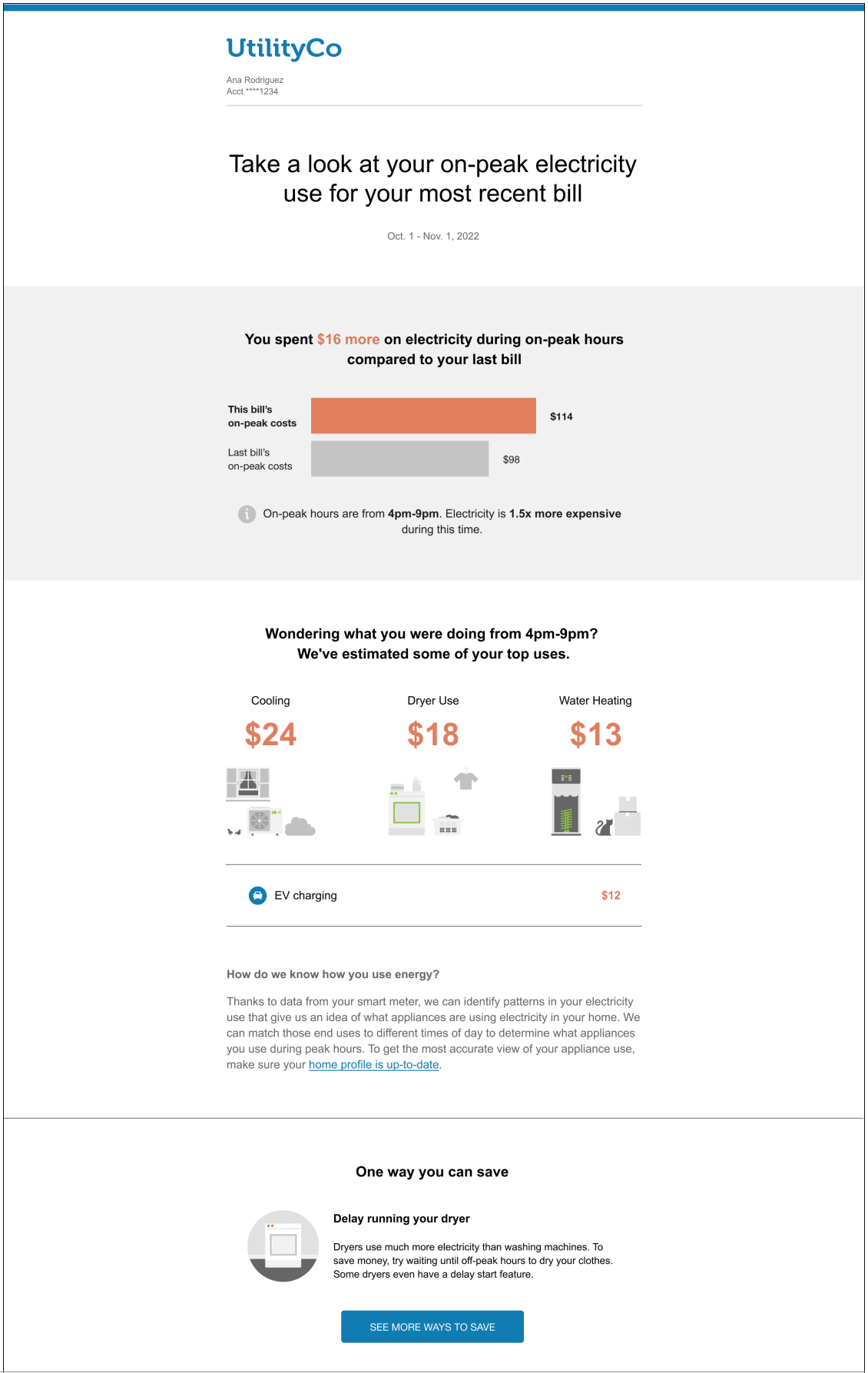
Post-Bill Report Emails

The Post-Bill Report is delivered to customers selected for the peak disaggregation experience in place of the Peak Usage Summary email each month. The report helps customers understand which appliances they are using during peak hours, and how that usage contributes to their energy charges under a TOU rate plan. It includes a comparison of peak usage or costs between the customer's most recent bill and previous bill, a peak period disaggregation module, and a tip.

By default, the Post-Bill Report emails contain these modules, in the order listed:

- Email Header and Subject Lines Modules
- Post-Bill Report Header Module
- Post-Bill Bill Comparison Module
- Post-Bill Peak Period Disaggregation Module
- Tips Module
- Load Shifting Collective Benefit Module
- Email Footer Module

Figure 2-5 Post-Bill Report Email



Design and Configuration: Demand Rate Coach

This section discusses the design, configuration options, and the user experience variations that are specific to the Demand Rate Coach emails.

Demand Rate Coach emails are designed to educate AMI customers with demand rate electricity plans about their rate plan, and to encourage them to minimize their electricity demand in order to lower their demand charge. Demand Rate Coach emails include rate plan details, personalized energy use insights, and actionable tips to help customers save money on their energy bills.

The Demand Rate Coach emails are intended to:

- Increase satisfaction and comprehension for utility customers on demand rate plans.
- Reduce electricity demand.
- Reduce demand charges for utility customers.
- Reduce calls to the utility's call center from customers with demand rate plans.
- Increase customer retention on demand rate plans.

Customers receive one of the following Demand Rate Coach emails each week:

- Introduction emails
- Weekly Coach emails
- Monthly Demand Report emails

Each of these emails is comprised of a specified set of load shifting modules that are intended to help customers understand their demand rate plan and educate them on how to save electricity and money.

Note: Each email is comprised of individual modules. It is strongly recommended that you use the default order of the modules, as the emails were designed to be read from top to bottom, to provide the reader with an easy-to-understand message about their energy use. The default order of the modules for each email is listed in the sections below.

Configuration and user variation details are provided for each individual module and are included in the Email Module Appendix. Alternatively, you can access the details by clicking the module names listed in the following sections.

Introduction Emails

The first email customers receive as part of the Demand Rate Coach program is the Introduction email. The Introduction email is designed to welcome customers with Demand rate plans to the program, and to provide peak hour energy use insights. The message offers tips on how to reduce energy use during peak hours and how to decrease demand charges. The email also encourages customers to use less during peak hours by including information about the average savings of other utility customers who have shifted their use to off-peak hours.

By default, the Introduction email contains these modules, in the order listed:

- Email Header and Subject Lines Modules
- Demand Introduction Module
- Demand 101 Module
- Hourly Usage Module

- Demand Education Module
- Demand Big Appliances Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-6 Introduction Email (Part 1)

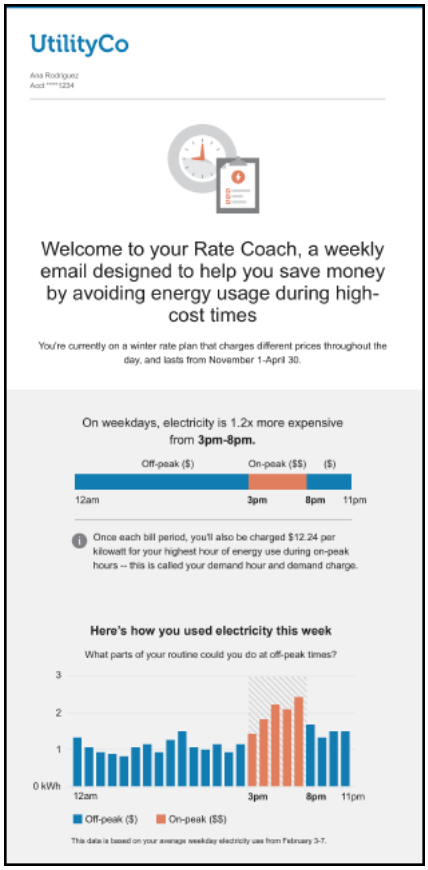
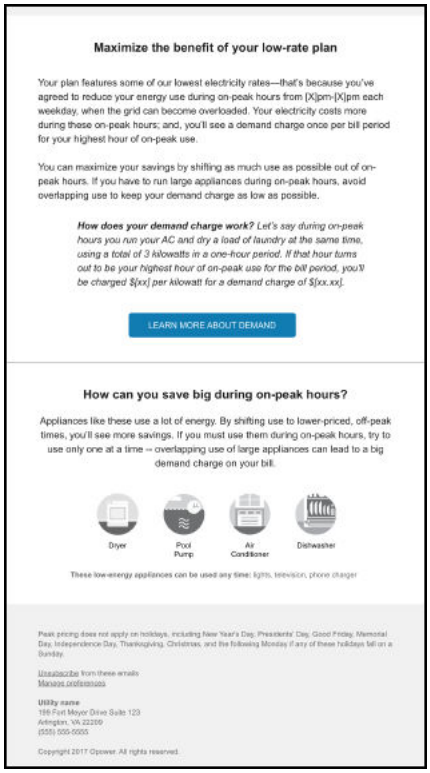


Figure 2-7 Introduction Email (Part 2)



Weekly Coach Emails

The Weekly Coach email is delivered to customers each week as part of the Demand Rate Coach email program. It provides peak hour and demand energy use insights as well as a comparison between peak hour electricity spending during the current week and the previous week. Customers begin receiving the Weekly Coach email after they receive their Introduction email, and do not receive the Weekly Coach email in weeks when they receive the Monthly Demand Report email.

By default, the Weekly Coach emails contain these modules, in the order listed:

- Email Header and Subject Lines Modules
- Weekly Comparison Module
- Demand 101 Module
- Hourly Usage Module
- Demand Tracker Module
- Tips Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-8 Weekly Email (Part 1)

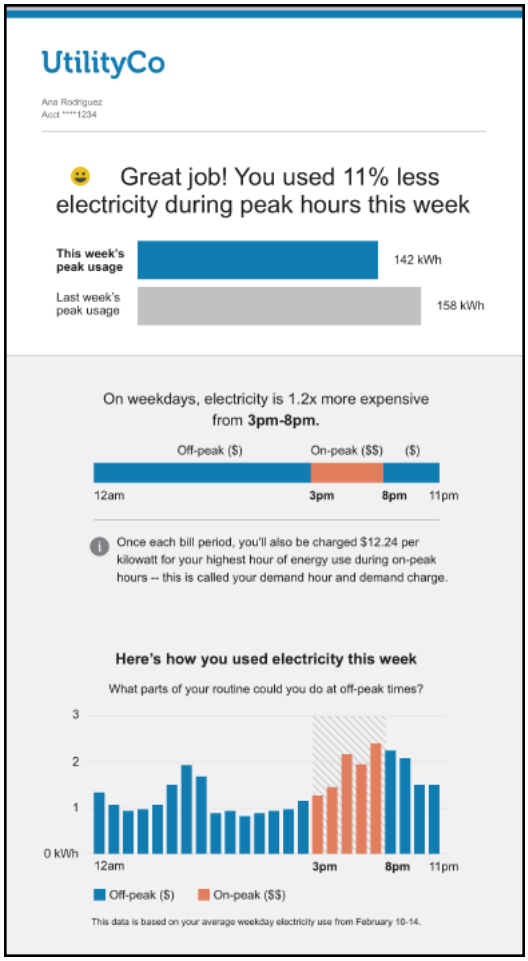
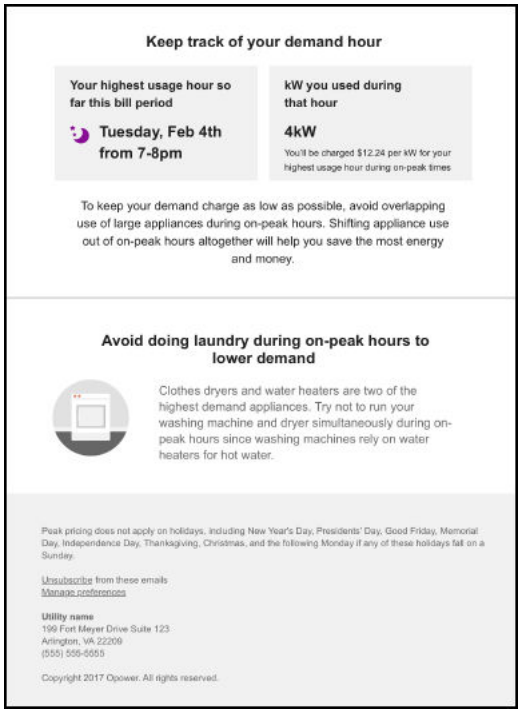


Figure 2-9 Weekly Email (Part 2)



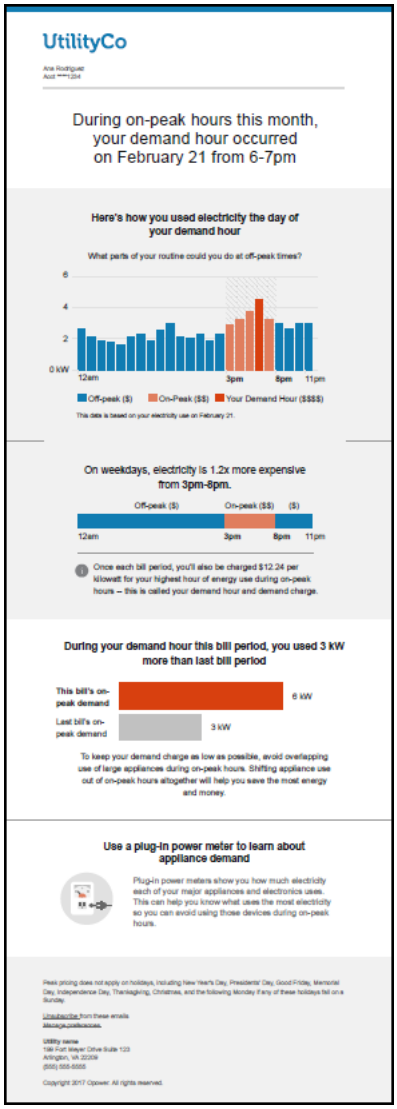
Monthly Demand Report Emails

The Monthly Demand Report email is delivered to customers every month, just after they receive their bill. This email is designed to help a customer reduce bill shock, and to help them understand demand charges. It includes details about when the customer's demand hour occurred during the month, shows how electricity was used on that day, and provides information about how the demand charge is calculated. It also compares the demand hour from the current bill to the demand hour from the previous bill, and provides tips about how the customer can save money and energy.

By default, the Monthly Demand Report emails contain these modules, in the order listed:

- Email Header and Subject Lines Modules
- Demand Report Header Module
- Demand Day Usage Module
- Demand 101 Module
- Demand Value Comparison Module
- Tips Module
- Easy Open Module (optional)
- Email Footer Module

Figure 2-10 Monthly Demand Report Email



Design and Configuration: Load Shifting Insights in HBA AMI Emails

This section discusses the design, configuration options, and the user experience variations that are specific to the modules that are used to include Load Shifting insights in the High Bill Alert AMI emails.

For information about configuring additional options and modules within the High Bill Alert AMI emails, see the High Bill Alerts AMI Configuration Guide.

The Load Shifting Cloud Service, Rate Coach provides the load shifting modules that can be included in the High Bill Alert (HBA) Advanced Metering Infrastructure (AMI) Email. These modules are designed to educate HBA AMI customers about their time of use (TOU) or demand rate plans, and encourage them to shift energy use to off-peak hours.

Be aware that at least two peak categories must be set up in order for load shifting modules to display correctly. For example, a utility might have PEAK hours from 6am to 12am, and OFF-PEAK hours from 12am to 6am.

TOU Rate Plans

For customers on TOU rate plans, load shifting insights can be included within the HBA AMI email communications using one of these modules:

- Load Shifting High Usage module: This is a simplified module that displays the cost or usage during each peak period.
- TOU HBA Main Insight module: This is an expanded and updated module that includes additional insights that help readers understand how they can save money and energy by shifting their use to off-peak hours. Oracle recommends using this version of the module.

Demand Rate Plans

For customers on Demand rate plans, load shifting insights can be added to the HBA AMI email communication using the following modules:

- Demand 101 module: This module provides additional explanation about how demand charges are calculated.
- Either the Load Shifting High Usage module or the TOU HBA Main Insight module. Oracle recommends using the TOU HBA Main Insight module.

3

Delivery Rate Coach Emails

Load Shifting Rate Coach emails are regularly scheduled communications. The rules that govern delivery of these emails include:

Waking Hours: Messages must be delivered during waking hours (between 9 a.m. and 6 p.m.) in a utility-specific delivery window. You cannot choose the specific time to send.

Weekdays: Messages must be delivered only on business days (Monday-Friday). They cannot be delivered on weekends.

Weekly Cycle: Weekly cycles begin on Monday at 12:00:00 AM (midnight) and end on Sunday at 11:59:59 PM. This is consistent with how people typically think about weekly events, and allows customers to better analyze their weekday usage compared to their weekend usage. The email is sent as close to the end of the weekly cycle as possible, depending upon when the AMI data becomes available. Weekly cycles and billing cycles are independent of one another. A weekly cycle may contain the end of one billing cycle and the beginning of another.

> **Note**
>
> Emails are not sent any later than 96 hours, or four days, after the end of the weekly cycle. For example, if the weekly cycle covers Monday morning through Sunday night, an email will not be sent later than the following Thursday night. This expiration parameter can be configured for each utility. Emails are not sent to customers whose data is either unavailable or does not become available until after the expiration.

Delivery Frequency: Ideally, customers will receive their weekly email shortly after the end of a weekly cycle. This is typically 2-4 days after the data is received by the utility. During the first week, customers receive the Introduction email. Every fourth week, the Peak Usage Summary or Post Bill Report email is delivered to TOU customers, and the Monthly Demand Report email is delivered to demand rate customers. During all other weeks, customers receive the weekly email. Note that customers cannot opt out of one type of Rate Coach email without also opting out of all Rate Coach emails.

Blackout Periods: Blackout periods are a span of time (usually a certain week or day) during which clients do not want us to send email communications to their customers. Blackout periods are not supported for these emails.

Emails and Attachments: Email content is delivered directly in the email message with no attachments. This makes it more convenient for customers to quickly view the information, and it makes the emails less likely to be blocked by spam filters.

Enrollment and Delivery for HBA AMI Emails

All enrollment and delivery rules and options for High Bill Alert emails are defined within the Proactive Alerts Cloud Service. See Delivery in the *High Bill Alerts AMI Configuration Guide* for more information.

4

Load Shifting FAQs

This chapter helps you answer the following frequently asked questions:

- Why did I receive this email?
- How was I selected to be part of this program?
- How can the report be accurate if I am gone for extended periods of time?
- I have been gone all month, yet the report says I am using more energy. Why?
- I haven't changed anything, yet the report says I am using more energy. Why?
- Can I opt out of these emails?
- Can I opt back in after I have opted out?

Why did I receive this email?

You are receiving this email because you are enrolled in a Time of Use rate plan. In a Time of Use plan, the cost of electricity depends on the time of day and how the utility defines on-peak versus off-peak hours. We want to help you save money on your electricity bill by shifting your peak energy use to off-peak hours.

How was I selected to be part of this program?

You were selected to be part of this program because you are currently on a Time of Use electricity rate plan. These communications will help you save energy and money during times of day when energy is more expensive.

How can the report be accurate if I am gone for extended periods of time?

The Load Shifting report is based on data pulled directly from your smart meter that is monitoring the energy usage in your home. Even if you are not actually in your home, there are probably still devices drawing power. For example, your air conditioning and large appliances like refrigerators may still be drawing power even though they cycle on and off. You may also have other devices that are drawing power because they are always plugged in, such as game consoles and security systems. Taken together, these appliances and devices can use a significant amount of energy while you're away.

I have been gone all month, yet the report says I am using more energy. Why?

There are several possible reasons for why you may have used more energy even though you have been away from your home for a while.

- You may have many devices or appliances that are drawing power simply because they are plugged in (such as game consoles, security systems, and refrigerators).
- The weather may have fluctuated considerably. For example, if the weather was very hot while you were away and you kept your thermostat at a static set point, then your air conditioning could have used a lot more energy than usual to keep your home cool during extreme weather.
- Your electricity rate plan may have changed recently. Time of Use rates often change prices, or the cost of energy during peak hours, or both. If you were not aware of these changes, they could have also led to higher energy costs during peak hours.

I haven't changed anything, yet the report says I am using more energy. Why?

See the FAQ above about why some customers may use more energy even if they are not home. In short, some reasons may be that (1) you have a large number of devices that are always plugged in, (2) the weather may have fluctuated considerably, or (3) your rate plan may have changed its costs or its on-peak and off-peak hours.

Can I opt out of these emails?

Yes. You can opt out in several ways. The options available will depend on your utility's setup and program design.

From the web: The recommended method is to use the Digital Self Service - Energy Management Web Portal **Account and Preferences** section to change your preferences. If you unsubscribe in this way, you will be able to subscribe again in the future.

> **Note**
>
> Some utilities choose to host their own account services. If your utility does not offer the Digital Self Service - Energy Management Web Portal as part of their program, contact your utility for more information about account management.

From an email: Click the unsubscribe link at the bottom of the email and follow the instructions to opt out.

> **Note**
>
> If you click **Unsubscribe** in the email and then click to unsubscribe from *all* emails, this action is permanent, and you will not be able to opt back in. If you click to opt out of Load Shifting emails only, then you can opt back into them at a later time.

5 Next Steps

After completing all required inputs in this configuration guide, complete the following next steps.

1. Complete any other product-specific configuration guides provided to you by your Service Delivery Manager.
2. Submit all configuration guides and required documents to your Service Delivery Manager as an email attachment. Be sure to include the following:
   - The Oracle Utilities Opower Platform Configuration Guide
   - Up-to-date HTML, CSS, and JavaScript files for your utility website
   - Utility branding guidelines
3. Update the Version table of this guide with your name, the date, and a descriptive comment. Complete this step using the PDF version of this guide.

> **Note**
>
> This HTML documentation is for reference only. Your Delivery Team will give you an editable PDF or DOCX version of the document to capture your inputs. Once submitted to Oracle Utilities, all utility inputs recorded in the configuration guides are final and cannot be modified. Ensure that all configuration inputs are accurate before submitting them.

6

Contact Your Delivery Team

Your Oracle Delivery Team is the group responsible for setting up, configuring, launching, or expanding your Oracle Utilities Opower program. Contact your Delivery Team if you have any questions about your program products and implementation.

To contact your Delivery Team:

1. Sign in to Inside Opower (https://inside.opower.com). This is your portal for questions and information related to your program.
2. Go to the Community tab to see who is on your Delivery Team.
3. Contact any of the team members using the information provided.

If you need to report an issue or get technical support, contact My Oracle Support.

7

Appendix: Load Shifting Email Modules

The Load Shifting Cloud Service includes the following email communication features:

- Time of Use Rate Coach Emails
- Demand Rate Coach Emails
- Load Shifting Insights in High Bill Alert Emails

Each of these features includes a series of emails sent to customers who are on Time of Use (TOU) or demand electric rate plans. The emails are intended to help customers better understand their rates, encourage them to shift electric usage to off-peak hours, and reduce usage when electricity is most expensive.

Some of the modules are used in multiple emails. For example, the Hourly Usage Module is used in both the Time of Use Coach and the Demand Coach emails.

The Easy Open module, which is part of the Proactive Alerts Cloud Service, can also be included in these emails.

The following modules are available:

Big Appliances Module

Demand 101 Module

Demand Big Appliances Module

Demand Day Usage Module

Demand Education Module

Demand Introduction Module

Demand Report Header Module

Demand Tracker Module

Demand Value Comparison Module

Email Footer Module

Email Header and Subject Line Modules

Hourly Usage Module

Load Shifting Collective Benefit Module

Load Shifting High Usage Module

Peak Usage Summary Module

Post Bill Report Bill Comparison

Post-Bill Report Header

Post-Bill Peak Period Disaggregation Module

Season Transition Module

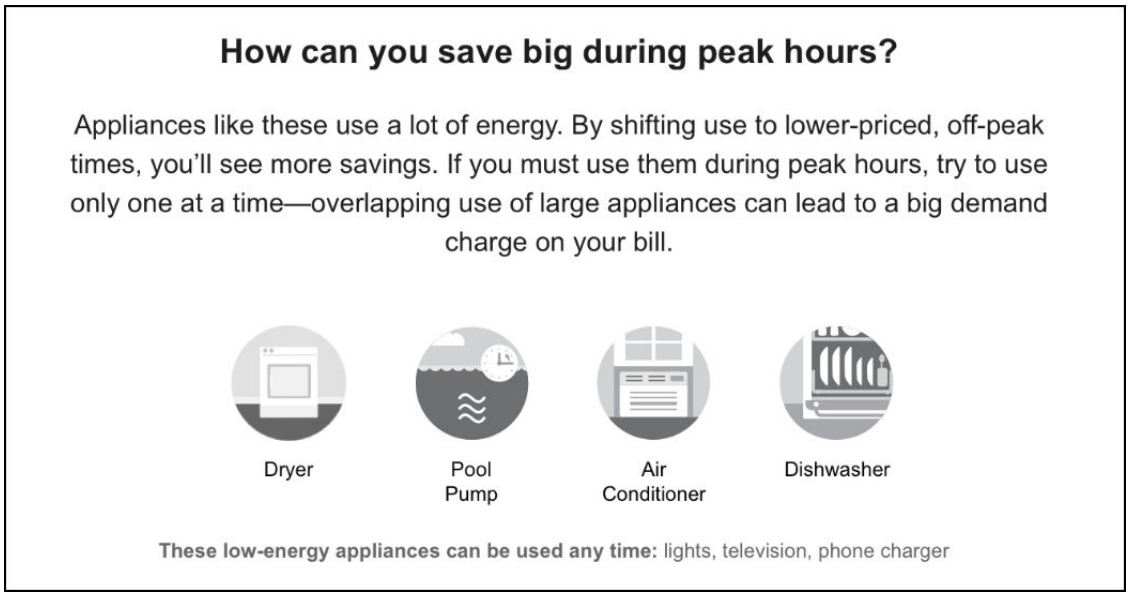
Big Appliances Module

This module educates customers about which appliances use the most electricity, and which are low-usage appliances. This information enables customers to understand how they can shift the usage of their appliances to save money during peak hours.

Design

This image shows an example of the Big Appliances module:

Figure 7-1 Big Appliances Module



Configuration Options

There are no supported configurations for this module.

To see how this module fits into the overall user experience, see Design and Configuration: TOU Coach Emails.

User Experience Variations

This module has no user experience variations.

Demand 101 Module

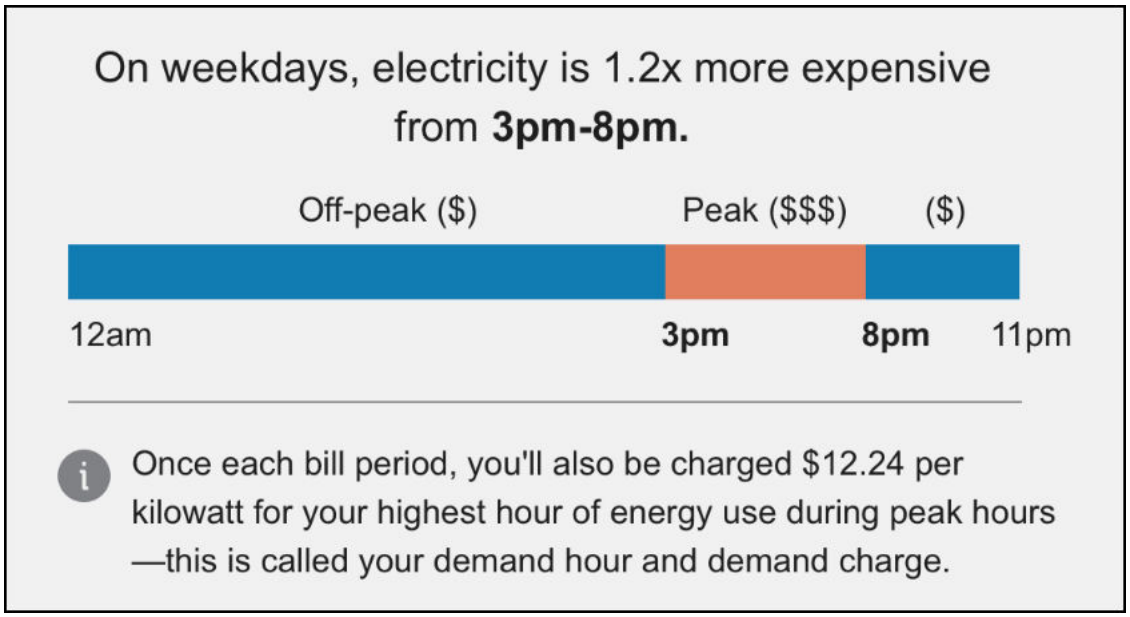
The Demand 101 module is used to educate customers about how their demand charge is calculated. The Demand 101 module provides customers with information such as:

- How much more expensive peak prices are than o□-peak prices.
- The hours during which electricity is most expensive.
- A visual timeline that displays o□-peak, partial-peak, and peak hours.
- An explanation of how the demand charge is calculated.

Design

This image shows an example of the Demand 101 module:

Figure 7-2 Demand 101 Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Color and Chart Alignment Oracle strongly recommends that the colors and charts for this module, the Hourly Usage module, and the Demand Day Usage module all use the same colors, and are aligned to show the customer the visual connection between each hour's price and the customer's use during each hour.	**Required** Choose one of the following: Use default colors. Work with your Delivery Team to specify other colors.

Configuration Option	Input Value
Peak Time Price Ratio in Insight Statement The introduction statement of the Demand 101 module can include a price ratio that indicates how much more expensive electricity is during peak hours. For example, "Electricity is 1.2x more expensive during peak hours". By default, the value is automatically calculated based on the rate plan details received from the client. However, this value can be manually entered, or it can be excluded from the statement.	**Required** Choose one of the following: Use the ratio from the rate plan. Use the following ratio: Exclude ratio from the statement.
Peak Time Names You can designate the name of peak and off-peak ranges on the bar chart, including how many dollar signs ($) appear for each. You can also specify the name of the peak period that is used in the Demand Charge Statement. Dollar signs do not appear in this statement. Default values include: • Off-peak periods: Off-peak ($) • Peak periods: Peak ($$$) • Partial peak periods: Partial peak ($$) The values used here should be the same as the values in all other Load Shifting Rate Coach modules that display the peak time names.	**Required** Choose one of the following: Use the default names. Use the following names:

To see how this module fits into the overall user experience, see the following topics:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Load Shifting Insights in HBA AMI Emails

User Experience Variations

This module has no user experience variations.

Demand Big Appliances Module

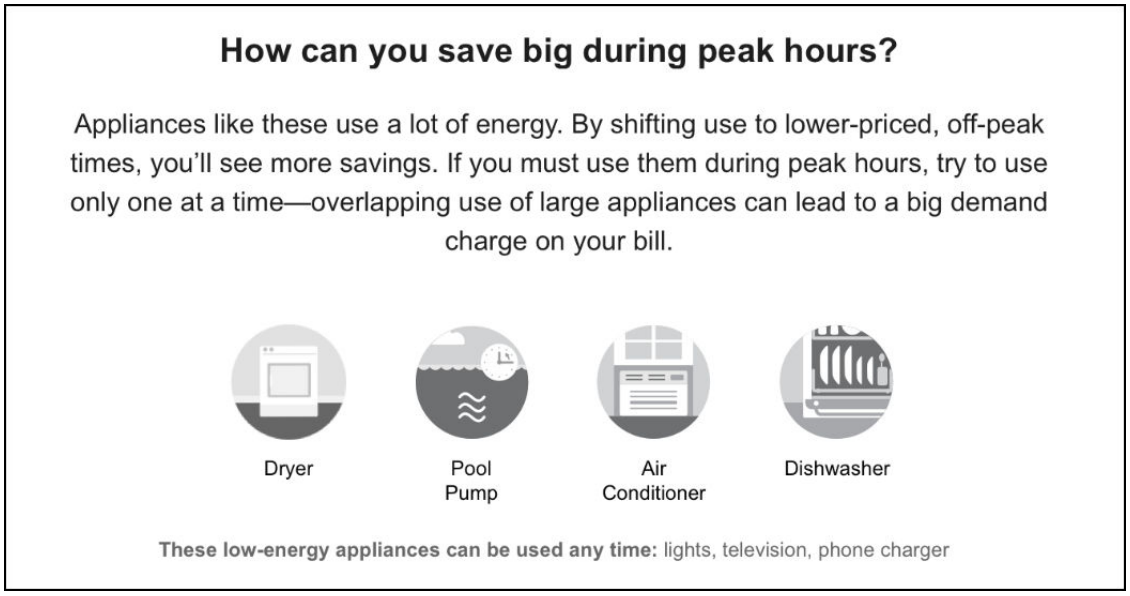
The Demand Big Appliance module educates customers about which appliances use the most electricity, and which are low-usage appliances. This information enables customers to understand how they can shift the usage of their appliances to reduce their energy use during peak hours. The module also lets customers know that they should avoid using multiple big appliances at the same time during peak hours to help reduce demand charges. The module includes illustrations of high-use appliances, including:

- Dryer
- Pool Pump
- Air Conditioner
- Dishwasher

Design

This image shows an exampl of the Demand Big Appliances module:

Figure 7-3 Demand Big Appliances Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Period Name The name of the peak period can be configured in the heading and the high-energy insight statement. The same name should be used in all instances across all Load Shifting Rate Coach email modules. **Default:** Peak	**Required** Choose one of the following: Use the default. Use the following peak period name:

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This module has no user experience variations.

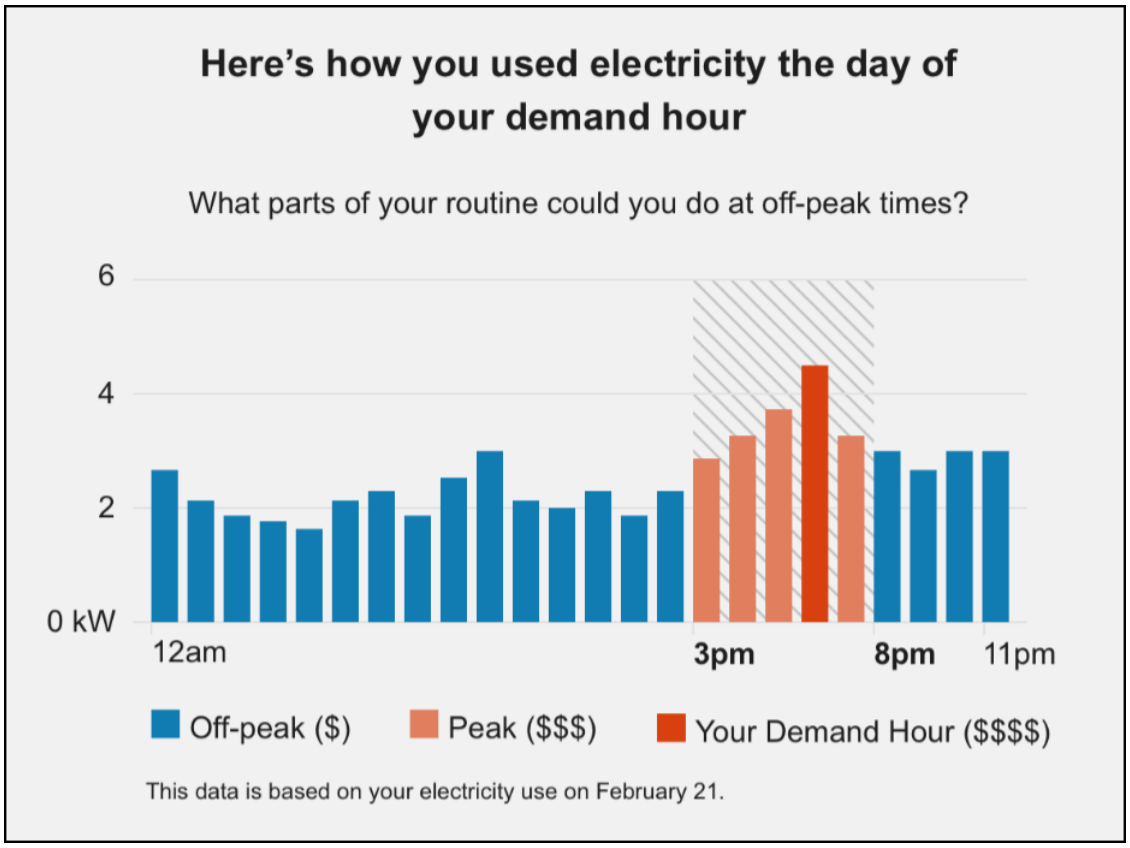
Demand Day Usage Module

The Demand Day Usage module educates customers about how much energy they use during peak hours on the day in which their demand hour occurred. The module encourages them to shift tasks to off-peak hours to lower their demand and save money.

Design

This image shows an example of the Demand Day Usage module:

Figure 7-4 Demand Day Usage Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Color and Chart Alignment Oracle strongly recommends that the colors and charts for this module, the Hourly Usage module, and the Demand 101 module all use the same colors, and are aligned to show the customer the visual connection between each hour's price and the customer's usage during each hour.	**Required** Choose one of the following: • Use default colors. • Work with your Delivery Team to specify other colors.
Hashing Display The module can be configured to display hashing behind the peak period. **Default:** Display hashing in the chart.	**Required** Choose one of the following: • Display hashing. • Do not display hashing.
Peak Time and Demand Hour Names You can designate the name of peak and off-peak ranges in the legend, including how many dollar signs ($) are displayed for each. Default values include: • Off-peak periods: Off-peak ($) • Partial peak periods: Partial Peak ($$) • Peak periods: Peak ($$$) • Demand hour: Your Demand Hour ($$$$)	**Required** Choose one of the following: • Use the default names. • Use the following names:
Include Bill Period Dates in Date Range Statement By default, the bill period dates are not included in the statement.	**Optional** Choose one of the following: • Do not include the bill period dates. • Include the bill period dates.

> **Note**
>
> The values used here must be the same as the values used in the Demand 101 module.

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This module has no user experience variations.

Demand Education Module

The Demand Education module was designed with two specific goals in mind:

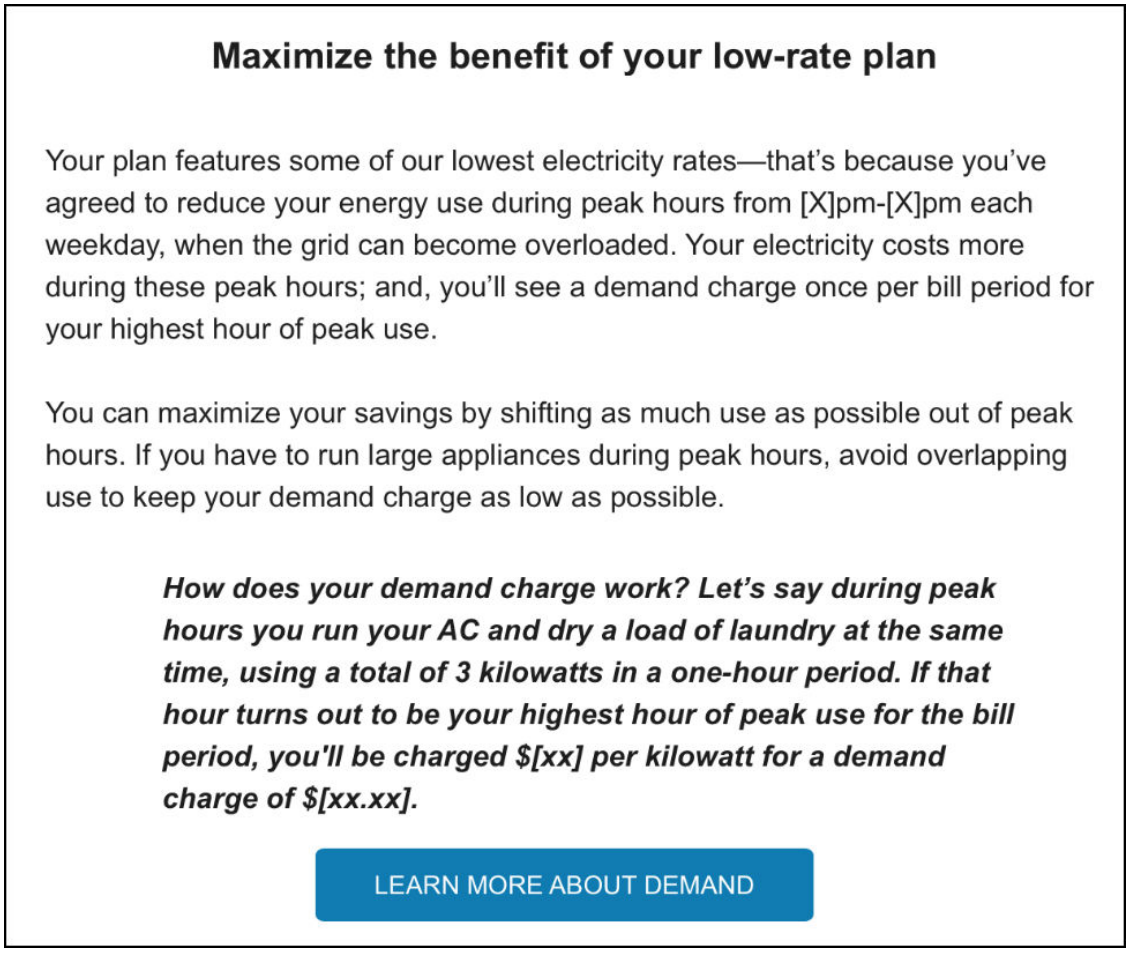
- To help customers better understand their demand rate plan.
- To provide an example of how a demand charge works.

This module helps customers better understand the benefits associated with demand rates, and how their demand charge is calculated.

Design

This image shows an example of the Demand Education module:

Figure 7-5 Demand Education Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Period Name The name of the peak period can be configured in the heading, the education statement, and the demand charge statement. The same name must be used in all instances in all Load Shifting modules. **Default:** Peak	**Required** **Required** Choose one of the following: • Use the default. • Use the following peak period name:

Configuration Option	Input Value
Learn More About Demand Button When clicked, this button directs customers to a utility website that provides explanatory information about their rate plan.	**Required** Specify the URL of the page this button directs customers to:

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This module has no user experience variations.

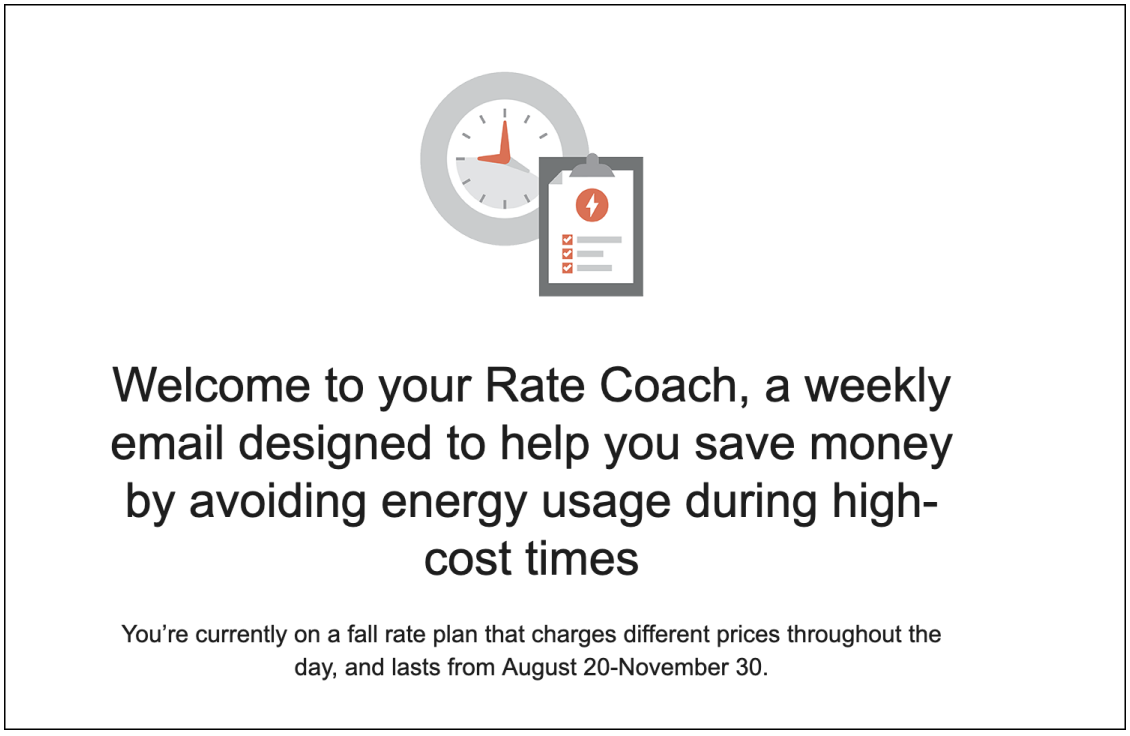
Demand Introduction Module

The Demand Introduction module introduces customers to the Demand Rate Coach email program.

Design

This image shows an example of the Demand Introduction module:

Figure 7-6 Demand Introduction Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Image Color This image can be configured to use client-specific colors. Other than that, the image cannot be changed.	**Required** Choose one of the following: • Use default colors. • Work with your Delivery Team to specify other colors.
Email Program Name in Welcome Message The introduction paragraph of the module introduces the customer to the email program and specifies the name of the email program. **Default:** Rate Coach.	**Required** Choose one of the following: • Use the default name. • Use the following name:
Rate Plan Details in Insight Statement Utility customers can configure the name of the rate plan and the date range that the plan is in effect. Both options are shown in bold in the following example paragraph: You're currently on a **summer** rate plan that charges different prices throughout the day, and lasts from **April 25-September 30.**	**Required** Specify the following information: • Rate plan name: • Date range:

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This module has no user experience variations.

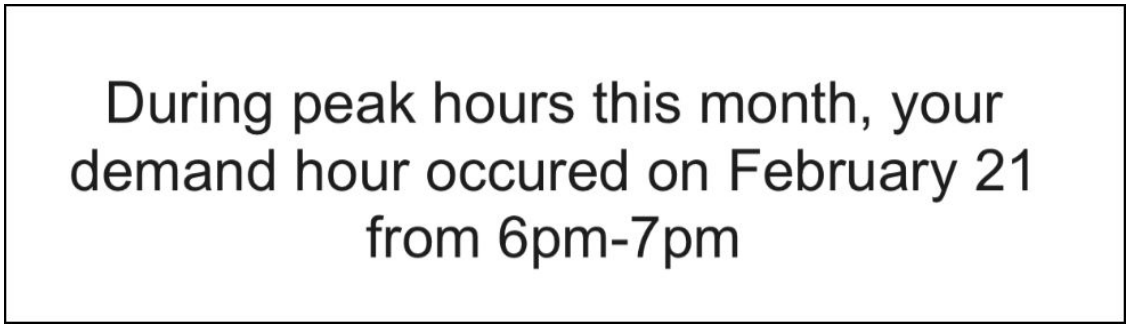
Demand Report Header Module

The Demand Report Header module notifies customers of when their demand hour occurred during the current month. This module is included only in the Demand Report email, and appears at the top, below the standard email header.

Design

This image shows an example of the Demand Report Header module:

Figure 7-7 Demand Report Header Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Period Name The name of the peak period can be configured in the heading, the education statement, and the demand charge statement. The same name must be used in all instances in all Load Shifting modules. **Default:** Peak	**Required** **Required** Choose one of the following: • Use the default. • Use the following peak period name:

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This module has no user experience variations.

Demand Tracker Module

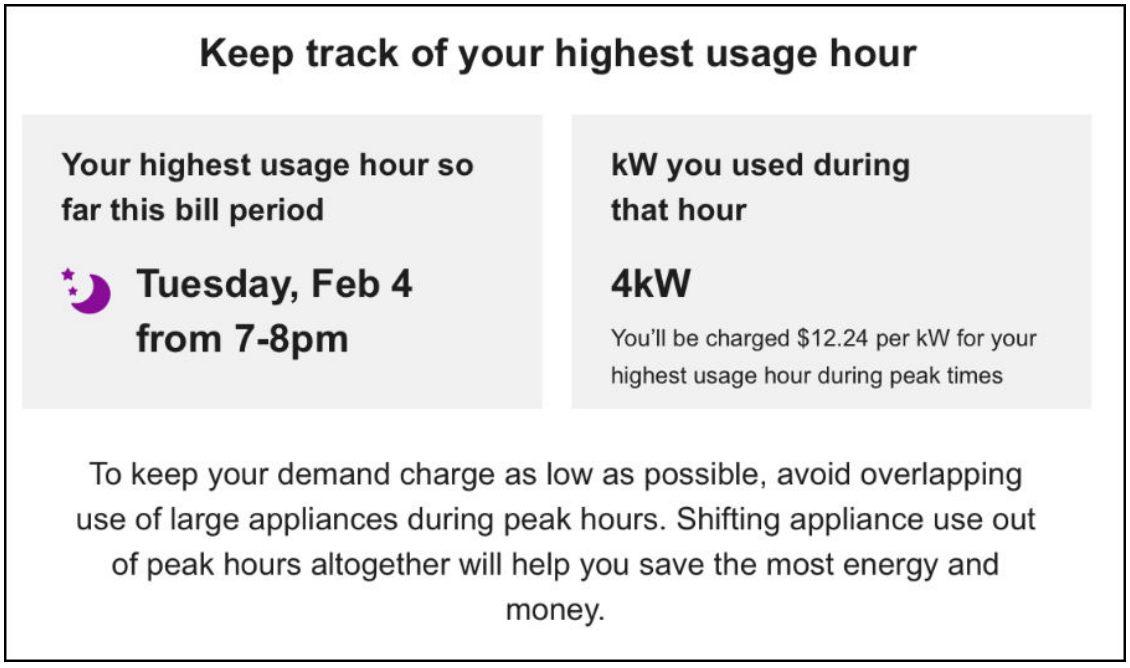
The Demand Tracker module informs customers about the demand charge that will be included in their current billing period. Note the module does not identify the highest hour for the current week, but rather shows the highest demand hour during the current bill period. This hour might not have occurred in the current week. If the customer's demand charge has increased during the current week, the module notifies the customer that their demand charge increased during the current bill period.

This module also provides savings insights that help customers understand how shifting the use of high-energy appliances to off-peak hours can help them save money.

Design

This image shows an example of the Demand Tracker module:

Figure 7-8 Demand Tracker Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Decimal Places You can configure the module to include up to two decimal places in the kW value display. For example, you can display the kW value as follows: • 24 kW • 24.2 kW • 24.25 kW	**Required** Specify the number of decimal places:
Peak Period Name The name of the peak period in the Demand Charge Box and the Savings Statement can be configured. This value should match the peak period name for all other Load Shifting modules. **Default:** Peak	**Required** Choose one of the following: • Use the default. • Use the following peak period name:
Include Bill Period Dates in Savings Statement By default, the bill period dates are not included in the statement.	**Optional** Choose one of the following: • Do not include the bill period dates. • Include the bill period dates.

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This topic covers the variations that can occur in this module.

New Demand Hour This Week

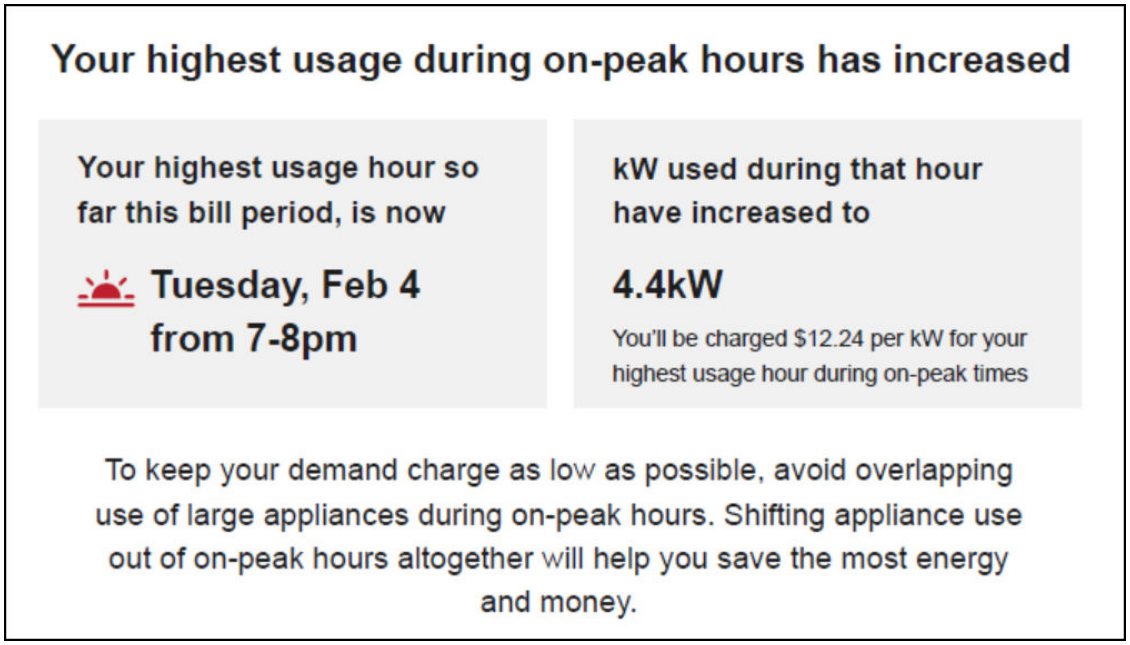
If the customer surpasses their highest demand in the current bill period, the module changes as follows to identify that the highest hour usage has increased since the last weekly email:

Heading: The heading changes to, "Your highest usage during peak hours has increased".

Demand Hour Box: The text in this box changes to, "Your highest usage hour so far this bill period is now".

Demand Charge Box: The ext in this box changes to, "kW used during that hour have increased to".

Figure 7-9 New Demand Hour



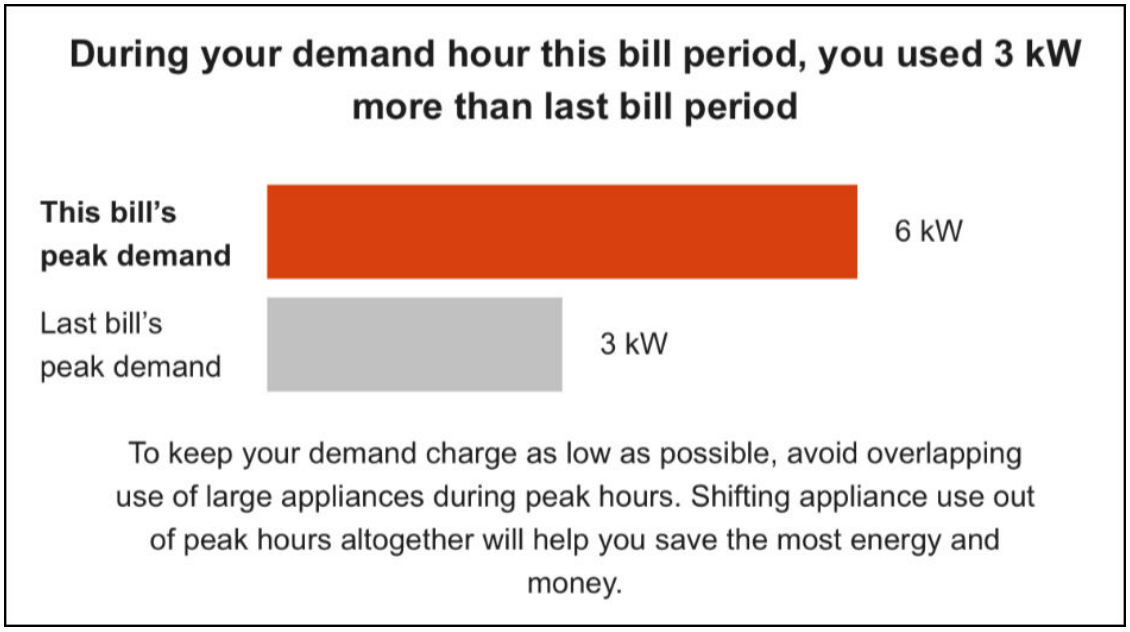
Demand Value Comparison Module

The Demand Value Comparison module compares the customer's billed demand in the current bill period to their billed demand in the previous bill period, and provides varying feedback based on how the customer's usage in the current period compares to the previous period.

Design

This image shows an example of the Demand Value Comparison module:

Figure 7-10 Demand Value Comparison Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Decimal Places You can configure the module to include up to two decimal places in the kW value display. For example, you can display the kW value as follows: • 24 kW • 24.2 kW • 24.25 kW	**Required** Specify the number of decimal places:
Peak Period Name The name of the peak period can be configured in the bar graph labels and the explanatory statement. The same name should be used in all instances across all Load Shifting email modules. **Default:** Peak	**Required** Choose one of the following: • Use the default. • Use the following peak period name:

To see how this module fits into the overall user experience, see Design and Configuration: Demand Rate Coach.

User Experience Variations

This section discusses how the module can vary.

Customer Used Less This Period

If a customer used less energy during their demand hour this period than they did during the previous period, the module displays the following:

Insight Statement: During your demand hour this bill period, you used <X> kW less than last bill period.

Customer Used About The Same This Period

If a customer used about the same during their demand hour as they did the previous period, the module displays the following:

Insight Statement: During your demand hour this bill period, you used <X> kW, the same as the last bill period.

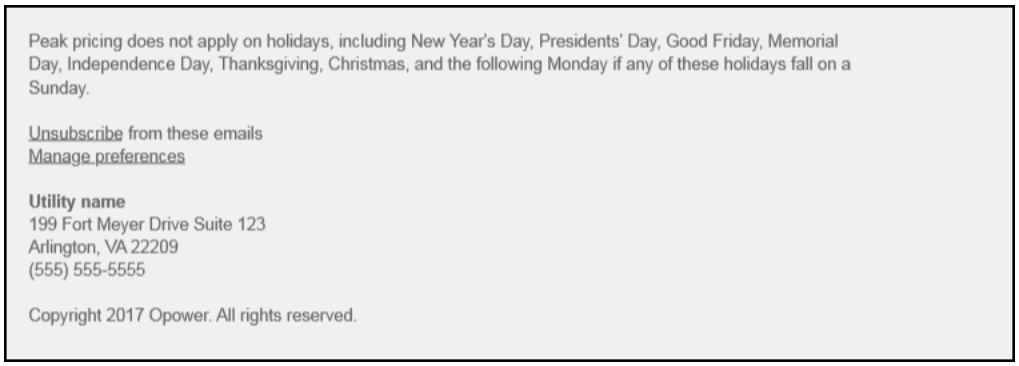
Email Footer Module

This module includes information that provides more context about the email, includes legal text, and enables users to unsubscribe from emails.

Design

This image shows an example of the footer:

Figure 7-11 Email Footer Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Holiday Statement A statement that tells the customer that peak pricing does not apply to specified holidays. The list of holidays included can vary by utility customer. **Default:** Peak pricing does not apply on holidays, including New Year's Day, Presidents' Day, Good Friday, Memorial Day, Independence Day, Thanksgiving, Christmas, and the following Monday if any of these holidays fall on a Sunday.	**Required** Choose one of the following: • Use default statement. • Use the following statement:
Manage Preference Provide a link to the Web Portal page where a customer can edit their communication preferences.	**Required** Choose one of the following: • Do not include a Manage Preferences link. • Use the following URL for the Manage Preferences link:
Utility Name and Address The utility's name and mailing address must appear due to CAN-SPAM regulations in the US and similar regulations abroad.	**Required** Specify the name and address to use in the email footer:
Legal Text This is the copyright and any other legal text required by the utility and/or Oracle Utilities.	**Required** Use the following legal text:

To see how this module fits into the overall user experience, see:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Time of Use Rate Coach

User Experience Variations

This module has no user experience variations.

Email Header Module and Subject Lines

These modules deliver high-level information to the customer and introduces users to their BLS Coach emails. These modules are used in both the TOU Rate Coach and the Demand Rate Coach emails.

Design

This image shows an example of the header:

Figure 7-12 Email Header Module

Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Subject Lines Default subject lines are specific to the email that the customer receives, and to their specific experience. Default subject lines are listed in the User Experience Variations section above. Oracle recommends using the default subject lines, as research has shown that they drive the most customer engagement.	**Optional** Work with your Delivery Team if you need to configure your subject lines.
Utility Logo The RGB and CMYK versions of the utility logo as .ai files. Example: UtilityCo_Logo_RGB.ai	**Optional** Provide the utility logo in the Oracle Utilities Opower Platform Configuration Guide.
Utility URL The utility logo can be configured to point to a specific URL. **Default:** Do not use a URL.	**Optional** Choose one of the following: • Do not use a URL. • Use the following URL:
Account Number Format An example of how the customer account number is formatted on the email. In your example, indicate how many digits should be displayed. In the example, four digits are displayed. Example: 12-34XX-XXX	**Required** Provide the account number format in the Oracle Utilities Opower Platform Configuration Guide.

To see how this module fits into the overall user experience, see:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Time of Use Rate Coach

User Experience Variations

This section describes user experience variations in the Subject Line module.

Subject Line Variations for TOU Rate Coach Emails

The subject lines for each TOU Rate Coach user experience are listed below.

Email Type	Usage Variation	Cost Variation
TOU Rate Coach Introduction Email	Hi <first name>, welcome to your weekly Rate Coach	Hi <first name>, welcome to your weekly Rate Coach
TOU Rate Coach Weekly Email and TOU Rate Coach Weekly Email with Peak Period Disaggregation Customer Spends Less	<first name>, you used less electricity during peak hours last week <date range>	<first name>, you spent less on electricity during peak hours last week <date range>

Email Type	Usage Variation	Cost Variation
TOU Rate Coach Weekly Email and TOU Rate Coach Weekly Email with Peak Period Disaggregation Customer Spends More	<first name>, you used more electricity during peak hours last week <first name>, <date range>	<first name>, you spent more on electricity during peak hours last week <date range>
TOU Rate Coach Weekly Email and TOU Rate Coach Weekly Email with Peak Period Disaggregation Customer Spends About The Same	<first name>, you used about the same amount of electricity during peak hours last week <date range>	<first name>, you spent about the same on electricity during peak hours last week <date range>
TOU Rate Coach Peak Usage Summary Email Default	Hi <first name>, you used the least amount of electricity during peak hours the week of <date range>	Hi <first name>, you spent the least amount of electricity during peak hours the week of <date range>
TOU Rate Coach Peak Usage Summary Email Flat Peak Usage	Hi <first name>, here's how you used electricity during peak hours the week of <date range>	Hi <first name>, here's how much you spent on electricity during peak hours the week of <date range>
TOU Rate Coach Post-Bill Report Email Customer used less/spent less than last bill period	Hi <first name>, you used less electricity during on-peak hours this bill period <date range, year>	Hi <first name>, you spent less on electricity during on-peak hours this bill period <date range, year>
TOU Rate Coach Post-Bill Report Email Customer used more/spent more than last bill period	Hi <first name>, you used more electricity during on-peak hours the week of <date range, year>	Hi <first name>, you spent more on electricity during on-peak hours the week of <date range, year>
TOU Rate Coach Post-Bill Report Email Customer used/spent about the same as last bill period	Hi <first name>, you used around the same amount of electricity during on-peak hours this bill period <date range, year>	Hi <first name>, you spent around the same amount of electricity during on-peak hours this bill period <date range, year>
TOU Rate Coach Pre Season Transition Email	Hi <first name>, your weekly Rate Coach has an update coming <date>	Hi <first name>, your weekly Rate Coach has an update coming <date>
TOU Rate Coach Post Season Transition Email	Hi <first name>, your weekly Rate Coach is here with new peak details	Hi <first name>, your weekly Rate Coach is here with new peak details

Subject Line Variations for Demand Rate Coach Emails

Default subject lines for the email that the customer receives, and to their specific experience. The subject lines for each Demand Rate Coach user experience are listed here:

Email Type	Usage Variation	Cost Variation
Demand Rate Coach Introduction Email	Hi <first name>, welcome to your weekly Demand Rate Coach	Hi <first name>, welcome to your weekly Demand Rate Coach
Demand Rate Coach Weekly Email Default	<first name>, it’s important to track your Demand Hour each week	<first name>, it’s important to track your Demand Hour each week

Email Type	Usage Variation	Cost Variation
Demand Rate Coach Weekly Email Demand Charge Increases	<first name>, your Demand Hour use went up	<first name>, your Demand Hour use went up
Monthly Demand Report Email	During your Demand Hour this month you used <XX>kW of electricity	During your Demand Hour this month you spent $<XX> on electricity

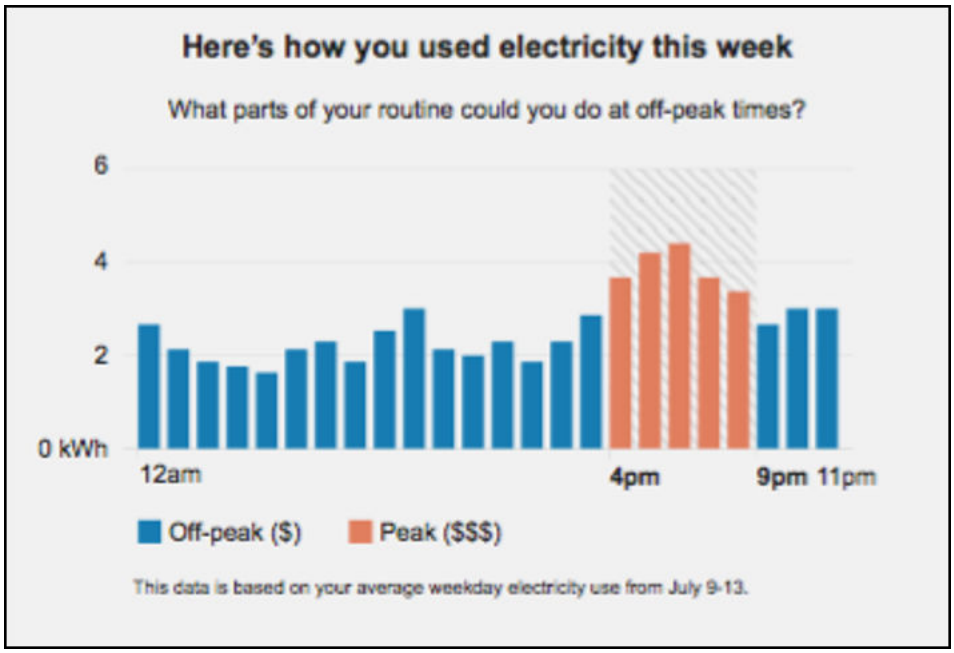
Hourly Usage Module

This module educates customers about how much electricity they use during peak hours and encourages them to shift tasks to off-peak hours to save money. The module supports partial-peak periods, multiple peak periods in a day, and weekday and weekend breakdowns.

Design

This image shows an example of the Hourly Usage module:

Figure 7-13 Hourly Usage Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Time Hours The bar chart displays the times associated with the peak period. For example, electricity might be more expensive from **4pm-9pm**. Note that this value, and the Peak Time Hours value in the TOU 101 module must be the same.	**Required** Specify the peak hours:
Bar Chart Colors Colors in the bar graph for Off-peak, Partial peak, and Peak can match the utility's color palette, if desired. The colors shown are the default colors. Research has shown that using a bright color to identify the peak periods is the most successful. Attention to contrast and accessibility guidelines should be considered if changing the default colors. Note that the colors used here must be the same as the colors used in the TOU 101 module.	**Optional** Choose one of the following: • Use the default colors. • Work with your Delivery Team to specify other colors.
Peak Time Names You can designate the name of peak and off-peak ranges in the legend. Default values include: • Off-peak periods: Off-peak ($) • Partial peak periods: Partial peak ($$) • Peak periods: Peak ($$$) Note that the values used here should be the same as the values used in the TOU 101 module.	**Optional** Choose from the following: • Use the default values. • Use this name for off-peak periods: • Use this name for partial-peak periods: • Use this name for peak periods:
Data Basis Statement This statement identifies the data that is used to generate the graph. **Default:** This data is based on your average weekday electricity use from [date range].	**Optional** Choose one of the following: • Use the default statement. • Use this statement:

To see how this module fits into the overall user experience, see:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Time of Use Rate Coach

User Experience Variations

This section discusses the user experience variations in the Hourly Usage module.

Partial Peak Periods

For utility companies with partial-peak periods, the module displays off-peak, partial-peak, and peak hours using different colors within the bar chart.

Multiple Peak Periods

For utility companies with multiple peak periods each day, the module displays all peak periods in the chart.

Weekday and Weekend Breakdowns with Different Pricing

If a customer's rate plan has different weekday and weekend pricing breakdowns, then the Hourly Usage and TOU 101 modules should be separated so that weekdays are discussed first (with the accompanying TOU 101 module sliding scale) and the weekend modules appear next. Note that this is only true if there are peak hours during both weekdays and weekends. See the "Weekday Only Peak Pricing" variation below for additional information.

Note that the introduction statement above the graph changes to reflect whether the chart is displaying weekday or weekend usage.

Weekday and Weekend Breakdowns with Same Pricing

If a customer's rate plan has peak hours on the weekdays and weekends, but the pricing scheme is the same during both the weekdays and weekends, then the TOU 101 module should only appear once, followed by two separate Hourly Usage modules that show the usage patterns of weekdays and weekends separately. Weekday and weekend usage patterns are typically consistently different. Separating them gives the customer an opportunity to better envision their behaviors.

Note that the introduction statement above the graph changes to reflect whether the chart is displaying weekday or weekend usage.

Weekday Only Peak Pricing

If a customer's rate plan only charges peak pricing on weekdays, then the email includes only one set of modules, where the Hourly Usage and TOU 101 modules for weekday peak pricing appear, and the introduction statement above the graph reflects weekday usage. No charts are displayed to show the weekend pricing, which does not include any peak periods.

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the Time of Use Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

Load Shifting Collective Benefit Module

The Collective Benefit module provides customers with information about the collective impacts of their peak-use reduction or load shifting. The module provides a rotating series of information that is aimed at increasing customer motivation to decrease their peak usage without sacrificing customer satisfaction.

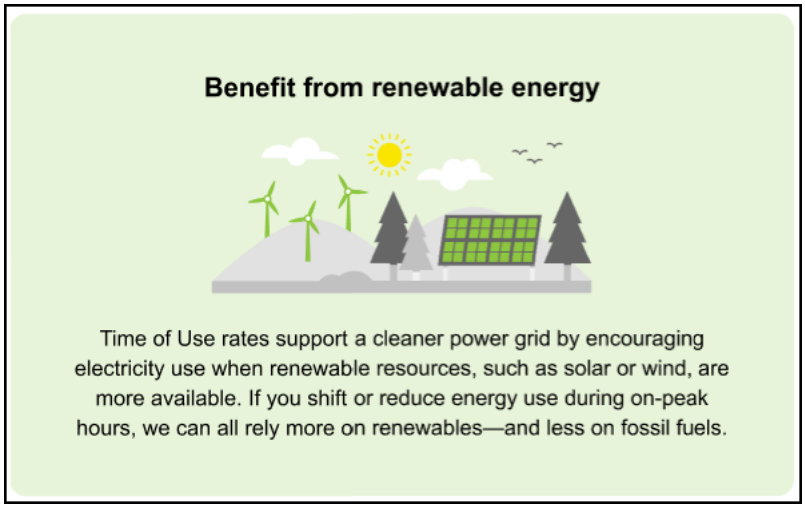
This module can be included in the Post-Bill Report or in the Peak Usage Summary email, and rotates between 6 different messages that can be selected and configured by the utility. There are 8 available messages for the utility to choose from. For information about these different variations, contact your Delivery Team.

Each selected message should run for approximately four weeks, ensuring it is included in each customer's Post-Bill Report or Peak Usage Summary email for the month. Then a new message is selected to run for approximately 4 weeks. This cadence typically allows for each of the 6 selected messages to be shown twice over the course of a year.

Design

This example illustrates the renewable energy variation of the Collective Benefit module:

Figure 7-14 Collective Benefit Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Select Module Variations Utilities can select six of the eight available variations of the Collective Benefits module. Each module will run for approximately 4 weeks, and will then be replaced by a different selected variation, ensuring that customer receive each message approximately twice a year.	**Required** Specify the module variations to use:
Image Colors Colors in the images can be updated to match the utility's color palette, if desired.	**Optional** Choose one of the following: • Use the default colors. • Work with your Delivery Team to specify other colors.

Configuration Option	Input Value
Module Text Utilities should work with their delivery teams to review any changes to copy to ensure it adheres to Oracle's behavioral science practices, reflects the grid conditions of the utility, and aligns with the values of the utility's customer base.	**Optional** Choose one of the following: • Use the default colors. • Work with your Delivery Team to specify other text.

To see how this module fits into the overall user experience, see:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Time of Use Rate Coach

Load Shifting High Usage Module

This module shows customers how much money they spent on off-peak and on-peak hours over a specific time frame, encouraging them to shift their energy usage to off-peak hours.

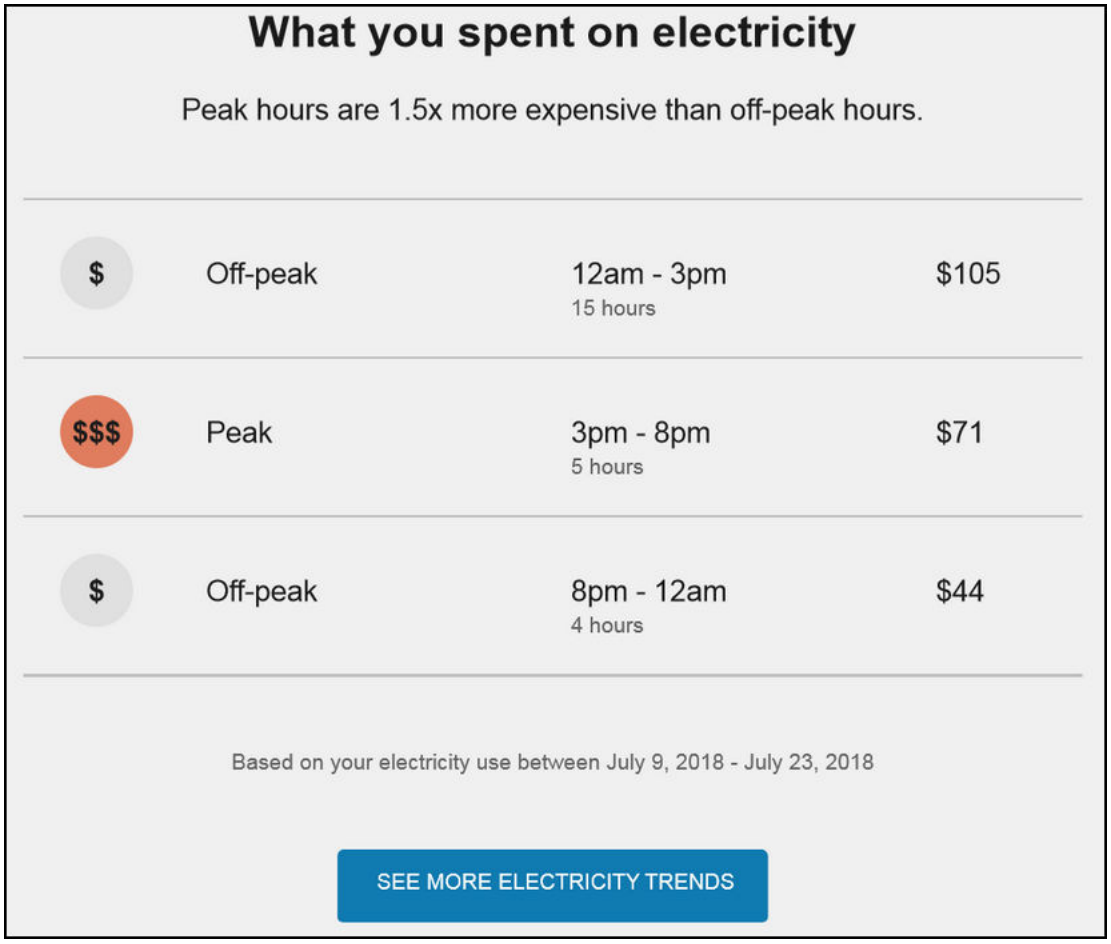
Note that dual fuel customers might receive the dual fuel High Bill Alert AMI email that contains the Load Shifting High Usage Period module and the standard High Usage Period module. The Load Shifting High Usage Period module shows electric usage and the different pricing periods through the day that are associated with the electric TOU or demand rate plan. The standard High Usage Period module shows a single price for the day and displays gas usage.

> **Note**
>
> - This section describes only the Load Shifting High Usage Period module and does not cover additional modules that are delivered within the High Bill Alert AMI Email communication. See the Oracle Utilities Opower Proactive Alerts Cloud Service Product Overview for more information about the other modules.
> - This module is considered a legacy version. Before using this, be aware that Oracle recommends using the TOU HBA Main Insight module instead. While this module is still available, utilities starting a new deployment should use the TOU HBA Main Insight module, and utilities currently using the Load Shifting High Usage Module are encouraged to upgrade to the TOU HBA Main Insight module. Contact your delivery team if you have questions about which module to use.

Design

This image shows an example of the Load Shifting High Usage module:

Figure 7-15 Load Shifting High Usage Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Time Price Ratio The insight statement of the Load Shifting High Usage Period module includes a price ratio that identifies how much more expensive electricity is during peak hours. For example: Peak hours are **1.5x** more expensive than off-peak hours. By default, this value is calculated automatically based on the rate plan data provided. However, you can manually specify the ratio. For customers on tiered TOU plans, the price ratio of the first tier is used in this statement.	**Required** Choose one of the following: • Use the default calculated value. • Use this price ratio:
Peak Icon Color Icon colors can match the utility's color palette. This icon should also match the color in the TOU 101 module. The colors shown are the default colors. Research has shown that using a bright color to identify the peak periods is the most successful.	**Optional** Choose one of the following: • Use the default color. • Work with your Delivery Team to select other colors.
Disclaimer The disclaimer statement identifies the date range that is used to determine the information in the use table. For example, "Based on your electricity use between July 9, 2018 - July 23, 2018."	**Optional** Choose one of the following: • Use the default statement. • Use this statement:
Peak Time Names You can designate the name of peak and off-peak ranges on the bar chart. Default values include: • Off-peak periods: Off-peak ($) • Partial-peak periods: Partial peak ($$) • Peak periods: Peak ($$$) You must have at least two ranges for Load Shifting insights to display correctly.	**Optional** Choose one of the following: • Use the default values. • Use the following names:

To see how this module fits into the overall user experience, see Design and Configuration: Load Shifting Insights in HBA AMI Emails.

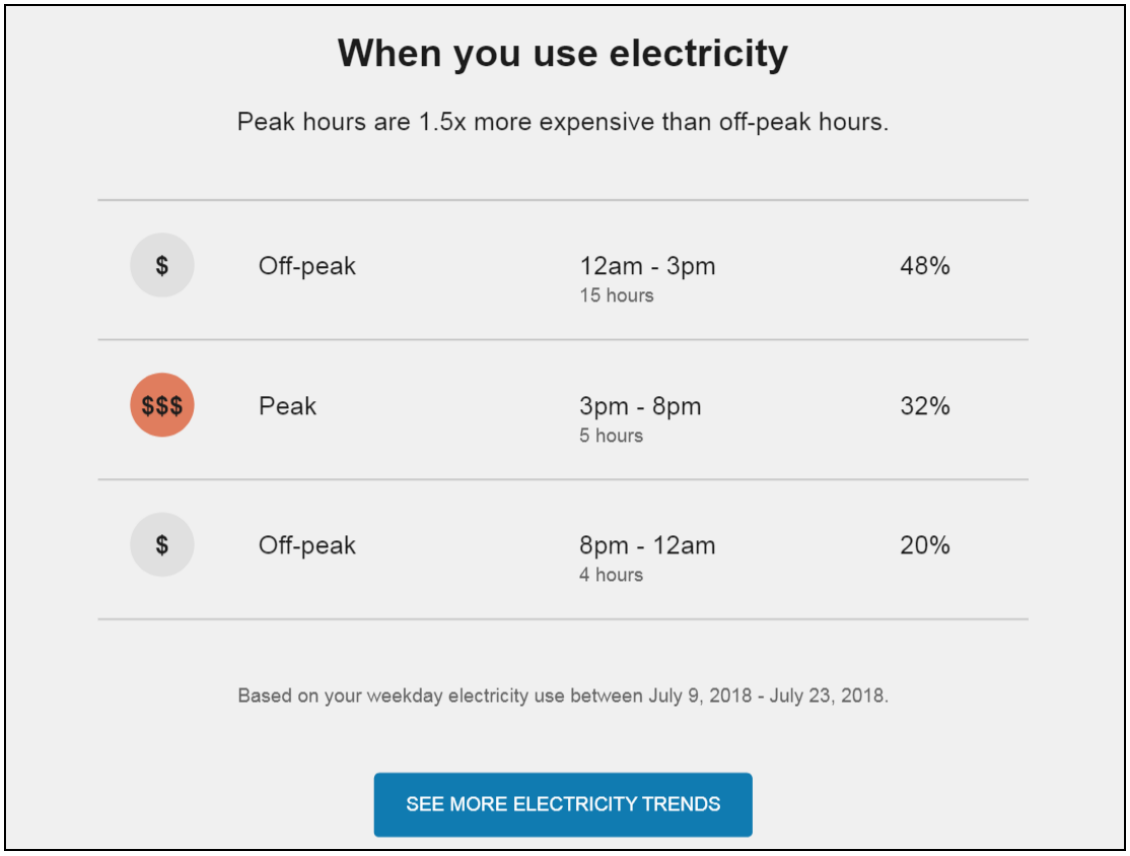
User Experience Variations

This section discusses user experience variations for the BLS High Usage module.

Use vs. Cost Variations

If the module is configured to display usage, the module shows the percentage of use during each period. If the module is configured to show cost, the module shows dollar amounts spent during each period.

Figure 7-16 Usage Variation



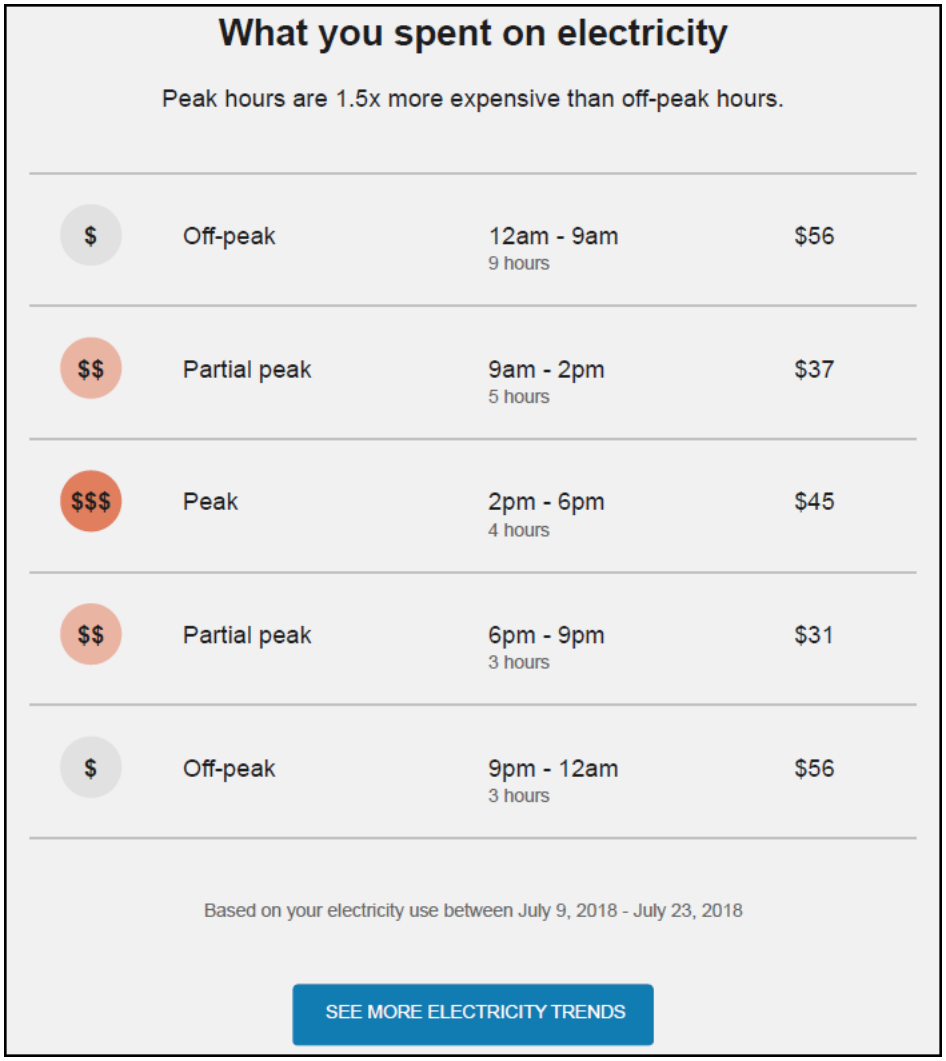
Tiered TOU Rates

For customers on tiered TOU rate plans, the tier with the highest price ratio is used to determine the price ratio in the insight statement of the Load Shifting High Usage Period module.

Partial-Peak Periods

For customers with rate plans that include partial-peak periods, the module displays off-peak, partial-peak, and peak hours using different color icons within the table.

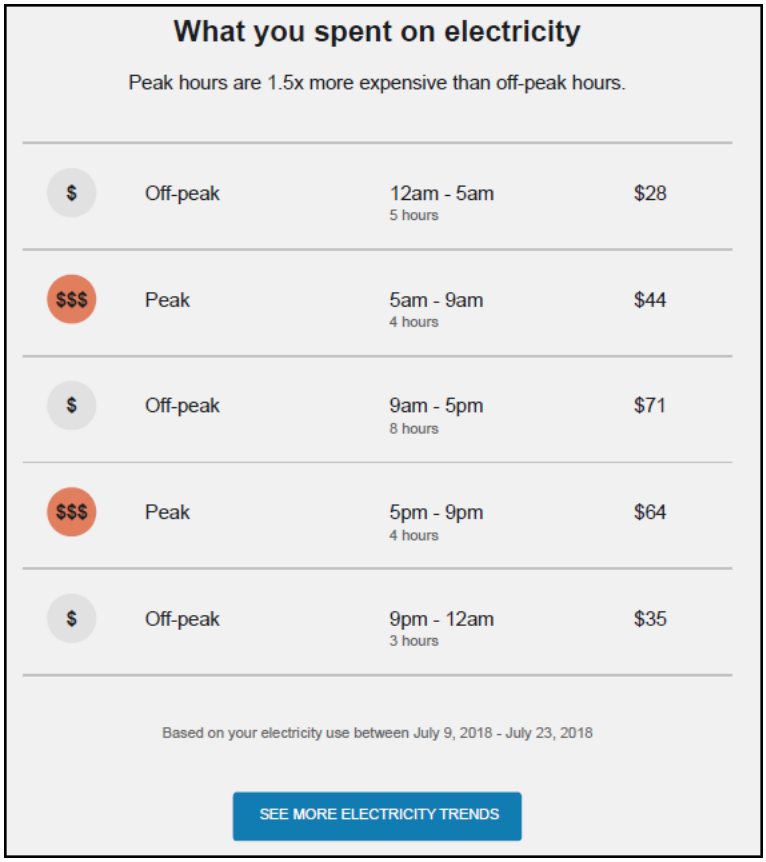
Figure 7-17 Partial-Peak Variation



Multiple Peak Periods

For customers with rate plans that include multiple peak periods each day, the module displays all peak periods in the table.

Figure 7-18 Multiple Peak Periods Variation



Weekday and Weekend Breakdowns

If a customer's rate plan has different weekday and weekend pricing breakdowns, then the Load Shifting Time of Day modules should be separated so that the weekday module is displayed first and the weekend module appears next.

Insight Statement: The statement that appears below the module heading changes as follows, depending on whether the module is displaying weekday or weekend data:

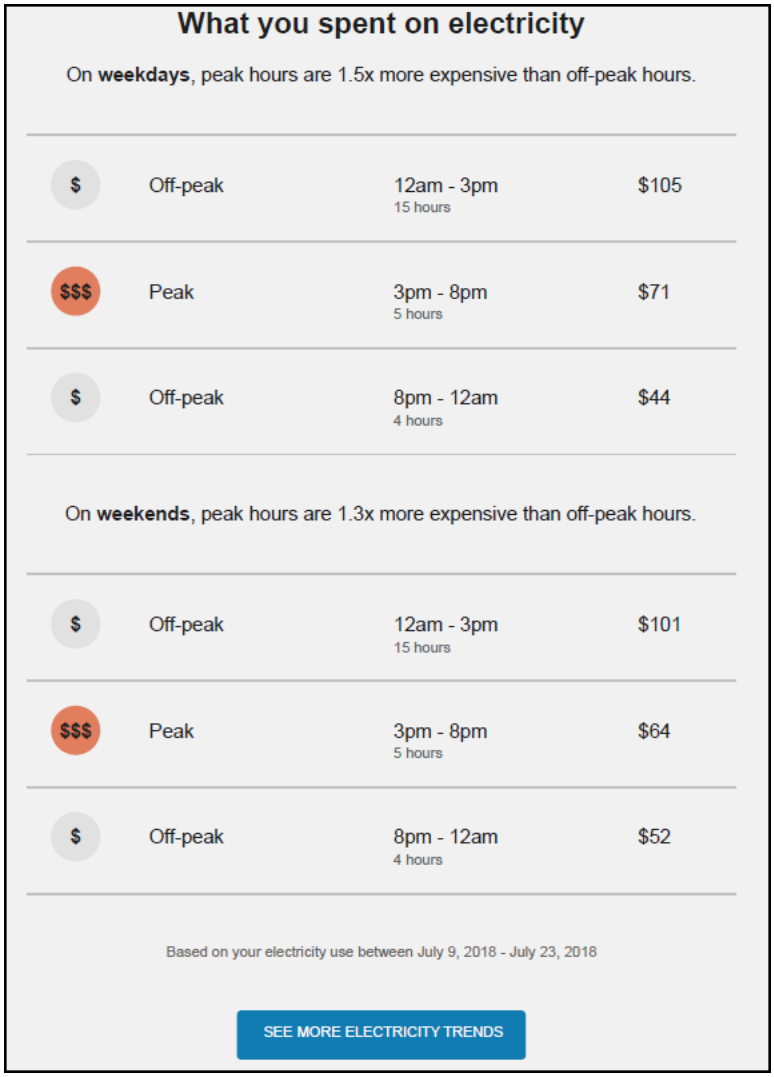
- On weekdays, peak hours are 1.5x more expensive than off-peak hours.
- On weekends, peak hours are 1.3x more expensive than off-peak hours.

In some scenarios, the price ratio can be the same on weekdays and weekends, but there will still be two charts displayed if the peak period times are different on weekdays and weekends.

Footer: The footer statement reads: "Based on your electricity use between [date range]."

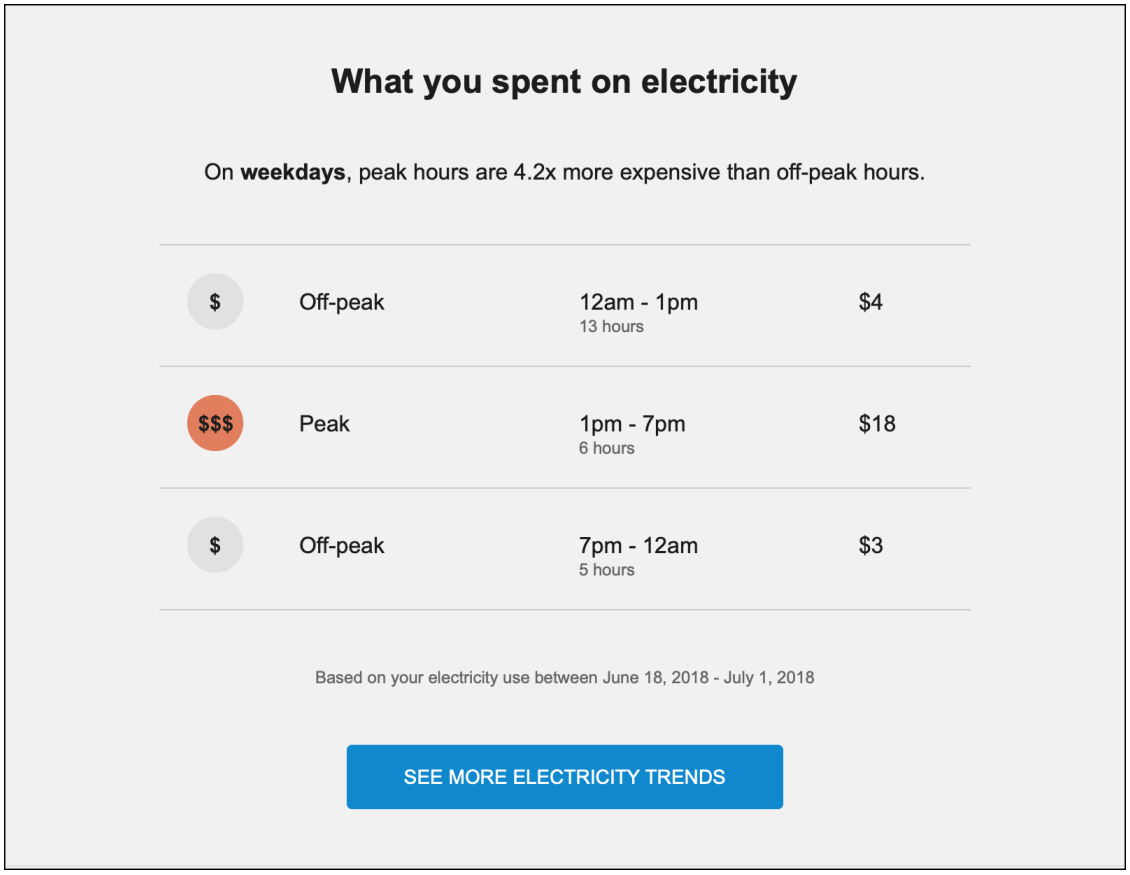
This example illustrates different price ratios on weekdays and weekends:

Figure 7-19 Weekday and Weekend Breakdown Variation



If the rate plan has peak hours during the week, but no peak hours on the weekend, the module appears as follows, and no weekend chart is displayed, as shown here:

Figure 7-20 No Weekends Variation



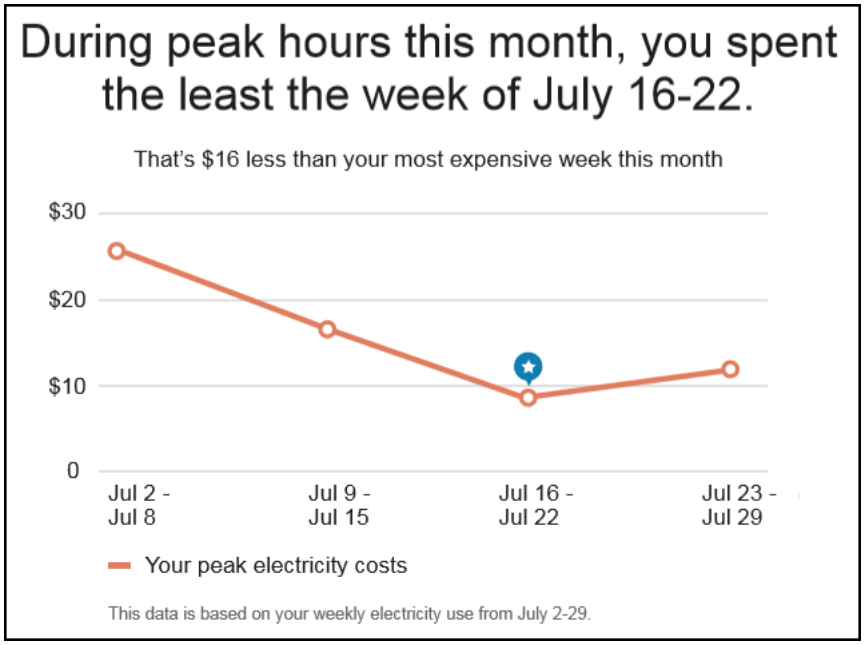
Peak Usage Summary Module

This module educates customers about how their electricity costs during peak hours changed throughout the month. The module highlights the difference between the lowest peak usage week and the highest peak usage week over the previous four weeks. The module provides customers with a view of how they've progressed in changing their peak usage over the past four weeks, and displays data in dollar amounts, illustrating cost savings over time.

Design

This image shows an example of the Peak Usage Summary module:

Figure 7-21 Peak Usage Summary Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Heading The heading above the graph tells the customer when they used the least energy during peak hours. You can update the default statement to use the name of the utility's peak period. **Default:** During peak hours this month, you spent the least the week of <date range>.	**Optional** Choose one of the following: • Use the default heading. • Use the following heading:
Graph Colors Colors in the line graph and the star can match the utility's color palette. The colors in the example represent the default colors.	**Optional** Choose one of the following: • Use the default colors. • Work with your Delivery Team to select other colors.
Date Range Disclaimer A statement below the graph identifies the dates used to determine the usage data for the chart. The statement changes based on whether TOU pricing is in effect every day, or on weekdays only. The default statements are: • The data is based on your weekly electricity use from [date range] • The data is based on your weekday electricity use from [date range]	**Optional** Choose one of the following: • Use the default statements. • Use the following statements:

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This section discusses the user experience variations in the Peak Usage Summary module.

Customer Has Multiple Lowest-Cost Weeks

If customers have two or three lowest-cost weeks, the module displays the following:

- **Heading:** During peak hours this month, you spent the least on [2/3] different weeks.
- **Line Graph:** The graph does not display a visual indicator to show the lowest-cost week.

Customer Has Multiple Lowest-Cost and Highest-Cost Weeks

If customers have multiple lowest-cost weeks and multiple highest-cost weeks, the Peak Usage Summary module displays the following:

- **Heading:** During peak hours this month, you spent the least on [2/3] different weeks.
- **Insight Statement:** That's [$X] less than your most expensive weeks.
- **Line Graph:** The graph does not display a visual indicator to show the lowest-cost week.

Customer Spends About the Same Each Week

If customers spend about the same during peak hours each week, the Peak Usage Summary module displays the following:

- **Heading:** During peak hours this month, you spent about the same each week.
- **Insight Statement:** You spent an average of [$X] those weeks.
- **Line Graph:** The graph does not display a visual indicator to show the lowest-cost week.

Usage Variation

If the email displays usage information instead of cost information, the module displays the following:

- **Heading:** The heading will vary as follows, based on usage trends:
  - During peak hours this month, you used the least the week of <date range>
  - During peak hours this month, you used the least during two different weeks
  - During peak hours this month, you used the least during three different weeks
  - During peak hours this month, you used about the same each week.
- **Insight Statement:** The insight statement tells the reader how much less they used during their lowest week(s). For example, "That's XX kWh less than your highest weeks this month". When usage is about the same during each week, the statement reads, "You used an average of XX kWh those weeks".
- **Line Graph:** The graph displays data in terms of kWh instead of costs.
- **Legend:** The legend reads "Your peak electricity usages".

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the TOU Rate Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

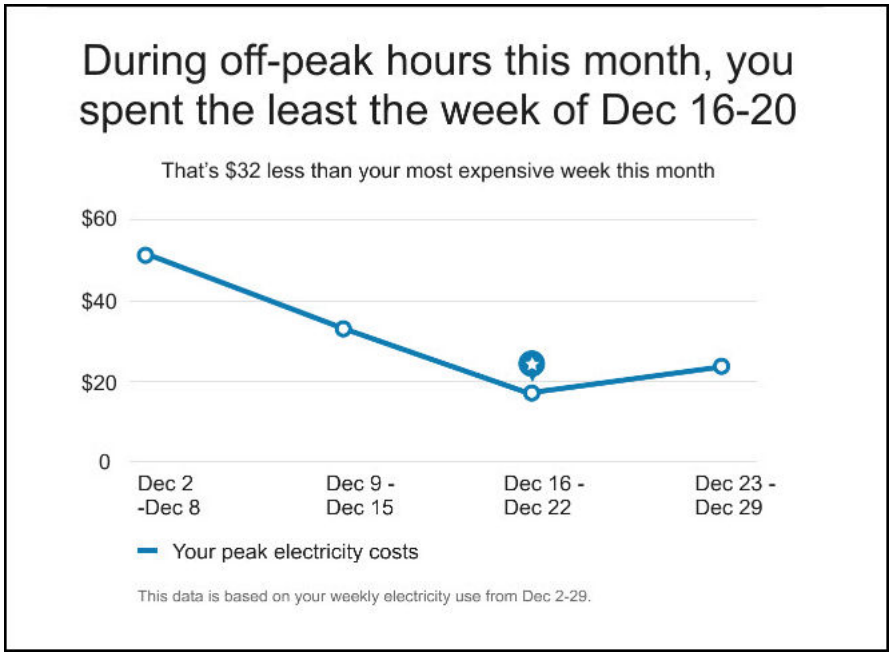
- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

Rates with Off-Peak and Partial-Peak Periods Only

The module automatically evaluates whether there is an on-peak period in the current rate plan. If there is no on-peak period in the current rate plan, the module will use part-peak data to show off-peak usage.

This variation is only applicable to the Weekly Comparison module and the Peak Usage Summary module. Disaggregation and bill period modules do not support an off-peak usage variation.

Figure 7-22 No On-Peak Periods



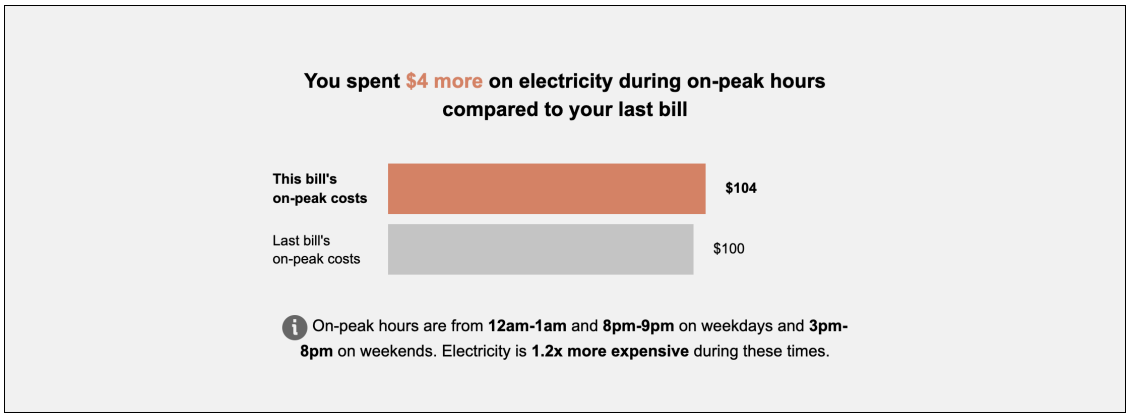
Post-Bill Report Bill Comparison Module

This module compares the customer's costs or usage during peak hours in the current bill period to their spending during peak hours in the previous bill. It provides feedback based on how the customer's costs in the current bill period compare to those of the previous bill.

Design

This image shows an example of the Post-Bill Report Bill Comparison Module:

Figure 7-23 Post-Bill Report Bill Comparison Module



Configuration Options

There are no supported configurations for this module.

To see how this module fits into the overall user experience, see Design and Configuration: TOU Coach Emails.

User Experience Variations

This section discusses the user experience variations in the Post-Bill Bill Comparison module.

Usage Variation

If the email is designed to display usage instead of cost, the module displays the following:

- **Insight Statement**: Depending on the usage, one of these insight statements is used:
  - **Used less electricity**: You used <XX% less> electricity during on-peak hours compared to your last bill.
  - **Used more electricity**: You used <XX% less> electricity during on-peak hours compared to your last bill.
  - **Used about the same electricity**: You used about the same amount of electricity during on-peak hours compared to your last bill.
- **Bar Labels**: The labels to the left of the graph read "This bill's on-peak usage" and "Last bills on-peak usage. " The labels to the right display the usage in kWh.

Peak Hours Explainer Text

The explainer message varies based on the on-peak data state, hours, and rates for the billing period.

- **Peak hours on weekdays only, one peak period**: On weekdays, on-peak hours are from <Xpm-Xpm>. Electricity is [XX] more expensive during this time.
- **Peak hours on weekdays only, two peak periods**: On weekdays, on-peak hours are from <Xam-Xam and Xpm-Xpm>. Electricity is <XX> more expensive during these times.
- **Peak hours same on all days, one peak period**: On-peak hours are from <Xpm-Xpm> Electricity is <X.X> more expensive during this time.
- **Peak hours same on all days, two peak periods**: On-peak hours are from <Xam-Xam and Xpm-Xpm> Electricity is <X.X> more expensive during these times.
- **Peak hours different on weekends and weekdays, one peak period each**: On-peak hours are from <Xpm-Xpm> on weekdays and <Xpm-Xpm> on weekends. Electricity is <X.X> more expensive during these times.
- **Peak hours different on weekends and weekdays, more than one peak period for each**: On-peak hours are from <Xam-Xam> and <Xpm-Xpm> on weekdays and <Xpm-Xpm> on weekends. Electricity is <X.X> more expensive during these times.

Previous Month's Data Unavailable

If data for the previous month's bill is not available, the module includes only the insight statement and explainer text.

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the TOU Rate Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

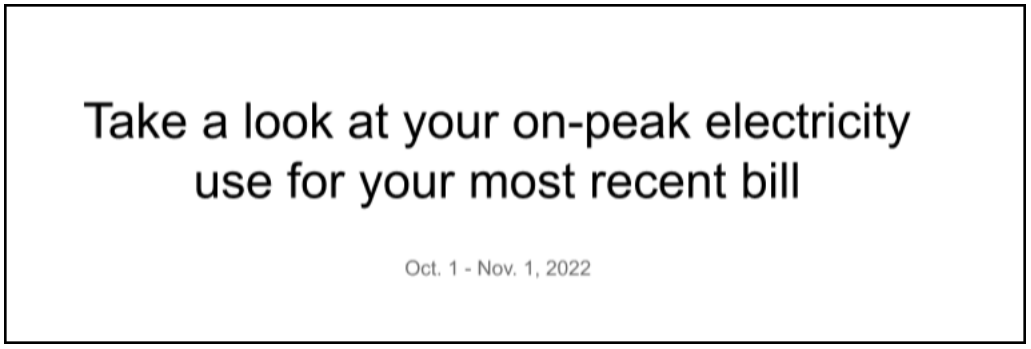
Post-Bill Report Header Module

This module encourages customers to learn more about their on-peak electricity use for their most recent bill period. This module is included only in the Post-Bill Report Email, and appears at the top of the report below the standard email header.

Design

This image shows an example of the Post-Bill Report Header module:

Figure 7-24 Post-Bill Report Header Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Bill Usage Statement A statement that encourages the customer to review the report to learn more about their on-peak electricity use for their most recent bill period. **Default:** Take a look at your on-peak electricity use for your most recent bill.	**Required** Choose one of the following: • Use the default statement. • Work with your Delivery Team on creating an alternative header.

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This module has no user experience variations.

Post-Bill Peak Period Disaggregation Module

This module provides customers with insights about what appliances they use the most during peak hours each month as part of their TOU Coach Post-Bill Report email. The disaggregation highlights up to six customer end uses to provide customers with a holistic view of their usage. End uses are split into quantified and unqantified groups based primarily on the detail with which we can provide information about the appliance use.

Quantified End Uses: Quantified categories include end uses that for which our disaggregation algorithms are able to provide an accurate estimate of how much of the appliance a customer was using during peak hours, and therefore, can be associated with a specific metric, such as kWh, percentage, or cost. The top three of these appliances are

presented in the top portion of the disaggregation breakdown and accentuated with images. Possible quantified end uses include:

- Heating
- Cooling
- EV charging
- Dryer use
- Water heating

Unquantified End Uses: The unquantified section includes end use categories that we can successfully detect if a customer used them during peak but cannot provide an accurate estimate of how much of the appliance a customer was using during peak hours. These appliances are presented in the bottom portion of the disaggregation breakdown. Possible unquantified end uses include:

- Dishwasher use
- Oven use

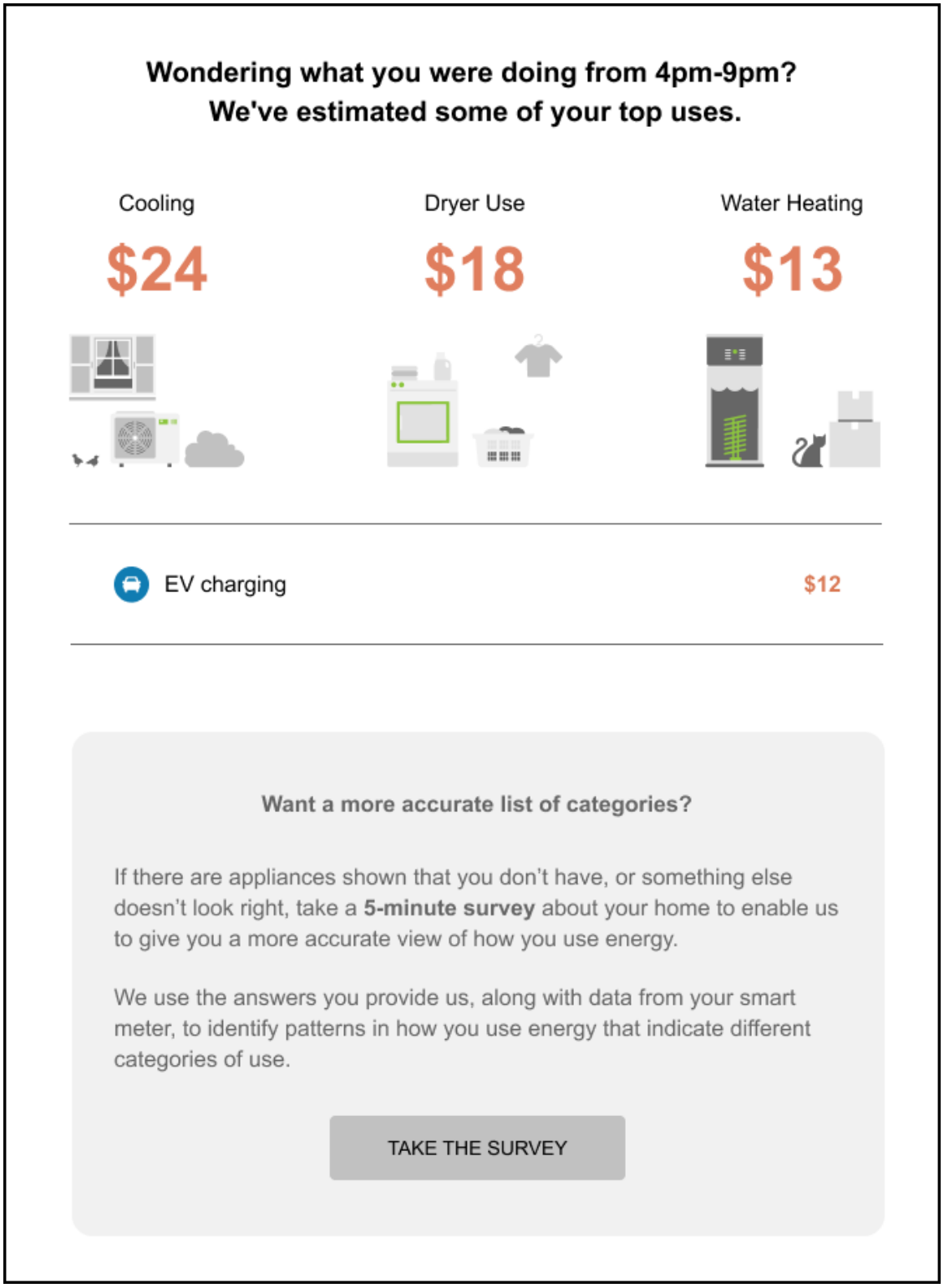
Together, the qantified and unquantified groups provide the customer with a comprehensive picture of what contributes to their peak hour energy use. The disaggregation is followed by a call to action encouraging the customer to complete or update their Home Energy Analysis. The goal of this module is to raise the customer's awareness of which of their quantified and unquantified appliances contribute the most to on-peak energy use so that they can take action to save energy during on-peak billing periods.

This module is only available as part of the Post-Bill Report email.

Design

This image shows an example of the module:

Figure 7-25 Post-Bill Report Peak Period Disaggregation Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Allowable number of missed days of scored AMI data By default, the number of allowable missed days of scored AMI data is 2.	**Optional** Choose one of the following: • Use the default. • Work with your Delivery Team to customize the number of allowable missed days of scored AMI data.
Exclude Disaggregation Categories Shown The default is heating, cooling, EV charging, dryer use, water heating, dishwasher use, and oven use. Any of these can be excluded by the utility. **Note** This configuration is shared with the Post-Bill Report.	**Optional** Choose one of the following: • Use the default. • Work with your Delivery Team to exclude disaggregation categories from the module.

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This section discusses the user experience variations in the Weekly Peak Period Disaggregation module.

Header

The header varies by the data state and number of appliances.

Quantified and unquantified category behaviors operate independently from each other, with the exception of instances where there are no quantified use categories to report.

Header Type	Cost or Usage	Property Name / Description	Usage
Quantified Header	Usage	Usage - multiple-quantified-categories	Around % of your on-peak electricity use came from these categories:
		Usage - one quantified category	Around % of your on-peak electricity use came from <category>
	Cost	Cost - multiple-quantified-categories	Around $ of your on-peak electricity costs came from these categories:

Header Type	Cost or Usage	Property Name / Description	Usage
		Cost - one quantified category	Around $ of your on-peak electricity costs came from <category>
	Not applicable	No quantified category	Section is omitted from the report.
Unquantified Header	Not applicable	Quantified categories	Other contributors to your on-peak electricity use include:
	No quantified categories present	No quantified categories present	Contributors to your on-peak electricity use include:
	No unquantified categories	No unquantified categories	Section is omitted from the report.

Call to Action

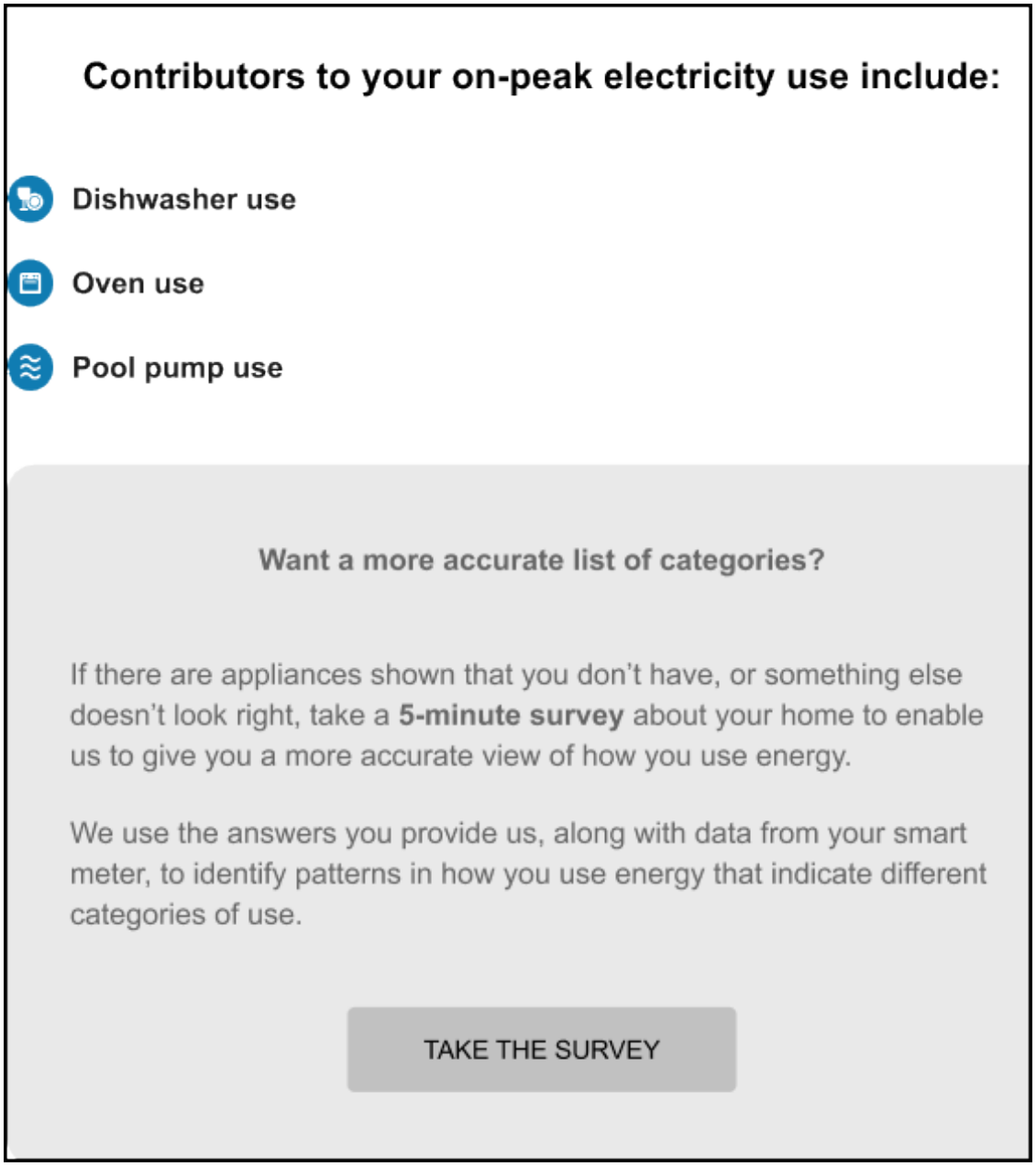
The call-to-action section varies depending on whether the customer has completed the Home Energy Analysis.

Home Energy Analysis Status	Heading	Body Text	Home Energy Analysis Link or Button
Incomplete	Want a more accurate list of categories?	If there are appliances shown that you don't have, or something else doesn't look right, take a 5-minute survey about your home to enable us to give you a more accurate view of how you use energy. We use the answers you provide us, along with data from your smart meter, to identify patterns in how you use energy that indicate different categories of use.	Button
Complete	How do we know how you use energy?	Thanks to data from your smart meter, we can identify patterns in your electricity use that give us an idea of what appliances are using electricity in your home. We can match those end uses to different times of day to determine what appliances you use during peak hours. To get the most accurate view of your appliance use, make sure your home profile is up-to-date.	Link

Zero Quantified Use Categories and One or More Unquantified Use Categories

If there are no quantified use categories, the quantified portion of the disaggregation breakdown is omitted from the report.

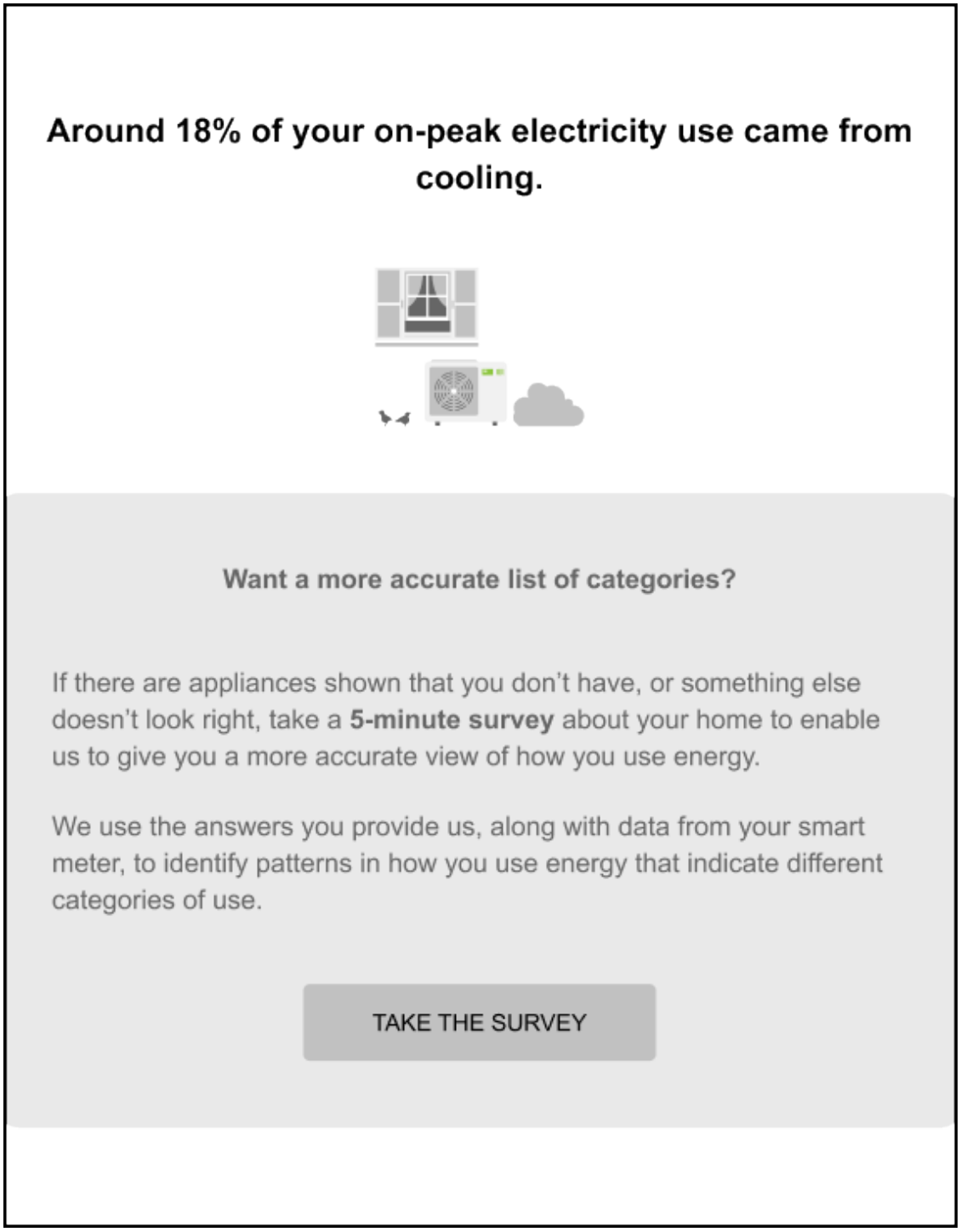
Figure 7-26 Zero Quantified Use Categories



One Quantified Use Category and Zero Unquantified Use Categories

If there is a single quantified use and there are no unquantified use categories, the quantified heading modifies to address the single data state, and the single quantified use is highlighted with a centered image. The unquantified portion of the disaggregation breakdown is omitted from the report.

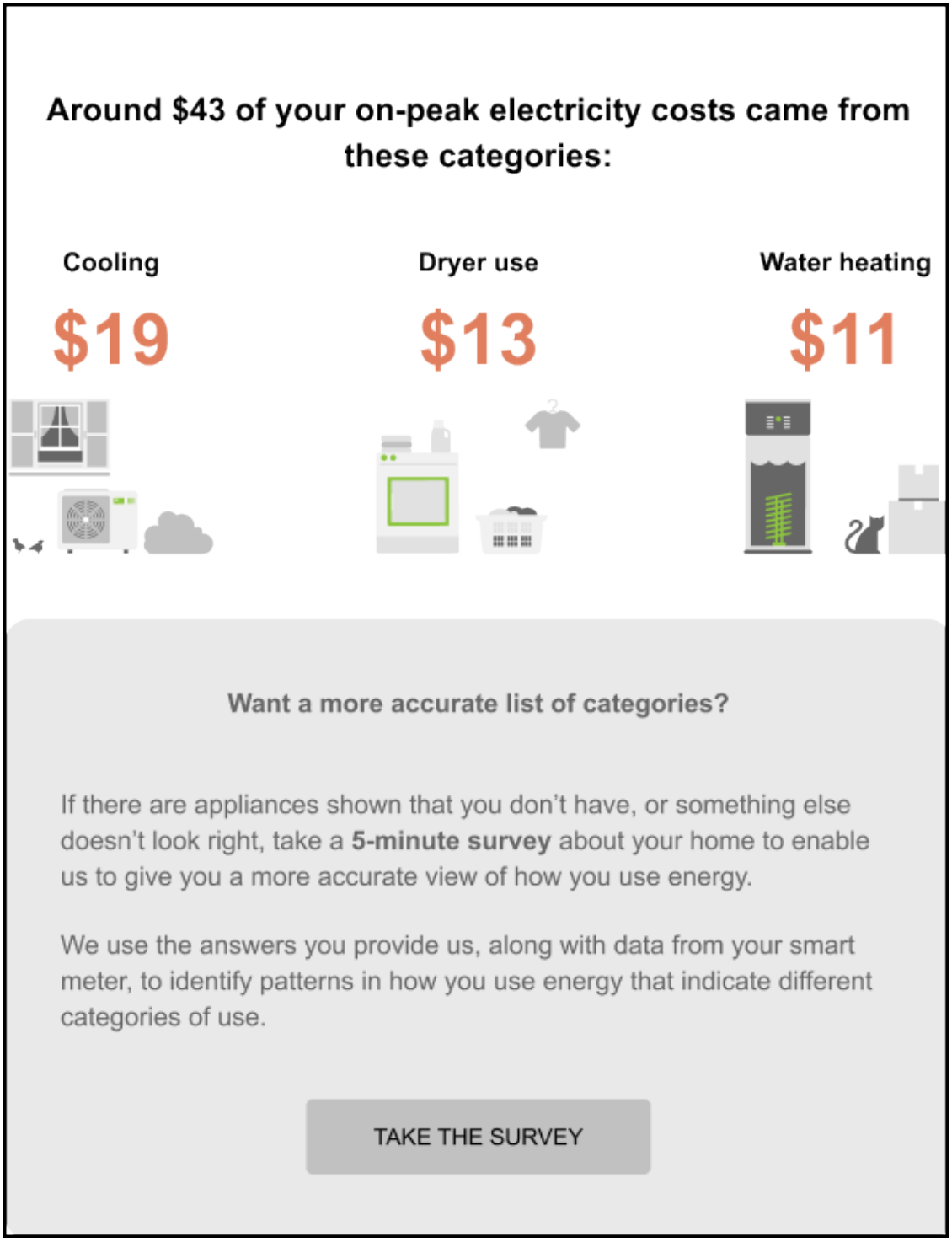
Figure 7-27 One Quantified Use Category



Two or More Quantified Use Categories and Zero Unquantified Use Categories

If there are multiple quantified use and there are no unquantified use categories, the unquantified portion of the disaggregation breakdown is omitted from the report.

Figure 7-28 2 or More Quantified Use Categories

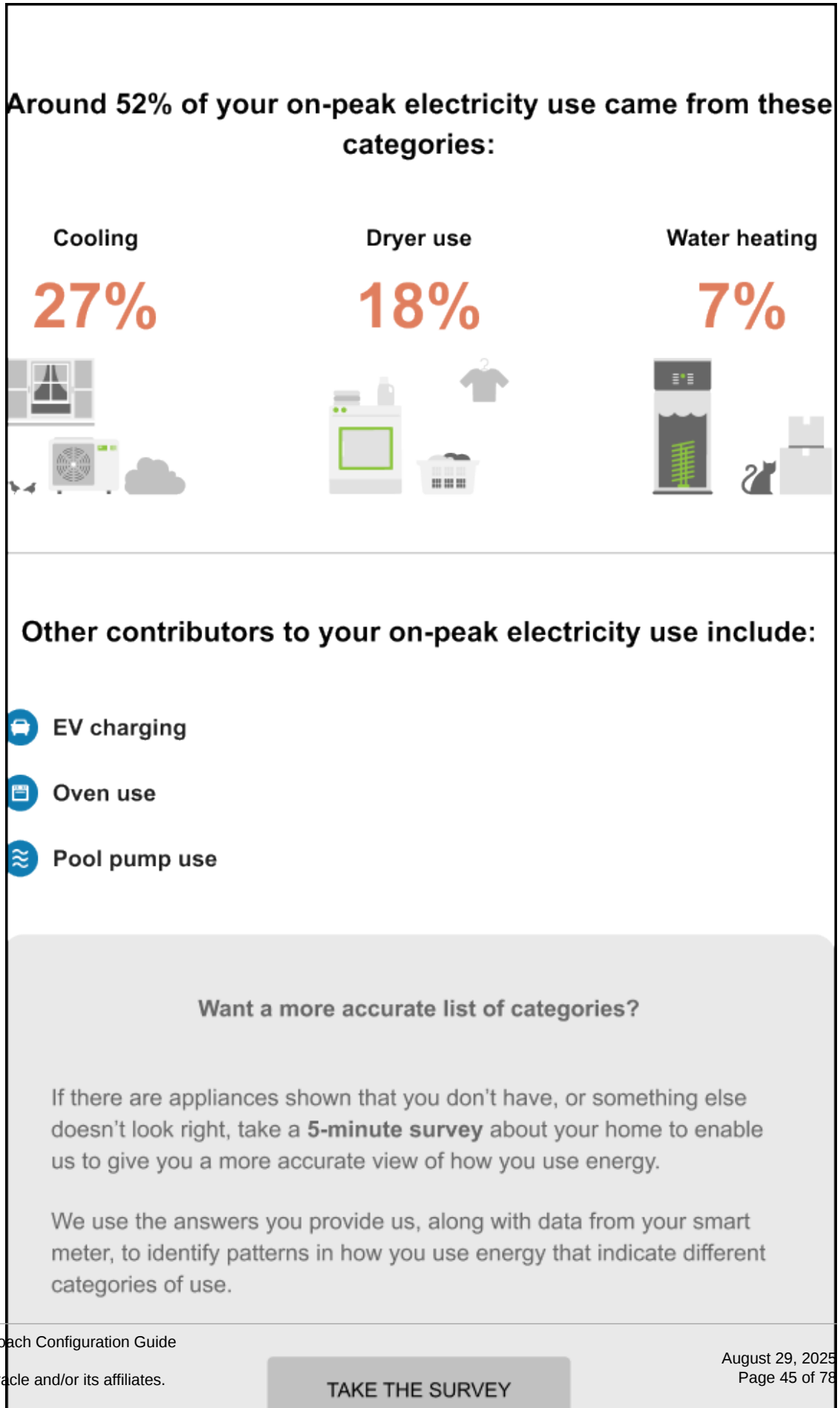


More Than Three Quantified Use Categories

If there are more than three quantified appliances available, the top three highest uses are listed in the quantified section. Any remaining quantified appliances are added to the alphabetical list of non-quantified uses. For example, EV charging will be listed in the

unquantified usage list for a client if it is the quantified appliance category for a customer with quantified appliance data for Cooling, Dryer Use, Water Heating, and EV Charging.

Figure 7-29 More Than 3 Quantified Use Categories



No Quantified or Unquantified Use Categories

If there are no appliances in both the quantified and unquantified sections, the module will be hidden. No fallback message is displayed.

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the Time of Use Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

Season Transition Module

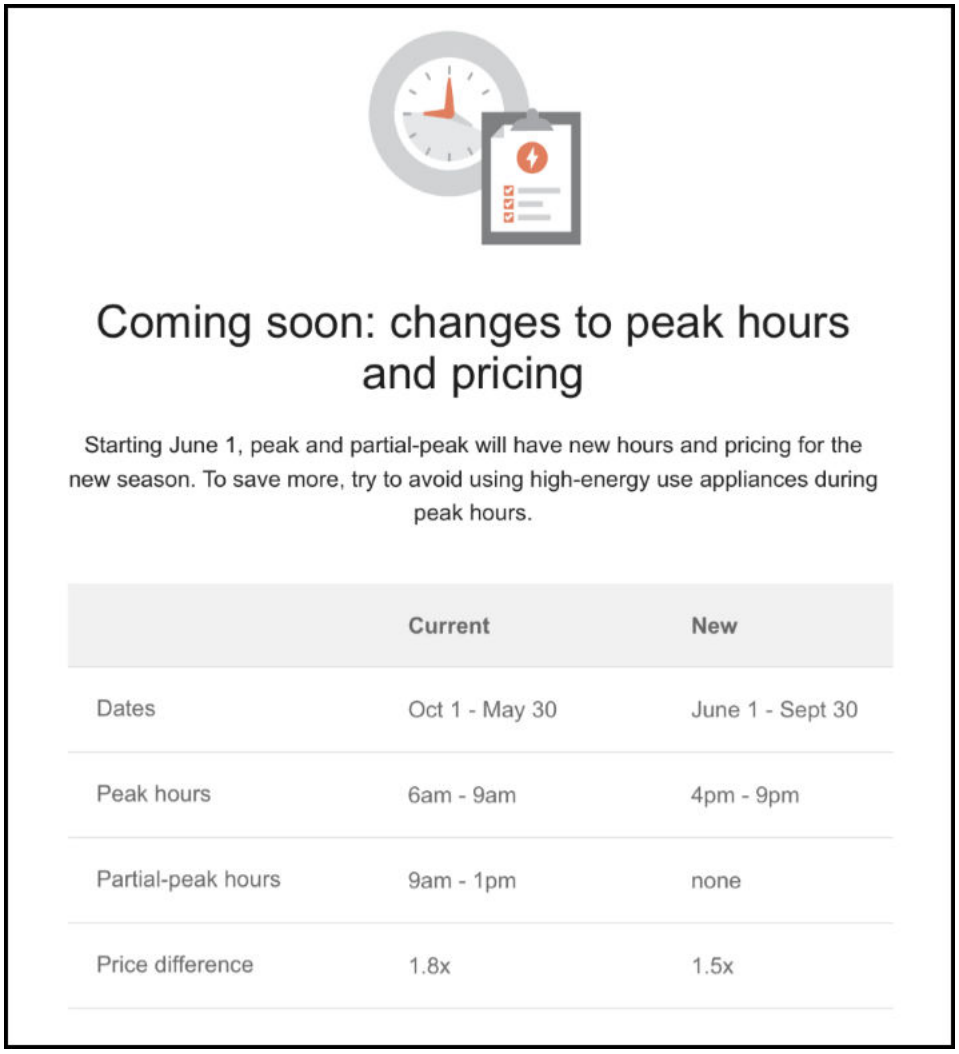
The Season Transition module notifies customers when their peak to off-peak price ratios or peak hours are changing. This module is sent one week before the transition date, and again one week after the transition date, along with the regular cadence of the TOU Rate Coach emails. This module can be included in the Weekly Coach email or the Peak Usage Summary email, depending on the timing of the change.

Design

Pre-Transition Module

This image shows an example of the module:

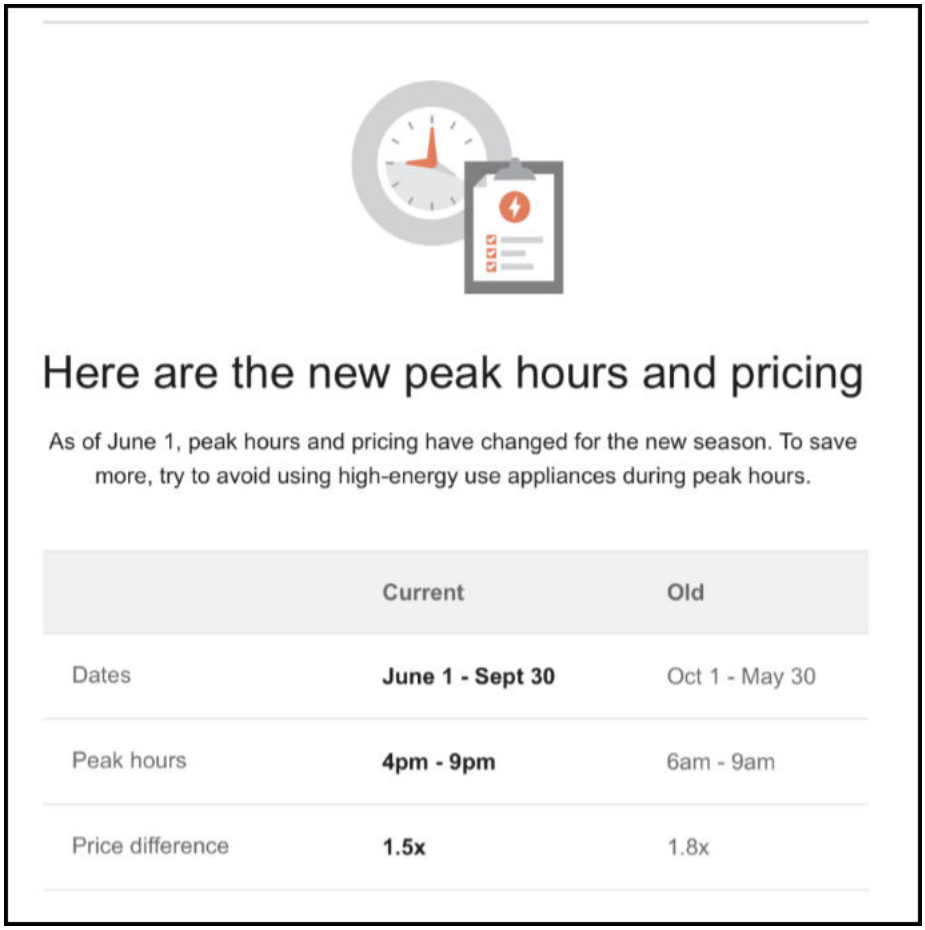
Figure 7-30 Season Transition Module - Pre-Transition



Post-Transition Module

This image shows an example of the module:

Figure 7-31 Seasonal Transition Module - Post-Transition



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Pre-Transition Subject Line Specify the subject line for emails that include the pre-transition module. **Default:** Hi [first name], your weekly Rate Coach has an update coming [date].	**Required** Choose one of the following: • Use the default subject line. • Use the following subject line:

Configuration Option	Input Value
Pre-Transition Header The header statement educates customers about an upcoming change to their TOU rate plan. While it is recommended to use the default heading, it is configurable to meet the needs of the utility. **Default options:** • When peak hours and price ratios change: "Coming soon: changes to peak hours and pricing." • When peak hours change and price ratios stay the same: "Coming soon: changes to peak hours." • When peak prices change and hours stay the same: "Coming soon: changes to peak pricing." • When peak and partial-peak hours change and price ratios stay the same: "Coming soon: changes to peak hours."	**Required** Choose one of the following: • Use the default headers. • Use the following headers:
Pre-Transition Insight Statement An insight message below the header describes the upcoming change. Depending on whether both peak price ratios and peak times are changing, the following default insight statements are used: • Starting [date], peak hours and pricing will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours. • Starting [date], peak hours will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours. • Starting [date], peak pricing will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours While it is recommended to use the default values, these can be configured to meet the needs of the utility.	**Required** Choose one of the following: • Use the default statements. • Use the following statements:
Post-Transition Subject Line Specify The subject line for emails that include the post-transition module. **Default:** Hi [first name], your weekly Rate Coach is here with new peak details.	**Required** Choose one of the following: • Use the default subject line. • Use the following subject line:
Post-Transition Header The header statement educates customers about a recent change to their TOU rate plan. It is recommended to use the default heading. **Default:** Here are the new peak hours and pricing.	**Required** Choose one of the following: • Use the default header. • Use the following header:

Configuration Option	Input Value
Post-Transition Insight Statement An insight message below the header describes the recent change. Depending on whether both peak price ratios and peak times are changing, the following default insight statements are used: • As of [date], peak hours and pricing have changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours. • As of [date], peak hours have changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours. • As of [date], peak pricing has changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours. It is recommended to use the default values.	**Required** Choose one of the following: • Use the default statements. • Use the following statements:
Column and Row Labels in Pre-Transition and Post-Transition Tables It is possible to change the column and row labels (for example, Current, New, Dates, Peak Hours, Price Difference), to meet the needs of the utility. However, it is recommended that you use the default values, except where the name of the peak period needs to be updated to reflect the naming used by the utility. Default values for peak and partial-peak periods are Peak Hours and Partial Peak Hours.	**Required** Choose one of the following: • Use the default values. • Use the following values:

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This section discusses the user experience variations in the Season Transition module.

Peak Hours Change but Price Ratios Stay the Same

When only the peak hours are changing, and the ratios are staying the same, several items in the pre-transition and post-transition modules vary.

Pre-transition variations:

- **Header:** The module header is, "Coming soon: changes to peak hours."
- **Insight Statement:** The insight statement is, "Starting [date], peak hours will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table does not include the price difference row.

Post-transition variations:

- **Header:** The module header is, "Here are the new peak hours."
- **Insight Statement:** "As of [date], peak hours have changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours."

- **Peak Details Table:** The table does not include the price difference row.

Price Ratios Change but Peak Hours Stay the Same

When only the price ratios are changing, and the peak hours are staying the same, several items in the pre-transition and post-transition modules vary.

Pre-transition variations:

- **Header:** The module header is, "Coming soon: changes to peak pricing."
- **Insight Statement:** The insight statement is, "Starting [date], peak pricing will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table does not include the peak hours row.

Post-transition variations:

- **Header:** The module header is, "Here is the new peak pricing."
- **Insight Statement:** "As of [date], peak pricing has changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table does not include the peak hours row.

Peak and Partial-Peak Hours Change but Price Ratios Stay the Same

When only the peak and partial-peak hours are changing, and the price ratios are staying the same, several items in the pre-transition and post-transition modules vary.

Pre-transition variations:

- **Header:** The module header is, "Coming soon: changes to peak hours."
- **Insight Statement:** The insight statement is, "Starting [date], peak and partial-peak hours will change for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table includes a row for partial-peak hours and does not include the price difference row.

Post-transition variations:

- **Header:** The module header is, "Here are the new peak hours."
- **Insight Statement:** "As of [date], peak and partial-peak hours have changed for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table includes a row for partial-peak hours and does not include the price difference row.

Peak and Partial-Peak Hours and Price Ratios Change

When the peak and partial-peak hours are changing, and the price ratios are also changing, several items in the pre-transition and post-transition modules vary.

Pre-transition variations:

- **Header:** The module header is, "Coming soon: changes to peak hours and pricing."
- **Insight Statement:** The insight statement is, "Starting [date], peak and partial-peak hours will have new hours and pricing for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table includes a row for partial-peak hours.

Post-transition variations:

- **Header:** The module header is, "Here are the new peak hours and pricing."
- **Insight Statement:** "As of [date], peak and partial-peak hours have changed to new hours and pricing for the new season. To save more, try to avoid using high-energy use appliances during peak hours."
- **Peak Details Table:** The table includes a row for partial-peak hours.

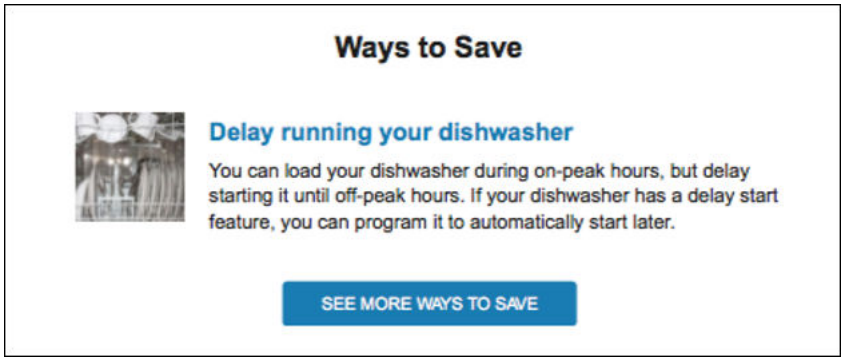
Tips Module

This module delivers energy savings tips to customers using dynamic personalized tips that are relevant to a customer's unique needs. The tips are automatically selected and prioritized based on each customer's attributes, continually refreshed with new information, and designed to cover a wide variety of energy-saving and financial investment categories. A Load Shifting tip library has been created with tips that help customers shift usage from peak to off-peak hours and reduce peak consumption.

Design

This image shows an example of the Tips module:

Figure 7-32 Tips Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Tip Content All tip content, including the name of the tip, can be altered. However, the meaning of the tip cannot be changed because the targeting algorithm relies on the meaning. Note that changes to tip content will be seen by all customers. **Default:** Varies by tip.	**Optional** Contact your Service Delivery Manager for tip editing options.

Configuration Option	Input Value
See More Ways to Save Button If available, the button directs users to the Digital Self Service - Energy Management Ways to Save, where customers can see the public-facing version of this page even if they have not signed in. Alternatively, you can configure this button to direct customers to an alternate page, or you can remove the button.	**Optional** Choose one of the following: • Do not include the button. • Use the following URL for the button:

To see how this module fits into the overall user experience, see:

- Design and Configuration: Time of Use Rate Coach
- Design and Configuration: Demand Rate Coach

User Experience Variations

This module has no user experience variations.

TOU 101 Module

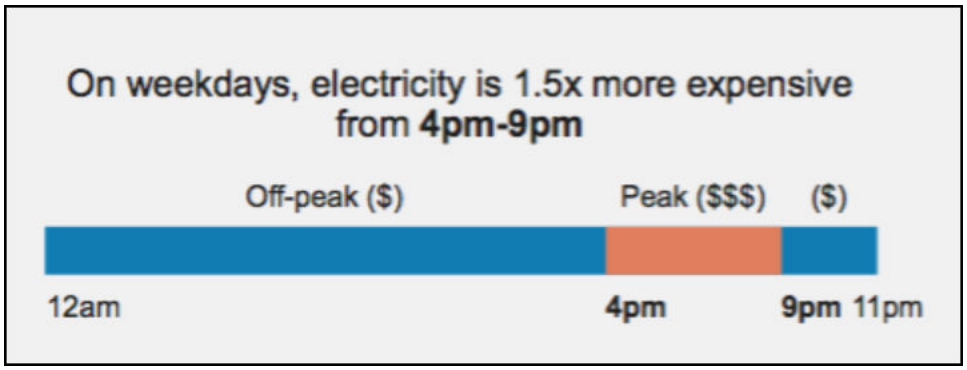
This module educates customers about when electricity is most expensive based on their TOU rate plan. The module provides customers with the following information:

- Whether electricity prices differ on weekdays and weekends
- How much more expensive peak prices are than o□-peak prices
- The hours during which electricity is most expensive
- A visual timeline that displays o□-peak, partial-peak, and peak hours

Design

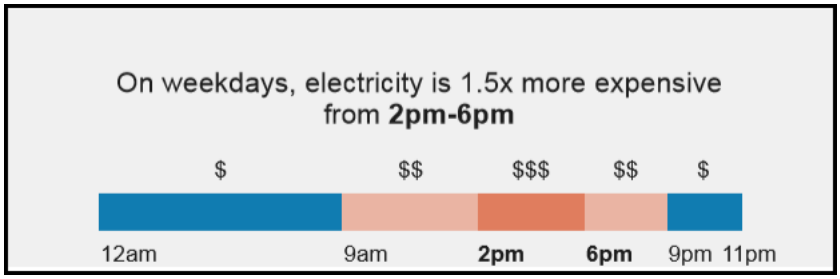
This image is an example using only peak and off-peak periods:

Figure 7-33 TOU 101 Module



This image shows an example using peak, partial-peak, and off-peak periods:

Figure 7-34 TOU 101 Module - Partial Peaks



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Peak Time Hours The introduction statement of the TOU 101 module identifies the hours included in peak time pricing. For example: On weekdays, electricity is 1.5x more expensive from 2pm to 6pm. Note that this value, and the Peak Time Hours value in the Hourly Usage module must be the same.	**Required** Specify the peak hours: Specify partial-peak hours (if used):

Configuration Option	Input Value
Peak Time Price Ratio The introduction statement of the TOU 101 module identifies how much more expensive electricity is during peak hours. For example: On weekdays, electricity is 1.5x more expensive from 2pm to 6pm. By default, this value is automatically calculated by dividing the peak price by off-peak price, based on the rate plan details provided.	**Required** Choose one of the following: • Use the default calculation. • Use this price ratio:
Bar Chart Colors Colors in the bar graph for Off-peak, Partial peak, and Peak can match the utility's color palette, if desired. The colors shown are the default colors. Research has shown that using a bright color to identify the peak periods is the most successful. Attention to contrast and accessibility guidelines should be considered if changing the default colors. Note that the colors used here must be the same as the colors used in the Hourly Usage module.	**Optional** Choose one of the following: • Use the default colors. • Work with your Delivery Team to select other colors.
Peak Time Names You can designate the name of peak and off-peak ranges in the legend. Default values include: • Off-peak periods: Off-peak ($) • Partial peak periods: Partial peak ($$) • Peak periods: Peak ($$$) Note that the values used here should be the same as the values used in the Hourly Usage module.	**Optional** Choose from the following: • Use the default values. • Use this name for off-peak periods: • Use this name for partial-peak periods: • Use this name for peak periods:

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This section discusses the user experience variations in the TOU 101 module.

Peak Hours Insight Statement

The Peak Hours insight statement varies based on the customer's rate plan and the type of days displayed in the timeline. The following table shows the insight statement variations for different scenarios:

Peak Hour Scenario	User Experience Example
Weekdays with a single peak period for plans with differing rates on weekdays and weekends.	On weekdays, electricity is 1.5x more expensive from <Xpm to Xpm>.
Weekdays with multiple peak periods for plans with differing rates on weekdays and weekends.	On weekdays, electricity is 1.5x more expensive from <Xam to Xpm> and <Xpm to Xpm>.
Weekend days with a single peak period for plans with differing rates on weekdays and weekends.	On weekends, electricity is 1.5x more expensive from <Xpm to Xpm>.
Weekend days with multiple peak periods for plans with differing rates on weekdays and weekends.	On weekdays, electricity is 1.5x more expensive from <Xam to Xpm> and <Xpm to Xpm>.
Any day for plans with a single peak period, and a pricing scheme that is the same on weekdays and weekends.	Electricity is 1.5x more expensive from <Xpm to Xpm>.
Any day for plans with multiple peak periods, and a pricing scheme that is the same on weekdays and weekends.	Electricity is 1.5x more expensive from <Xam to Xpm> and <Xpm to Xpm>.
Any of the above variations with tiered TOU rates.	The above statements are used, but the wording "up to" is included before the price ratio. For example: • Electricity is up to 1.5x more expensive from <Xpm to Xpm>. • On weekdays, electricity is up to 1.5x more expensive from <Xpm to Xpm> and <Xpm to Xpm>. Note that the tier with the highest price ratio is used when determining the price ratio in the statement.

Multiple Peak Periods

For utility customers with rate plans that include multiple peak periods, the timeline shows all peak periods using the same color.

Peak and Partial-Peak Periods

For utility customers with rate plans that include both peak and partial-peak periods, the timeline shows both periods using two different colors.

Weekday and Weekend Breakdowns with Different Pricing

If a customer’s rate plan has different weekday and weekend pricing breakdowns, then the Hourly Usage and TOU 101 modules must be separated so that weekdays are discussed first (with the accompanying TOU Coach Hourly Usage graph) and the weekend modules appear next.

Note that the insight statement above the timeline changes to reflect weekday and weekend use and includes the expense ratio for the specified day.

Weekday and Weekend Breakdowns with Same Pricing

If a customer's rate plan has peak hours on the weekdays and weekends, but the pricing scheme is the same during both the weekdays and weekends, then the TOU 101 module should only appear once, followed by two separate Hourly Usage modules that show the usage patterns of weekdays and weekends separately. Weekday and weekend usage patterns are typically consistently different. Separating them gives the customer an opportunity to better envision their behaviors.

TOU HBA Main Insight Module

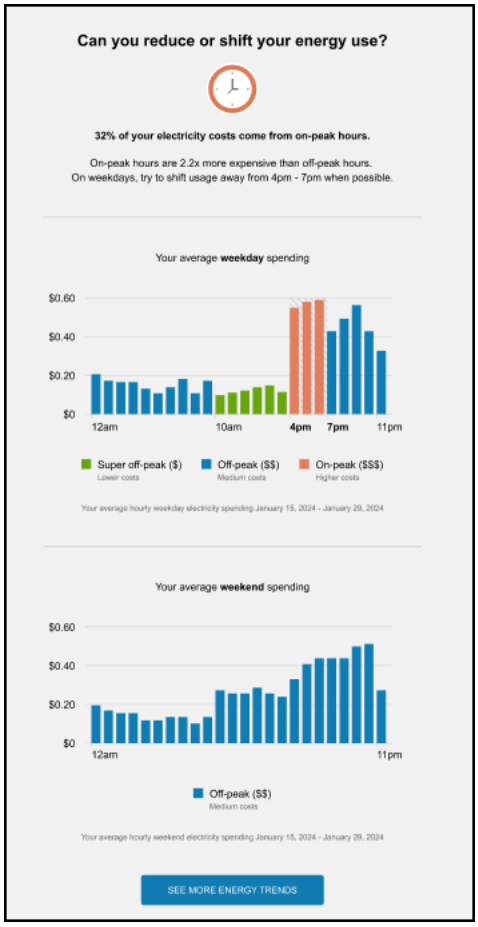
This module shows customers what portion of their energy use occurs during on-peak periods, provides details about the cost of energy use during peak periods, displays usage charts for weekdays and weekends, and encourages them to shift their energy usage to off-peak hours.

> **Note**
>
> - This section describes only the TOU HBA Main Insights module and does not cover additional modules that are delivered within the High Bill Alert AMI Email communication. See the Oracle Utilities Opower Proactive Alerts Cloud Service Product Overview for more information about the other modules.
> - This is an updated version of the Load Shifting High Usage Module. Oracle recommends using this updated version of the module, as it provides additional details for your customers.

Design

This image shows an example of the TOU HBA Main Insight module:

Figure 7-35 TOU HBA Main Insight



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Color in Graphic By default, the color of the clock graphic is set to use the utility's On Peak color.	**Optional** Choose one of the following: • Use the default color. • Work with your Delivery Team to specify other colors.
Low Usage Threshold If the customer only has a small percentage of their usage during peak hours, the module is adjusted to remove some peak hour information. By default, the threshold is set to 0.05 (5%).	**Optional** Choose one of the following: • Use the default threshold. • Use this threshold:

Configuration Option	Input Value
Chart Legend Indicators You can specify whether to include the dollar sign indicators next to the peak period names in the legend. The indicators are included by default using the **Config Show Legend TOU Period Dollar Signs** configuration. For example: • Off-peak ($) • Partial peak ($$) • Peak ($$$)	**Optional** Choose one of the following: • Display the indicators. • Do not display the indicators.
Chart Legend Labels You can specify whether to include labels under each item in the chart legend. The labels are included by default using the **Config Show Legend TOU Period Sub-Label** configuration. For example: • Lower costs • Medium costs • Higher costs	**Optional** Choose one of the following: • Display the labels. • Do not display the labels.
Show Weekend Chart Separately You can configure the charts to display weekday and weekend days as two separate charts, or to combine the days into a single chart. You can not combine the charts if the TOU periods are different on weekdays and weekends. By default, the charts are set to display separately.	**Optional** Choose one of the following: • Display separate charts. • Do not display separate charts.

To see how this module fits into the overall user experience, see Design and Configuration: Load Shifting Insights in HBA AMI Emails.

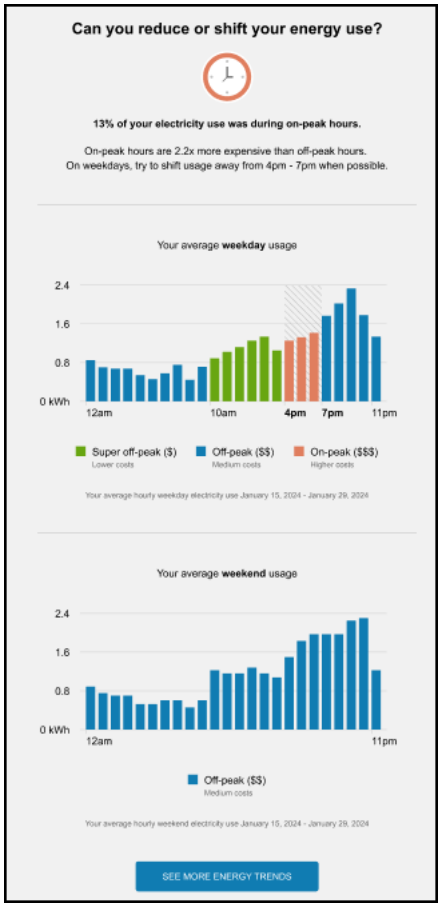
User Experience Variations

This section discusses the user experience variations in the TOU HBA Main Insight module.

Usage Variations

This image shows an example of the usage version of the TOU HBA Main Insight module:

Figure 7-36 Usage Variation



The usage version of the module varies from the cost version as follows:

Insight Statement 1: The statement below the graphic tells the reader what percentage of their energy use was during on-peak hours. For example, the statement might say, "32% of your electricity use was during on-peak hours."

Weekday Chart Title: The title of the first chart informs the user that the data is related to their weekday energy usage.

Weekday Bar Chart: The chart depicts the average weekday electricity usage during each hour of the day. The different peak periods are color coded, and described in the legend below the chart, to enable readers to easily identify when they are using the most electricity.

Weekday Date Range Statement: This statement identifies the date range that is used to determine the information in the bar chart. For example, the statement might say, "Your average hourly weekday electricity use January 15, 2024 - January 29, 2024".

Weekend Chart Title: The title of the second chart informs the user that the data is related to their weekend energy usage.

Weekend Bar Chart: The chart depicts the average weekend electricity use during each hour of the day. Utilities typically do not have peak periods on weekends, therefore, this chart is typically shown in a single color with a legend below. The data helps readers understand when they are using energy on the weekends.

Weekend Date Range Statement: This statement identifies the date range that is used to determine the information in the bar chart. For example, the statement might say, "Your average hourly weekend electricity use January 15, 2024 - January 29, 2024".

Tiered TOU Plans

For tiered TOU plans, the module varies in the following way:

Insight Statement 2: This statement explains how much more expensive energy is during peak hours compared to off-peak hours, and asks the reader to try and shift usage away from the on-peak time period. The tier with the highest cost ratio is used when calculating the price ratio in the statement, which might say, "On-peak hours are up to 2.2x more expensive than off peak hours. On weekdays, try to shift usage away from 4pm - 7pm when possible."

Demand Rate Plans

For demand rate plans, the module varies in the following way:

Insight Statement 2: For Demand TOU plans, the cost ratio is already stated in the Demand TOU 101 module. Therefore, the first sentence of the statement is removed. The statement might say, "On weekdays, try to shift usage away from 4pm - 7pm when possible."

Multiple High-Cost Periods

If there are two or more highest costs periods, the module varies in the following way:

Insight Statement 2: The last sentence of the statement varies for multiple high-cost periods to tell the user that there are multiple time periods when they should shift their energy use, as follows:

- **Two high-cost periods:** The statement might say, "On-peak hours are up to 2.2x more expensive than off peak hours. On weekdays, try to shift usage away from 7am - 10am and 4pm - 7pm when possible."
- **Three or more high-cost periods:** The statement uses the name of the highest cost period, and might say "On-peak hours are up to 2.2x more expensive than off peak hours. On weekdays, try to shift usage away from on-peak when possible."

Low Peak Usage

If the percentage of peak usage is below a certain threshold, the module varies in the following ways:

Module Title: The title of the module changes to "Can you reduce your energy use?"

Module Graphic: No graphic is included.

Insight Statement 1: Not included in the module.

Insight Statement 2: Not included in the module.

TOU Hours the Same on Weekdays and Weekends

If TOU hours are the same during weekdays and weekends, only one chart is included in the module. The chart encompasses both weekdays and weekend days.

The chart title and the date range statements are changed as follows for cost variations:

- **Chart title:** "Your average hourly cost"
- **Date range statement:** "Your average hourly electricity spending January 15, 2024 - January 29, 2024"

The chart title and the date range statements are changed as follows for usage variations:

- **Chart title:** "Your average hourly usage"
- **Date range statement:** "Your average hourly electricity use January 15, 2024 - January 29, 2024"

Holiday Variation

When a holiday is included in the time period, the module is updated as follows for cost variations:

Chart titles: "Your average <weekend or weekday> and holiday spending"

Date range statements: "Your average hourly <weekend or weekday> and holiday electricity spending January 15, 2024 - January 29, 2024"

The module is updated as follows for usage variations:

Chart titles: "Your average <weekend or weekday> and holiday usage"

Date range statements: "Your average hourly <weekend or weekday> and holiday electricity use January 15, 2024 - January 29, 2024"

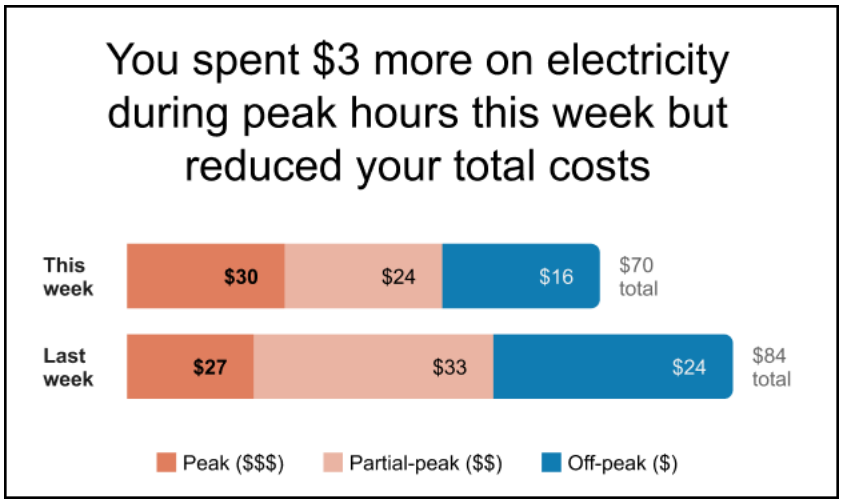
Weekly Comparison Module

This module compares the customer's electricity costs during peak hours in the current week to their spending during peak hours in the previous week, and provides varying feedback based on how the customer's costs in the week compare to those of the previous week.

Design

This image shows an example of the Weekly Comparison module:

Figure 7-37 Weekly Comparison Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Bar Colors Colors in the graph can match the utility's color palette. The colors in the example represent the default colors.	**Required** Choose one of the following: • Use the default colors. • Work with your Delivery Team to specify other colors.
Comparison Range (Not Depicted) The comparison range determines whether the customer's energy use for the current week falls within the "neutral" state. The neutral state, which provides the message, "You used about the same…" occurs if this week's usage is within +/- *n* of the specified range. The range is configurable and can be stated as a percentage or in absolute dollars. **Default**: The default values are +/- 5% for usage and +/- $1 for cost.	**Required** Use the following range:

To see how this module fits into the overall user experience, see:

- Design and Configuration: Demand Rate Coach
- Design and Configuration: Time of Use Rate Coach

User Experience Variations

This section discusses the user experience variations in the Weekly Comparison module.

Customer Spent More This Week

If a customer spends more during peak hours this week, the TOU Coach Weekly Comparison module displays the following:

- **Insight Statement:** You spent [$X] more on electricity during peak hours this week.
- **Insight Graphic:** The module displays an exclamation point next to the insight statement.

Customer Spent About the Same This Week

If a customer spends about the same amount during peak hours this week, the TOU Coach Weekly Comparison module displays the following:

- **Insight Statement:** You spent about the same on electricity during peak hours this week.
- **Insight Graphic:** The module does not display a graphic next to the insight statement.

Usage Variation

If the email is designed to display usage instead of cost, the module displays the following:

- **Insight Statement:** You used <XX% more/less> electricity during peak hours this week

- **Bar Labels:** The labels to the left of the graph read "This week's peak usage" and "Last week's peak usage", and the labels to the right display the usage in kWh.
- **Decimal Places for kWh:** When displaying usage, you can configure the module to include up to two decimal places in the kWh display. For example, 4.25 kWh.

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the TOU Rate Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

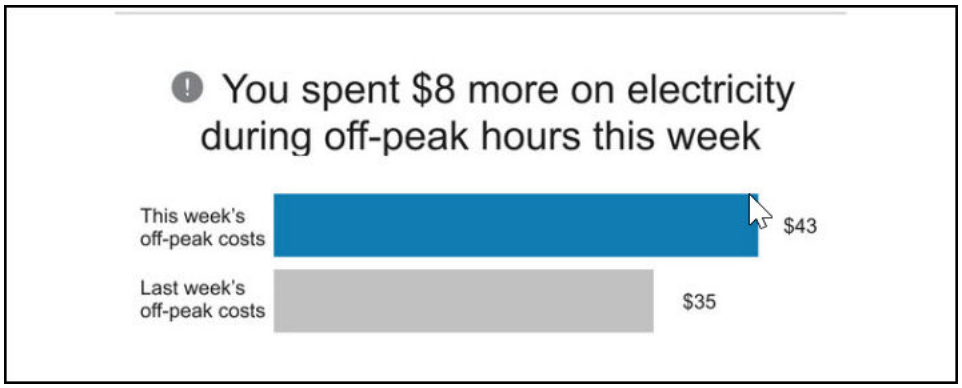
- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

Rates with Off-Peak and Partial-Peak Periods Only

The module automatically evaluates whether there is an on-peak period in the current rate plan. If there is no on-peak period in the current rate plan, the module will use part-peak data to show off-peak usage.

> **Note**
>
> This variation is only applicable to the Weekly Comparison module and the Peak Usage Summary module. Disaggregation and bill period modules do not support an off-peak usage variation.

Figure 7-38 Off-Peak and Partial-Peak Periods Only



Weekly Peak Period Disaggregation Module

This module provides the customer with insights about what appliances they use the most during peak hours each week as part of their TOU Weekly Rate Coach email with peak period disaggregation. It highlights up to four customer end uses, and encourages the customer to improve their report insights by completing or updating their Home Energy Analysis. End uses are split into quantified and unqantified groups based primarily on the detail with which we can provide information about the appliance use.

Quantified End Uses: Quantified categories include end uses that our disaggregation algorithms are able to provide an accurate estimate of how much of the appliance a customer was using during peak hours, and therefore can be associated with a specific metric, such as kWh or percentage. Possible quantified end uses include:

- Cooling
- EV Charging
- Water Heating
- Dryer Use

A bar located next to the category indicates the percentage that category contributed to the customer's energy overall energy use.

Unquantified End Uses: The unquantified category includes appliances that can be accurately detected if used during peak hours. Possible unquantified end uses include:

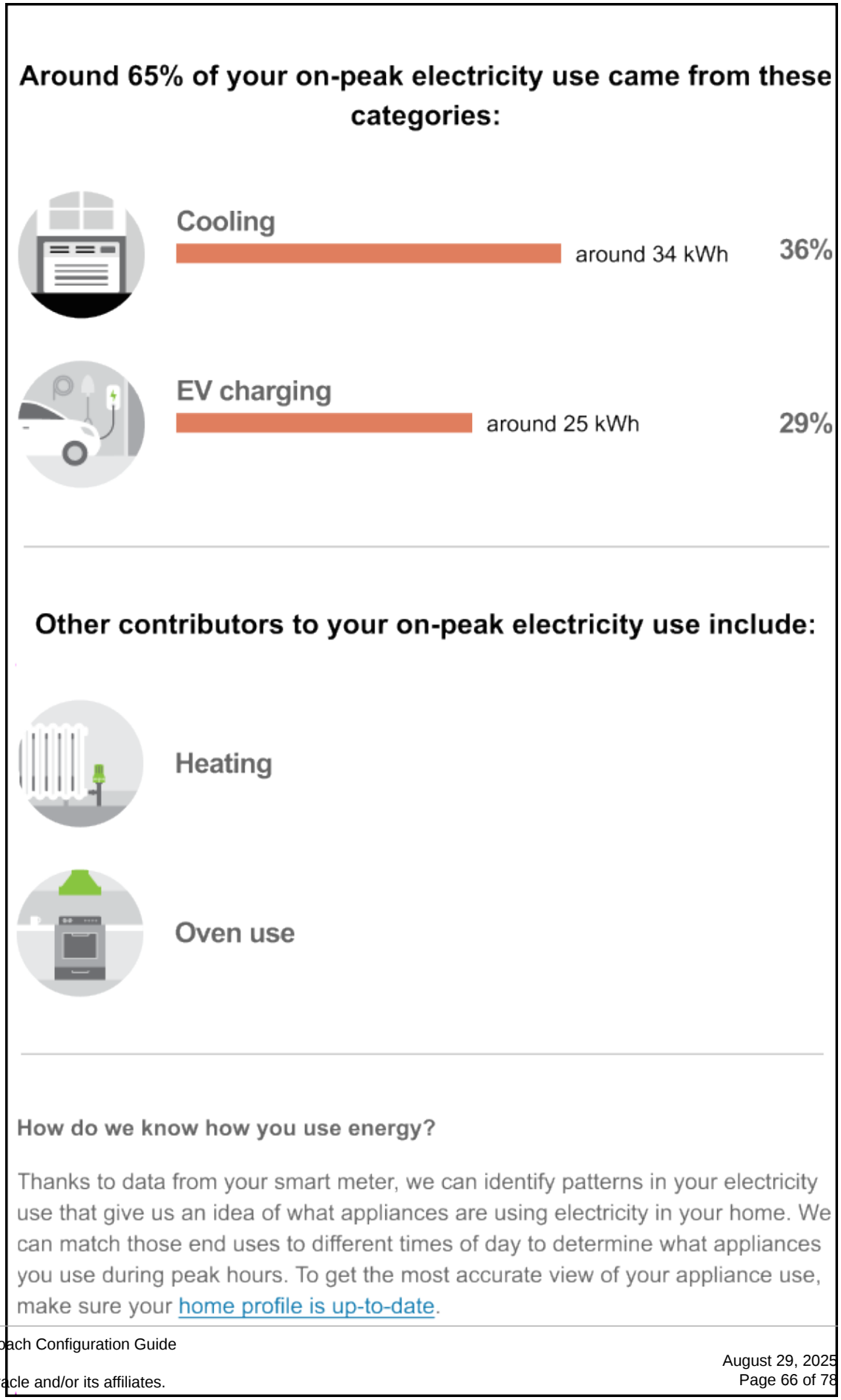
- Heating
- Oven use

Together, the quantified and unquantified groups provide the customer with a comprehensive picture of what contributes to their peak hour energy use. The goal of this module is to raise the customer's awareness of which of their appliances contribute the most to on-peak energy use so that they can take action to save energy during on-peak periods.

Design

This image shows an example of the Weekly Peak Period Disaggregation module:

Figure 7-39 Weekly Peak Period Disaggregation Module



Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Allowable number of missed days of scored AMI data By default, the number of allowable missed days of scored AMI data is 0.	**Optional** Choose one of the following: • Use the default. • Work with your Delivery Team to customize the number of allowable missed days of scored AMI data.
Exclude Disaggregation Categories Shown The default is heating, cooling, EV charging, dryer use, water heating, dishwasher use, and oven use. Any of these can be excluded by the utility. **Note** This configuration is shared with the Post-Bill Report.	**Optional** Choose one of the following: • Use the default. • Work with your Delivery Team to exclude disaggregation categories from the module.
Minimum Disaggregation Categories You can specify the minimum number of disaggregation categories that are needed for the module to display. **Default:** 1	**Optional** Choose one of the following: • Use the default number. • Use the following number:
Minimum Threshold for Values Specify the minimum threshold for values. Default values are: • Usage values - default is 10 kWh • Usage ratios - default is 1% • Costs - default is $1 **Note** This configuration is shared with the Post-Bill Report, but there is no cost variation for this module.	**Optional** Choose from the following: • Use the default values. • Use these values:

Configuration Option	Input Value
Decimal Places Default number of decimal places: • Usage values (kWh): 2 • Usage ratios (%): 2 • Costs ($): 0 These are independently configurable from each other.	**Optional** Choose from the following: • Use the default values. • Use these values:

> **Note**
>
> This configuration is shared with the Post-Bill Report, but there is no cost variation for this module.

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This section discusses the user experience variations in the Weekly Peak Period Disaggregation module.

Header

The header varies by the number of quantified and unquantified end uses:

Data States	Number of Appliances	Text
Quantified Header	2 or more	Around X% of your on-peak energy use came from these categories:
Quantified Header	1	Around x% of your on-peak energy use came from <use category>.
Unquantified Header	0	Not applicable. Section is omitted.
Unquantified Header	1	<category> was a contributor to your energy use.
Unquantified Header	2 or more	Other contributors to your on-peak energy use include:
Unquantified Header	2 or more with quantified section omitted.	Contributors to your on-peak energy use include:

Call-to-Action

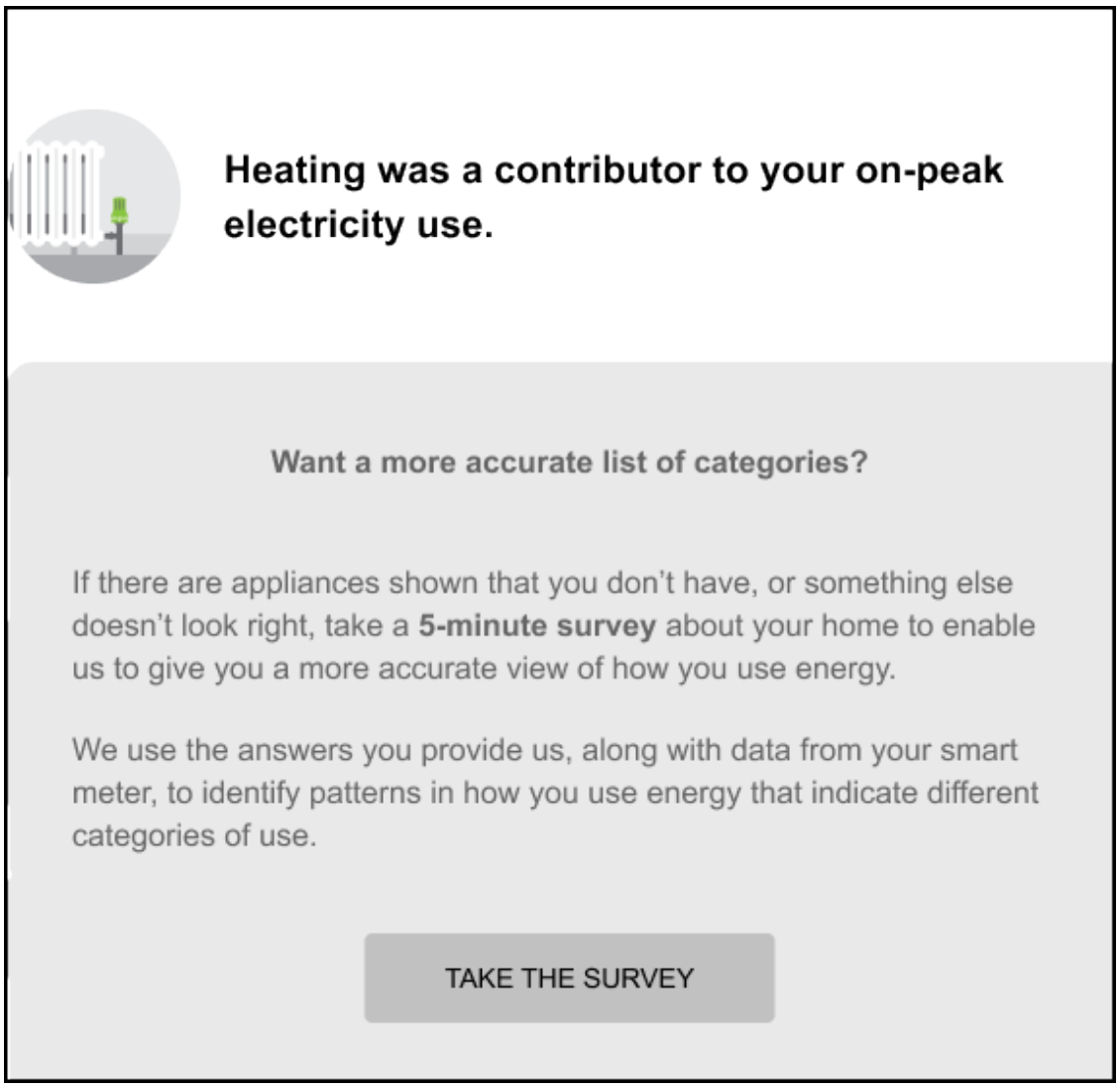
The call-to-action section varies depending on whether the customer has completed the Home Energy Analysis.

Home Energy Analysis Status	Heading	Body Text	Link or Button
Incomplete	Want a more accurate list of categories?	If there are appliances shown that you don't have, or something else doesn't look right, take a 5-minute survey about your home to enable us to give you a more accurate view of how you use energy. We use the answers you provide us, along with data from your smart meter, to identify patterns in how you use energy that indicate different categories of use.	Button
Complete	How do we know how you use energy?	Thanks to data from your smart meter, we can identify patterns in your electricity use that give us an idea of what appliances are using electricity in your home. We can match those end uses to different times of day to determine what appliances you use during peak hours. To get the most accurate view of your appliance use, make sure your home profile is up-to-date.	Link

Zero Quantified Use Categories and One or More Unquantified Use Categories

If there are no quantified use cases, the quantified section is omitted. The unquantified header is omitted when there is only one unquantified category. The text next to the unquantified icon indicates that the use category contributed to their on-peak usage. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis.

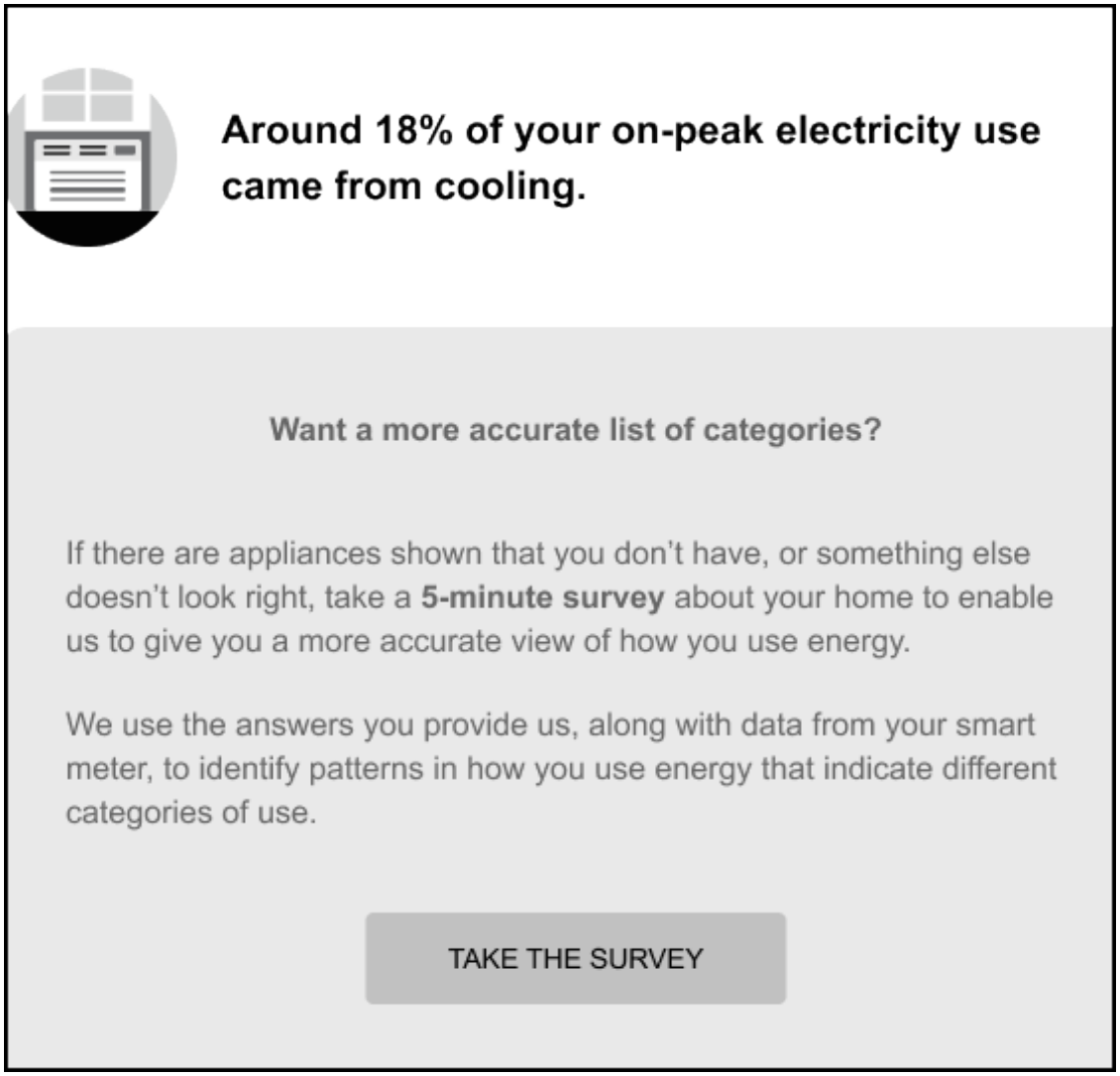
Figure 7-40 Variation Example



One Quantified Use Category and Zero Unquantified Use Categories

If there is only one quantified category, the quantified section header is omitted. Text indicating what percent of the on-peak electricity usage came from the use category is located next to the use case icon. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis. The unquantified section is omitted.

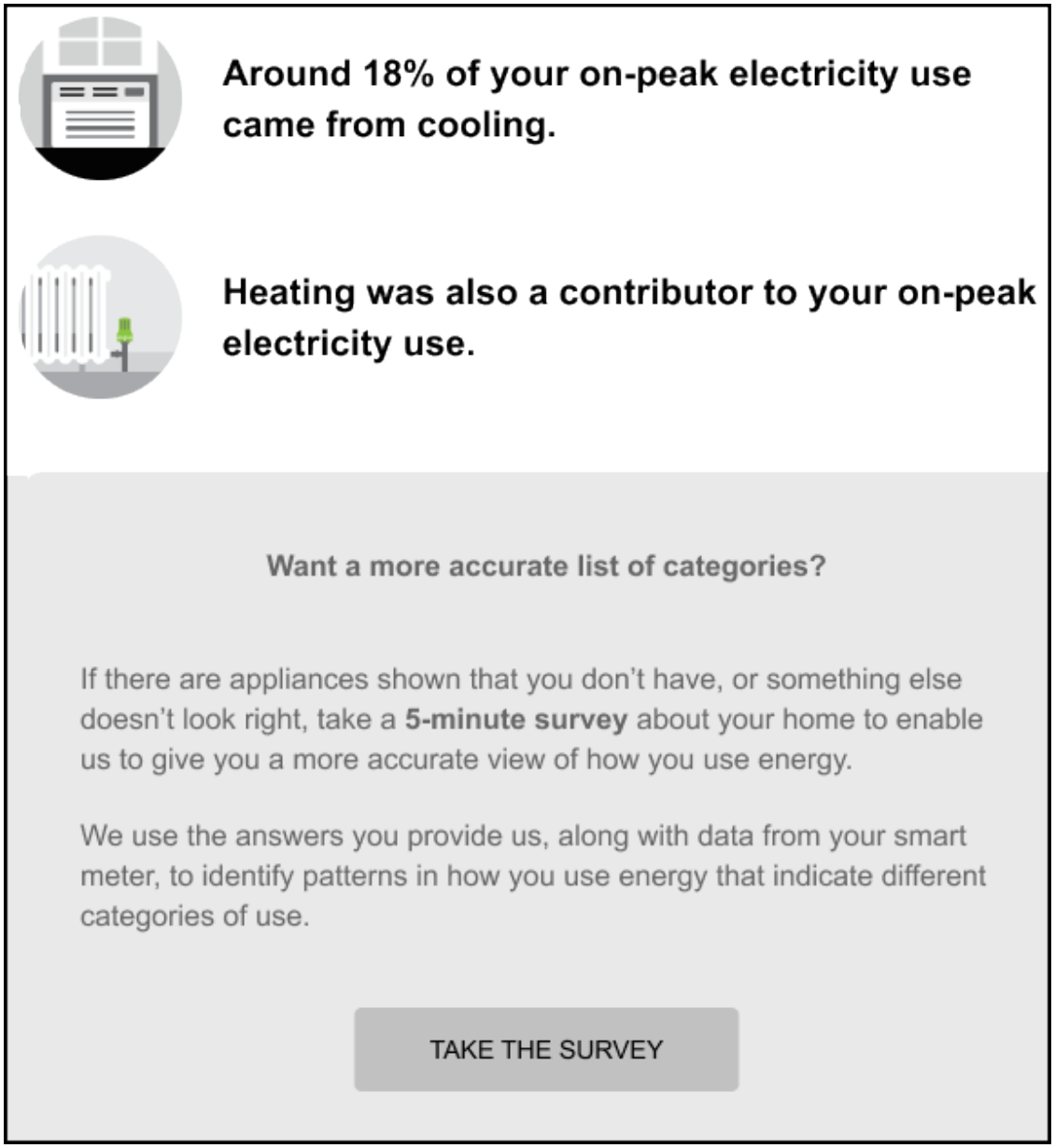
Figure 7-41 Variation Example



One Quantified Use Category and One Unquantified Use Categories

If there is only one quantified and one unquantified category, the headings are omitted. Text next to the quantified icon indicates what percent of the on-peak electricity usage came from the use category. Text next to the unquantified category indicates that it contribute to their on-peak use. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis.

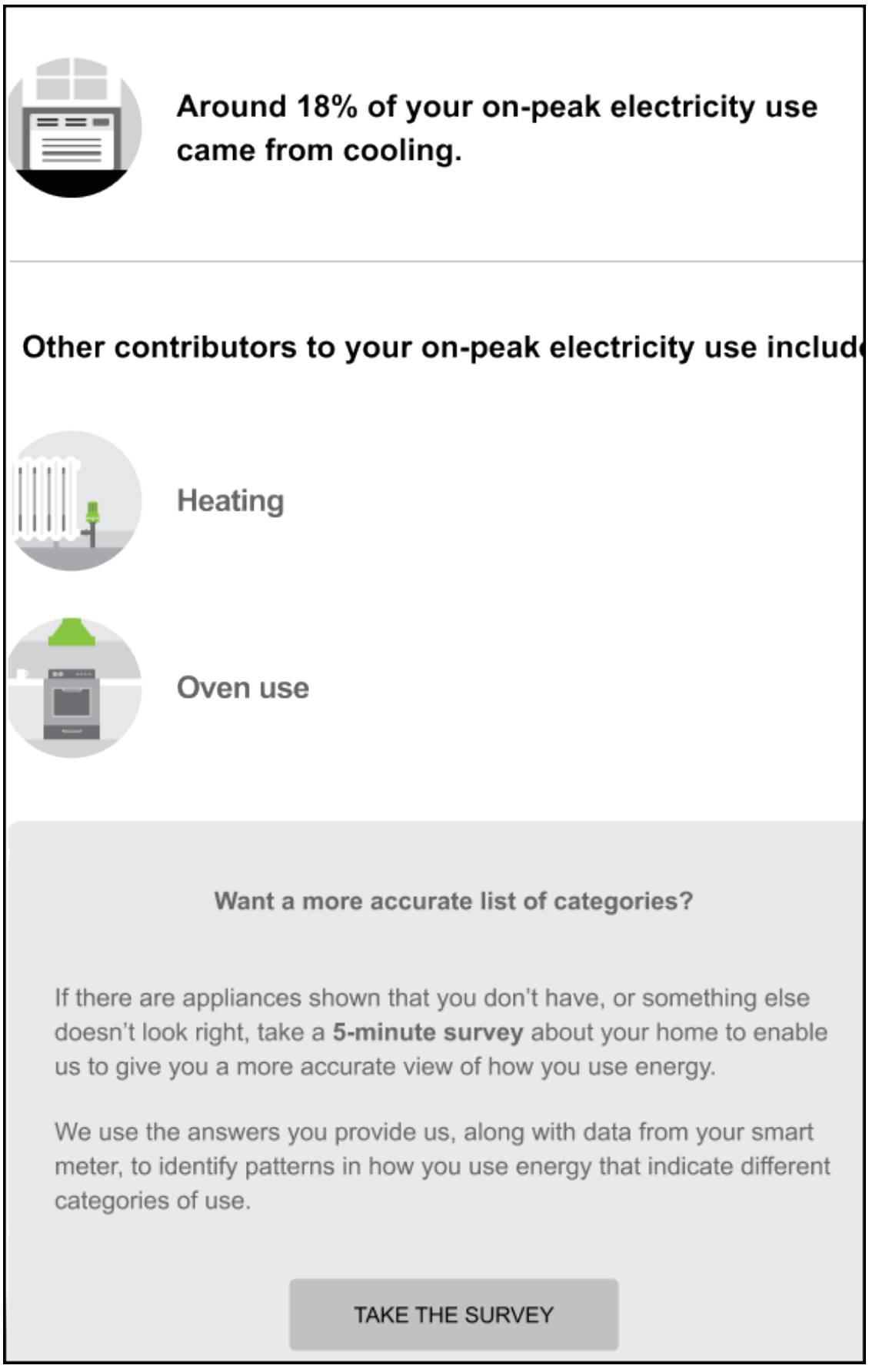
Figure 7-42 Variation Example



One Quantified Use Category and Two or More Unquantified Use Categories

The quantified section omits the use categories heading. Text next to the quantified use icon indicates what percent of the on-peak electricity usage came from the use category. The unquantified header indicated that the listed categories were also contributors to on-peak usage. The names of the unquantified use categories are located next to the unquantified use icons. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis.

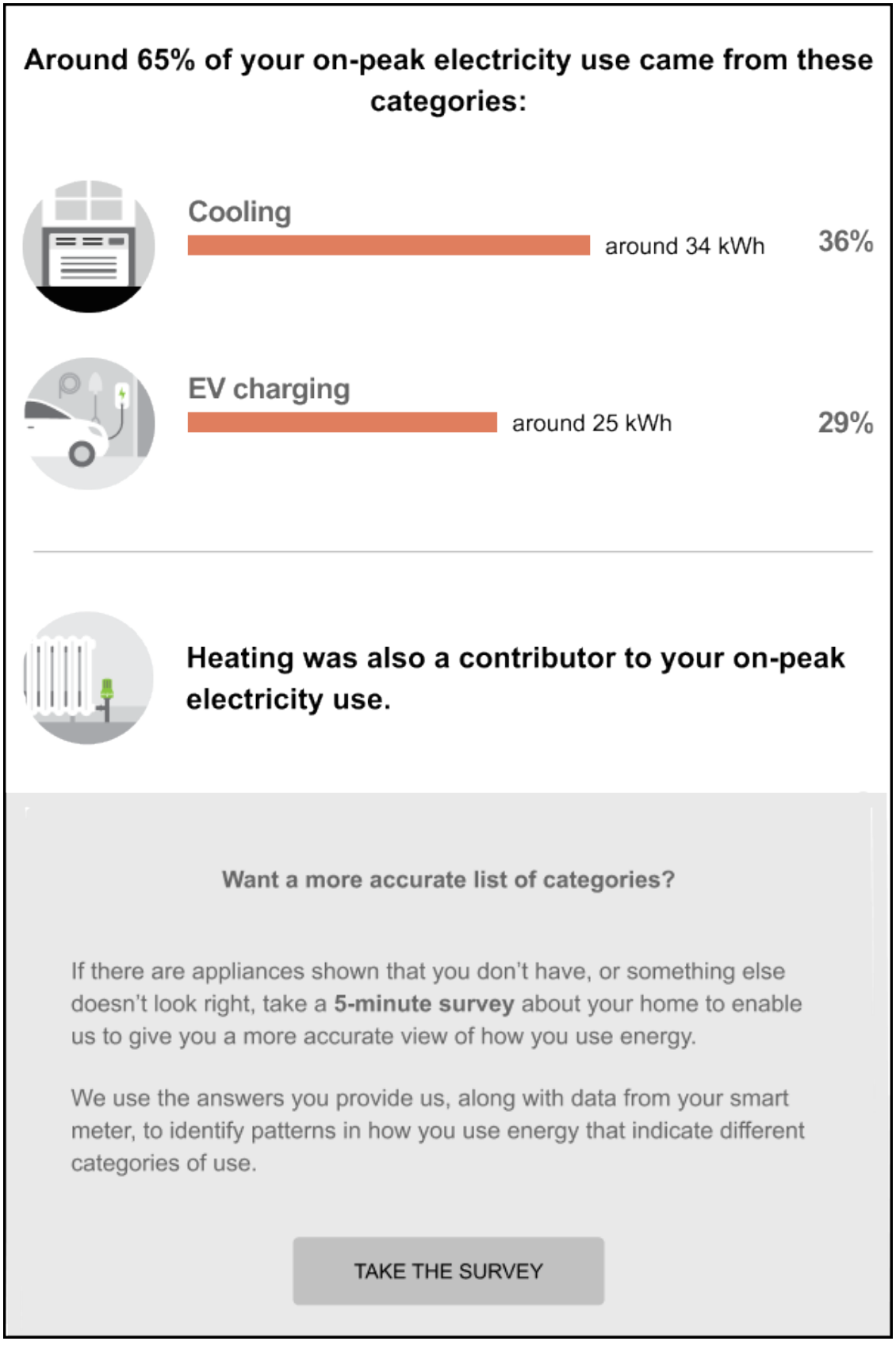
Figure 7-43 Variation Example



Two or More Quantified Use Categories and One Unquantified Use Category

The quantified section includes the quantified header and quantified end use category breakdown. The unquantified use header is omitted from the unquantified use section. Text next to the unquantified category indicates that it contribute to their on-peak use. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis.

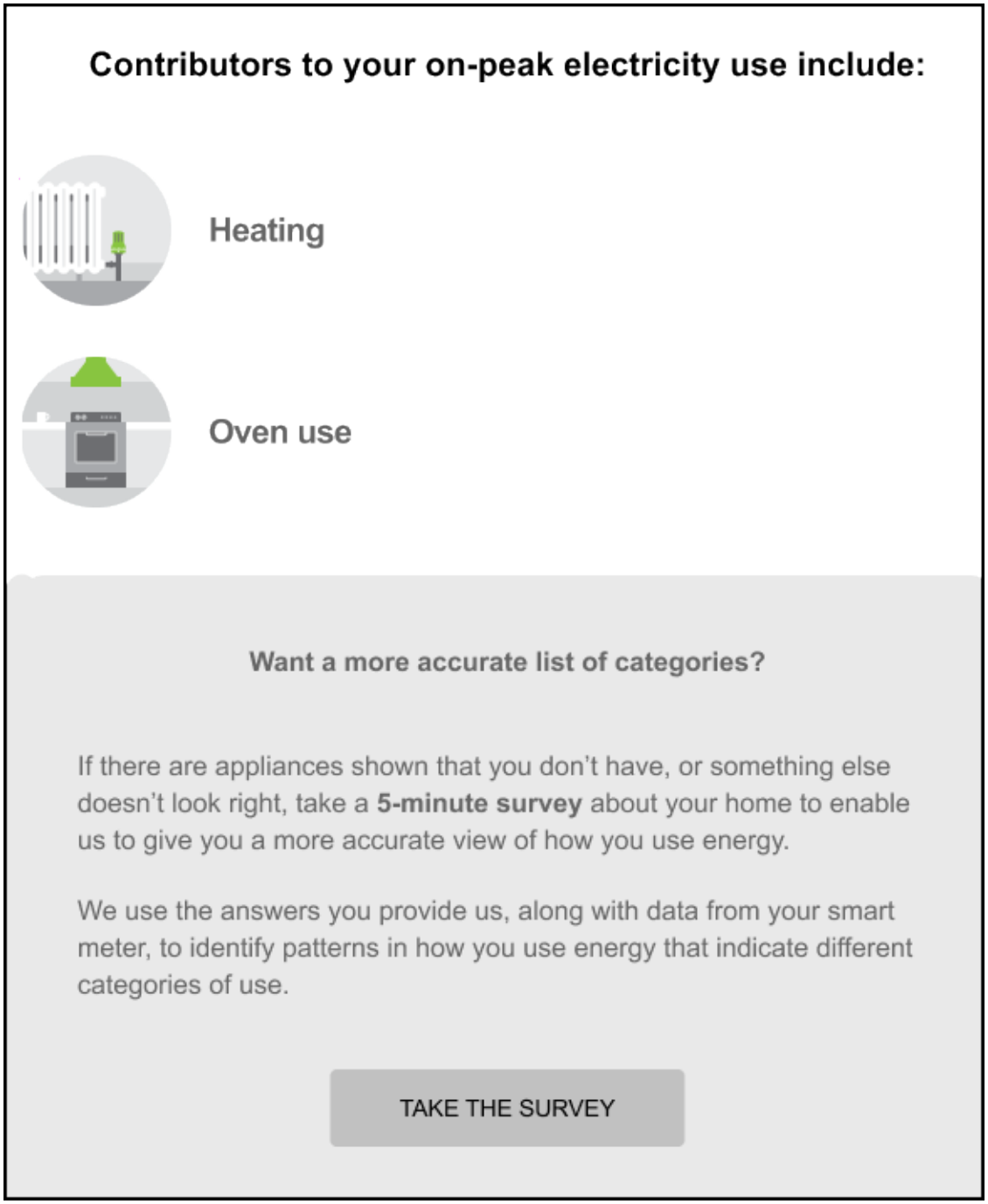
Figure 7-44 Variation Example



Zero Quantified Use Categories and Two or More Unquantified Use Categories

The quantified section is omitted. The unquantified use section includes a header. The names of the unquantified end use category is included next to the icon. The call-to-action section varies depending on whether the customer has completed their Home Energy Analysis.

Figure 7-45 Variation Example



Zero Quantified Use Categories and Zero Unquantified Use Categories

The module is not included in the report.

Data Overlapping the Seasonal Transition Date

Costs cannot be calculated for this module if the seasonal transition occurs within the module look back period. The behavior of the module is impacted by whether or not the peak hours data has changed.

Peak hours have changed: If peak hours changed at the season transition, and the look-back period for a given module overlaps the season transition date, then the module fails and the individual module is not included in the Time of Use Coach email type. The report will still be sent with the remaining modules.

Peak hours have not changed: If the customer's peak hours have not changed, one the following variations occurs:

- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed during the season transition date*, then all of the report modules are shown in usage form. Costs are not calculated or shown.

Welcome Message Module

This module appears below the header and introduces customers to the program. This module is only included in the Introduction email, not in subsequent emails.

Design

This image shows an example of the Welcome Message module:

Figure 7-46 Welcome Message Module

Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
Email Program Name The introduction paragraph of the Welcome Message module introduces the customer to the email program and specifies the name of the email program. **Default:** Rate Coach.	**Required** Choose one of the following: • Use the default name, Rate Coach. • Use the following name:
Rate Plan Details The second paragraph of the Welcome Message module provides details about the rate plan. Utility customers can configure the name of the rate plan and the date range that the plan is in effect. Both options are shown in bold in the following example paragraph: You're currently on a **summer** rate plan that charges different prices throughout the day, and lasts from **April 25-September 30**. By using less electricity when it's most expensive, others have saved on average $5 to $30 a month. Additionally, the sentence "By using less electricity when it's most expensive, others have saved on average $5 to $30 a month" was shown to increase customer interest in the emails and to provide context for how much they could save if they change their behavior. The $5-$30 stated range was based on study findings. If these numbers do not match savings figures you expect for your territory, talk to your Service Delivery Manager about using different high and low numbers. We recommend using a range rather than a single value.	**Required** Use the following rate plan name: Use the following date range:

To see how this module fits into the overall user experience, see Design and Configuration: Time of Use Rate Coach.

User Experience Variations

This module has no user experience variations.