

Oracle Utilities Opower Load Shifting Cloud Service, Rate Coach

Load Shifting Rate Coach Configuration Guide V3



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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 V3 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. 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.

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 Delivery Team how customization options could enhance your program.

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: TOU Load Shifting Report

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

These emails are designed to encourage AMI customers on a TOU electricity rate plan to shift their electricity use to off-peak hours. The 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 Load Shifting Report emails each week:

- Introduction emails
- Weekly Coach emails
- Post-Bill Report emails

Each of these emails is comprised of a specified set of 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.

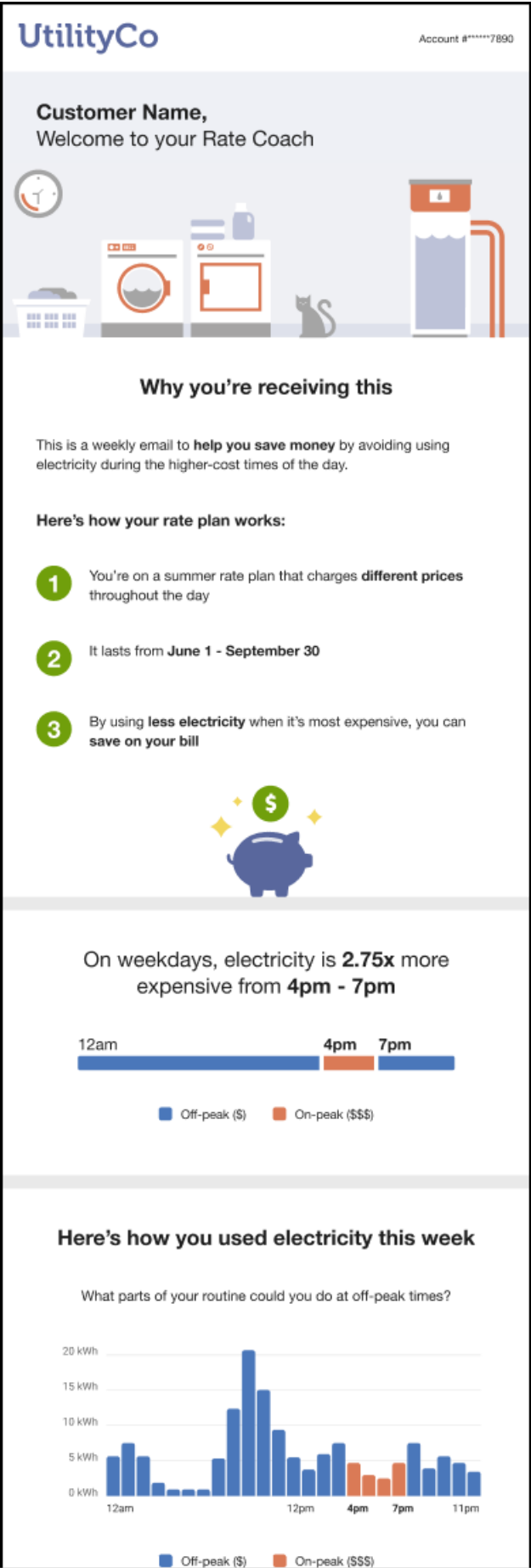
Introduction Emails

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](#)
- [Introduction Module](#)
- [Transition Module](#) - Welcome State
- [TOU 101 Module](#)
- [Hourly Usage Module](#)
- [Big Appliances Module](#)
- [Easy Open Module](#) (optional)
- [Email Footer Module](#)



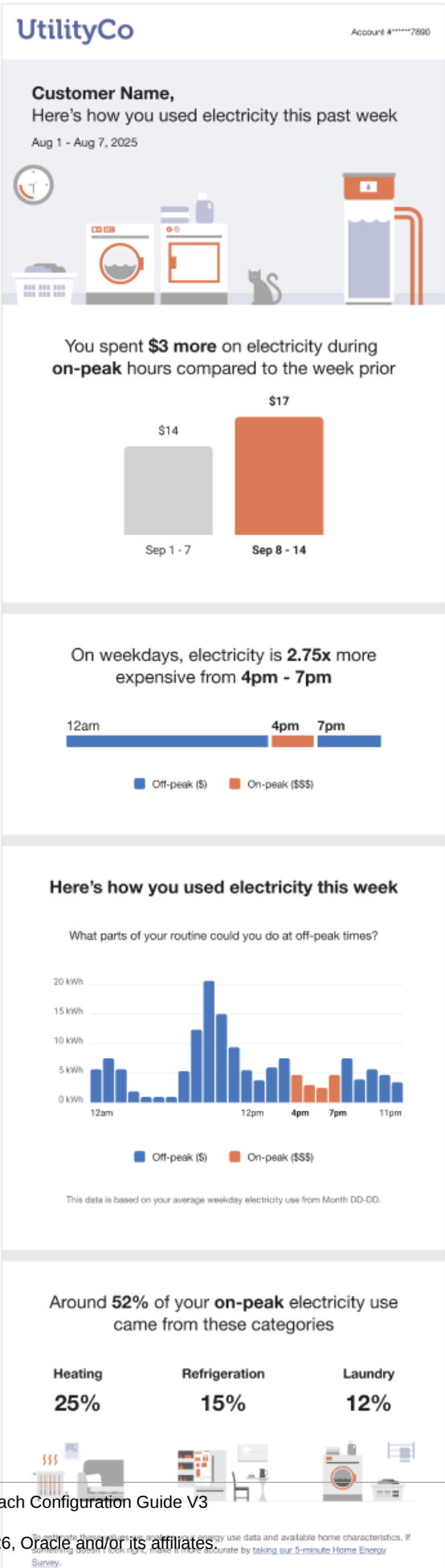
Weekly Emails

The Weekly 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. The email also includes a breakdown of up to three appliances that were used during peak hours.

Customers begin receiving the Weekly email after they receive their Introduction email, and do not receive the Weekly email in weeks when they receive the Post-Bill Report Email.

The Weekly email contains these modules, in the order listed:

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

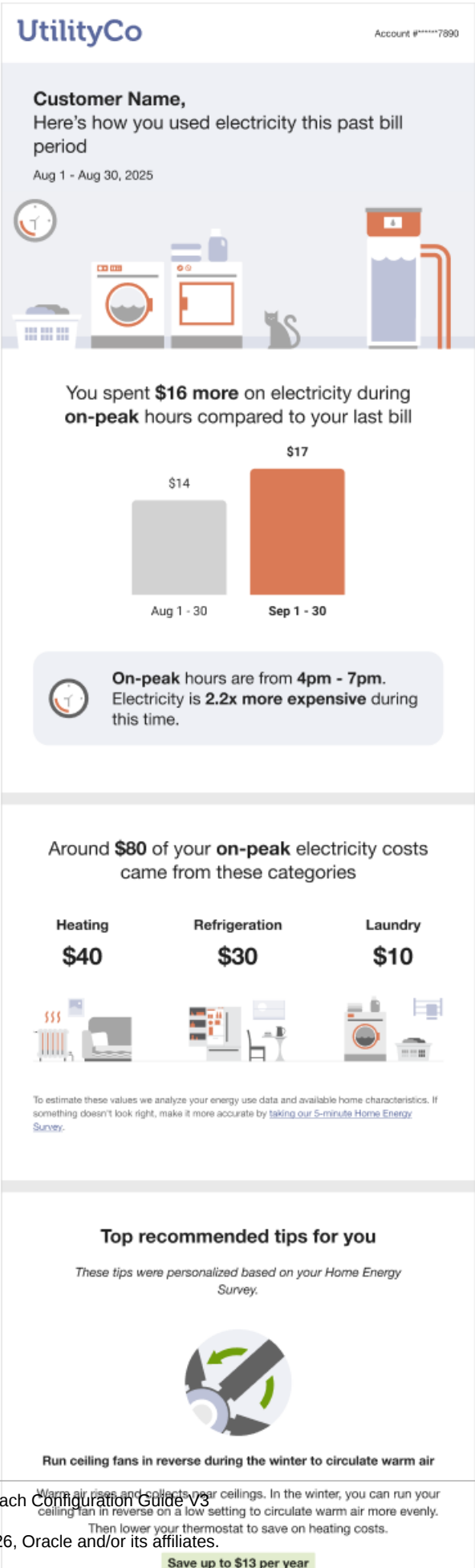


Post Bill Report Emails

The Post-Bill Report is delivered to customers at the end of 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 Module](#)
- [Introduction Module](#)
- [Post-Bill Report Bill Comparison Module](#)
- [Peak Period Disaggregation Module](#)
- [Tips Module](#)
- [Load Shifting Collective Benefit Module](#)
- [Email Footer Module](#)



Design and Configuration: Flat Rate Load Shifting Report

This section discusses the design, configuration options, and the user experience variations that are specific to the Flat Rate Load Shifting Report emails.

The Load Shifting Cloud Service, Rate Coach V3 provides modules that can be combined with modules from the Weekly Energy Update v3 emails, to produce weekly Flat Rate Load Shifting Report emails. These emails are digital messages sent each week through the email channel to inform customers about how they used energy over the past week, or the past bill period. These emails also educate customers about how they can shift their usage to times when there is lower demand on the utility grid.

The series of emails includes:

- Introduction email
- Weekly emails
- Post-bill report emails

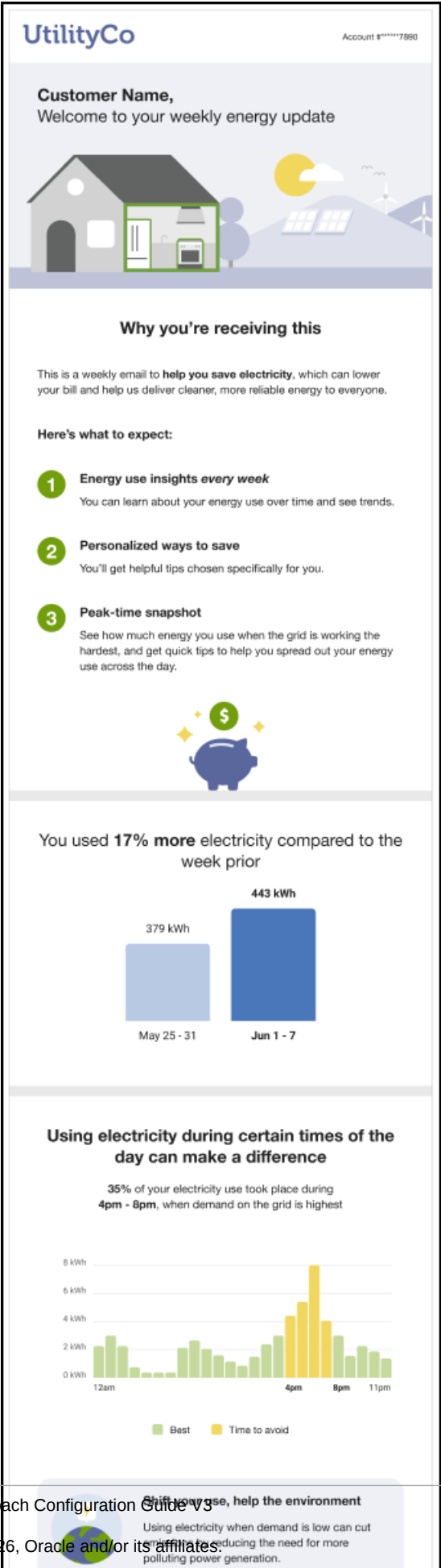
Introduction Emails

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,

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

- [Email Header and Subject Lines Modules](#)
- [Transition Module](#)
- [Weekly Comparison Module](#)
- [24 Hour Chart for Flat Rates Module](#)
- [Big Appliances Module](#)
- [Email Footer Module](#)

This image shows an example of the Introduction email:



Weekly Emails

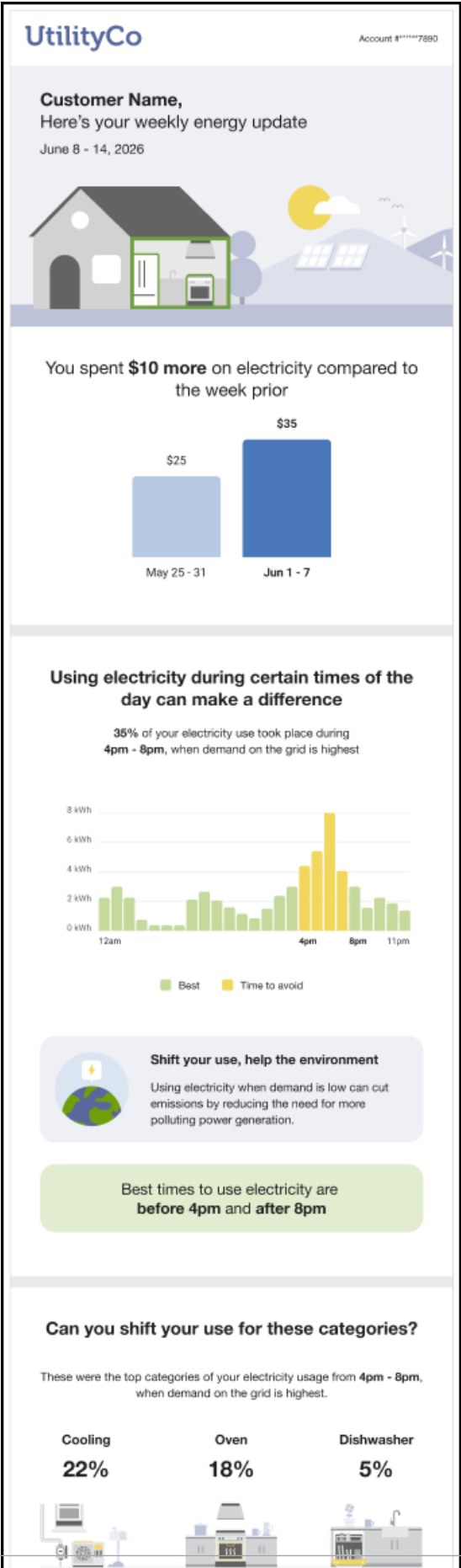
The Weekly Flat Rate Load Shifting Report email is delivered to customers at the end of each week. It provides a comparison between electricity spending during the current week and the previous week. The email also includes

Customers begin receiving the Weekly Flat Rate Load Shifting Report email after they receive their Introduction email, and do not receive the weekly email in weeks when they receive the Post-Bill Report email.

The Weekly Flat Rate Load Shifting Report email contains these modules, in the order listed:

- [Email Header and Subject Lines Modules](#)
- [Weekly Comparison Module](#)
- [24 Hour Chart for Flat Rates Module](#)
- [Flat Rate Disaggregation Module](#)
- [Tips Module](#)
- [Email Footer Module](#)

This image shows an example of the weekly email:



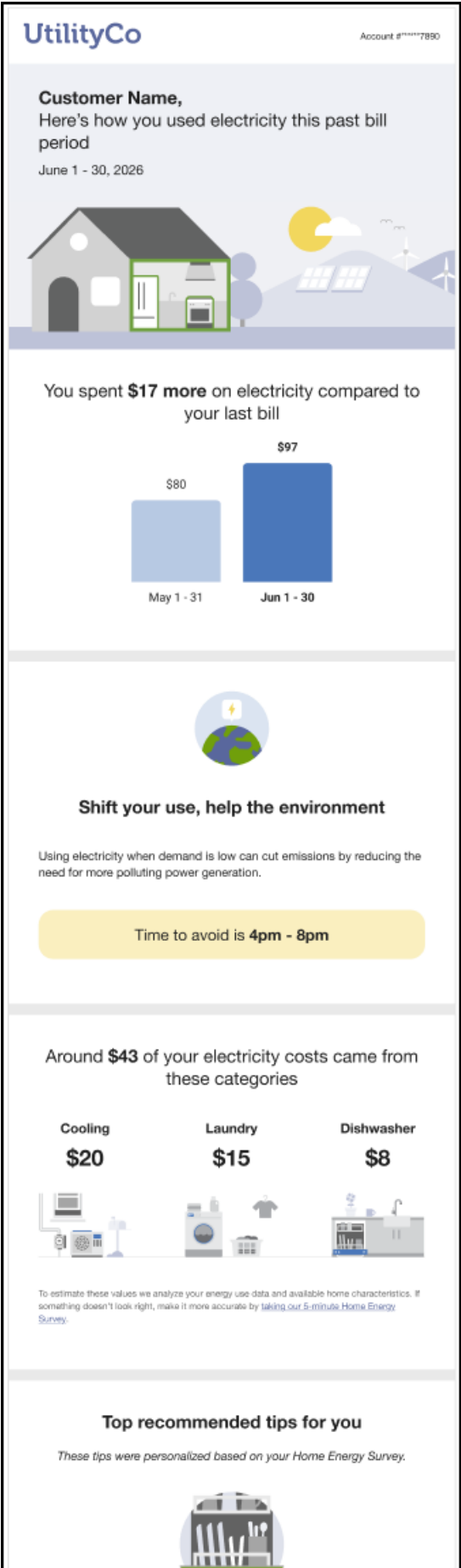
Post Bill Report Emails

The Post-Bill Report is delivered to customers at the end of each month. The report helps customers understand which appliances they are using during peak hours, and how that usage contributes to their energy charges. It includes a.

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

- [Email Header and Subject Lines Modules](#)
- [Post-Bill Report Bill Comparison Module](#)
- [Shift Nudge Module](#)
- [Flat Rate Disaggregation Module](#)
- [Email Footer Module](#)

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



3

Delivery

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

Waking Hours: Messages must be delivered during waking hours (between 9:00 AM and 6:00 PM) 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 Post Bill Report email is delivered. During all other weeks, customers receive the weekly email. Note that customers cannot opt out of one type of Load Shifting email without also opting out of all Load Shifting 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.

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 (TOU) or flat-rate electric rate plan, and shifting your electric usage to off-peak times could benefit you, your utility, and your community. 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, and the email can help you save money on your electricity bill by shifting your peak energy use to off-peak hours. In a flat-rate plan, electric costs don't change throughout the day, but the utility is encouraging users to shift their usage to times when the grid is less busy, which provides a more reliable grid for all customers.

How was I selected to be part of this program?

You were selected to be part of this program because you are currently on an eligible rate plan. These communications will help you save energy and money during times of day when energy is more expensive, or will help your utility provide customers with a more reliable grid.

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

These reports are 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. For example, TOU 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](#).

A

Appendix: Load Shifting Email Modules

The Load Shifting Cloud Service, Rate Coach V3 includes emails that 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 or when the grid is busiest. This product includes the following email communication features:

- TOU Load Shifting Report Emails
- Flat Rate Load Shifting Report Emails

Each of these features includes a series of emails sent to customers who are on Time of Use (TOU) or flat rate electric plans. These emails are made of up a series of interchangeable modules, which are documented in this appendix.

Note

Be aware that some modules are used in more than one report. Also, The [Easy Open module](#), which is part of the Proactive Alerts Cloud Service, can also be included in these emails.

24 Hour Chart for Flat Rates Module

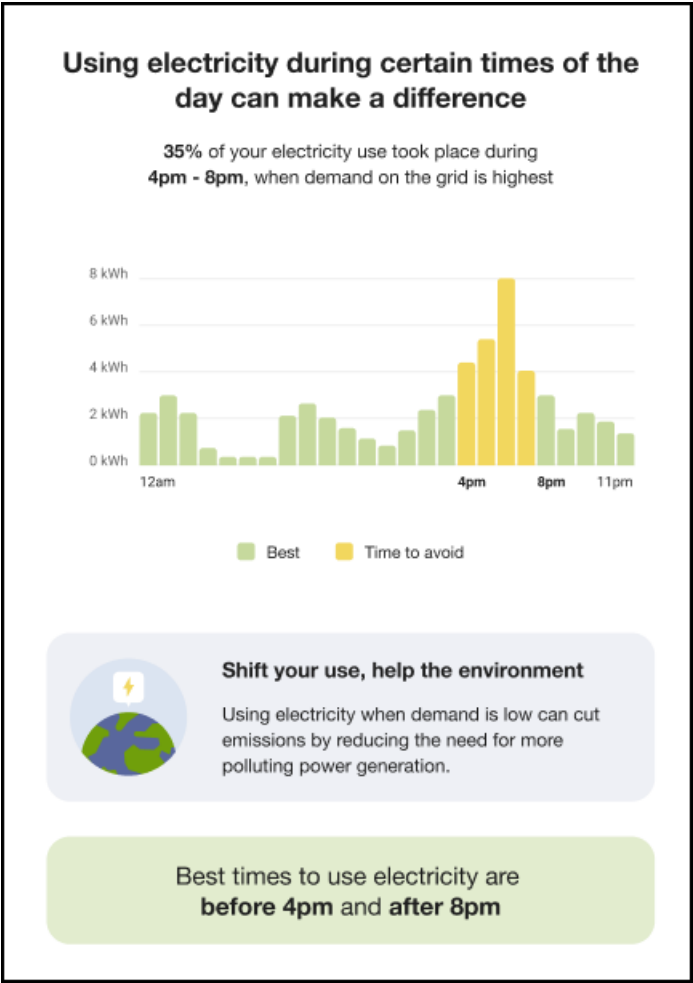
The 24 Hour Chart for Flat Rates module helps customers understand how their electricity usage is distributed throughout the day, with a specific focus on peak hours. It shows how much electricity they used during peak periods and provides a clear 24-hour view of their average usage over the past week.

The chart makes consumption patterns easy to interpret at a glance. By visualizing when energy is used most and highlighting opportunities to shift usage, this module encourages customers to make more informed decisions about when they consume electricity. These changes can help reduce strain on the grid during peak periods and support environmentally responsible energy usage.

For utilities, this module supports demand management goals and promotes energy-conscious behavior. It enhances customer engagement by delivering timely, relevant insights that encourage customers to shift usage to optimal times, improving grid efficiency and contributing to a more sustainable energy system.

Design

This image shows an example of the 24 Hour Chart for Flat Rates 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.

Table A-1 Configuration Options

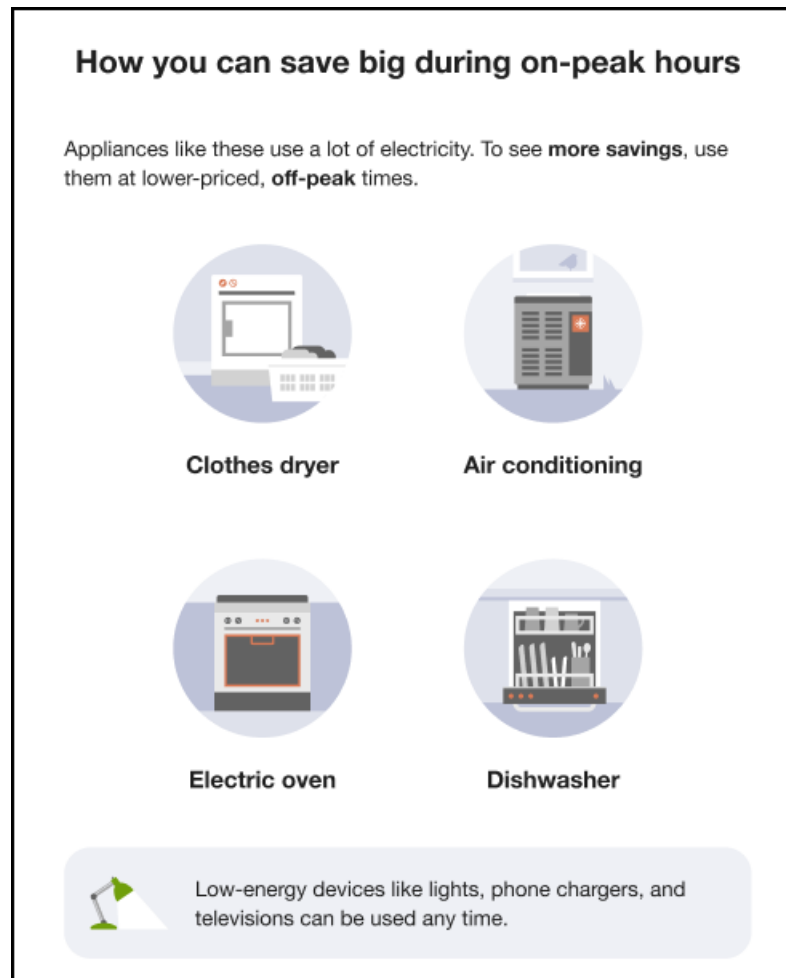
Configuration Option	Input Value
Image Colors Colors in the images can be updated to match the utility's color palette, if desired.	Optional Choose one of the following: - Use the default colors. - Work with your Delivery Team to specify other colors.
Peak Hours Specify the hours that are considered Peak Hours. For example, 4pm - 8pm on weekdays.	Required Specify your peak hours here:
Best Times Specify the hours that are considered the best times to use electricity. For example, before 4pm and after 9pm.	Required Specify your best times here:

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 module:



Configuration Options

There are no supported configurations for this module.

User Experience Variations

This section discusses how the module can vary.

Flat Rate Load Shifting Report Variation

When this module is included in the Flat Rate Load Shifting Report, it varies as follows:

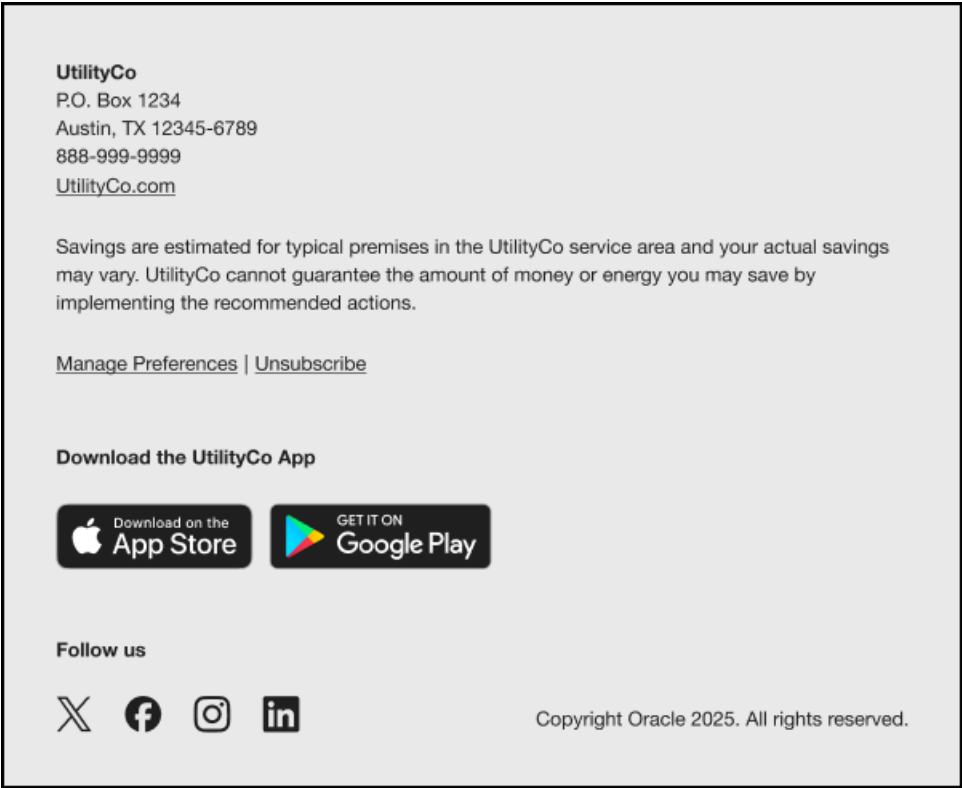
- **Heading:** The heading asks the reader to consider what appliances they can use during a different time period. For example, "What you can shift"
- **High-Energy Insight Statement:** The statement notifies the customer that they can shift their usage to a different time period to use cleaner energy sources. For example, "Appliances like these use a lot of electricity. To use cleaner sources of energy, use them **before 4pm** and **after 8pm**, when demand on the grid is lower."

Email Footer Module

This module includes information that provides more context about the email, includes legal text, and enables users to unsubscribe from emails. The footer can also include links to the utility's mobile application and social media accounts.

Design

This image shows an example of the 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:

User Experience Variations

This section discusses how the module can vary.

Flat Rate Load Shifting Report Variation

When this module is included in the Flat Rate Load Shifting Report, it varies as follows:

- **Heading:** The heading asks the reader to consider what appliances they can use during a different time period. For example, "What you can shift"
- **High-Energy Insight Statement:** The statement notifies the customer that they can shift their usage to a different time period to use cleaner energy sources. For example, "Appliances like these use a lot of electricity. To use cleaner sources of energy, use them **before 4pm** and **after 8pm**, when demand on the grid is lower."

Email Header Module and Subject Lines

These modules deliver high-level information to the customer and introduces users to their weekly emails. These modules are used in all weekly emails, and they include the following:

- Subject lines and preview text that the customer sees before they open the email.
- Header information about who is sending the email and basic customer information the customer sees after they open the email.

Design

Subject Line (not depicted): The subject lines are designed to engage customers. An example of a subject line is, "Michael, you spent less on electricity during peak hours last week (Sep 17 - Sep 23)".

This image shows an example of the 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 .

User Experience Variations

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

Subject Line Variations for TOU Load Shifting Emails

The subject lines and preview text for each TOU Load Shifting Report user experience are listed below.

Email Type and State	Usage Variation	Cost Variation
TOU Load Shifting Introduction Email	Subject Line: Hi <first name>, welcome to your weekly energy update! Preview Text: Learn about how you are using energy, plus ways to save.	Subject Line: Hi <first name>, welcome to your weekly energy update! Preview Text: Learn about how you are using energy, plus ways to save.
TOU Load Shifting Weekly Email Customer Spends Less	Subject Line: <first name>, you used less electricity during peak hours last week <date range> Preview Text: Way to go! Check out savings tips to continue the trend.	Subject Line: <first name>, you spent less on electricity during peak hours last week <date range> Preview Text: Way to go! Check out savings tips to continue the trend.
TOU Load Shifting Weekly Email Customer Spends More	Subject Line: <first name>, you used more electricity during peak hours last week <date range> Preview Text: Check out savings tips for ways to reduce your energy usage.	Subject Line: <first name>, you spent more on electricity during peak hours last week <date range> Preview Text: Check out savings tips for ways to reduce your energy spending.
TOU Load Shifting Weekly Email Customer Spends About The Same	Subject Line: <first name>, you used about the same amount of electricity during peak hours last week <date range> Preview Text: Check out savings tips for ways to reduce your energy usage.	Subject Line: <first name>, you spent about the same on electricity during peak hours last week <date range> Preview Text: Check out savings tips for ways to reduce your energy spending.
TOU Load Shifting Post-Bill Report Email Customer Spends Less	Subject Line: Hi <first name>, you used less electricity during on-peak hours this bill period <date range, year> Preview Text: Great job! Check out what used the most energy during peak hours in your home.	Subject Line: Hi <first name>, you spent less on electricity during on-peak hours this bill period <date range, year> Preview Text: Great job! Check out what used the most energy during peak hours in your home.
TOU Load Shifting Post-Bill Report Email Customer Spends More	Subject Line: Hi <first name>, you used more electricity during on-peak hours the week of <date range, year> Preview Text: Check out what used the most energy during peak hours in your home.	Subject Line: Hi <first name>, you spent more on electricity during on-peak hours the week of <date range, year> Preview Text: Check out what used the most energy during peak hours in your home.
TOU Load Shifting Post-Bill Report Email Customer Spends About the Same	Subject Line: Hi <first name>, you used around the same amount of electricity during on-peak hours this bill period <date range, year> Preview Text: Check out what used the most energy during peak hours in your home.	Subject Line: Hi <first name>, you spent around the same amount of electricity during on-peak hours this bill period <date range, year> Preview Text: Check out what used the most energy during peak hours in your home.

Email Type and State	Usage Variation	Cost Variation
TOU Load Shifting Emails during Pre-Season Transition	Subject Line: Hi <first name>, your seasonal peak hours are about to change <date> Preview Text: Check out the new hours and tips for saving energy.	Subject Line: Hi <first name>, your seasonal peak hours are about to change <date> Preview Text: Check out the new hours and tips for saving energy.
TOU Load Shifting Emails during Post-Season Transition	Subject Line: Hi <first name>, we just transitioned to new seasonal peak hours Preview Text: Review the new hours and discover more tips for saving energy.	Subject Line: Hi <first name>, we just transitioned to new seasonal peak hours Preview Text: Review the new hours and discover more tips for saving energy.

Subject Line Variations for Flat Rate Load Shifting Emails

The subject lines and preview text for each Flat Rate Load Shifting Report user experience are listed below.

Email Type and State	Usage Variation	Cost Variation
Flat Rate Load Shifting Introduction Email	Subject Line: <first name>, welcome to your weekly energy update Preview Text: See your energy insights and peak time trends	Subject Line: <first name>, welcome to your weekly energy update Preview Text: See your energy insights and peak time trends
Flat Rate Load Shifting Weekly Email Customer Spends Less	Subject Line: Weekly energy update <date range>: You used X% less energy Preview Text: Way to go! Check out savings tips to continue the trend.	Subject Line: Weekly energy update <date range>: You spent X% less on energy Preview Text: Way to go! Check out savings tips to continue the trend.
Flat Rate Load Shifting Weekly Email Customer Spends More	Subject Line: Weekly energy update <date range>: You used X% more energy Preview Text: Check out savings tips for ways to reduce your energy usage.	Subject Line: Weekly energy update <date range>: You spent \$X more on energy Preview Text: Check out savings tips for ways to reduce your energy spending.
Flat Rate Load Shifting Weekly Email Customer Spends About The Same	Subject Line: Weekly energy update <date range>: Your energy use was about the same Preview Text: Check out savings tips for ways to reduce your energy usage.	Subject Line: Weekly energy update <date range>: You spent about the same on energy Preview Text: Check out savings tips for ways to reduce your energy spending.
Flat Rate Load Shifting Post-Bill Report Email Customer Spends Less	Subject Line: Hi <first name>, you used less energy this bill period <date range, year> Preview Text: Great job! Check out what used the most energy in your home.	Subject Line: Hi <first name>, you spent less on energy this bill period <date range, year> Preview Text: Great job! Check out what used the most energy in your home.

Email Type and State	Usage Variation	Cost Variation
Flat Rate Load Shifting Post-Bill Report Email Customer Spends More	Subject Line: Hi <first name>, you used more energy this bill period <date range, year> Preview Text: Check out what used the most energy during peak hours in your home.	Subject Line: Hi <first name>, you spent more on energy this bill period <date range, year> Preview Text: Check out what used the most energy in your home.
Flat Rate Load Shifting Post-Bill Report Email Customer Spends About the Same	Subject Line: Hi <first name>, your energy use was about the same this bill period <date range, year> Preview Text: Check out what used the most energy in your home.	Subject Line: Hi <first name>, your energy costs were about the same this bill period <date range, year> Preview Text: Check out what used the most energy in your home.

Flat Rate Disaggregation Module

The Flat Rate Disaggregation module helps utility customers better understand how they are using electricity during each week or billing period, depending on which email the module is included in. By identifying the top three categories of energy consumption, the module brings visibility to which appliances use the most energy. The module displays the top 3 quantified end uses for the customer.

For utilities, this module provides a clear and actionable way to engage customers in helping them understand how energy is used in their household, and how they can shift usage to off-peak times to help relieve demand on the grid.

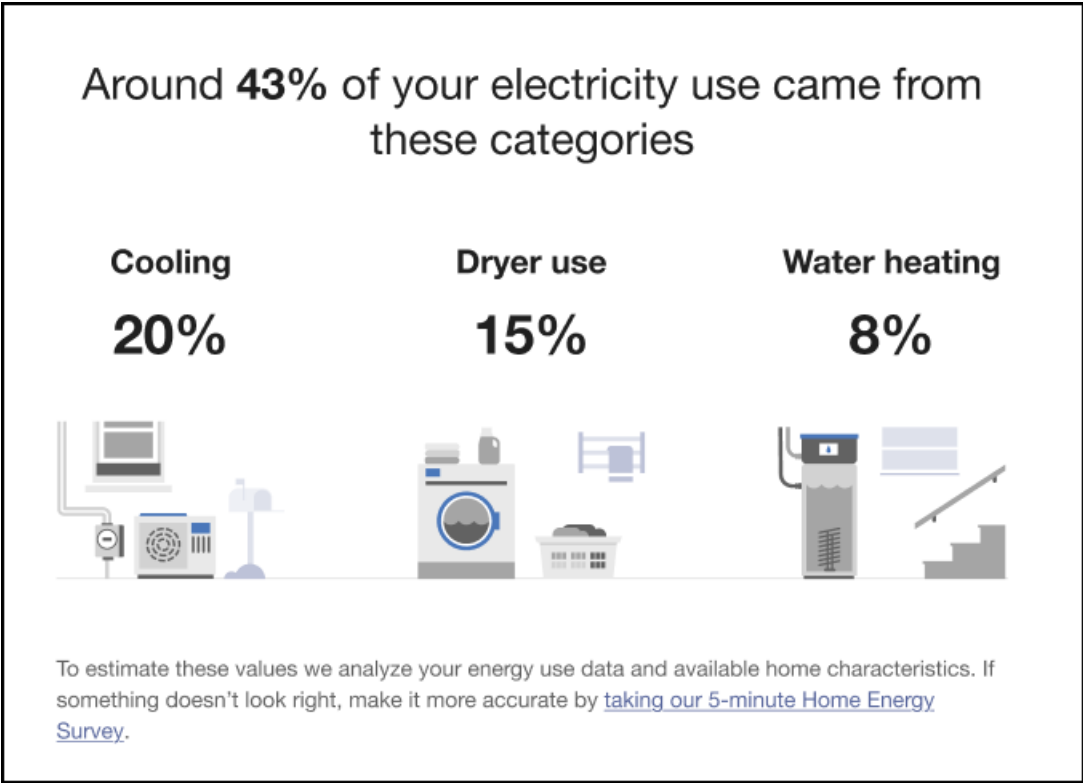
Quantified End Uses: End uses for which our disaggregation algorithms are able to provide an accurate estimate of how much of the appliance a customer was using during peak hours, and therefore, can be associated with a specific metric, such as kWh, percentage, or cost. The top three of these appliances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

Note

Whether a category is quantified is determined by the data that is available from the utility and by the disaggregation model.

Design

This image shows an example of the 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.

Table A-2 Configuration Options

Configuration Option	Input Value
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.
Home Energy Analysis URL Specify the URL that should be used to direct customers to the Home Energy Analysis.	Required Specify the URL here:

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.

Requirements and Limitations

This section discusses utility and customer requirements and limitations.

Customer Requirements

This table lists the customer requirements:

Category	Description
Data Requirements	AMI (hourly or more granular) data.
Data History	AMI data for the last 5 or 7 days, depending on whether the utility has peak hours on the weekends.
Data Coverage	The default requirement is: 50% read coverage for the week covered by the report. Note This product does not differentiate between estimated and non-estimated reads. Both types of reads are supported.

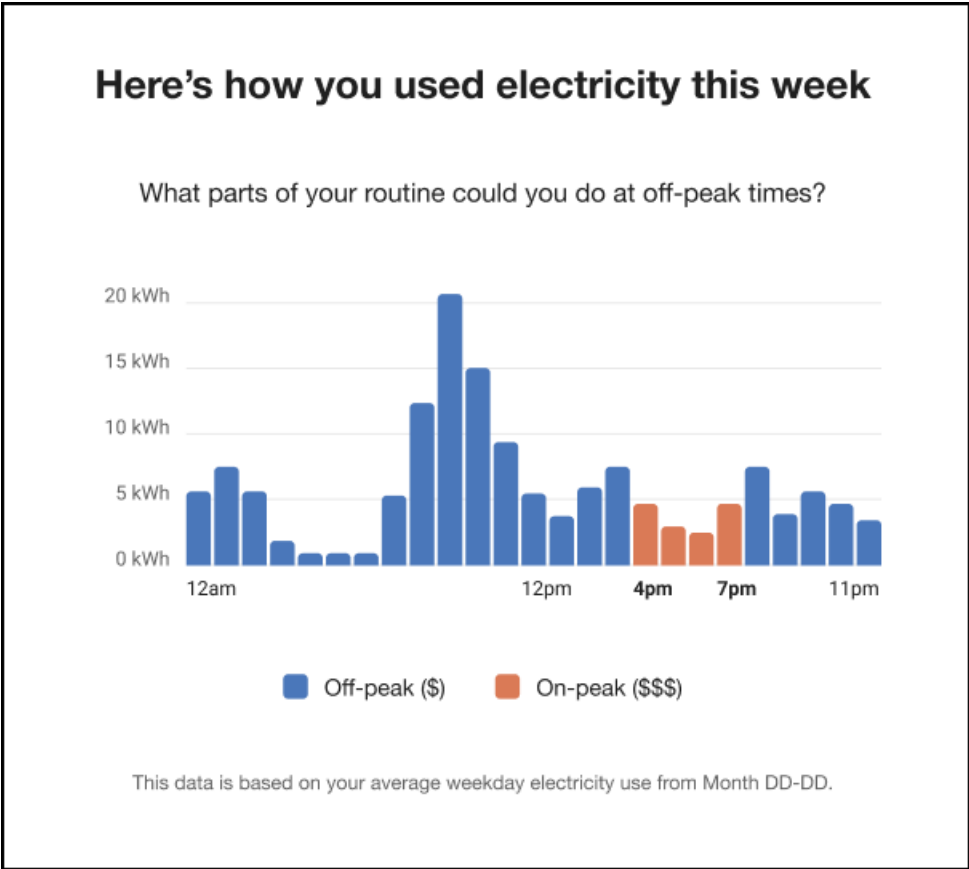
Limitations

These are the limitations:

- **Zero Usage:** If a customer hasn't used any electricity during the week, several checks are completed to determine whether to hide modules, or to fail the entire email communication. The checks are as follows:
 - **Introduction Email:** If the Hourly Usage module has 0 usages, exclude that module but send the communication.
 - **Weekly Email:** If the Weekly Comparison module has 0 usages, the communication is not sent. If the Hourly Usage module has 0 usages, the module is excluded from the communication.
 - **Emails Including the Transition Module:** The Weekly Email can contain the Transition module when there is a seasonal rate transition. In cases where the emails include the pre-transition version of the module, if the Weekly Email module has 0 usages, the module is excluded from the communication. If the Hourly Usage module has 0 usages, the module is excluded from the communication.
- **Rates with no on-peak period in a given season:** The module shows non-peak usage data when no on-peak time of use period is present. See the User Experience Variations.

Design

This image shows an example of the 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.

Configuration Option	Input Value
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:

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.

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 Load Shifting Report emails. 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:

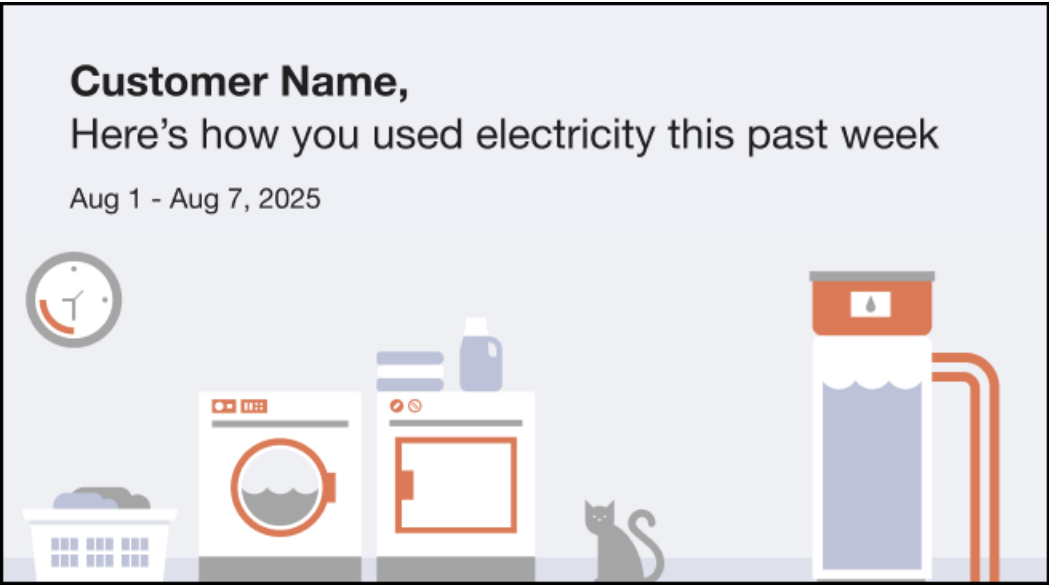
- If peak hours have not changed in a period that overlaps the seasonal transition, the seasonal transition module is shown in usage form.
- If peak hours have not changed in a period that overlaps the seasonal transition, *and non-peak data for other data changing modules in the report have changed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

Introduction Module

The Introduction module is used at the top of most emails and introduces customers to their email program.

Design

This image shows an example of the 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.

Table A-3 Configuration Options

Configuration Option	Input Value
Header The statement that appears at the top of the email to explain what the email is about.	Optional Choose one of the following:
Default: The default value changes based on the email that is sent.	• Use the default. • Contact your delivery team to customize your header text.

User Experience Variations

This section discusses how the module can vary.

Flat Rate Load Shifting Report Variation

When this module is included in the Flat Rate Load Shifting Report, it varies as follows:

- **Heading:** The heading asks the reader to consider what appliances they can use during a different time period. For example, "What you can shift"
- **High-Energy Insight Statement:** The statement notifies the customer that they can shift their usage to a different time period to use cleaner energy sources. For example,

"Appliances like these use a lot of electricity. To use cleaner sources of energy, use them **before 4pm** and **after 8pm**, when demand on the grid is lower."

Load Shifting Collective Benefit Module

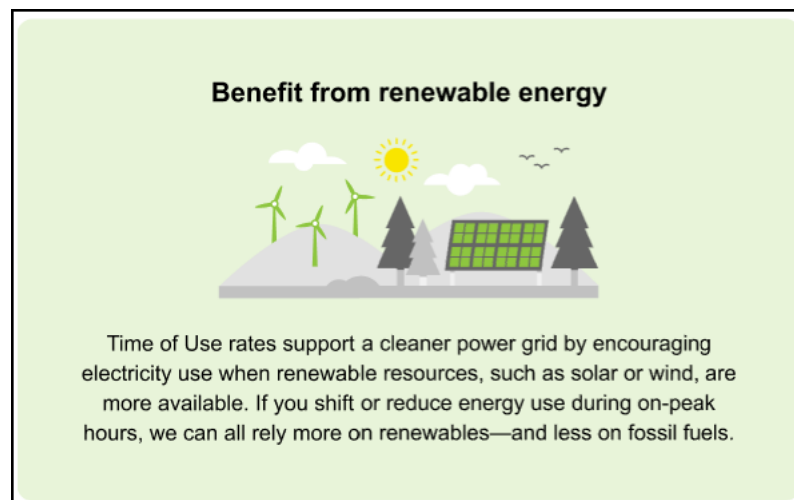
The Collective Benefit module provides customers with information about the collective impacts of their peak-use reduction or load shifting. The module provides a rotating series of information that is aimed at increasing customer motivation to decrease their peak usage without sacrificing customer satisfaction.

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 image shows an example of the 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.
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.

Peak Period Disaggregation Module

This module provides customers with insights about what appliances they use the most during peak hours each week, when included in the weekly email, and each bill period when included in the 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 unquantified groups based primarily on the level of detail we have 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.

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

Together, the quantified and unquantified groups provide the customer with a comprehensive picture of what contributes to their peak hour energy use.

Note

Whether a category is quantified or unquantified is determined by the data that is available from the utility and by the disaggregation model.

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.

Requirements and Limitations

This section discusses customer requirements and limitations.

Customer Requirements

This table lists the customer requirements and limitations:

Category	Description
Data Requirements	AMI (hourly or more granular) data .There are additional AMI data requirements to show advanced insights such as appliance-level disaggregation. Contact your Delivery Team for more information.
Data History	AMI data for at least one period.
Data Coverage	The customer must meet the default scored AMI data threshold and may not exceed the maximum number of missed AMI reads for the billing period. Contact your Delivery Team for more information.

Limitations

These are the limitations:

- **Seasonal Transition:** Costs cannot be calculated for this module if the data period overlaps the seasonal transition date.

Design

This image shows an example of the module:

Around **\$80** of your **on-peak** electricity costs came from these categories

Heating

\$40



Refrigeration

\$30



Laundry

\$10



To estimate these values we analyze your energy use data and available home characteristics. If something doesn't look right, make it more accurate by [taking our 5-minute Home Energy Survey](#).

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.	Optional Choose one of the following: • Use the default. • Work with your Delivery Team to exclude disaggregation categories from the module.

Note

This configuration is shared with the Post-Bill Report.

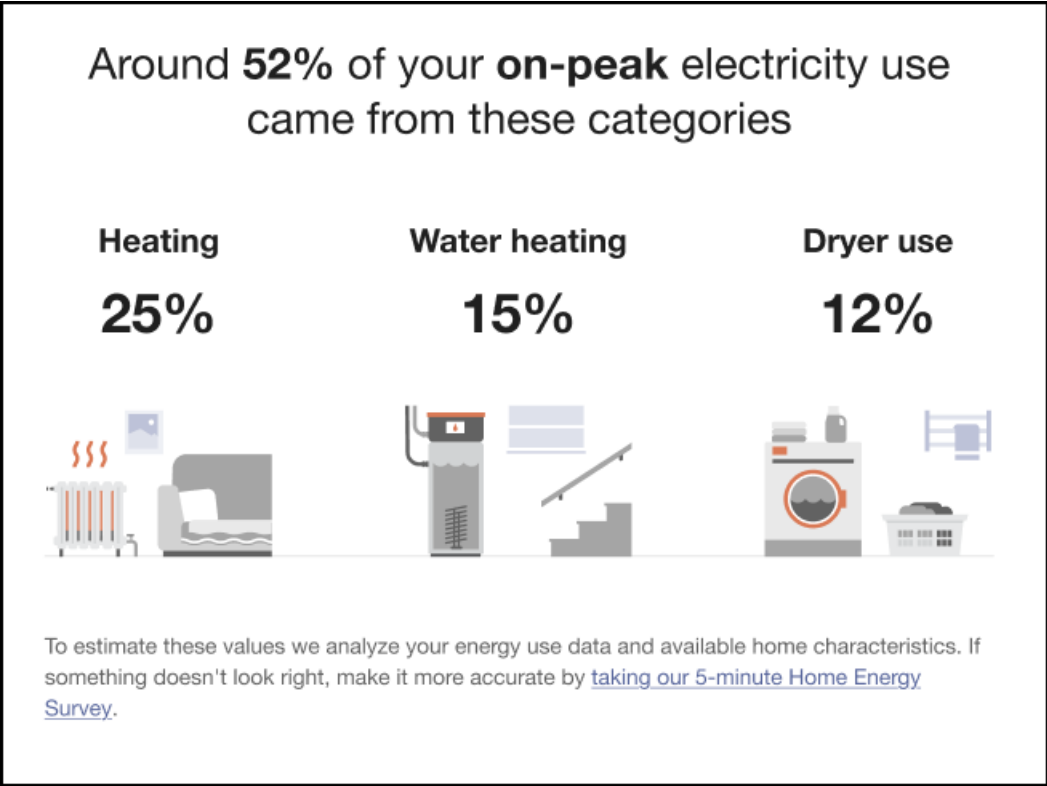
User Experience Variations

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

When Included in the Post-Bill Report

The module varies as follows when included in the Post-Bill Report.

Header: The header introduces the customer to the module by telling them how much of their usage this month was associated with their top three appliances during on-peak hours. For example, "Around **52%** of your **on-peak** electricity use came from these categories".



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:

Header Type	Cost or Usage	Property Name / Description	Usage
		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:
		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.

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.

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.

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.

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.

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 email. 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 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 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.

Requirements and Limitations

This section discusses customer requirements and limitations.

Customer Requirements

This table lists the customer requirements:

Category	Description
Data Requirements	• AMI (hourly or more granular) data. • Customers must be eligible for the Hourly Disaggregation service.
Data History	AMI data for the last two weeks.
Data Coverage	50% read coverage for the bill covered by the report. 50% read coverage for the previous report. Note This product does not differentiate between estimated and non-estimated reads. Both types of reads are supported.

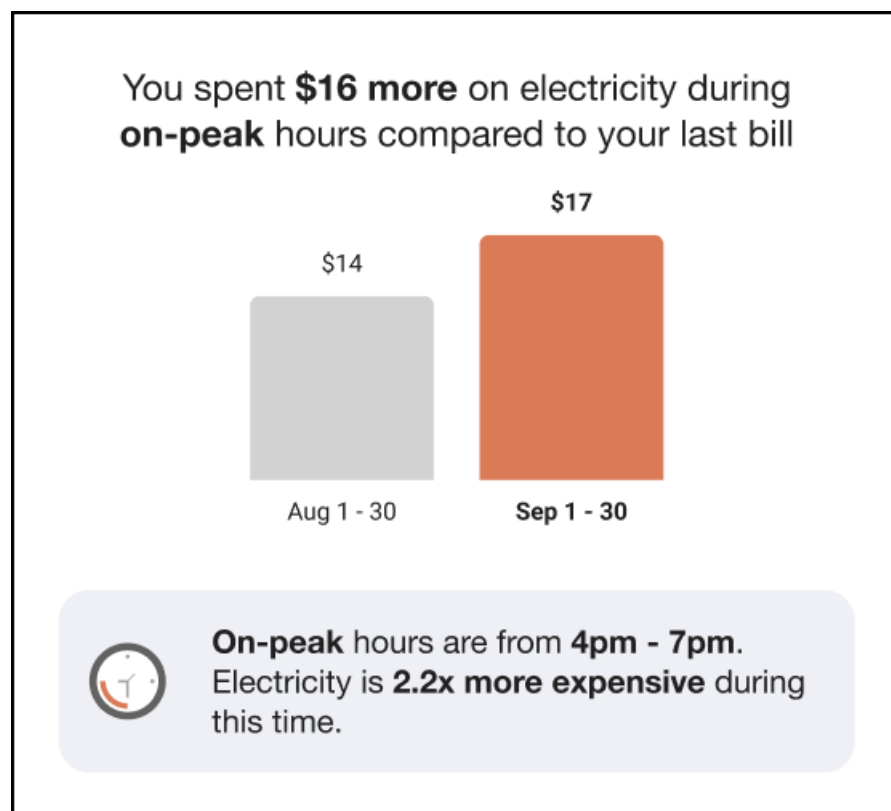
Limitations

These are the limitations:

- **Post-Bill Report Email Only:** This module is only available as part of the Post-Bill Report email.
- **Hourly Disaggregation Service:** Customers must be eligible for the Hourly Disaggregation service in order to receive this module as part of the Post-Bill Report email.

Design

This image shows an example of the module:



Configuration Options

There are no supported configurations for this module.

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 above the bars 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 is not included in the email.

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 email. 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.

Shift Nudge Module

The Shift Nudge Module is designed to educate utility customers about the environmental benefits of adjusting when they use electricity. By highlighting the impact of high-demand

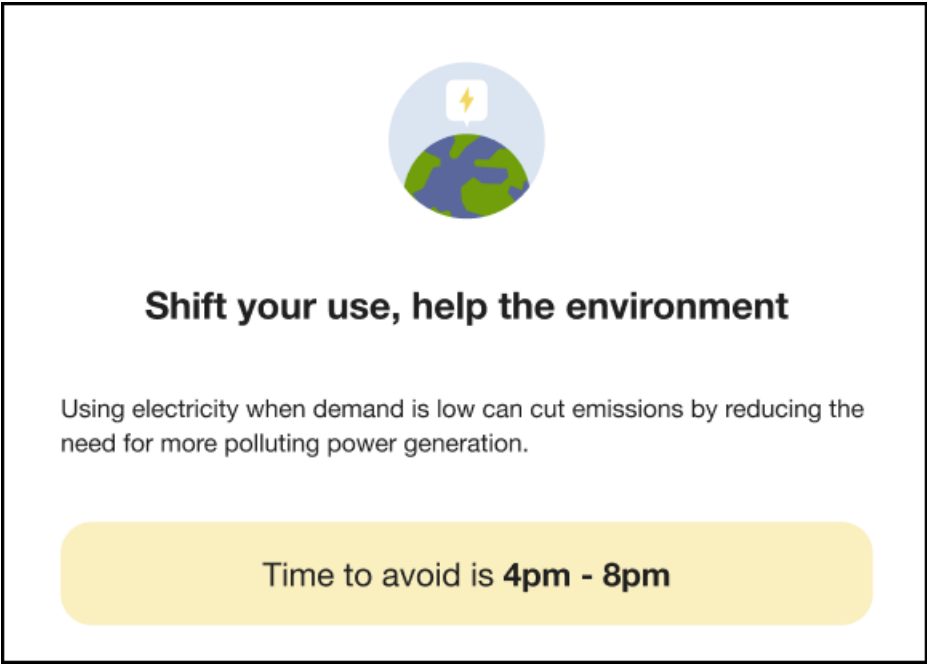
periods on energy generation, the module encourages customers to shift their usage to times when demand is lower and cleaner energy sources are more likely to be used.

This module helps utilities promote more sustainable energy consumption behaviors without requiring significant effort from customers. By clearly communicating when to avoid using electricity, it empowers customers to make small changes that collectively reduce strain on the grid and lower overall emissions.

For customers, the module provides simple, actionable guidance that connects everyday energy use decisions to broader environmental outcomes. This strengthens customer engagement while reinforcing the utility's role in supporting environmental responsibility.

Design

This is an example of the 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.

Table A-4 Configuration Options

Configuration Option	Input Value
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.

Table A-4 (Cont.) Configuration Options

Configuration Option	Input Value
Peak Hours Specify the hours that are considered Peak Hours. For example, 4pm - 8pm on weekdays.	Required Specify your peak hours here:

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.

Requirements

This table discusses customer requirements:

Category	Description
Data Coverage	The default requirements are: • 50% read coverage for the last two weeks. • 50% read coverage for the week covered by the report. • 50% read coverage for the highest day in the customer's last week. • 50% read coverage for the last day of the week. This product does not differentiate between estimated and non-estimated reads. Both types of reads are supported.

Design

This image shows an example of the module:

Top recommended tips for you

These tips were personalized based on your Home Energy Survey.



Run ceiling fans in reverse during the winter to circulate warm air

Warm air rises and collects near ceilings. In the winter, you can run your ceiling fan in reverse on a low setting to circulate warm air more evenly. Then lower your thermostat to save on heating costs.

Save up to \$13 per year



Make sure your refrigerator door seal is tight

If the seal on your refrigerator or freezer door isn't doing its job, your appliance could be leaking some of the cooled air it produces. To fix the problem, replace your leaky seal with a new one.

Save up to \$13 per year



Use a moisture sensor on your dryer to avoid over-drying

Hang drying is the most energy-efficient and low-cost way to dry clothes. If you do need to use a clothes dryer, make sure to run only full loads and remove lint from the filter after each cycle.

Save up to \$4 per year

Get more savings tips

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.
Get More Savings Tips 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:

User Experience Variations

This section discusses how the module can vary.

Flat Rate Load Shifting Report Variation

When this module is included in the Flat Rate Load Shifting Report, it varies as follows:

- **Heading:** The heading asks the reader to consider what appliances they can use during a different time period. For example, "What you can shift"
- **High-Energy Insight Statement:** The statement notifies the customer that they can shift their usage to a different time period to use cleaner energy sources. For example, "Appliances like these use a lot of electricity. To use cleaner sources of energy, use them **before 4pm** and **after 8pm**, when demand on the grid is lower."

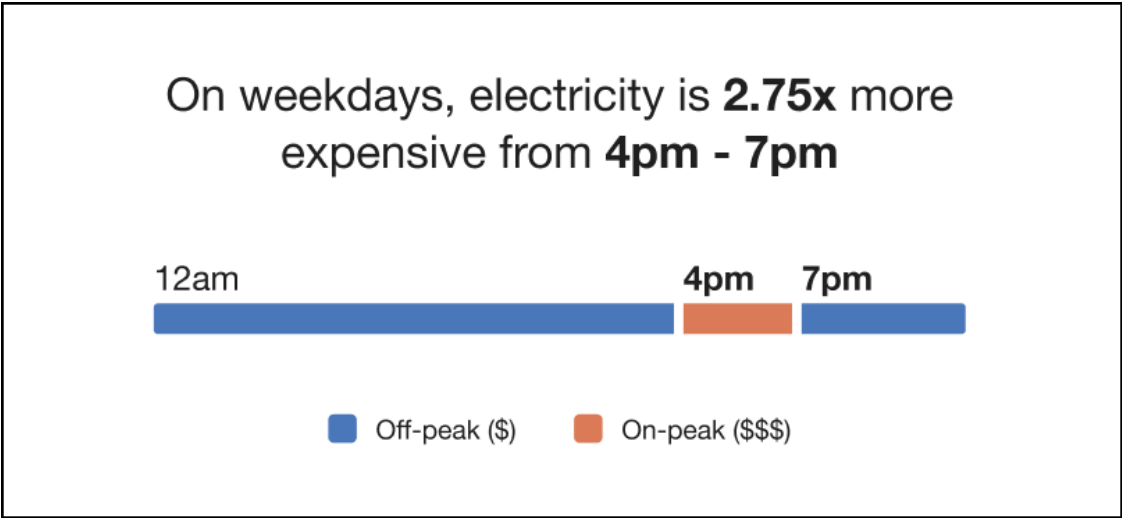
TOU 101 Module

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 off-peak prices
- The hours during which electricity is most expensive
- A visual timeline that displays off-peak, partial-peak, and peak hours

Design

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



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:	Required Specify the peak hours: Specify partial-peak hours (if used):
On week days, electr icity is 1.5x more expe nsive from 2pm to 6pm.	
Note that this value, and the Peak Time Hours value in the Hourly Usage module must be the same.	

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 week days, electricity is 1.5x more expensive from 2pm to 6pm.	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:

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.

Transition Module

The Transition module serves multiple purposes at different times of the year. This module is used to:

- Welcome customers to their program in their introduction email
- Notify customers that their peak to off-peak price ratios or peak hours are about to change each season
- Remind customers that their peak to off-peak price ratios or peak hours have recently changed for the season

The welcome state of the module is included in the customer's Introduction email. The seasonal transition states of the module are sent one week before the transition date, and again one week after the transition date, along with the regular cadence of the emails.

Requirements and Limitations

This section discusses customer requirements and limitations.

Customer Requirements

This table lists the customer requirements:

Category	Description
Data History	AMI data for the last two weeks.
Data Coverage	50% read coverage for the week covered by the report. Note This product does not differentiate between estimated and non-estimated reads. Both types of reads are supported.

Limitations

The limitations are:

- **Zero Usage Emails Including the Season Transition Module:** In cases where the email includes the pre-transition version of the module, if the Weekly Comparison module has 0 usages, exclude that module but send the communication. If the Hourly Usage module has 0 usages, exclude that module but send the communication. User only has one opportunity to see the rate transition information, so it's valuable to send, even if other modules are excluded from the email.

Design

This section shows the design of the two main states of this module.

Pre-Transition State

This image shows an example of the module in the pre-transition state:



Coming soon: changes to your peak hours and pricing

Starting May 1, on-peak and partial-peak will have **new hours and pricing** for the new season. To save more, try to avoid using high-energy use appliances during on-peak hours.

	Current	New
Dates	Nov 1 - Apr 30	May 1 - Oct 31
Peak hours	7am - 10am	5am - 8am
Partial-peak hours	None	None
Price difference	1.8x	1.5x

Post-Transition State

This image shows an example of the module in the post-transition state:



Here are the new peak hours and pricing

As of June 1st, on-peak and partial-peak hours and pricing have changed for the new season. To save more, try to avoid using high-energy use appliances during on-peak hours.

	New	Old
Dates	Jun 1 - Sep 30	Oct 1 - May 30
Peak hours	4pm - 7pm	6am - 9am
Partial-peak hours	None	9am - 1pm
Price difference	1.5x	1.8x

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:

User Experience Variations

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

Welcome State - TOU Load Shifting Report Emails

When the module is included in the welcome email of the TOU Load Shifting Report, it introduces the customer to their rate plan, and explains why they are receiving the email. In this state, the module contains these components:

Explanatory Statement: The module begins with the heading "Why you're receiving this" followed by the explanatory statement that reads, "This is a weekly email to help you save money by avoiding using electricity during the higher-cost times of the day."

Plan Steps: The next section of the module explains how the customer's rate plan works. For TOU customers, there are 3 items listed under the "Here's how your rate plan works" heading, while Demand rate customers have an additional 4th item.

Graphic: The module ends with a piggy bank graphic, showing that they can save money.

Why you're receiving this

This is a weekly email to **help you save money** by avoiding using electricity during the higher-cost times of the day.

Here's how your rate plan works:

- 1** You're on a winter rate plan that charges **different prices** throughout the day
- 2** It lasts from **November 1 - April 30**
- 3** By using **less electricity** when it's most expensive, you can **save on your bill**
- 4** Your plan includes **demand charges** - once per bill period you'll also be **charged \$12.24 per kilowatt** you use in the **hour of your highest electricity usage** during **on-peak** times of the day



Welcome State - Flat Rate Load Shifting Emails

When the module is included in the welcome email of the Flat Rate Load Shifting Report program, it introduces the customer to the program and explains why they are receiving the email. In this state, the module contains these components:

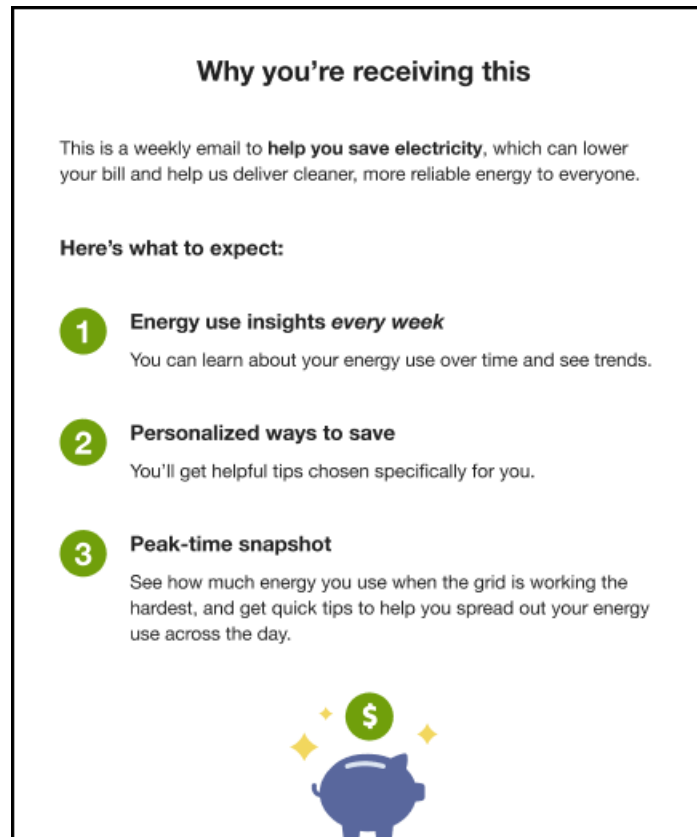
Explanatory Statement: The module begins with the heading "Why you're receiving this" followed by the explanatory statement that reads, "This is a weekly email to help you save electricity, which can lower your bill and help us deliver cleaner, more reliable energy to everyone."

What to Expect Section: The next section of the module explains what the customer can expect from the Flat Rate Load Shifting Email program. There are 3 items listed under the "Here's what to expect" heading, as follows:

- **Energy use insights:** The first item in the list begins with "Energy use insights every week", followed by the explanatory statement, "You can learn about your energy use over time and see trends."
- **Tips:** The second item in the list begins with "Personalized ways to save", followed by the explanatory statement, "You'll get helpful tips chosen specifically for you."

- **Peak-time information:** The third item in the list begins with "Peak-time snapshot", and is followed by the explanatory statement, "See how much energy you use when the grid is working the hardest, and get quick tips to help you spread out your energy use across the day."

Graphic: The module ends with a piggy bank graphic, showing that they can save money.



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.

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.

Requirements and Limitations

This section discusses customer requirements and limitations.

Customer Requirements

This table lists the customer requirements:

Category	Description
Data Requirements	AMI (hourly or more granular) data.
Data History	AMI data for the last two weeks.
Data Coverage	The default requirements are: 50% read coverage for the week covered by the report. 50% read coverage for the week preceding the report one. This product does not differentiate between estimated and non-estimated reads. Both types of reads are supported.

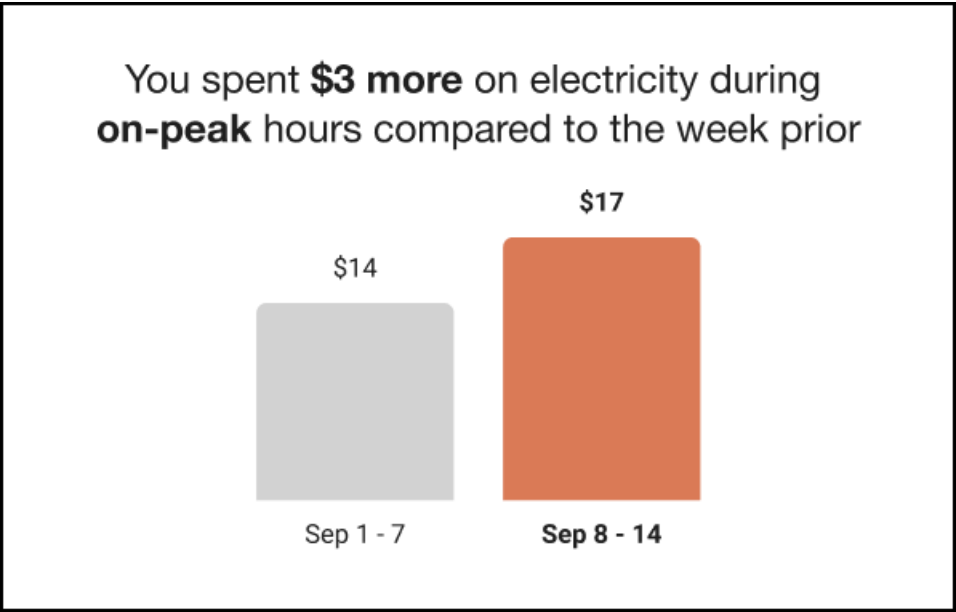
Limitations

These are the limitations:

- **Zero Usage:** In the case when a customer hasn't used any electricity during the week, several checks are completed to determine whether to hide modules, or to fail the entire email communication. The checks are as follows:
 - **Introduction Email:** If the Hourly Usage module has 0 usage, the module is excluded from the communication.
 - **Weekly Email:** If the Weekly Comparison module has 0 usages, the communication is not sent. If the Hourly Usage module has 0 usages, the module is excluded but the communication is sent.
 - **Emails Including the Season Transition Module:** The TOU Load Shifting Weekly email can contain the Season Transition module. If the emails include the pre-transition version of the module and the Weekly Comparison module has 0 usages, the module is excluded from the communication. If the Hourly Usage module has 0 usages, the module is excluded from the communication.
- **Rates with no on-peak period in a given season:** The module shows non-peak usage data when no on-peak time of use period is present. See the User Experience Variations.

Design

This image shows an example of the 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 +/- <i>n</i> 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:

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 Weekly Comparison module displays the following:

- **Insight Statement:** You spent [\$X] more on electricity during peak hours this week.

Customer Spent About the Same This Week

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

- **Insight Statement:** You spent about the same on electricity during peak hours this week.

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
- **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 email. 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.