

Oracle Utilities Opower Load Shifting, Electric Vehicle Cloud Service

Load Shifting, Electric Vehicle Configuration Guide



Latest Release
G23066-05

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Oracle Utilities Opower Load Shifting, Electric Vehicle Cloud Service Load Shifting, Electric Vehicle Configuration Guide, Latest Release

G23066-05

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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 Oracle Utilities Opower Load Shifting, Electric Vehicle programs.

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.

Product Overview

The Oracle Utilities Opower Load Shifting Cloud Service, Electric Vehicle is part of Opower's solution for managing daily grid load for utilities. This service provides features that deliver insights to customers that educate them about when to charge their vehicle and motivate them to change their charging patterns accordingly.

The transition to electrified vehicles (EVs) is rapidly increasing, and utilities must figure out how to manage the charging behavior of EV owners. Given the increase of extreme temperatures that strain the grid, intermittent supply-side capacity, and the proliferation of EVs, it's imperative that EVs are not adding to grid load at times when the grid is strained by other high-demand end uses, such as air conditioning, which are considered non-negotiable.

At the same time, EV customers want to maintain their independence and have the ability to charge their cars where and when they please. EV customers are wary of situations where they can't get somewhere important, such as work, the hospital, or starting a road trip, because their car wasn't charged. Additionally, EV customers might want to reduce the cost of charging their car, but only to the extent that it doesn't cause inconvenience, and only if they understand how their rate or charging program works.

Utilities must keep the electric grid reliable and affordable as this transition takes place, while also keeping their customers satisfied. The Load Shifting Cloud Service, Electric Vehicle features can help:

- Reduce grid peaks by reducing EV charging during certain peak times.
- Avoid creating secondary peaks caused by time-of-use (TOU) rate schedules by getting EV drivers to stagger their charging throughout off-peak hours.
- Increase customer satisfaction for EV customers.
- Provide coaching that helps both TOU and non-TOU customers understand their rates and charging programs.

- Customers save money through avoided procurement costs.

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.

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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.

Default Text and Options

Unless otherwise noted, Oracle recommends that you use the default text and options that are provided. These options have been chosen carefully by our copywriters and have been through user testing to maximize comprehension and effectiveness.

For the Load Shifting, Electric Vehicle features, 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.

If you must configure an option to use something other than the default, be aware of the following:

- While you can configure the text that appears, you cannot change the logic behind the text.
- Using options and text other than the default could impact the effectiveness of your program.

The following sections discuss the default order of the modules, design, configuration options, and the user experience variations that are specific to these Load Shifting, Electric Vehicle features:

- [Design and Configuration: EV Charging Coach Emails](#)
- [Design and Configuration: Load Shifting EV Insights in Weekly Energy Update Emails](#)

Design and Configuration: EV Charging Coach Emails

This section discusses the design, configuration options, and the user experience variations that are specific to the Electric Vehicle (EV) Charging Coach emails.

The EV Charging Coach email feature includes a series of emails sent to customers on Time of Use (TOU) rate plans who charge electric vehicles. The emails are intended to educate customers about how they can shift or stagger their EV charging to support the grid and save money on their electric bill.

Customers receive one of the following emails each week:

- Introduction emails
- Weekly Coach emails
- 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 following sections.

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 topics.

Introduction Emails

The EV Charging Coach experience starts with a series of three emails that are designed to welcome customers with electric vehicles to the EV charging experience, provide energy use insights, and offer tips on how to shift or stagger EV charging to reduce electricity costs.

The first week customers receive an introduction email that includes these modules, in order:

1. [EV Charging Coach Subject Lines and Preview Text](#)
2. [EV Charging Coach Email Header](#)
3. [EV Hero Module](#)
4. [TOU Welcome Message Module](#)
5. [TOU 101 Module](#)
6. [TOU Hourly Usage Module](#)
7. [EV Thanks Module](#)
8. [EV Habits Module](#)
9. [EV Confirmation Module](#)
10. [EV Charging Coach Email Footer](#)

During the second week of the EV Charging Coach program, customers receive an email that is similar to the weekly email, but also includes additional information. This is the default list of modules, in order:

1. [EV Charging Coach Subject Lines and Preview Text](#)
2. [EV Charging Coach Email Header](#)
3. [EV Hero Module](#)
4. [EV Weekly Main Insight Module](#)

5. [EV Why Off-Peak Module](#)
6. [EV Confirmation Module](#)
7. [TOU 101 Module](#)
8. [TOU Hourly Usage Module](#)
9. [TOU Weekly Peak Period Disaggregation Module](#)
10. [TOU Tips Module](#)
11. [EV Charging Coach Email Footer](#)

During the third week of the EV Charging Coach program, customers receive an email that is similar to the weekly email, but also includes the EV Best Time Off-Peak Module. This is the default list of modules, in order:

1. [EV Charging Coach Subject Lines and Preview Text](#)
2. [EV Charging Coach Email Header](#)
3. [EV Hero Module](#)
4. [EV Weekly Main Insight Module](#)
5. [EV Best Time Off-Peak Module](#)
6. [EV Confirmation Module](#)
7. [TOU 101 Module](#)
8. [TOU Hourly Usage Module](#)
9. [TOU Weekly Peak Period Disaggregation Module](#)
10. [TOU Tips Module](#)
11. [EV Charging Coach Email Footer](#)

Weekly Emails

The weekly email is delivered to customers each week as part of the EV Charging Coach email program. It provides EV charging and energy use insights, as well as tips to help the customer save money. Customers begin receiving the weekly email after they receive their three introduction emails, and they do not receive the weekly email in weeks when they receive the post-bill report email.

The weekly email includes these modules, in order:

1. [EV Charging Coach Subject Lines and Preview Text](#)
2. [EV Charging Coach Email Header](#)
3. [EV Hero Module](#)
4. [EV Weekly Main Insight Module](#)
5. [TOU 101 Module](#)
6. [TOU Hourly Usage Module](#)
7. [TOU Weekly Peak Period Disaggregation Module](#)
8. [TOU Tips Module](#)
9. [EV Charging Coach Email Footer](#)

Post-Bill Report Emails

The Post-Bill Report email is delivered to customers at the end of each billing period, replacing the weekly email. It includes details about how the customer's electricity costs this month compared to costs from the previous month. It also provides insights on your EV charging for the month and identifies opportunities to save more during the upcoming billing period.

The Post-Bill Report email includes these modules, in order:

1. [EV Charging Coach Subject Lines and Preview Text](#)
2. [EV Charging Coach Email Header](#)
3. [EV Hero Module](#)
4. [TOU Post-Bill Bill Period Comparison Module](#)
5. [EV Post-Bill Report Main Insight Module](#)
6. [TOU Post-Bill Peak Period Disaggregation Module](#)
7. [TOU Tips Module](#)
8. [Load Shifting Collective Benefit Module](#)
9. [EV Charging Coach Email Footer](#)

Design and Configuration: EV Insights in Weekly Energy Update Emails

This section discusses the design, configuration options, and the user experience variations that are specific to the Electric Vehicle (EV) Insights in Weekly Energy Update emails feature.

The Load Shifting Cloud Service, Electric Vehicle (EV) provides insights that can be included in Weekly Energy Update (WEU) V3 emails and the WEU Post-Bill Report V3 emails to create an EV-specific WEU experience for utility customers that charge EVs at their homes.

Load shifting EV insights are provided within Load Shifting EV modules that are purpose-built to be included in the WEU emails. These insights are designed to educate customers about their charging habits and encourage them to shift their charging to hours the utility prefers, such as when there is low demand on the grid or high availability of renewable energy.

Customers receive the following EV-specific emails as part of the WEU V3 program:

- **First EV-Specific Weekly Energy Update Email:** This email provides an introduction to the EV-specific WEU email program by including the [EV Habits Checklist in WEU module](#). This module is then included in the email again once every six months.
- **Second EV-Specific Weekly Energy Update Email:** This email provides additional EV-specific information to the customer by including the [EV Best Time Off Peak in WEU module](#). This module is then included in the email again once every six months.
- **All Other Weeks:** After the above emails are received, customers will receive one of the following emails each week:
 - The standard WEU email, which does not include any EV-specific modules. The exception to this is when one of the above modules is included in the standard WEU email every six months.

- The WEU Post Bill Report email, which includes the [EV Main Insight in WEU module](#), which provides EV-specific insights. Customers will receive this email each month after the close of their bill period.

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 topics.

Weekly Emails

As part of the EV Load Shifting in Weekly Energy Update (WEU) emails program, customers can receive three different variations of the WEU, as explained below. For detailed customer experience information for the Weekly Energy Update Emails, see [Report Types](#) in the *Oracle Utilities Opower Weekly Energy Update v3 Configuration Guide*.

Note

Oracle recommends using the default order of the modules, as noted in this section, 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 following topics.

First EV-Specific Weekly Energy Update Email

This email includes the [EV Habits Checklist in Weekly Energy Update Email Module](#). This module is then included in the email again once every six months.

When customers receive this email, the EV Habits Checklist in WEU module is placed below the Day-by-Day and Hourly Breakdown module, and above the Personalized Tips module.

Second EV-Specific Weekly Energy Update Email

This email includes the [EV Best Time Off-Peak in Weekly Energy Update Email Module](#). This module is then included in the email again once every six months.

When customers receive this email, the Best Time Off Peak in WEU module is placed below the Day-by-Day and Hourly Breakdown module, and above the Personalized Tips module.

All Other Weekly Energy Update Emails

In all other weeks in which the customer receives the standard WEU email, no EV-specific insights are included.

Post Bill Report Emails

After a customer receives their first two standard Weekly Energy Update V3 emails, they will then receive one of two emails going forward:

- A standard WEU weekly email with no EV-specific insights
- The WEU Post Bill Report email, which includes the [EV Main Insight Module in Weekly Energy Update Emails](#)

Each month, shortly after the bill period is completed, customers receive the Post Bill Report email, which provides deeper understanding of how much energy each of their major end uses, including their EV, consumed during the month. For detailed customer experience information

for the WEU Post Bill Report Emails, see [Report Types](#) in the *Oracle Utilities Opower Weekly Energy Updates v3 Configuration Guide*.

Note

Oracle recommends using the default order of the modules, as noted in this section, 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 following topics.

WEU Post Bill Report Email

This email includes the [EV Main Insight in WEU module](#), which provides EV-specific insights. Customers will receive this email each month shortly after the close of their bill period.

When customers receive this email, the EV Main Insight in WEU module should be included in the email after the WEU Introduction module and before the WEU Post Bill Comparison module.

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Delivery

This section discusses the delivery information for the EV Rate Coach emails. For delivery information associated with Weekly Energy Update V3 emails, see the [Oracle Utilities Opower Weekly Energy Update v3 Configuration Guide](#) in the Proactive Alerts Cloud Service Documentation Library.

Waking Hours: The 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: The messages must be delivered only on business days (Monday-Friday). They cannot be delivered on weekends.

Delivery Frequency: The messages are limited to being sent once per week to avoid excessive alerting.

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 Tools: Oracle Utilities uses third-party tools to send these messages. Most of these tools provide Oracle Utilities with information on bounces, opens, opt-outs, and click-throughs.

Emails and Attachments: For email communications, the 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

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.

5

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](#).

6

Appendix A: Load Shifting Electric Vehicle Modules

The Load Shifting Cloud Service, Electric Vehicle (EV) includes the following email communication features:

- EV Charging Coach Emails
- Load Shifting EV Insights in Weekly Energy Update Emails

Each of these features includes a series of emails sent to customers who charge EVs at their home. The emails are intended to help customers better understand their rates, and encourage them to shift their charging to utility-preferred times, when electricity is typically less expensive.

For each of the modules listed in this appendix, you will find:

- Module overview
- Design image that shows an example of the module
- Requirements
- User experience variations, if any are available
- Configuration options

EV Charging Coach Subject Lines and Preview Text

The subject lines and preview text that are used in the EV Charging Coach are the same as those used in the Load Shifting, Rate Coach Emails.

For additional details about this module, including requirements and variations, see [Email Header and Subject Line Modules](#) in the Opower Load Shifting, Rate Coach Configuration Guide.

EV Best Time Off-Peak in Weekly Energy Update Email Module

The EV Best Time Off-Peak in Weekly Energy Update (WEU) Email module can be included in Weekly Energy Update emails. This module explains to the reader when the best times are to charge their electric vehicle (EV) during off-peak hours. The module explains how this behavior can ease the strain on the grid.

This module should be included in the second EV-specific Weekly Energy Update email the customer receives, and then again once every six months to remind the customer about the best times to charge their EV.

Requirements

There are no module-specific requirements. For product requirements, see:

- [Requirements and Limitations for Load Shifting EV Insights in WEU V3 Emails](#)
- [Requirements and Limitations for Weekly Energy Updates V3](#)

Design

This image shows an example of the Best Time Off-Peak in Weekly Energy Update Emails module:

Figure 6-1 Best Times Off-Peak in Weekly Energy Update Emails Module

Your EV charging patterns matter

By charging during specific times of the day—not just avoiding peak demand—you can make your driving even greener and better for your community.



The best time to charge is [window 1]

Make your EV driving greener by charging midday when clean solar energy powers the grid.



The next best time is [window 2]

Charge during the early morning hours when demand is low.



Avoid starting to charge right at [TOU off-peak start]

If you need to charge in the evening, try not to begin right at Xpm. This is the beginning of low-cost hours for customers on UtilCo's [TOU rate name] plan and a resulting surge in appliance electricity usage.

User Experience Variations

This section discusses how the module can vary.

Time-Of-Use Customers

There is not a specific variation of this module for time-of-use (TOU) customers. However, when sending this module to TOU customers, we recommend configuring the text to match the text in the default version of the [EV Charging Coach Best Time Off-Peak 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 6-1 Configuration Options

Configuration Option	Input Value
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.
Statement and Tip Text Utilities must specify the time to be included in the Window 1 and Window 2 spots. Additionally, utilities are encouraged to review the statements and adjust them to ensure that they are pushing customers to charge at the times that are most beneficial to the utility.	Required Specify the following: <ul style="list-style-type: none"> Window 1 Value: Window 2 Value:
Recurrence Setting Utilities can specify how often they want this module to be included in the email. Default: Module is included in the email every 6 months.	Optional Select one of the following: <ul style="list-style-type: none"> Every 6 months. (default) Specify alternative value:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Best Time Off-Peak Module

The Best Time Off-Peak module explains to the reader when the best times are to charge their electric vehicle (EV) during off-peak hours. The module explains how this behavior can ease the strain on the grid. This module is used only in the third introduction email.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Best Time Off Peak module:

Save money by charging your EV during off-peak hours

You can also go the extra mile to make the grid more reliable, affordable and clean by charging at certain times within off-peak hours:



Charge when the sun is shining

Make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.



Delay your scheduled start time

Help avoid straining the grid at the beginning of off-peak hours, when many people start charging their vehicle, by setting your schedule to start a couple hours into the off-peak period.



Set a “departure” time

Some vehicles let you set the time you need the car charged and ready to go, and your charging will finish in time for departure. This helps avoid demand spikes on the grid by staggering when EVs start charging.

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 6-2 Configuration Options

Configuration Option	Input Value
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.
Extra Mile Statement and Tip Text Utilities are encouraged to review the statements and tip text and adjust them to ensure that they are pushing customers to charge at the times that are most beneficial to the utility.	Optional Specify one of the following: <ul style="list-style-type: none"> • Use default language. • Use the following language:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Charging Coach Email Footer

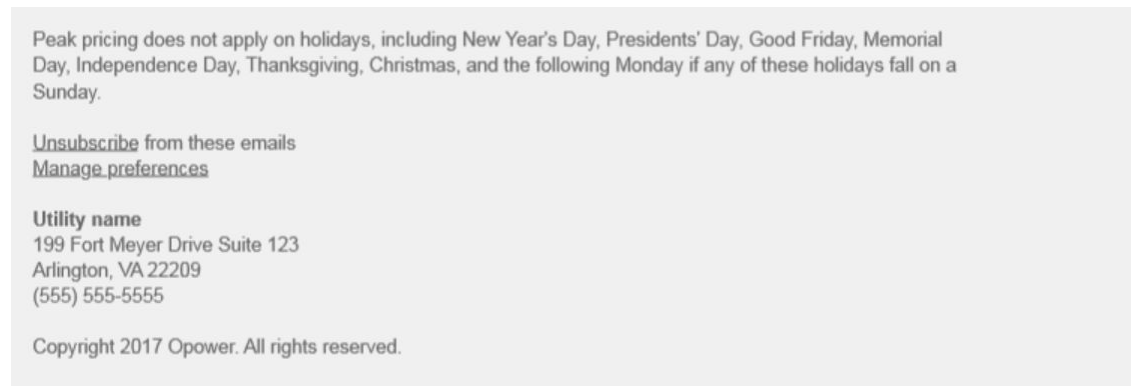
The Footer module is included at the bottom of all EV Charging Coach emails, and provides context about the email and includes legal and regulatory information that is required to be included in all email communications.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Charging Coach email footer:



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 6-3 Configuration Options

Configuration Option	Input Value
<p>Footer Text</p> <p>Text throughout the footer can be edited to reflect the utility's information. As much as possible, we recommend using the default language.</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> Use the default language. Specify custom text:
<p>Holiday Statement</p> <p>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.</p> <p>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.</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> Use the default statement. Specify custom statement:
<p>Manage Preferences</p> <p>You can provide a link to the Web Portal page where a customer can edit their communication preferences.</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> Do not include this link. Include the link using this URL:

Table 6-3 (Cont.) Configuration Options

Configuration Option	Input Value
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 of the utility:
Legal Text This is the copyright and any other legal text required by the utility and/or Opower. There is no hard coded character limit for this text.	Required Work with your delivery team to verify that all required legal language is included.

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Charging Coach Email Header

The header module used in all of the EV Charging Coach emails deliver high-level information to the customer.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

EV Confirmation Module

The EV Confirmation module asks the reader to confirm whether they have an electric vehicle. If the users confirms they have an EV, they will continue to receive EV Charging Coach emails. If the user does not have an EV, they will no longer receive the emails.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Confirmation module:

Don't have an EV?

Our detection algorithms may not always get it right. Let us know so we can provide you a better experience.

NO, I DON'T HAVE AN EV

YES, I HAVE AN EV

EV Habits Checklist in Weekly Energy Update Email Module

The EV Habits Checklist in Weekly Energy Update (WEU) Email module can be included in Weekly Energy Update emails. This module helps to coach readers about how they can create good charging habits for their electric vehicle (EV).

The module provides two standard charging tips that can save them money and time, and then asks if they can adopt a third tip that will help to alleviate stress on the electric grid.

This module should be included in the first EV-specific Weekly Energy Update email the customer receives, and then again once every six months to remind the customer about good charging habits. The utility can configure how often the module appears in the email.

Requirements

There are no module-specific requirements. For product requirements, see:

- [Requirements and Limitations for Load Shifting EV Insights in WEU V3 Emails](#)
- [Requirements and Limitations for Weekly Energy Updates V3](#)

Design

This image shows an example of the EV Habits Checklist in Weekly Energy Update Emails module:

Figure 6-2 EV Habits Checklist in Weekly Energy Update Email Module

Good EV charging habits

- ✓ **Avoid charging during high-demand times on the grid**
Grid demand is at its peak between 4pm - 8pm. Waiting until 8pm or later to charge your EV reduces grid strain and lowers your vehicle's carbon footprint. A small shift, a big impact!
- ✓ **Set an automated charging schedule**
Does avoiding high-demand hours seem like a hassle? With an automated schedule for your EV or charger, you can plug in anytime and charge only during low-demand hours—adding convenience to your routine!

**Can you go the extra mile?
Delay your scheduled start time**

Help reduce grid strain at the start of off-peak hours, when many people begin charging their vehicles, by scheduling your charge to start sometime after 11pm.

User Experience Variations

This section discusses how the module can vary.

Time-Of-Use Customers

There is not a specific variation of this module for TOU customers. However, when sending this module to TOU customers, we recommend configuring the text to match the text in the default version of the [EV Charging Coach EV Habits 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 6-4 Configuration Options

Configuration Option	Input Value
Recurrence Setting Utilities can specify how often they want this module to be included in the email. Default: Module is included in the email every 6 months.	Optional Select one of the following: <ul style="list-style-type: none"> • Every 6 months. (default) • Specify alternative value:
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.

Table 6-4 (Cont.) Configuration Options

Configuration Option	Input Value
Text and Extra Mile Statement Utilities are encouraged to review the text and statements in this module and adjust them to ensure that they are pushing customers to charge at the times that are most beneficial to the utility.	Optional Select one of the following: <ul style="list-style-type: none"> • Use the default text and statement. • Specify alternative text and statement:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Habits Module

The EV Habits module helps to coach readers about how they can create good charging habits for their EV. The module provides two standard charging tips that can save them money and time, and then asks if they can adopt a third tip that will help to alleviate stress on the electric grid.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Charging Habits module:

Good EV charging habits

✓ Avoid charging during on-peak hours

Charge your EV during off-peak hours when savings are greater.

✓ Set an automated charging schedule

No more going into the garage to plug in when off-peak hours start. With an automated schedule, you can plug in anytime, adding convenience to your routine!



Can you go the extra mile?

One way is to delay your scheduled start time: help avoid straining the grid at the beginning of off-peak hours, when many people start charging their vehicle, by setting your schedule to start a couple hours into the off-peak period.

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 6-5 Configuration Options

Configuration Option	Input Value
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.
Text and Extra Mile Statement Utilities are encouraged to review the text and statements in this module and adjust them to ensure that they are pushing customers to charge at the times that are most beneficial to the utility.	Optional Select one of the following: <ul style="list-style-type: none"> • Use the default text and statement. • Specify alternative text and statement:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Hero Module

The EV Hero module welcomes the customer to their EV Charging Coach email. The module welcomes the customer by name, provides the date range associated with the message, and includes an image that depicts an EV charging in the garage, and a kitchen with various

appliances. Together, this information helps the user understand that this message provides energy insights related to EV charging as well as the rest of the home.

Requirements

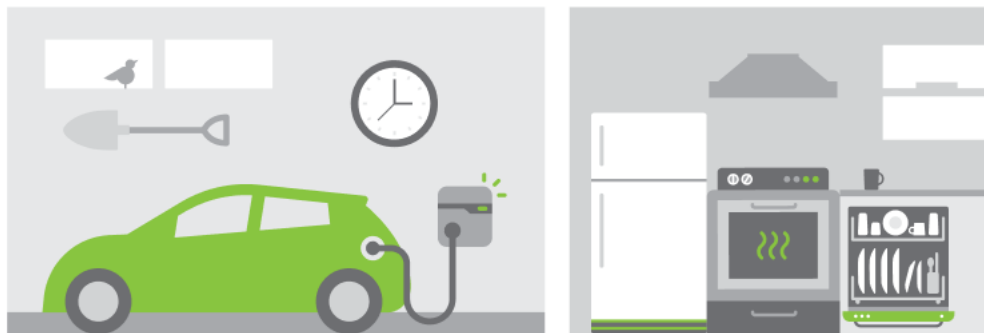
There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Hero modules:

Jane, welcome to your Rate Coach for EV drivers

Nov. 1 - Nov. 7



User Experience Variations

This topic discusses how the module can vary.

Post-Bill Report Email Variation

When this module is included in the Post-Bill Report email, the welcome message changes to "<First Name>, here's your Rate Coach summary for this bill period".

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 6-6 Configuration Options

Configuration Option	Input Value
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.
Program Name The welcome message introduces the customer to the email program, and specifies the name of the email program. Default: Rate Coach for EV drivers	Optional Specify one of the following: <ul style="list-style-type: none"> • Use the default program name. • Use this program name:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Main Insight Module in Weekly Energy Update Emails

The EV Main Insight in Weekly Energy Update (WEU) module can be included in the WEU Post Bill Report emails. The module is designed to give customers that charge electric vehicles (EVs) at their homes an overview of their monthly charging habits and encourage them to shift their charging to times the utility prefers, such as when there is low demand on the grid or when there is high availability of renewable energy.

The module includes several sections, and can vary depending on how much the customer is charging their vehicle during high-demand times. The module includes:

- Graphical information about when the EV is charging
- Insights about the best times to charge an EV
- Motivational information related to the benefits of shifting charging to low-demand times
- Marketing content (optional)

Requirements

This module is currently available only for homes with L2 chargers, and requires that the utility has hourly disaggregation enabled.

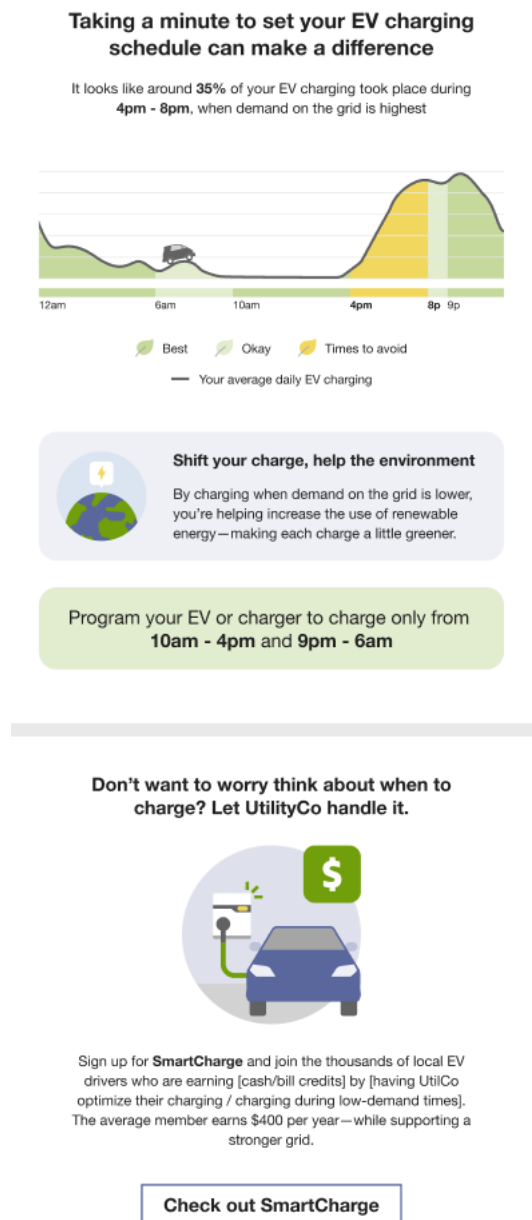
For all other requirements, see:

- [Requirements and Limitations for Load Shifting EV Insights in WEU V3 Emails](#)
- [Requirements and Limitations for Weekly Energy Updates](#)

Design

This image shows an example of the EV Main Insight in Weekly Energy Update Emails module:

Figure 6-3 EV Main Insight in Weekly Energy Update Module



User Experience Variations

This section describes how the module can vary.

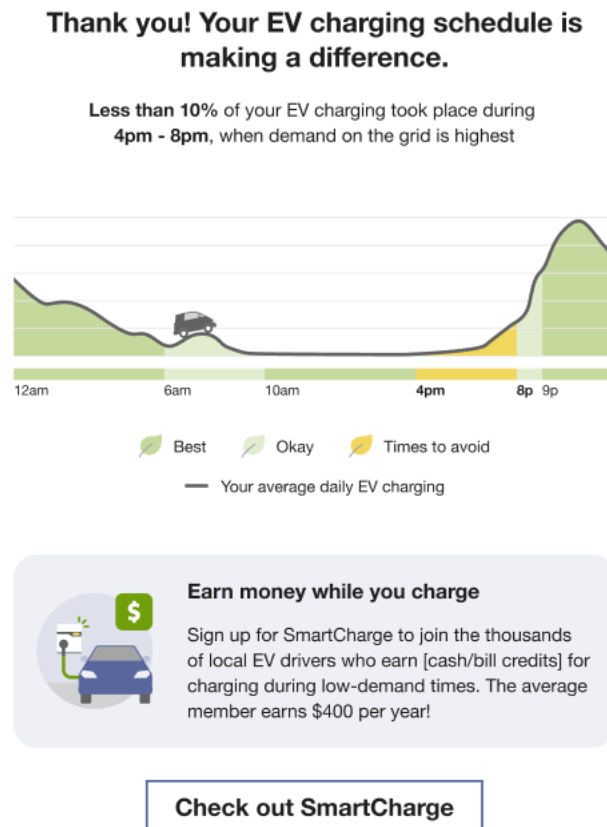
Success State

A success state occurs when the user charges their EV during the hours that the utility has specified as "times to avoid" less than the threshold that is set by the utility. By default, the threshold is set to 10%. Therefore, if the user charged their EV 8% of the time during the times to avoid, they would fall into the Success state.

In this state, the email varies as follows:

- **Header Statement:** The header statement reads, "Thank you! Your EV charging schedule is making a difference."
- **Charging Time Statement:** The statement reads, "Less than 10% of your EV charging took place during <hours> when demand on the grid is highest".
- **Motivation Statements:** The motivation statement is removed from the module.
- **Promotion:** If a promotion is included in the module, it is displayed in a similar format to the motivation statements in other states.
- **Time to Charge Statement:** This statement is removed from the module.

Figure 6-4 Success State Variation



Needs Improvement State

This state occurs when the user charges their EV during high-demand times more than the threshold that is set by the utility, and they were not previously in the Success state. By default, the threshold is set to 10%. For example, if the user did 20% of their EV charging during high-demand periods this bill period, and they were not in a Success state last bill period, they would fall into this state.

In this state, the email varies as follows:

- **Header Statement:** The header statement reads, "Taking a minute to set your EV charging schedule can make a difference".

- **Charging Time Statement:** The statement reads, "It looks like around X% of your EV charging took place during <hours>, when demand on the grid is highest". The percentage is rounded to the nearest 5%.
- **Time to Charge Statement:** The statements in this section begin with one of the following:
 - "Best times to charge are from" and the statement is followed by the time blocks the utility has identified as the best charging periods.
 - "Better times to charge are from" and the statement is followed by the time blocks the utility has identified as the best and okay charging periods.

Transition State

This state occurs when the user charges their EV during high-demand times more than the threshold that is set by the utility during this bill period, but they were in a Success state during the previous bill period. For example, if they did 5% of their charging during high-demand times last bill period, but did 20% of their charging this period during high-demand times, they fall into the Transition state.

In this state, the email varies as follows:

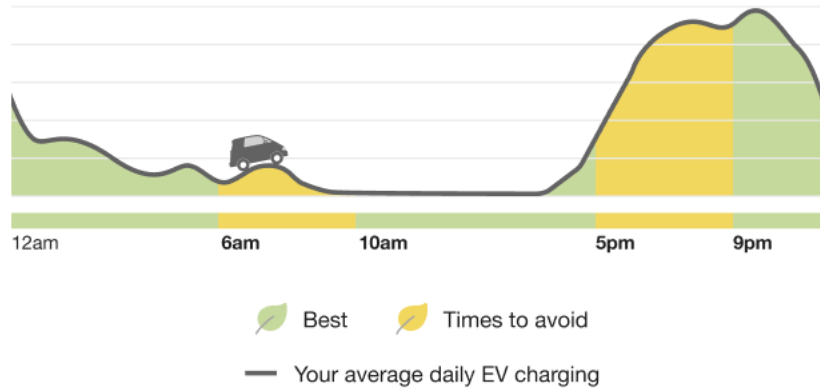
- **Header Statement:** The header statement reads, "Your EV charging patterns may have changed".
- **Charging Time Statement:** The statement reads, "It looks like around X% of your EV charging took place during <hours>, when demand on the grid is highest". The percentage is rounded to the nearest 5%.
- **Time to Charge Statement:** The statements in this section begin with one of the following:
 - "Best times to charge are from" and the statement is followed by the time blocks the utility has identified as the best charging periods.
 - "Better times to charge are from" and the statement is followed by the time blocks the utility has identified as the best and okay charging periods.

Charging Graph Variations

The charging graph can vary depending on whether utilities that have specified two or three time blocks in their schedule. Utilities with two time blocks will show Best and Times to Avoid in the chart, while utilities with three time blocks will show Best, Okay, and Times to Avoid in the chart.

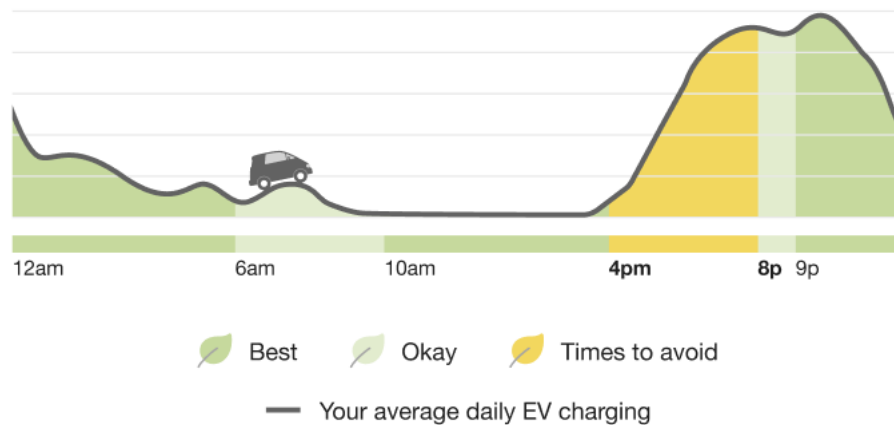
Utility specifies two time blocks:

Figure 6-5 Two Time Blocks



Utility specifies three time blocks:


Figure 6-6 Three Time Blocks



Motivation Statements

Utilities can choose from six motivation statements that can be included in the email on a rotating basis. The following images show the available motivation statements. Note that in mobile formats, the images appear above the statements rather than beside the statements.

Figure 6-7 Motivation Statements

 <p>Shift your charge, help the community You can help your whole community by scheduling your EV to charge when there's less demand on the grid. This keeps the grid healthy and reliable.</p>	 <p>Shift your charge, help the environment By charging when demand on the grid is lower, you're helping increase the use of renewable energy—making each charge a little greener.</p>	 <p>When you charge matters The best times to charge are when there are fewer customers using energy. Plugging in during these low-demand times is better for the environment—and supports a healthier grid.</p>
 <p>Most EV drivers charge at night 70% of EV drivers who charge at home do so overnight, when there is less demand for energy. This is healthier for the grid and the environment.</p>	 <p>Soak up the sun Make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy and demand for it is low.</p>	 <p>The smart way to charge Many EVs and smart EV chargers have an app or built-in settings that allow you to set a charging schedule. If you ever need to override your settings, you can do that easily, too.</p>

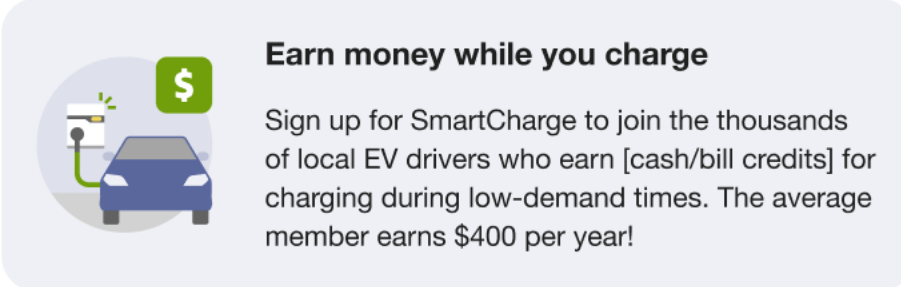
Promotions

Utilities can choose to include one of three promotions in the module:

- Smart Charger promotion (shown below)
- TOU Rate Plan promotion (shown below)
- Custom promotion

When included in a Success state email, promotions are displayed using a similar format to the motivation statements, as shown here:

Figure 6-8 Success State Promotion



Earn money while you charge

Sign up for SmartCharge to join the thousands of local EV drivers who earn [cash/bill credits] for charging during low-demand times. The average member earns \$400 per year!

The graphic features a blue car being charged by a white station, with a green dollar sign icon above it.

[Check out SmartCharge](#)

When included in the Needs Improvement or Transition states, the promotion is displayed at the bottom of the module, and is separated by a bar, as shown here:

Figure 6-9 Promotion in Other States

Program your EV or charger to charge only from
10am - 4pm and 9pm - 6am

Can you save money on a Time-of-Use plan?



Many EV drivers take advantage of lower electricity rates by charging overnight during off-peak hours. Switching to a Time-of-Use plan is a simple way to cut energy costs while keeping your EV powered and ready to hit the road.

[Compare plans and start saving](#)

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 6-7 Configuration Options

Configuration Option	Input Value
<p>Images</p> <p>The images can be configured to use client-specific colors. Other than that, the image can not be changed.</p>	<p>Optional</p> <p>Specify client branding colors.</p>
<p>Icons in the Chart Legend</p> <p>Utilities can specify whether they want to use leaves in the chart legend or rounded boxes.</p>	<p>Required</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use leaves. • Use rounded boxes.
<p>Threshold Percentage</p> <p>Utilities can specify the percentage of EV charging that is used to determine whether customers are in a success state. The default threshold his 10%. Using this threshold, customers who do less than 10% of their EV charging during high-demand periods will be in the success state. Customers who are over 10% will be in the Needs Improvement or Transition state.</p> <p>Oracle recommends not using a value over 15%, and all values must be a multiple of 5.</p> <p>Default: 10%</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default percentage. • Specify an alternate percentage:
<p>Time Blocks</p> <p>Utilities can define whether they have 2 or 3 time blocks. These blocks are typically similar to the different peak periods for customers on Time-of-Use rates. For utilities with 2 time blocks, you must define which block is the "Times to Avoid" block, and all remaining hours are classified as "Best".</p> <p>For utilities with 3 time blocks, specify both the "Times to Avoid" and the "Okay" times. All other hours are classified as "Best".</p> <p>This option is used to determine how the chart renders. Utilities with 3 time blocks should also review the Time Focus configuration option to determine how their Times to Charge statements are displayed.</p>	<p>Required</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use these 2 time blocks: <ul style="list-style-type: none"> – Times to avoid block: – Best times block: • Use these 3 time blocks: <ul style="list-style-type: none"> – Times to avoid block: – Okay block: – Best times block:
<p>Time Focus</p> <p>Utilities that have 3 time blocks can define the focus of the Time to Charge statement in the module, as follows:</p> <ul style="list-style-type: none"> • Focus on Best times only • Focus on Best and Okay times <p>This option is not used for utilities with only 2 time blocks.</p>	<p>Required if Using 3 Blocks</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Focus on Best times only. • Focus on Best and Okay times.

Table 6-7 (Cont.) Configuration Options

Configuration Option	Input Value
<p>Motivations</p> <p>The text and images included in the motivations can be customized to meet the needs of the utility.</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default text and images. • Work with your delivery team to specify alternate text and images.
<p>Missing Disaggregation Days Allowed</p> <p>Specify the number of days that disaggregation data can be missing before the module fails.</p> <p>For example, if you set this option to 2, the module will fail if there are 3 days of disaggregation data missing for the bill period. Note that the email is sent without this module if it fails.</p> <p>Default: 2 days</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default days. • Specify an alternate number of days:
<p>Total EV Charging Threshold</p> <p>Specify the required amount of EV charging that must be detected for the module to be included.</p> <p>For example, if you set this option to 5 kWh, the module will fail if the customer's EV charging totals 4kWh. Note that the email is sent without this module if it fails.</p> <p>Default: 5 kWh</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default. • Specify an alternate amount:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Weekly Main Insight Module

The EV Weekly Main Insight module is used to give the reader an overview of their EV charging for the week, provides a comparison to how they charged during on-peak hours the previous week, gives them a tip about how they can improve their charging habits, and explains how the utility identifies their EV charging habits.

Requirements

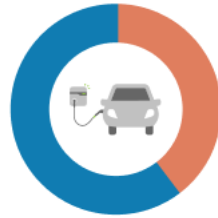
This module has the following requirements and limitations:

- AMI (hourly or more granular) data and use of the hourly disaggregation service are required.
- EV charging must be detected by the hourly disaggregation service.
- Only L2 chargers are supported.
- Estimated reads are not supported.

Design

This Image shows an example of the EV Main Insight module:

Over 30% of your EV charging cost came from on-peak



On-peak (\$\$\$) Off-peak (\$)

↑ Higher on-peak cost than previous week



Save more by charging less on-peak

Program your EV to avoid charging on-peak: many EVs allow you to set your on-peak hours, so you can plug in when you want, and the car won't start charging until off-peak hours begin.

Wondering how we track your EV charging? We use data from your smart meter to identify usage patterns. This calculation may differ slightly from what you see in your EV app, even when you didn't charge on-peak at all.

User Experience Variations

This topic discusses how the EV Main Insight module can vary.

High On-Peak Charging, Two Periods

When the user's rate plan has only two periods (ie, on-peak and off-peak), and they charge their EV during on-peak hours more than the high threshold percentage (30%, by default), the module varies as follows:

- **Header:** The header reads, "Over 30% of your EV charging costs came from on-peak". The percentage shown in the message is the high threshold value that can be configured by the utility.

Medium On-Peak Charging, Two Periods

When the user's rate plan has only two periods (ie, on-peak and off-peak), and they charge their EV during on-peak hours less than the high threshold percentage (30%, by default), but more than the low threshold (10%, by default) the module varies as follows:

- **Header:** The header reads, "Over 10% of your EV charging costs came from on-peak". The percentage shown in the message is the low threshold value that can be configured by the utility.

Low On-Peak Charging, Two Periods

When the user's rate plan has only two periods (ie, on-peak and off-peak), and they charge their EV during on-peak hours less than the low threshold percentage (10%, by default), the module varies as follows:

- **Image:** A new image with an EV charging and several stars appears at the top of the module in place of the standard header.
- **Chart, Legend, and Standard Comparative Statement:** These items are omitted from the module.
- **Header:** The header appears below the image, and reads "Excellent! Nearly all of your EV charging was off-peak".
- **Low Charging Comparative Statement:** Depending on how many weeks the user has been considered a "low" on-peak charger, they will see one of the following:
 - Week 1 of being a "low" on-peak charger: No statement is displayed.
 - Weeks 2-8: The statement begins with a green image of a medal and reads, "<X> weeks in a row of almost no on-peak charging!"
 - More than 8 weeks: For all additional consecutive weeks of low charging, the statement begins with a green image of a medal and reads, "More than 8 weeks in a row of almost no on-peak charging!"
- **Savings Statement:** This item is omitted from the module and is replaced by the Extra Mile Statement.
- **Extra Mile Statement:** If the user does not charge within the first hour after peak hours end, this statement is not included in the email. If they do charge during that hour, one of three Extra Mile Statements is displayed in place of the Savings Statement. All three begin with the header "Can you go the extra mile?", have a trophy graphic, and are followed by one of these statements, which are selected randomly:
 - **One way is to delay your scheduled start time:** help avoid straining the grid at the beginning of off-peak hours, when many people start charging their vehicle, by setting your schedule to start a couple hours into the off-peak period.
 - **The best time to charge is when the sun is shining:** make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.
 - **One way is to set a "departure" time:** some vehicles let you set the time you need the car charged and ready to go, and your charging will finish in time for departure. This helps avoid demand spikes on the grid by staggering when EVs start charging.



Excellent! **Nearly all** of your EV charging was off-peak



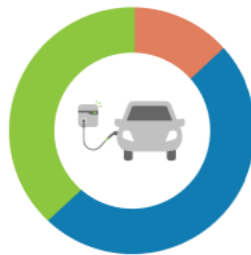
Can you go the extra mile?

The best time to charge is when the sun is shining: make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.

Wondering how we track your EV charging? We use data from your smart meter to identify usage patterns. This calculation may differ slightly from what you see in your EV app, even when you didn't charge on-peak at all.

High or Medium On-Peak Chargers, Three Periods

When the user's rate plan has three periods (ie, on-peak, off-peak, and super off-peak), and they charge their EV at high or medium levels, the variations described in the High and Medium variations above occur. Additionally, the chart and legend both include three periods instead of two. This image shows an example of the chart and legend for rate plans with three peak periods:



■ On-peak (\$\$\$)
 ■ Off-peak (\$\$)
 ■ Super off-peak (\$)

Low On-Peak with Above Threshold Mid-Peak Charging, Three Periods (Low Charger)

When the user's rate plan has three periods (for example, highest-cost period, mid-cost period, and lowest-cost period), and they charge their EV less than the low threshold percentage (10% by default) during the highest-cost period, but above the low threshold on the mid-cost periods, the user is considered a low on-peak charger, but there is still room for their charging habits to improve. For example, if a user charged their vehicles as follows, the module would fall into this scenario:

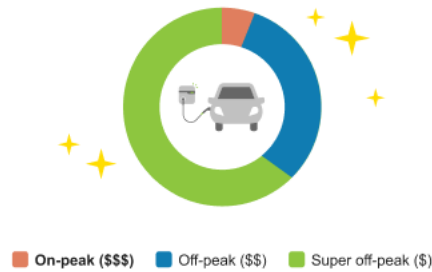
- **5%** of charging during the highest-cost peak period (**below** the 10% threshold)


- **15%** of charging during the mid-cost peak period (**above** the 10% threshold)
- **80%** of charging during the lowest-cost peak period

In this scenario, the module varies as follows:

- **Header:** The header appears at the top of the module, and reads "Excellent! **Less than 10%** of your EV charging cost came from on-peak".
- **Graphic:** Several star graphics appear around the chart.
- **Low Charging Comparative Statement:** Depending on how many weeks the user has been considered a "low" on-peak charger, they will see one of the following:
 - Week 1 of being a "low" on-peak charger: No statement is displayed.
 - Weeks 2-8: The statement begins with a green image of a medal and reads, "**<X> weeks in a row** of almost no on-peak charging!"
 - More than 8 weeks: For all additional consecutive weeks of low charging, the statement begins with a green image of a medal and reads, "**More than 8 weeks in a row** of almost no on-peak charging!"
- **Savings Statement:** This item is omitted from the module and is replaced by the Extra Mile Statement.
- **Extra Mile Statement:** One of three Extra Mile Statements is displayed in place of the Savings Statement. All three begin with the header "Can you go the extra mile?", have a trophy graphic, and are followed by one of these statements, which are selected randomly:
 - **One way is to delay your scheduled start time:** help avoid straining the grid at the beginning of off-peak hours, when many people start charging their vehicle, by setting your schedule to start a couple hours into the off-peak period.
 - **The best time to charge is when the sun is shining:** make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.
 - **One way is to set a "departure" time:** some vehicles let you set the time you need the car charged and ready to go, and your charging will finish in time for departure. This helps avoid demand spikes on the grid by staggering when EVs start charging.

Excellent! **Less than 10%** of your EV charging cost came from on-peak



 **More than 8 weeks in a row** of almost no on-peak charging!



Can you go the extra mile?

The best time to charge is when the sun is shining: make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.

Wondering how we track your EV charging? We use data from your smart meter to identify usage patterns. This calculation may differ slightly from what you see in your EV app, even when you didn't charge on-peak at all.

Low On-Peak and Mid-Peak Charging, Three Periods (Super Low Charger)

When the user's rate plan has three periods (ie, highest-cost period, mid-cost period, and lowest-cost period), and they charge their EV less than the low threshold (10% by default) during both the lowest-priced and the mid-priced period, they are considered a super low charger. For example, if a user charged their vehicles as follows, the module would fall into this scenario:

- **5%** of charging during the highest-cost peak period (**below** the 10% threshold)
- **5%** of charging during the mid-cost peak period (**below** the 10% threshold)
- **90%** of charging during the lowest-cost peak period

In this scenario, the module varies as follows:

- **Image:** A new image with an EV charging and several stars appears at the top of the module in place of the standard header.
- **Chart, Legend, and Standard Comparative Statement:** These items are omitted from the module.
- **Header:** The header appears below the image, and reads "Excellent! **Nearly all** of your EV charging was super off-peak".
- **Additional Statements:** The Savings Statement and the Extra Mile Statement are omitted from the module.



Amazing! **Nearly all** of your EV charging was super off-peak

Wondering how we track your EV charging? We use data from your smart meter to identify usage patterns. This calculation may differ slightly from what you see in your EV app, even when you didn't charge on-peak at all.

Usage Variation

In cases where cost can not be determined, or usage has been specifically selected by a utility, a usage variation is used instead of the cost variations. In this variation, all percentages refer to the percent of usage, not the percent of cost. The only change to any of the above variations when usage is used instead of costs occurs in the module header and in the Comparative Statement that appears below the chart and legend, as follows:

- **Header:** The header changes as follows, based on the percentage of EV charging that was done on-peak:
 - High usage: **Over x%** of your EV charging was on-peak
Note that the default percentage for the usage variation is 20%.
 - Low usage: **Less than x%** of your EV charging was on-peak
Note that the default percentage for the usage variation is 5%.
 - Super low usage: Excellent! **Nearly all** of your EV charging was off-peak
- **Comparative Statement:** Below the legend, a statement tells the reader how their charging this week compares to the previous week. The statement begins with an icon, and can be one of the following:
 - A green arrow pointing up with a statement that reads, "Higher on-peak charging than previous week"
 - A green arrow pointing down with a statement that reads, "Lower on-peak charging than previous week"
 - A gray arrow pointing from side to side with a statement that reads, "Same on-peak charging as previous week"

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 6-8 Configuration Options

Configuration Option	Input Value
<p>Images</p> <p>The images can be configured to use client-specific colors. Other than that, the image can not be changed.</p>	<p>Optional</p> <p>Specify client branding colors.</p>
<p>TOU Period Names</p> <p>Specify the names of each of the peak periods. For example:</p> <ul style="list-style-type: none"> • On-Peak (\$\$\$) • Partial-Peak (\$\$) • Off-Peak (\$) 	<p>Required if using TOU Rates</p> <p>Specify the names of each period:</p> <ul style="list-style-type: none"> • Period 1: • Period 2: • Period 3:
<p>High Threshold</p> <p>When users spend more than this percentage of their EV charging during on-peak hours, they receive the message that they are above the specified threshold. The high and low threshold values are used to determine the messaging for the module.</p> <p>Default: 30%</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> • Use the default percentage. • Specify an alternative percentage:
<p>Low Threshold</p> <p>When users spend less than this percentage of their EV charging during on-peak hours, they receive the message that they are below the specified threshold. The high and low threshold values are used to determine the messaging for the module.</p> <p>Default: 10%</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> • Use the default percentage. • Specify an alternative percentage:
<p>Text and Extra Mile Statement</p> <p>Utilities are encouraged to review the statements and adjust them to ensure that they are pushing customers to charge at the times that are most beneficial to the utility.</p>	<p>Optional</p> <p>Select one of the following:</p> <ul style="list-style-type: none"> • Use the default text and statement. • Specify alternative text and statement:
<p>Missing Disaggregation Days Allowed</p> <p>Specify the number of days that disaggregation data can be missing before the module fails.</p> <p>For example, if you set this option to 5, the module will fail if there are 6 days of disaggregation data missing for the bill period. Note that the email is sent without this module if it fails.</p> <p>Default: 2 days</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default days. • Specify an alternate number of days:
<p>Total EV Charging Threshold</p> <p>Specify the required amount EV charging that must be detected for the module to be included.</p> <p>For example, if you set this option to 5 kWh, the module will fail if the customer's EV charging totals 4 kWh. Note that the email is sent without this module if it fails.</p> <p>Default: 5 kWh</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default. • Specify an alternate amount:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Post-Bill Report Main Insight Module

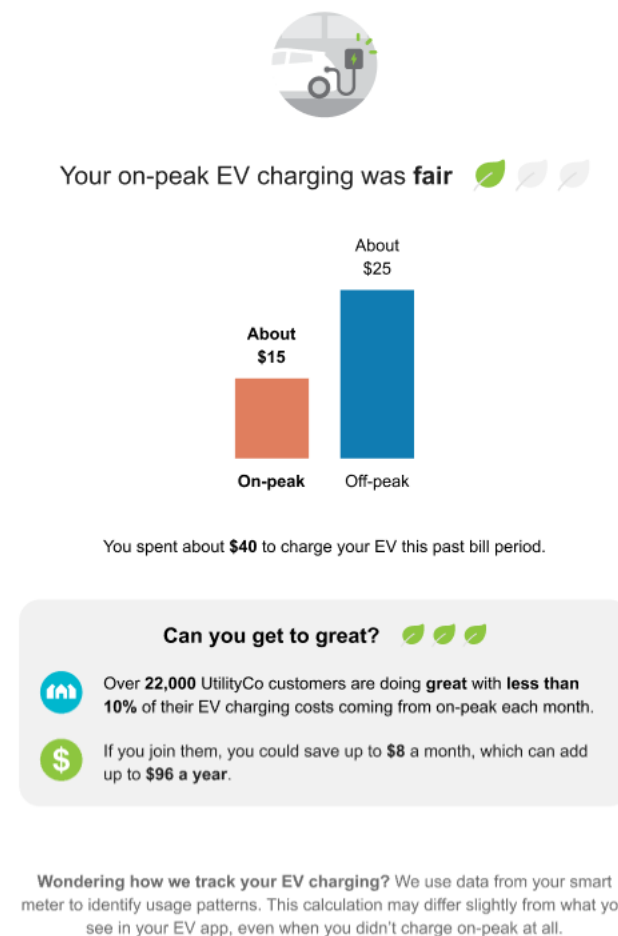
The EV Post Bill Report Main Insight module provides the reader with an overview of their electric vehicle (EV) charging during the most recent billing period. The module rates their charging habits as fair, good, or great, compares their on-peak and off-peak charging, identifies how much they spent charging their vehicle, provides tips to improve their charging habits, and explains how the utility tracks EV charging data.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Post-Bill Report Main Insight module:



User Experience Variations

This topic discusses how the module can vary.

Chart Display Variations

The chart in the module varies as follows, depending on whether the customer has 2 or 3 periods in their rate plan:

- When the customer's rate plan includes two periods, the chart displays two bars.
- When the customer's rate plan includes three different periods, the chart displays three bars.

Rating Statement and Incentive Statement Variations

This table describes how the statements in the module can vary:

State	Two Periods	Three Periods
Good/Fair	<p>When the customer's on-peak cost is greater than the low threshold (default 10%):</p> <p>Rating Statement: "Your on-peak EV charging was <good/fair>"</p> <p>Incentive Statement: "Over 22,000 UtilCo customers are doing great, with less than 10% of their EV charging costs coming from on-peak this month."</p>	<p>When the customer's on-peak cost is greater than the low threshold (default 10%):</p> <p>Rating Statement: "Your on-peak EV charging was <good/fair>."</p> <p>Incentive Statement: "Over 22,000 UtilCo customers are doing great, with less than 10% of their EV charging costs coming from on-peak this month."</p>
Great	<p>When the customer's on-peak cost is less than the low threshold (default 10%):</p> <p>Rating Statement: "Excellent! Your on-peak EV charging was great" and is followed by three leaves.</p> <p>Incentive Statement: Does not appear in the module.</p>	<p>When the customer's on-peak cost is below the low threshold (10% by default) while the part-peak cost share is above the low threshold:</p> <p>Rating Statement: "Excellent! Your on-peak EV charging was great" and is followed by three leaves.</p> <p>Incentive Statement: "Can you shift more of your charging to super off-peak? Over 6,000 UtilCo customers charge their EV almost entirely during super off-peak each month. If you join them, you could save up to \$7 a month, which can add up to \$84 a year."</p>
Super Great	<p>Not applicable. Only customers with three periods can have this state.</p>	<p>When the customer's charging during the highest-cost and middle-cost periods are both less than the low threshold (default 10%):</p> <p>Rating Statement: "Excellent! Your on-peak EV charging was great" and is followed by three leaves.</p> <p>Incentive Statement: Does not appear in the module.</p>

Icon Variations

Utilities can decide whether they want to include icons in the module. If they include icons, they can use:

- Leaves
- Smiley faces
- Medals

If the utility chooses to use the icons, they are present in both the Rating Statement and the Incentive Statement.

Usage Variation

In cases where cost can not be determined, a usage variation is used instead of the cost variations. The only changes to any of the above variations when usage is used instead of costs are:

- **Charging Graph:** The numbers on the graph depict usage in percentages instead of costs.
- **Spending Statement:** The statement that typically appears below the chart is not included in 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 6-9 Configuration Options

Configuration Option	Input Value
Images The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.
Social Norm Icons Utilities can specify whether they want to use icons in their rating statement, and if so, which icons they use. Icon choices include: <ul style="list-style-type: none"> • Leaves (default) • Smiley faces • Medals • No icons 	Optional Specify one of the following: <ul style="list-style-type: none"> • Leaves (default) • Smiley faces • Medals • No icons
Injunctive Norm Language The injunctive norm language used in the rating statement can be adjusted to meet the needs of the utility. By default the language is: <ul style="list-style-type: none"> • Fair • Good • Great 	Optional Specify one of the following: <ul style="list-style-type: none"> • Use default language. • Specify alternative language:

Table 6-9 (Cont.) Configuration Options

Configuration Option	Input Value
<p>Missing Disaggregation Days Allowed</p> <p>Specify the number of days that disaggregation data can be missing before the module fails.</p> <p>For example, if you set this option to 5, the module will fail if there are 6 days of disaggregation data missing for the bill period. Note that the email is sent without this module if it fails.</p> <p>Default: 5 days</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default days. • Specify an alternate number of days:
<p>Total EV Charging Threshold</p> <p>Specify the required amount of EV charging that must be detected for the module to be included.</p> <p>For example, if you set this option to 10, the module will fail if the customer's EV charging totals 9 kWh. Note that the email is sent without this module if it fails.</p> <p>Default: 10 kWh</p>	<p>Optional</p> <p>Specify one of these options:</p> <ul style="list-style-type: none"> • Use the default. • Specify an alternate amount:

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Thanks Module

The EV Thanks module is used to tell the reader that driving an EV is impacting their community in a positive way. The module thanks the reader for driving an EV, and tells them that their community thanks them for helping to create a healthier environment, while also saving on fuel and maintenance costs.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Thanks module:

Your community thanks you for driving an EV



You are doing your part by contributing to a healthier environment, while saving on fuel and maintenance costs!

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 6-10 Configuration Options

Configuration Option	Input Value
Images The image can be configured to use client-specific colors. Other than that, the image can not be changed.	Optional Specify client branding colors.

To see how this module fits into the overall user experience, see [Design and Configuration](#).

EV Why Off-Peak Module

The EV Why Off-Peak module explains to the reader why it is important and beneficial to charge their EV during off-peak hours. The module explains how this behavior can save them money, make charging more convenient, and ease the strain on the grid. The module also asks them if they can go the extra mile to use clean energy to charge their EV.

Requirements

There are no module-specific requirements. For product requirements, see [Requirements and Limitations for EV Charging Coach Emails](#).

Design

This image shows an example of the EV Why Off-Peak Module:

Why charge your EV during off-peak hours?

- 1 Save money**
 Your TOU rate plan is set up to save you money! Get the most out of it by charging your EV during off-peak hours when savings are greater.
- 2 Ease strain on the grid**
 The grid works hard to keep up with demand when people use it most. Charging your EV during off-peak hours eases strain on the grid, which can help avoid electricity cost increases for you and your neighbors.
- 3 Set it and forget it**
 Routines make life easier. Schedule your EV to charge automatically during off-peak hours so you never have to think about it.



Can you go the extra mile?

The best time to charge is when the sun is shining: make your EV driving even greener by charging in the middle of the day when the grid is filled with clean solar energy.

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 6-11 Configuration Options

Configuration Option	Input Value
Icons and Images	Optional
The images can be configured to use client-specific colors. Other than that, the image can not be changed.	Specify client branding colors.

To see how this module fits into the overall user experience, see [Design and Configuration](#).

Load Shifting Collective Benefit Module

The Load Shifting Collective Benefits module is part of the Opower Load Shifting Cloud Service, Rate Coach. When included in EV Charging Coach emails, the only variation is the background color, which is light gray.

For additional details about this module, including requirements, user experience variations, and configuration options, see [Load Shifting Collective Benefit Module](#) in the Opower Load Shifting, Rate Coach Configuration Guide.

TOU 101 Module

The TOU 101 module is part of the Opower Load Shifting Cloud Service, Rate Coach. There are no specific variations for the EV Charging Coach.

For additional details about this module, including requirements, variations and configuration options, see [TOU 101 Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.

TOU Hourly Usage Module

The TOU Hourly Usage module is part of the Opower Load Shifting Cloud Service, Rate Coach. There is no EV-specific variation.

For additional details about this module, including requirements, variations and configuration options, see [TOU Hourly Usage Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.

TOU Post-Bill Bill Period Comparison Module

The TOU Post-Bill Bill Period Comparison module is part of the Opower Load Shifting Cloud Service, Rate Coach. The standard variation is used in the EV Charging Coach emails.

For additional details about this module, including requirements, variations and configuration options, see [TOU Post-Bill Period Comparison Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.

TOU Post-Bill Peak Period Disaggregation Module

The TOU Post-Bill Peak Period Disaggregation module is part of the Opower Load Shifting Cloud Service, Rate Coach. For the most part, the standard variation is used in the EV Charging Coach emails, with one exception:

- In the Quantified End Uses section of the module, the EV Charging end use is not included.

For additional details about this module, including requirements, variations and configuration options, see [TOU Post-Bill Peak Period Disaggregation Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.

TOU Tips Module

The TOU Tips module is part of the Opower Load Shifting Cloud Service, Rate Coach. The standard variation is used in the EV Charging Coach emails.

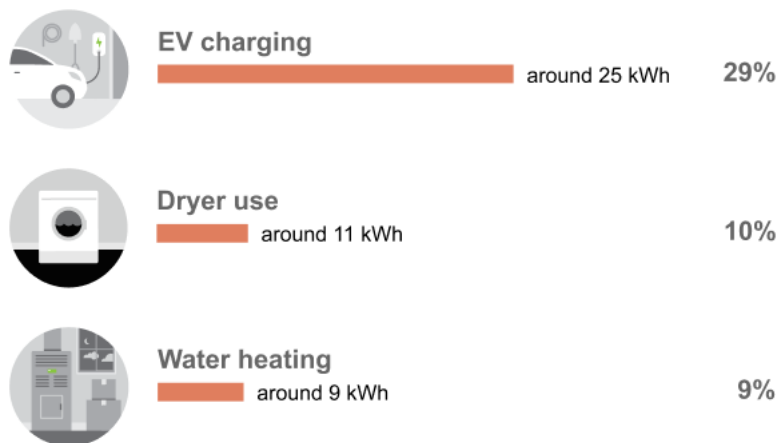
For additional details about this module, including requirements, variations and configuration options, see [TOU Tips Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.

TOU Weekly Peak Period Disaggregation Module

The TOU Weekly Peak Period Disaggregation module is part of the Opower Load Shifting Cloud Service, Rate Coach. An electric vehicle variation is used in the EV Charging Coach emails, and is shown below.

Figure 6-10 Weekly Peak Period Disaggregation Module

Around **48%** of your entire home's on-peak use came from these categories



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](#).

For additional details about this module, including requirements and variations, see [TOU Weekly Peak Period Disaggregation Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Product Overview.

TOU Welcome Message Module

The TOU Welcome Message module is part of the Opower Load Shifting Cloud Service, Rate Coach. An electric vehicle variation is used in the EV Charging Coach emails, and is shown below.

Figure 6-11 Welcome Message Module

Rate Coach is a weekly email designed to help you
save money

We'll help you avoid charging your EV and using other appliances at higher-cost
times.

You're on a rate plan that charges different prices throughout the day. The current
winter schedule lasts from **Month XX - Month YY**.

For additional details about this module, including requirements and variations, see [TOU Welcome Message Module](#) in the Oracle Utilities Opower Load Shifting, Rate Coach Configuration Guide.