Oracle Utilities Opower Proactive Alerts Cloud Service

Proactive Alerts Product Overview





Oracle Utilities Opower Proactive Alerts Cloud Service Proactive Alerts Product Overview, Latest Release

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Customer Service Interface - Program Management

Contact Your Delivery Team

Getting Started

The Proactive Alerts Cloud Service includes digital communications that are designed to educate advanced metering infrastructure (AMI) customers about their utility use. The following components are available in this service:

- High Bill Alerts AMI
- Weekly Energy Updates
- Weekly Energy Updates v3
- Inside Opower
- Customer Service Interface

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

High Bill Alerts AMI

High Bill Alerts AMI are messages designed to help residential AMI customers save energy and money when they are likely to use more than usual for a billing period. The alerts can be sent through the email, text message, voice message, and mobile push channels.

Requirements and Limitations

The following data requirements and limitations apply to all utilities and customers in the High Bill Alert AMI program.

Utility Requirements

This table lists the utility requirements:

Category	Description
Scale	Scale restrictions may apply to the number of customers enrolled in alerts. The actual number of communications sent may be affected by attrition, opt-outs, customer eligibility, data availability, and the number of customers whose forecasted usage exceeds configured thresholds.
Language	Not all languages and locales are supported at this time. Contact your Oracle Utilities Opower Sales Representative to confirm that alerts are available in your market.
Delivery Window	High Bill Alerts AMI must be delivered during waking hours in a utility-specific delivery window. They cannot be delivered during the configured non-delivery window.
Delivery Frequency	High Bill Alerts AMI are limited to being sent once per billing period per service point to avoid excessive alerting.
Rate Modeling	Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the Oracle Utilities Opower Rates Engagement Cloud Service Product Overview for more information.



Category	Description		
Other Product Requirements	Load Shifting Rate Coach Insights: In order to provide Load Shifting Rate Coach insights within the High Bill Alert AMI emails, the utility must have purchased the Load Shifting Rate Coach Cloud Service, and the customer must have modeled rates.		
	Water Data : The following requirements and limitations are associated with sending alerts that include water data:		
	Utilities must purchase the <u>Oracle Utilities OpowerDigital Self</u> Service - TransactionsCloud Service.		
	 Customer must have metered water service. Wastewater and sprinkler service are combined with standard water service under "water". 		
	 Water rates must be modeled. 		
	 A water cost experience is supported for the meter types and meter type combinations below. (A water usage experience is not supported.) Water 		
	 Electric and Water 		
	 Budget billing will display a usage experience, but is available only for Water or Water and Wastewater meter types. 		
	 Water alerts must be run as an opt-in program. Customers must opt-in to receive alerts and also set a personal cost threshold to be eligible. 		
	Water alerts are supported in the email and SMS channels only.		
Web Portal F documentatio customers to program from access to a w	Web Portal Requirements: Some of the features listed in this documentation require access to a web portal. For example, to enable customers to set a personal threshold, or to opt into or out of the program from a utility website, the utility must provide customers with access to a web portal. Oracle Utilities Opower provides the following web portal products:		
	Oracle UtilitiesOpowerEnergy Efficiency Web Portal		
	 Oracle Utilities Opower Digital Self Service - Energy Management Oracle Utilities Opower Digital Self Service - Energy Management Advanced Metering Infrastructure 		
	Note: Purchasing one of these web portal products is not required to send alerts. A web portal is required only if utilities want to utilize features that require customer access to a web portal. Utilities might also decide to create their own web portal and use APIs to enable customers to access and update their information. For additional information, see the Oracle Utilities REST API documentation .		

Customer Requirements

This table lists the customer requirements:

Category	Description
Billing Frequency	Monthly or bi-monthly.
Data Delivery Frequency	Daily. The utility must be able to deliver customer data to Oracle Utilities within 72 hours (48 hours from the last data read of the day). Data must be sent to Oracle Utilities in the right schema and according to the Oracle Utilities Opower Interval Data Transfer Standards.



Category	Description
Data Requirements	Billing Data : Billed usage data from the utility is required.
	AMI Data: Daily, hourly, or sub-hourly AMI data is required. High Bill Alerts AMI cannot be sent without this level of data granularity. The customer must have AMI data going back to the beginning of the current billing cycle.
	Hourly or subhourly AMI data is required for the Time of Day Module module (otherwise this module is hidden). AMI data is not required for weather insights to appear in the Time of Day module.
	Contact Information: The customer must have valid contact information for the channels through which they receive High Bill Alerts AMI.
Data History	AMI data going back to the beginning of the current billing cycle is required.
	For customers who do not have a personal cost threshold set, at least a year's worth of billing history is required.
	For customers who do have a personal cost threshold set, a year's worth of usage data is not required.
	More information about personal thresholds can be found in the <u>Bill Forecast Module</u> module topic.
Data Coverage	By default, at least 75% of the possible reads for the current billing cycle are required to calculate the bill forecast. Estimated reads count towards this threshold. This threshold is configurable.
	At least 75% of possible reads for the current billing cycle is required to calculate the customer's high usage period. If this threshold is not met, the Time of Day Module module is hidden.
Supported Fuels and Services	Electricity, gas, and water.

Limitations

The limitations are as follows:

- Non-Residential (Business) Customers: Non-residential business customers can receive High Bill Alerts AMI. See the <u>Business Customer Engagement Proactive Alerts</u> <u>Product Overview</u> for more information.
- **Dual Fuel Customers**: Dual fuel (gas and electricity) customers will receive a single combined fuel alert.
- Multi-Service Customers: Customers with electric and water service will receive a single combined service alert.
- **Number of Service Points**: To avoid over-alerting, multiple service points of the same fuel type (in the same service agreement) are combined and sent in a single alert.



Customer Experience

High Bill Alerts AMI inform customers before the end of a billing cycle that they are likely to have high use or a high bill for the current billing period. Customers can then use the tips provided in the alert to reduce their consumption before the billing period ends.

Channels: Alerts can be sent through the email, text message, voice message, and mobile push channels, unless noted for a particular type of alert. A utility can specify which customers are eligible to enroll in alerts and the channels by which they can receive those alerts.

Cost Information: Cost information can be included in the alerts if a utility's rates have been modeled. This means that the cost of energy use, and the calculators used to generate that cost, are modeled in the Oracle Utilities Opower system. As a result, the alert changes to display the increase in energy use in terms of cost. Utilities can also choose to display a cost range.

Budget Billing: Some alerts may display a message that the customer is on budget billing. Budget billing is a type of billing in which the customer pays a set amount of money each month for their bill. The utility will look at the amount the customer spent last year, add a percentage to this amount to cover the cost of inflation, and divide the amount over twelve months.

Personalized Threshold: The personalized threshold allows the customer to set a minimum usage or cost that they must reach before they receive a high bill alert. This threshold applies to all alert channels. More information about personal thresholds can be found in the Bill Forecast Module topic.

The following alert types are available:

- Email Alerts
- Text Alerts
- Voice Alerts
- Mobile Push Alerts

Email Alerts

Email High Bill Alerts AMI are digital messages sent through the email channel to inform customers when they are on track for a high bill or high use for the current period. The Email High Bill Alert AMI user experience can vary widely, depending on many factors, such as:

- Which fuel/resource types the customer has.
- Whether cost or usage is displayed.
- Whether the utility or the customer has set up a threshold.
- Whether the customer is part of utility programs, such as budget billing.

Each email is comprised of the following individual modules, each of which can also vary depending on these factors.

- Subject Lines and Header Module
- Bill Forecast Module
- Electric Gas Comparison Module
- Multi-Service Comparison Module



- Time of Day Module
- Water Time of Day Module
- Load Shifting Insights for High Bill Alerts
- Weather Insights Module
- Ways To Save Module
- Marketing Module
- Easy Open Module
- User Feedback Module
- Footer Module

Note: For utilities to send water alerts, they must also have the Digital Self Service - Transactions Cloud Service. See the <u>Oracle Utilities Opower Digital Self Service - Transactions Product Overview</u> for additional information.

This graphic shows an example of what the Email High Bill Alert AMI might look like for a customer.



UtilityCo

Sergei Poganshev Mr. Acct # *****6789

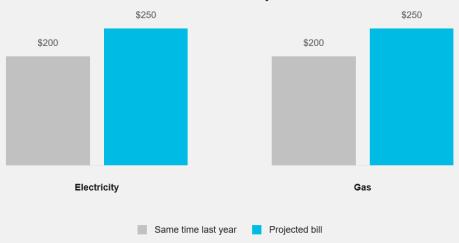
Your bill is projected to be \$250



That's higher than the high bill threshold you set. Change your threshold

Electricity and gas breakdown

You're projected to spend more on electricity and gas than the same time last year.



When you use the most electricity

Think about what's using electricity in the morning.

<u>*</u>	Mornings	6am - 12pm	50%
	Afternoons	12pm - 6pm	20%
1	Evenings	6pm - 12am	20%

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10%



Subject Lines and Header Module

The subject line and the header are used to engage the customer and brand the communication, while the footer provides necessary information and links to manage preferences or unsubscribe from the email channel.

Requirements

There are no module-specific requirements. See <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature for more information.

User Experience

This section describes the user experience for subject line, header, and footer components of the High Bill Alert AMI email.

Subject Line

The subject lines used in the High Bill Alert AMI email deliver high-value information, and explain to the reader why they are receiving the alert. Note that the display of subject lines varies based on the device and email client used to view the message. The subject line can also vary depending on the customer's program design and preferred language.

Default Subject Line: The default subject line uses "on track" language and informs the customer that their usage or cost during the current bill period could result in a high bill. For example, "Alert: You are on track for a high bill of \$240".

Header Module

The header information includes a logo provided by the utility, and the customer's name and account number. Most of the numbers in the account number are displayed as asterisks for security purposes.

The default Header module includes the following components:

- A logo provided by the utility.
- · The customer's name.
- The last four digits of the utility account.



Jane Doe Acct # ****00e1 Reference number *00e2

Bill Forecast Module

The Bill Forecast module provides a projection of how much the customer could spend on their utility bill if they continue their spending behavior through the end of the billing period. The



module can also include personalized threshold information, and can enable customers to access and update their threshold.

Requirements

There are no module-specific requirements. See Requirements and Limitations for the High Bill Alerts (AMI) feature for more information.

Limitations

This section lists the limitations:

- Rates Not Modeled: Users without modeled rates are only able to set a usage threshold.
- **Budget Billing**: Users with budget billing are only able to set a usage threshold.
- Multiple Accounts: The personalized threshold experience varies depending on what kind of accounts the customer has.
 - If a customer has budget billing and another non-budget billing account, they will receive the budget billing user experience.
 - If all of the customer's accounts have modeled rates and none of the accounts are budget billing, the customer can only set a cost threshold.
 - If at least one account doesn't have modeled rates or is budget billing, the customer can only set a usage threshold.
 - The combined usage or cost of all fuel/resource types included in the alert must meet the threshold to trigger the alert. For example, if the customer has electric and gas service, and has set a threshold of \$100, the combined cost for electric and gas must be \$100 or greater to trigger the alert.
 - The utility-wide default threshold is not allowed.
 - Utility customers with water service must opt in to receive HBAs and must set a personal cost threshold.
 - Customers in a budget billing program must set a usage personal threshold.
- Water Customers: For utilities that are including water data in their HBAs:
 - The utility-wide default threshold is not allowed.
 - Utility customers with water service must opt in to receive alerts and must set a personal cost threshold.
 - Customers in a budget billing program must set a usage personal threshold.

User Experience

If rates are not modeled, the email includes a usage forecast instead of a cost forecast. It is possible for some customers at a utility to see cost information in their forecast, while others see usage information. For example, some customers at a utility may be on budget billing. which typically means they will see a usage forecast. Other customers at the same utility who are not on budget billing will typically see a cost forecast.

Forecast Statement: The forecast amount is an estimate, not an exact amount, and is based on the estimated length of the bill. By default the cost values are rounded to the nearest whole dollar. For example, "Your bill is projected to be \$[XX]."

Personal Threshold Insight Statement: Below the forecast is an insight about how much more the projected bill could cost compared to the cost or usage-threshold. "That's higher than



the bill threshold you set." Note that this statement appears only if the customer has set their personal threshold.

Change Your Threshold Link: Below the insight statement is a link that customers can use to change their threshold (if that feature is made available by the utility). The personalized threshold allows the customer to set a minimum threshold that their projected energy use or bill must reach before they receive a high bill alert.

For utilities that do not include water in their messages, and have implemented the personal threshold, the threshold defaults to the utility-set threshold until the customer sets their personal threshold. The module encourages them to set their own threshold and provides a link to their <u>Digital Self Service Energy Management Account Center</u> where they can set either a cost or a usage-threshold. When a threshold is set, the alert triggers only when cost or usage is greater than the set threshold. Utilities can also implement their own preference center, and provide access to customers using APIs. For additional information, see <u>Oracle Utilities REST API for Digital Self Service - Energy Management</u>

For utilities that include water in their HBAs, there is no utility-wide threshold. Customers only receive the alert if they have opted-in and set up a personal threshold. They can use the link to access the DSS EM Account Center where they can update their threshold.

Depending on the characteristics of a customer's accounts, the customer is provided one of the following options to define a personalized threshold. After the customer sets their threshold, when they receive an alert the module reminds them they set a threshold, and provides a link to their account where they can modify the threshold.

- Cost threshold: Customers with modeled rates can set a dollar threshold range of \$1 \$100,000,000. When an absolute dollar threshold is set, the alert triggers only when cost is greater than the set dollar-threshold. For example, the customer could set their threshold to send the alert only if their bill exceeds \$100. All active utility accounts for a customer must have modeled rates and are not defined as budget billing accounts for the customer to define a cost-based threshold. Water customers must set a cost threshold to receive an alert. If the customer does not set a personalized cost threshold, they will receive alerts only when they exceed the combined usage and cost threshold set by the utility. The recommended and default utility threshold is 30 percent.
- Usage threshold: Customers without modeled rates or with budget billing accounts can set a usage threshold percentage range of zero to 1000 percent greater than the same bill the previous year. For example, the user could set their threshold to send the alert only if their usage is at least 25 percent greater than the same bill period the previous year. The default usage-threshold value is 30 percent. The usage-based threshold is provided to customers with at least one active account that does not have modeled rates or is defined as a budget billing account.

This image shows an example of the Bill Forecast module:

Your bill is projected to be \$250



That's higher than the high bill threshold you set.

Change your threshold



User Experience Variations

This section describes the user experience variations in the Bill Forecast module.

Personal Threshold Not Set

When the utility has a default utility-wide threshold, but the customer has not yet set up their own personal threshold, the bill forecast message changes to include a prominent button with the text "CHANGE YOUR THRESHOLD" to prompt users to set their own personal threshold.

Personal Threshold Not Available

If the utility does not implement the personal threshold, all language regarding the customer's personal threshold, and all links or buttons directing customers to set or change the threshold are removed from the message.

Budget Billing

Budget billing customers receive a usage experience, which means their bill forecast statement uses percentage rather than dollar amounts. Additionally, a statement is added to the message telling the customer that if their usage is high, it could impact their future bills.

Usage

The message can provide a usage forecast rather than a forecasted amount. The usage forecast is shown as a percentage. For example, "Your energy use is projected to be 10% higher this billing period".

Projected Range

Utilities can display a forecast cost range rather than a specific cost value for the projected bill. If you choose to display a range, you do so by specify the range percentage. By default, the range is set to 0 (zero), and therefore, a range is not displayed. If you set the range to 15%, for example, and a customer's projected bill is \$100, the range would display as \$100-\$115.

Display Billing Period Date Range

You can set the Bill Forecast module to display the bill period date range associated with the forecast. The date range appears at the top of the module when set to display. By default, the date range is not displayed.

Calculations

At a high level, the bill forecast calculation involves the following steps:

- Calculate the baseline cost and energy values using the customer's bills from the previous year.
- 2. Estimate the customer's billing period end date.
- 3. Calculate how much energy the customer has used to date.
- Take the customer's energy use and project it forward to the estimated billing period end date.
- 5. Convert the resulting energy use values to cost values, based on the customer's rate plan. The output is an actual cost value (to date) and a projected cost value (going forward).



Note that the projected cost can also be displayed as a cost range, depending on the module configuration.

Electric Gas Comparison Module

The Electric Gas Comparison module is included in the Email High Bill Alert AMI for customers who have both gas and electric service. The module includes two bar graphs. Each graph compares projected use to use from the same billing period of the previous year. One graph shows electricity use and the other shows gas use. If a customer has the cost view, a dollar amount is displayed above each graph bar. If the customer has the usage view, usage is displayed above each graph bar.

Requirements

This topic lists the utility and customer requirements.

Utility Requirements

There are no module-specific requirements. See <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature for more information.

Customer Requirements

In addition to the <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature, customers must have the following in order for this module to generate:

- At least one electric and one gas service point.
- Bill forecast information available for both fuels.

User Experience

This section describes the common user experience with the module.

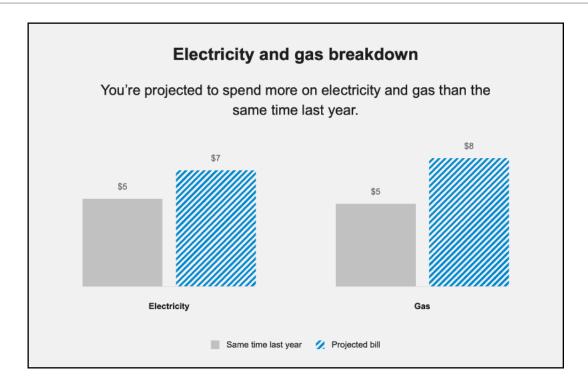
Heading: The module heading tells the customer that they are viewing a breakdown of both electricity and gas data. By default, the heading reads, "Electricity and gas breakdown".

Subheading: The subheading tells the customer whether they are projected to spend more than they did during the same time period last year. The message varies depending on how much they spend this billing period compared to the same period last year. For example, "You're projected to spend more on electricity and gas than the same time last year."

Bar Chart: Two graphs are displayed side by side. The graph on the left displays projected electricity costs for the current period, compared to the same period last year. The graph on the right displays estimated gas costs for the current period, compared to the same period last year. The dollar values for each bar are displayed above the bar.

Legend: Below the chart, a legend displays the color and shading used for each time period.





User Experience Variations

This section describes the user experience variations in the Electric and Gas Comparison module.

Usage Version

If the customer receives a usage version of the email, this module shows usage instead of costs. Electricity is displayed in kWh, and gas is displayed in therms.

Subheading

The subheader changes based on whether a customer spends more or less than they did during the same period last year. The customer most have spent at least 10% more than the previous year to be considered "spending more" during the current bill period. This 10% threshold for the comparison states is not configurable. These subheader variations are possible:

- Customers spends 10% more on both fuel types: "You're projected to spend more on electricity and gas than the same time last year."
- Customer spends 10% more on one fuel type, but not the other: "You're projected to spend more on <fuel type> than the same time last year."
- **Customer spends less:** "You're projected to spend less on electricity and gas than the same time last year." Note that this occurs only when the customer's bill forecast exceeds their personal cost threshold, even though they did not spend more.
- Customer spends about the same: "You're projected to spend about the same on
 electricity and gas than the same time last year." Note that this occurs only when the
 customer's bill forecast exceeds their personal cost threshold, even though they did not
 spend more.



Multi-Service Comparison Module

The Multi-Service Comparison module is included in the Email High Bill Alert AMI for customers who have multiple services, such as water and electric. The module includes two bar graphs. Each graph compares projected costs to costs from the same billing period of the previous year. One graph shows electricity and the other shows water. A dollar amount is displayed above each graph bar.

Note

Data for the water portion of the module can include standard water service, wastewater, and sprinklers.

Requirements

Same as listed in Requirements and Limitations. Additionally, this module requires one service point for electricity and one for water.

Limitations

Water can include standard water service, wastewater, and sprinklers. Customers must have standard water service to generate an electricity and water comparison. This comparison is not valid for wastewater-only or sprinkler-only customers.

User Experience

This section describes the common user experience with the module.

Heading: The module heading tells the customer that they are viewing a breakdown of both electricity and water data. By default, the heading reads, "Electricity and water breakdown".

Subheading: The subheading tells the customer whether they are projected to spend more than they did during the same time period last year. The message varies depending on how much more/less they spend this billing period compared to the same period last year. For example. "You're projected to spend more on electricity and water than the same time last year."

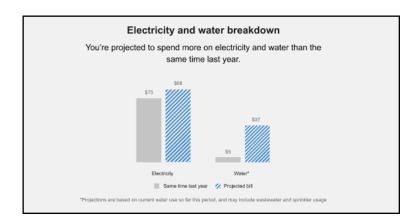
Bar Chart: Two graphs are displayed side by side. The graph on the left displays projected electricity costs for the current period compared to the same period last year. The graph on the right displays projected water costs for the current period compared to the same period last year. The dollar values for each are displayed above the bars.

Bar Chart Labels: If a disclaimer is included in the module, an asterisk (*) can be included on one or both of the bar chart labels to direct the customer's attention to the disclaimer statement, and identify which part of the graph the disclaimer is referring to. For example, if the disclaimer discusses only how water projections are calculated, the label under the water graph should read "Water*".

Legend: Below the chart, a legend displays the color and shading used for the projected bill, and for the same time last year.

Disclaimer: Below the legend, a disclaimer statement includes information that explains how the projections are calculated. For example, "*Projections are based on current water use for this period, and may include wastewater and sprinkler usage." This statement should begin with an asterisk to tie it back to the appropriate bar chart label, if needed.





User Experience Variations

Budget Billing

Budget billing customers see a usage experience for this module. The bar chart labels display units rather than dollar amounts. For example, kWh for electricity and gal for water.

Projections Only/No Baselines

If baseline amounts are not available for one or both of the resources in the chart, the subheader statement refers to the comparison between the projected bill amounts of the resources shown in the chart. For example, if the customer is expected to spend the same amount on electricity and water during this period, the statement reads "You're projected to spend the same amount on electricity and water on this upcoming bill." Alternatively, the subheading could read:

- "You're projected to spend more on electricity than water on this upcoming bill."
- "You're projected to spend more on water than electricity on this upcoming bill."

If baselines for both resource types are not available, the module eliminates the previous year bars and the "Same time last year" from the legend. If a baseline is available for one of the resource types, the module displays "N/A" as the label for the resource without a baseline.

Subheading Variations

The subheader changes based on whether a customer spends more or less than they did during the same period last year. The customer must have spent at least 10% more than the previous year to be considered "spending more" during the current bill period. This 10% threshold for the comparison states is not configurable. These subheader variations are possible:

- Customers spends 10% more on both fuel types: "You're projected to spend more on electricity and water than the same time last year."
- Customer spends 10% more on one fuel/resource type, but not the other: "You're projected to spend more on <fuel/resource type> than the same time last year."
- **Customer spends less:** "You're projected to spend less on electricity and water than the same time last year." Note that this occurs only when the customer's bill forecast exceeds their personal cost threshold, even though they did not spend more.
- Customer spends about the same: "You're projected to spend about the same on electricity and water than the same time last year." Note that this occurs only when the



customer's bill forecast exceeds their personal cost threshold, even though they did not spend more.

Time of Day Module

The Time of Day module identifies the time of day in which the customer tends to use the most energy and expresses this as a percentage, so that the customer knows when to focus on being more energy-efficient. The usage value represents usage-to-date within the current bill period. The six-hour time period with the most usage is highlighted, while the other three time periods display in a faded color.

Requirements

Same as listed in <u>Requirements and Limitations</u>. Additionally, hourly or sub-hourly AMI data for the customer is required. If such data is not available, this module is hidden from view. For example, the module will not be displayed for customers who have daily AMI data. The alert is sent with or without the module.

Limitations

Fuel Type: This module supports data for gas and electricity, and is included in emails as follows:

- Electric-Only: This module is included in the email once and shows electric information.
 Note that this module can be replaced with BLS insights for customers on TOU or Demand rate electric plans.
- Gas-Only: This module is included in the email once and shows gas information.
- Combined Gas and Electric: This module is included in the message twice. Once to display electric and once to display gas information. Note that the module that displays electric information can be replaced with <u>BLS insights</u> for customers on TOU or Demand rate electric plans.
- Water-Only: This module is not displayed.
- Combined Water and Electric: The module is included in the email once, and shows
 electric information. A module is not included for water. Note that the module that displays
 electric information can be replaced with <u>BLS insights</u> for customers on TOU or Demand
 rate electric plans.
- Only One Fuel Type Has a Forecast: If only one fuel type has a forecast, the alert can revert to a single fuel communication.

User Experience

This section describes the common user experience with the module.

Heading: The module heading tells the user that this data will show them when they use the most electricity.

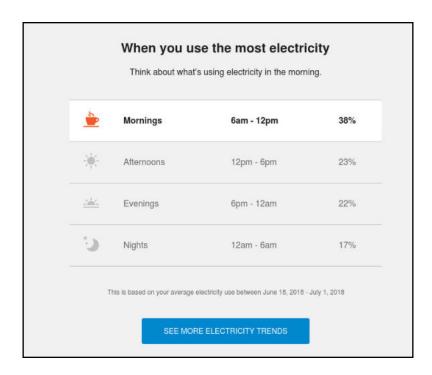
Insight Statement: The insight statement indicates when energy was used the most. The statement varies slightly depending on which time period is highlighted.

Graph: The usage value represents usage-to-date within the current bill period. The six-hour time period with the most usage is highlighted, while the other three time periods display in a faded color.



Time Period: The time period is displayed near the bottom of the module and describes the date range that the data represents. The time period covers the period-to-date, which represents the day that the bill period began to the day that the communication was generated.

See More Electricity Trends Button: This button should direct users to the utility's website where they can view more information about their usage trends. Opower recommends directing to the Oracle Utilities Opower Data Browser.



User Experience Variations

This section describes the user experience variations in the Time of Day module.

Multiple High-Use Periods (Tie State)

Customers can have a tie with regard to which time period uses the most energy. This module varies based on whether there are 1, 2, 3, or 4 periods with the same highest usage. The module highlights all periods that tie for the highest usage, and the insight statement varies as follows:

- Two-way tie: Think about what's using <fuel type> in the <period1> and <period2>.
- Three-way tie: Think about what's using <fuel type> in the <period1>, <period2>, and <period3>.
- All periods use the same: You are using an equal amount of <fuel type> throughout the
 day.

Water Time of Day Module

The Water Time of Day module identifies the time of day in which the customer tends to use the most water and expresses this as a percentage, so that the customer knows when to focus on being more energy-efficient. The usage value represents usage-to-date within the current bill period. The six-hour time period with the most usage is highlighted, while the other three time periods display in a faded color.



Requirements

Same as listed in the <u>Requirements and Limitations</u>. Additionally, hourly or sub-hourly AMI data is required. If such data is not available, this module is hidden from view. For example, the module will not be displayed for customers who have daily AMI data. The alert is sent with or without the module.

Limitations

Fuel Type: This module supports data for water, and is included in emails as follows:

- Water-Only: This module is displayed in the email.
- Combined Water and Electric: This module is included once for water. A separate <u>Time</u>
 of <u>Day Module</u> is also included to show electric use.
- Electric- or Gas-Only: This module is not included in the email.
- Combined Gas and Electric: This module is not included in the email.
- Only One Fuel Type Has a Forecast: If only one fuel type has a forecast, the alert can revert to a single fuel communication.

User Experience

This section describes the common user experience with the module.

Heading: The module heading tells the user that this data will show them when they use the most water.

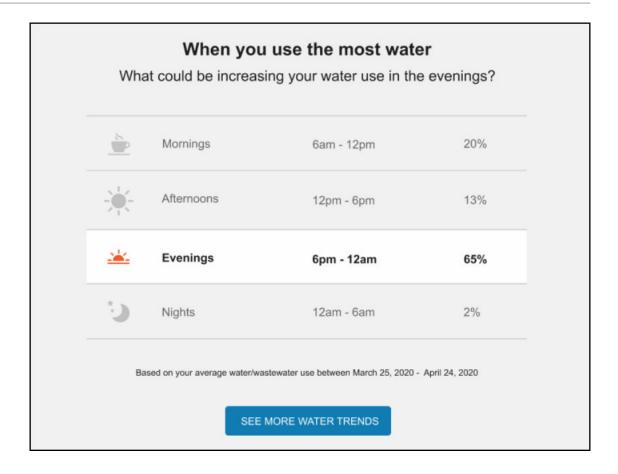
Insight Statement: The insight statement indicates when water was used the most. The statement varies slightly depending on which time period is highlighted.

Graph: The usage value represents usage-to-date within the current bill period. The six-hour time period with the most usage is highlighted, while the other three time periods display in a faded color.

Time Period: The time period is displayed near the bottom of the module and describes the date range that the data represents. The time period covers the period-to-date, which represents the day that the bill period began to the day that the communication was generated.

See More Water Trends Button: This button should direct users to the utility's website where they can view more information about their usage trends. Opower recommends directing to the Oracle Utilities Opower Data Browser.





User Experience Variations

This section describes the user experience variations in the Water Time of Day module.

Multiple High-Use Periods (Tie State)

Customers can have a tie with regard to which time period uses the most water. This module varies based on whether there are 1, 2, 3, or 4 periods with the same highest usage. The module highlights all periods that tie for the highest usage, and the insight statement varies as follows:

- Two-way tie: Think about what's using water in the <period1> and <period2>.
- Three-way tie: Think about what's using water in the <period1>, <period2>, and <period3>.
- All periods use the same: You are using an equal amount of water throughout the day.

Load Shifting Insights for High Bill Alerts

The Load Shifting: Rate Coach cloud service provides insights that can be included in the High Bill Alert AMI Email. These insights are designed to educate customers about their Time of Use (TOU) and Demand rate plans, and encourage them to shift energy use to off-peak hours.



Note

Utilities must purchase both the Proactive Alerts Cloud Service and the Load Shifting: Rate Coach Cloud Service to provide these insights to their customers.

For customers on TOU rate plans, one of the following modules should replace the <u>Time of Day Module</u> for the electric portion of the High Bill Alert AMI:

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

For customers on Demand rate plans, one of the above modules should replace the <u>Time of Day Module</u> for the electric portion of the alert. Additionally, the <u>Demand 101</u> should be included in the alert to provide additional explanation about how demand charges are calculated.

See the Load Shifting: Rate Coach Product Overview for more information.

Weather Insights Module

The Weather Insight module educates customers on how changes in temperature can affect their energy use. It also provides a comparison between the current month's average temperature and the average temperature from the same month of the previous year.

Requirements

Same as listed in the <u>Requirements and Limitations</u>. Additionally, the following interval weather conditions must be met in order for the weather insight to appear in the alert:

- The weather data interval for the current bill period or previous bill period is available.
- The weather data interval for the current season and previous season match for at least seven days.
- The weather data interval is less than the number of days for which weather data is available with respect to latency (2 days and 4 hours).

Limitations

There are no module-specific limitations for this module. For additional information see the Requirements and Limitations associated with the High Bill Alert (AMI) email.

User Experience

This section describes the common user experience with the module.

Heading: The heading tells the user how the weather might have impacted their energy use, and can include a graphic showing a sun for warmer weather and a snowflake for cooler weather. For example, "Warmer weather may have affected your energy use".

Subheading: The subheading provides further explanation about why the weather might have impacted the customer's bill. For example, "Energy use tends to be higher on warmer days."



Temperature Insight: The temperature insight gives customers additional information about how weather during the current period compares to the same time last year. For example, "On average, this month was 7°F hotter than the same time last year."



Warmer weather may have affected your energy use

Energy use tends to be higher on warmer days.

On average, this month was 11°F hotter than the same time last year.

User Experience Variations

This module can vary depending on how the temperature in the current period compares to the temperature in the comparison period from the previous year.

The weather insights calculation determines whether the average temperature was higher or lower between the current period and the comparison period. The calculator generates a weather insight that describes how weather might have impacted the bill's charges, and can result in the use of one of these states:

- Cooler
- Warmer
- Neutral

The sections below describe how weather information is calculated to determine the module state.

Weather Data Collection

Weather information is collected for the following intervals:

- **Current billing period:** An uncompleted bill interval. The bill interval end date can be shifted up to 2 days and 4 hours due to a weather service latency (4 hours).
- Last year's billing period: 1 year shifted from the current billing period.
- Current season period: Last 30 days interval.
- Last year's season period: 1 year shifted from the current season period.

We classify each of the above periods into seasons: Heating, Cooling or Transition. The classification is made using average mean temperature.

Determine Whether Seasons are Comparable

Once the season classifications are calculated, we determine if the seasons are comparable. A comparable season is defined by two periods being either the same season or one period being defined as Transition.

To be comparable the following checks are made:



- current billing period and current season period (for example both must be "Heating", or both must be "Cooling", or one could be "Transition")
- current billing period and previous billing period
- current season period and previous season period

If one or more of the checks return a negative result, the seasons are not considered comparable. In this case, the module will not render in the communication.

Identifying the Weather Insight States

If the seasons are determined to be comparable, then the weather insight states are determined by the season classification and temperature difference calculations listed here:

 Warmer: If current billing period is classified as Cooling, the mean temperature difference between current bill period and previous bill period is positive, and the mean temperature difference is greater than 8°F.

Ways To Save Module

The Ways to Save module provides energy and water saving tips to encourage customers to take action to lower their bill before the end of the billing period. The module can display up to three tips. Customers can click **See More Ways to Save** to view more tips in the Oracle Utilities Opower Digital Self Service - Energy Management.

Requirements

There are no module-specific requirements. See <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature for more information.

Limitations

There are no module-specific limitations for this module. For additional information see the Requirements and Limitations associated with the High Bill Alert (AMI) email.

User Experience

This section describes the common experience with the module.

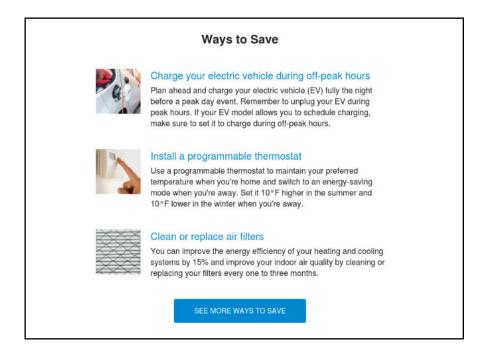
Tip Image: The tip image is a visual representation of the action that the tip recommends.

Tip Title: The tip title is a short sentence that summarizes the recommended action. Customers can click on the title to view more detailed information about the tip.

Tip Summary: The tip summary elaborates on the tip with more explanation about why doing the tip is beneficial.

See More Ways to Save: Clicking on an individual tip takes the customer to the public-facing tip details page on the Digital Self Service - Energy Management website.





User Experience Variations

This section discusses the user experience variations in the Ways to Save module.

Water Customers

Customers with water service can receive one of the following experiences:

- Combined water and electricity email
- Water-only email

Customers who receive the combined email will get one water tip and two electric tips. Customers who receive the water-only email should be given a one-tip version of this module, which will include one water tip.

Non-Residential Customers

Non-residential customers receive tips that are more applicable to businesses. See <u>Ways to Save</u> in the *Business Customer Engagement Proactive Alerts Product Overview* for details.

Marketing Module

A marketing module can appear either directly below the header or in the slot between the High Usage Period module and the footer. The marketing module can be used to promote a utility program, such as redirecting customers to the Oracle Utilities web portal or advertising a utility-specific rebate or discount.

For details about adding marketing modules to your Email High Bill Alert AMI program, <u>Contact</u> Your Delivery Team.

Easy Open Module

The Easy Open module enables customers to easily access the <u>Home Energy Analysis</u> feature from their email communication without needing to sign in to their utility account. Removing this



sign-in barrier increases engagement and customer satisfaction, and improves product functionality and the overall customer experience.

Requirements

Same as listed in the <u>Requirements and Limitations</u>. Additionally, utilities must purchase the <u>Digital Self Service - Energy Management Cloud Service</u>, which includes the Home Energy Analysis feature.

Limitations

There are no module-specific limitations for this module. For additional information see the Requirements and Limitations associated with the High Bill Alert (AMI) email.

User Experience

This section describes the common user experience with the module.

Heading: The module header tells the customer that they can get tips that are personalized for their home.

Home Energy Analysis Statement: The statement below the header explains how completing the <u>Home Energy Analysis</u> can help the user find out where they are using the most energy, get personalized tips, and save money.

Start The Survey Button: This button directs users to the Home Energy Analysis survey.

Get personalized tips for your home

Whether you live in a single-family home, an apartment, or a condo, there are plenty of ways to save that you may not know about.

With our Home Energy Audit, you can answer a few questions to see where you're using the most energy, and find tips to help you start saving right away.

START THE SURVEY

User Feedback Module

The User Feedback module can be included at the end of the High Bill Alert AMI email to solicit feedback on how useful this email is to customers. Customers can indicate their response on a



scale from 1 to 5. After submitting their feedback, customers are directed to a confirmation page and thanked for their input.

Requirements

There are no module-specific requirements. See <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature for more information.

Limitations

There are no module-specific limitations for this module. For additional information see the Requirements and Limitations associated with the High Bill Alert (AMI) email.

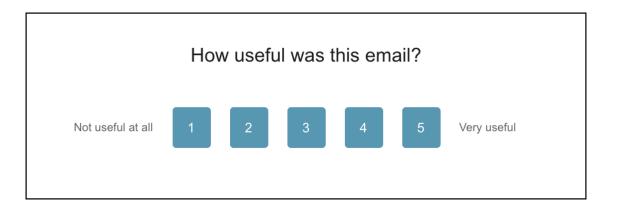
User Experience

This section describes the common user experience for the User Feedback module.

Prompt: A question at the top of the module asks customers if the promotion is helpful.

Response Option Buttons: The customer can respond 'Yes' or 'No' to the module questions.

Confirmation: After submitting feedback, customers are directed to a confirmation page where they are thanked for their input. The page also informs customers that their feedback is used to make improvements to the product.



Footer Module

The footer appears at the bottom of an email, and provides necessary information and links to manage preferences or unsubscribe from the email channel.

Requirements

There are no module-specific requirements. See <u>Requirements and Limitations</u> for the High Bill Alerts (AMI) feature for more information.

Limitations

Unsubscribe: Unsubscribing through the link provided in the email might be permanent, depending on the version of the <u>Account Center</u> the utility is using. <u>Contact Your Delivery Team</u> for additional information.



User Experience

The footer includes components that provide more context about the alert. These components include:

- An unsubscribe link
- A manage preferences link
- The utility's contact information
- An Oracle Utilities copyright statement
- A disclaimer statement (Optional)

Unsubscribe from these emails Manage preferences

Utility name, 1911 Fort Meyer Drive, Suite 702, Arlington, VA 22209

Copyright 2012-2018 Oracle. All rights reserved.

Text Alerts

SMS High Bill Alerts AMI are text messages sent through the mobile channel to inform customers when they are on track for a high bill or high energy use. SMS alerts are only delivered if the SMS alert type is turned on in a customer's account settings, and if the customer meets the minimum eligibility criteria to receive the SMS alert type. A dual fuel customer receives a single, combined fuel text message.

Data Requirements and Limitations

This section discusses the data requirements and limitations, which include:

- No Opt-Out Programs: SMS High Bill Alerts AMI cannot be provided as an opt-out program. This is because text messages are not free to the customer and cannot be sent to them without their prior consent.
- Opt-In Confirmation Message: As soon as the user enrolls, a one-time SMS message is sent to the user's phone informing them that they have enrolled in a recurring SMS program. This feature may vary depending on the utility's specific implementation of SMS alerts.
- Alert Length: The alert is limited to 160 characters. The static tip may be left off if the
 utility wants to include a lengthy utility name. Alerts that exceed the character limit will be
 sent in multiple messages..
- **Customer Opt Out**: Unsubscribing from the text alert itself is permanent. Customers will never receive the SMS alerts again and will be unable to opt back in at a later time.
- Short Codes: Each client setup for SMS requires the procurement of a short code (special
 phone number for outbound SMS) via our SMS vendor. This process requires 12 weeks
 and may necessitate changes to how the client markets their program, including additions
 to their Terms of Service and Privacy Policy.
- Character Limits: SMS messages are limited to 160 characters.



Water/Multi-Service Limitations:

- Customer must have metered water service. If customers also have wastewater service or sprinkler service, those services are combined under "water". There is no wastewater-only experience.
- Cost experience is supported. No usage experience is currently available.
- Budget Billing usage experience is supported for a customer with Water or Water + Wastewater service only.
- Utilities cannot use a utility-wide threshold for water customers.
- Customers must opt-in to receive alerts and must also set a personal cost threshold to enroll.

User Experience

These texts typically include the following components:

Utility Name: This identifies the utility that sponsors the message. We recommend that this be four characters or less. The maximum length is 45 characters.

Alert Message: A text message that is written in advance and that indicates whether the customer's bill or energy use is higher than usual. The value in the message can be expressed as a dollar amount, a percentage, or a cost range.

Personalized Threshold: The personalized threshold message encourages the customer to visit the website and set or modify their personal threshold. When a personalized threshold is set, the customer will only receive alerts when their cost or usage exceeds the set threshold.

SMS policy language: The message includes required SMS messaging policy. The number of messages/month number varies by client; however, the language should not be altered and is included in the 160 character limit.

Opt-Out Message (Optional): The opt-out message explains how the customer can unsubscribe from the alert.

User Experience Variations

This text shows an example of a High Bill Alert AMI SMS message:

UTILCO: Your energy use may be 38% higher than usual & above your alert threshold Up to 4msg/mo Msg&Data rates may apply Reply STOP to optout or HELP for info

The following example text is for a customer without rates modeled or who is on budget billing:

UTILCO: Your electricity use may be 15% higher than usual & above your alert threshold.

The following example text is for a customer whose rate plan has been modeled by Oracle Utilities. In this case, a dollar amount is used instead of a percentage:

UTILCO: Based on your electricity use, your next bill may be \$100.00 & above your alert threshold.

Voice Alerts

Interactive Voice Response High Bill Alerts AMI are digital voice messages sent through the telephone channel to inform customers when they are on track for a high bill or high energy use. Voice alerts are only delivered if the voice alert type is turned on in a customer's account settings, and if the customer meets the minimum eligibility criteria to receive the voice alert



type. While listening to a voice alert, a customer can press appropriate numbers on their phone to repeat the message or to unsubscribe from the messages. The major components of the voice alert are described below.

Data Requirements and Limitations

The requirements and limitations include:

- No Opt-Out Programs: Voice High Bill Alerts (AMI) cannot be provided as an opt-out program. This is because voice messages are not free to the customer and cannot be sent to them without their prior consent.
- **No Redial**: The product does not redial a phone number if it times out, encounters a send failure, or the customer does not answer.

User Experience

The alert message consists of the following pre-recorded content and a personalized content.

- Pre-recorded Content: The pre-recorded content is recorded in advance by a real person
 and typically does not include any personalized information. The message begins with a
 greeting and identification that this is an automated alert, not a real person calling. The
 personalized content (see below) is played, and the message closes by re-assuring the
 customer that there is still time to take action and directs the user to the web site of the
 utility that the message came from.
- **Personalized Content**: The personalized content includes information about a customer's projected energy use and how much more they are projected to spend by the end of the month compared to the same month last year.

After the message has played, the customer has two options: to play the message again or to stop receiving the alerts. If a customer does not pick up the call, the vendor uses a voice mail detection system to attempt to leave a message for the customer.

User Experience Variations

These examples show how the alert can vary.

Modeled Rates

The following example is for a customer whose rate plan has been modeled by Oracle Utilities. In this case, additional cost information is included.

Hello. This is an account alert from Utility Co. Based on your recent electricity use, your next bill is projected to be \$125.00. That's higher than the alert threshold you set, but there's still time to lower your bill. For energy saving tips, visit our website at UtilityCo.com/WaystoSave. To change your high bill threshold visit UtilityCo.com/AccountCenter. To hear this message again, press 1. To stop receiving these alerts, press 9. Thank you, goodbye.

Modeled Rates and Budget Billing

The following example is for a customer without rates modeled or who is on budget billing:

Hello. This is an account alert from Utility Co. Your recent electric use is about 15% higher than it normally is for this time of year. That's higher than the alert threshold you set. For energy saving tips, visit our website at UtilityCo.com/WaystoSave. To change your high bill threshold visit UtilityCo.com/AccountCenter. To hear this message again, press 1. To stop receiving these alerts, press 9. Thank you, goodbye.



Modeled Rates and Dual Fuel

The following example is for a dual fuel customer who has rates modeled:

"Hello. This is an account alert from Utility Co. Recently, your combined gas and electricity is about 15% higher than usual for this time of year. That's higher than the alert threshold you set, but there's still time to lower your bill. For energy saving tips, visit our website at UtilityCo.com/WaystoSave. To change your alert threshold visit UtilityCo.com/AccountCenter. To hear this message again, press 1. To stop receiving these alerts, press 9. Thank you, goodbye."

Mobile Push Alerts

High Bill Alert AMI mobile push alerts enable utility customers who have the utility's mobile application to receive in-application alerts regarding a potentially high bill. The alert notifies customers of what their projected upcoming bill is based on their usage so far in the billing period. The alerts are intended to provide customers with enough time to respond to the alert so that they have the opportunity to lower their bill.

Data Requirements and Limitations

In order for utility customers to receive mobile push alerts, the following must be true:

- The utility must have a mobile application.
- The utility must use a vendor to handle push notifications.
- The customer must have installed and signed into the utility's mobile application on a mobile device.

User Experience

This table provides examples of the different **cost** experiences customers might encounter with mobile push alerts:

Fuel Type	Personal Threshold Set	Personal Threshold Not Set	Personal Threshold Not Available
Electric Only	Utility Company: Based on your electric use, your bill could be \$67.00. That's more than your threshold of \$57.00.	Utility Company: Your electricity use is 32% higher than usual. We project your next bill to be \$45.00.	Utility Company: Your electricity use is 58% higher than usual. We project your next bill to be \$37.00.
Gas Only	Utility Company: Based on your natural gas use, your bill could be \$13.00. That's more than your threshold of \$10.00.	Utility Company: Your natural gas use is 32% higher than usual. We project your next bill to be \$45.00.	Utility Company: Your natural gas use is 58% higher than usual. We project your next bill to be \$37.00.
Combined Gas and Electric	Utility Company: Based on your energy use, your bill could be \$105.00. That's more than your threshold of \$100.00.	Utility Company: Your energy use is 44% higher than usual. We project your next bill to be \$126.00.	Utility Company: Your energy use is 43% higher than usual. We project your next bill to be \$150.00.



User Experience Variations

This table provides examples of the different experiences customers might encounter with mobile push alerts:

Fuel Type	Usage Experience	Budget Billing Experience
Electric Only	Utility Company: Your electricity use is 25% higher than usual for you this time of year. For energy saving tips, visit our website at www.utilco.com.	Utility Company: Your electricity use is 25% higher than usual. This could affect future bill amounts.
Gas Only	Utility Company: Your natural gas use is 25% higher than usual for you this time of year. For energy saving tips, visit our website at www.utilco.com.	Utility Company: Your natural gas use is 25% higher than usual. This could affect future bill amounts.
Combined Gas and Electric	Utility Company: Your energy use is 25% higher than usual for you this time of year. For energy saving tips, visit our website at www.utilco.com.	Utility Company: Your energy use is 25% higher than usual. This could affect future bill amounts

Enrollment

The following describes the customer enrollment programs for each High Bill Alert AMI channel.

Email Alerts: To deliver email alerts to customers, utilities can choose from one of two programs offered by Oracle Utilities Opower: an opt-in or an opt-out program. In an opt-in program, customers are given the option to sign up voluntarily, rather than being automatically enrolled. CSRs can also help customers enroll in the program. In an opt-out program, customers are automatically enrolled as long as they meet the eligibility criteria.

Text (SMS) Alerts: Customers must opt in to begin receiving text alerts. They can do this by changing their alert settings in the Oracle Utilities web portal. CSRs can also help customers enroll in the program. As soon as the customer enrolls, a one-time SMS message is sent to the customer's phone informing them that they have enrolled in a recurring SMS program.

Voice (IVR) Alerts: To deliver voice alerts via Interactive Voice Response (IVR), utilities can choose from one of two programs offered by Oracle Utilities Opower: an opt-in or an opt-out program. In an opt-in program, customers are given the option to sign up voluntarily, rather than being automatically enrolled. CSRs can also help customers enroll in the program. In an opt-out program, customers are automatically enrolled as long as they meet the eligibility criteria.

Mobile Push Alerts: To opt in to mobile push alerts, customers must install the utility's mobile application, and use the settings on their mobile device to specify their alert preferences. To opt out of mobile push alerts, utility customers use the settings on their mobile device to delete or silence alerts.

Delivery

Email, text, and voice alerts are delivered according to specific rules and within a particular delivery window.



Waking Hours: High Bill Alerts AMI are delivered during waking hours in a utility-specific delivery window.

Days of the Week: High Bill Alerts AMI are delivered on weekdays and weekends during waking hours.

Non-Delivery Window: Alerts cannot be sent during a default non-delivery window. Specifically, alerts cannot be sent within seven days after a new bill period starts, or within seven days before the bill period ends. The purpose of the non-delivery window is to ensure customers do not receive an alert too soon after their bill period starts or too late in the bill period to be useful.

For example, consider a customer who gets billed on the third day of every month. Also, consider that it is now June 3rd and that the customer's next bill is July 3rd. With the default delivery settings, Oracle Utilities could send an alert anytime between June 10th (seven days after the bill period starts) and June 26th (seven days before the bill period ends).

Utilities can coordinate with Oracle Utilities to configure the default non-delivery window settings.

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

Emails and Attachments: For email alerts, 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.

Providing Customer Support

Customer Service Representatives can do the following in the Oracle UtilitiesOpowerCustomer Service Interface (CSI) to assist with customer inquiries related to alerts:

- Review copies of alerts sent to customers
- Manage a customer's alert preferences (including unsubscribing them)
- Access a customer's Oracle Utilities web portal account and view and update their alert settings

See Supporting High Bill Alert AMI for details.

Weekly Energy Updates

Weekly Energy Updates are email reports sent to customers every week to inform them of their energy usage patterns, trends, and projected energy costs. With these emails, customers can better understand how their actions correspond to their utility bills, get a preview of their bills, and get helpful insights on how to adjust their energy usage. Weekly Energy Updates v3 provide a new, modernized experience with bold colors, a varied layout, and data-driven insights targeted to specific customer attributes.

Customers can receive the standard Weekly Energy Update email, or after their bill is ready, they can receive the Post Bill Report email that provides additional insights about energy costs or usage during the billing period. Customers can also be selected to receive Cost Tracker emails as a replacement for the standard Weekly Energy Update email.

WEU Requirements and Limitations

This topic discusses requirements and limitations.

Utility Requirements and Limitations

The following requirements and limitations apply to all utilities and customers in the Weekly Energy Updates program.

- Scale Limitation: The number of communications sent may be affected by attrition, optouts, customer eligibility, and data availability.
- Supported Languages: Not all languages and locales are supported at this time. Contact
 your Oracle Utilities Sales Representative to confirm that alerts are available in your
 market.
- Web Access Required: A utility must have Oracle Utilities Web Portal access for all of their customers regardless of whether or not certain customers will receive Weekly Energy Updates, or all of their customers that receive Weekly Energy Updates must also be report recipients. Without these prerequisites, customer service representatives cannot access the Customer Service Interface to view non-paper Weekly Energy Update recipients.
- Single Sign-On: The utility must use single sign-on (SSO) to be able to edit customer
 email addresses for non-recipients of the program, or they must edit these via Oracle
 Utilities Opower APIs.
- Data Frequency: The utility must be able to send the customer's data at a daily frequency to Oracle Utilities.
- **Data Transfer Standards**: Data must be sent to Oracle Utilities according to the <u>Oracle Utilities Opower Interval Data Transfer Standards</u>.
- Billing Frequency: Customers must be billed on a monthly or bi-monthly basis.
- **Data Transfer Window**: The utility must be able to deliver customer data to Oracle Utilities within 72 hours (48 hours from the last data read of the day).
- Customer Contact Information: The utility must be able to provide contact information for the customer if auto-enrollment is being used.



 Appliance Disaggregation: There are additional AMI data requirements to show advanced insights such as appliance-level disaggregation and insights about a customer's always-on usage. Contact your Delivery Team for more information.

Customer Requirements and Limitations

These are the customer requirements and limitations:

- Residential Customers Only: The customer must be residential.
- Supported Fuel Types: Electric-only, gas-only, and dual-fuel customers are supported.
- Service Points Limitation: The customer must only have one service point for each meter type. For example, dual-fuel customers must have exactly one electricity and one gas service point, while single-fuel customers must only have one service point.
- **Customer Contact Information**: The customer must be able to provide their contact information if self-enrollment (as opposed to auto-enrollment) is used.
- AMI Data: The customer must have AMI data for the last two weeks. Hourly or more
 granular data is required. Weekly Energy Updates will not be sent without this level of data
 granularity. By default, at least 50% coverage is required for the last two weeks, the
 highest day in the customer's last week, and the last day of the week.
- Email Address: The customer must have a valid email address.

Customer Service Limitations

Customer Service Representatives may not be able to determine why a customer did not receive a Weekly Energy Update. In such cases, an issue should be logged in My Oracle Support.

Customer Experience

Weekly Energy Updates are email communications that help customers understand their weekly energy use trends and provide personalized tips on how to be more energy efficient. Many areas of the product vary depending on whether or not the customer's rates have been modeled by Oracle Utilities. Depending on when Oracle Utilities receives the customer's data, it is also possible that a customer with their rates modeled will temporarily have the experience of a customer without modeled rates.

Customers can receive different types of Weekly Energy Update emails, including:

- Weekly Energy Updates
- Post Bill Report Emails

Weekly Energy Updates

Weekly Energy Updates are the original, and most common email reports sent to customers every week. These emails inform customers of their energy usage patterns, trends, and projected energy usage or costs. With these emails, customers can better understand how their actions correspond to their utility bills, get a preview of their use or bill, and get helpful insights on how to adjust their energy use.

Weekly Energy Update emails are made up of individual modules. The following list includes the recommended modules, in the recommended order:

- Subject Line and Header Module
- Weekly Comparison Module



- Bill Forecast Module
- Day-by-Day Breakdown Module
- Hourly Breakdown Module
- Personalized Tips Module
- <u>Easy Open Module</u> (Optional)
- Customer Feedback Module (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

The following Weekly Energy Update report types are supported:

- **Single Fuel Electric:** Weekly Energy Updates for customers who only have electricity. The energy units are displayed as kilowatt-hours (kWh).
- **Single Fuel Natural Gas:** Weekly Energy Updates for customers who only have natural gas. The energy units are displayed as therms, CCF, or m3.
- Dual Fuel Electric and Natural Gas: Weekly Energy Updates for customers who have both electricity and natural gas. Electric use is displayed as kWh and gas use is displayed as therms, CCF, or m3.

The image below shows an example of an electricity Weekly Energy Update.

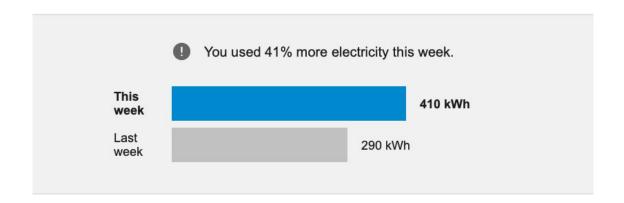


UtilityCo

Acct # ****00e1 Reference number *00e2

Your weekly electricity update

Apr 2, 2018-Apr 8, 2018



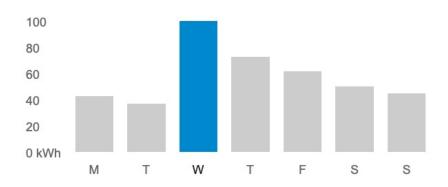


You are projected to use 585 kWh.

Days until your next bill: 3. This is an estimate*.

Your electricity use this week

You used the most on Wednesday



On Wednesday, Apr 4, you used the most in the evening



Post Bill Report Emails

After a bill period is completed, customers can receive the Post Bill Report email, which provides deeper understanding of how much energy each of their major gas or electric end uses consumed during the month. Disaggregated cost or usage is based on the AMI data that is collected during the billing period. Providing this information helps customers understand where they are using the most energy, and provides them with suggestions about how they can reduce use and save money.

The Post Bill Report email uses the information that the utility knows about the customer to determine their energy usage. While Opower's Appliance Detection and Disaggregation models are not required, they can enhance the data that is provided in the Post Bill Report email. Your Delivery Team can provide you with additional details regarding appliance disaggregation.

Customers receive one Post Bill Report email each month. This email replaces the standard Weekly Energy Update email on the week after the customer's bill period ends.

The Post Bill Report email is made up of individual modules, and it is recommended that they are included in the email in the following order:

- Subject Line and Header Module
- Post Bill Introduction Module
- Post Bill Comparison Module
- Post Bill End Uses Module
- Post Bill Always On Module
- Personalized Tips Module
- <u>Easy Open Module</u> (Optional)
- Customer Feedback Module (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

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





Melia Andersen Acct ****1234 1234 Main St.

Here's how your most recent bill breaks down

Oct 1, 2020-Nov 1, 2020



These top categories made up 54% of your energy usage this bill



How do we know your energy breakdown?

Thanks to data from your smart meter, we can read certain energy signatures to get an idea of how energy is being used in your home. We match those energy signatures to types of use, such as water heater, refrigerator, and more.



Subject Line and Header

The Weekly Energy Update subject line indicates that the email contains an update about the customer's energy use. The subject line varies based on report type and fuel type. For example, for electricity customers, the subject line is "Your weekly electricity update."

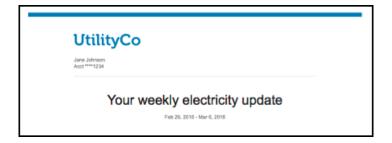
The Weekly Energy Update header includes the utility's logo, customer name, and customer account number (with only the last four digits displayed).

Standard Weekly Energy Update email headers also include the email title, and date range. The title varies depending on the customer's fuel type. Additionally, in the first Weekly Energy Update email a customer receives, the header includes a short introductory paragraph that explains the purpose of email. The Post Bill Report email does not include these items, and instead, the Post Bill Report Introduction Module is displayed.

If customers have any problems viewing the email, they can click a link to view it correctly in the email browser.

User Experience

This image shows an example of the Header module.



Post Bill Report Introduction Module

The Post Bill Report Introduction module appears at the top of the Weekly Energy Update Post Bill Report email, and notifies the customer that this email will provide them with a breakdown of their recent bill. The module also provides the dates of the associated billing period.

User Experience

The module includes these components:

Header: The module header tells the user that this data will show them information about their most recent bill. By default, the header statement reads, "This is how your most recent bill breaks down."

Date Range: The date range below the header tells the user the dates associated with the billing period. If the email includes information about multiple fuels and the date ranges are not the same for each of them, two date ranges are included, each with a label of "Electric:" or "Gas:"

The image below is an example of the Post Bill Report Introduction module:



Here's how your most recent bill breaks down

Oct 1, 2020-Nov 1, 2020

Weekly Comparison Module

The Weekly Comparison module shows a week-over-week comparison of a customer's weekly electric or gas use. If the customer is dual fuel, the module includes graphs for both electric and gas use. If the customer is eligible to receive cost information, a cost comparison is shown instead of a usage comparison.

Requirements and Limitations

Requirements and limitations are as follows:

- **Data Requirements**: The customer must have AMI data for the last two weeks. See additional details in the global Requirements and Limitations section.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the <u>Oracle Utilities Opower Rates Engagement Cloud</u> Service Product Overview for more information.

User Experience

The module includes these components:

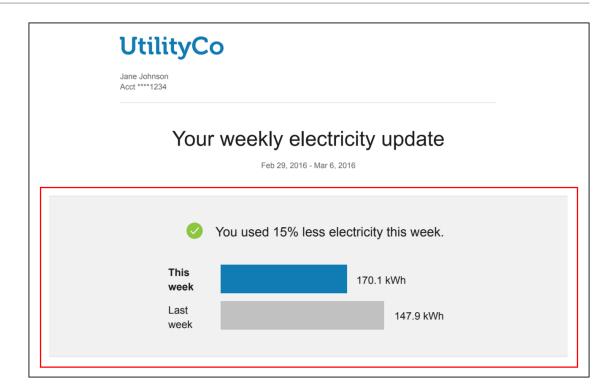
Insight Statement: An insight statement at the top of the module explains how the customer's energy use in the current week compares to their use last week in terms of a percentage increase or decrease.

Insight Statement Icon: An icon appears next to the insight statement. If the customer used more energy during the current week than the previous week, no icon is displayed. If the customer used less energy during the current week than the previous week, a green check mark in a circle is displayed.

Bar Chart: The Weekly Comparison displays a visual usage comparison between the customer's usage during the current week and the previous week. Usage per week is displayed in a bar chart, with bars for this week and last week, reducing how many numbers are used to convey information.

This image shows an example of the module:





Bill Forecast Module

The Bill Forecast module informs customers how much their bill is projected to be by the end of the billing period. Dual fuel customers see a combined bill forecast for both electric and gas use. The purpose of the forecast is to encourage customers to lower their usage before the bill period ends.

Requirements and Limitations

Requirements and limitations are as follows:

- Data History: The customer must have AMI data back to the beginning of the current bill
 period. One historical bill, from any billing period, is required to determine where the
 customer falls in the billing cycle for a given date.
- Data Coverage: The customer must have non-null reads for 75% of the total possible reads over both the last seven days as well as the total reads-to-date.
- Cost Information Automatically Displayed: Unlike other modules in the email, the Bill Forecast automatically displays cost information for eligible customers.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the <u>Oracle Utilities Opower Rates Engagement Cloud Service Product Overview</u> for more information.
- AMI Data Used: The AMI data used in the rest of the email is based on the data available
 as of Sunday, but the bill forecast in the email is based on the latest data available at the
 time that the email is generated. This may result in minor discrepancies between the bill
 forecast and the rest of the Weekly Energy Update.



User Experience

The module includes these components:

Forecast Statement: The forecast statement projects how much the customer's bill could be if they continue their current energy-spending behavior through the end of the billing period. The forecast is based on the estimated length of the bill. Cost information is automatically displayed if rates are modeled.

Estimation Statement: It is clearly stated that the forecast is an estimate to assure customers that their actual billed usage amount may be different. The estimate does not include taxes and fees

Days Remaining: The number of days remaining in the billing period is shown to reinforce the idea that the customer still has time to save energy.

Calculation: The forecast calculation relies upon Oracle Utilities Opower receiving a sufficient amount of energy use data for the customer. The customer must also meet the minimum eligibility criteria for the forecast, including the availability of at least one historical bill. At a high level, the bill forecast calculation involves the following steps:

- 1. Calculate the baseline cost that the customer pays for using energy.
- 2. Estimate the customer's billing period end date.
- 3. Calculate how much energy the customer has used to date.
- 4. Take the customer's energy use and project it forward to the billing period's end date.
- 5. Convert the resulting energy use values to cost values, based on the customer's rate plan. The output is an actual cost value (to date) and a projected cost value (going forward).

This image shows an example of the module:



Your bill is projected to be \$99.00.

This is an estimate*. Days until your next bill: 14.

Day by Day Breakdown Module

The Day by Day Breakdown shows how much energy the customer spent each day of the previous week. For electricity customers, the bars in the graph represent the total electricity consumed on the corresponding day, and the blue bar represents the day on which the most was used. If a customer's rates are modeled, the cost per day can be displayed below each bar in the graph. Dual fuel versions of the communication include graphs for both electricity and gas use.



User Experience

The module includes these components:

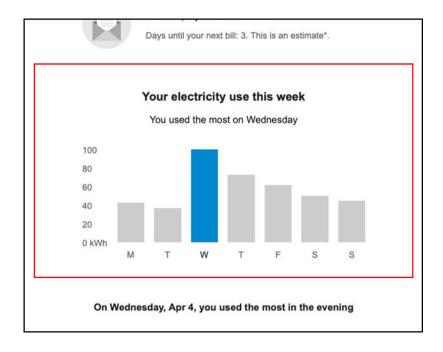
Title: The title specifies a fuel type and the fact that the date range is for a week.

Insight: The insight below the title indicates the day on which the customer used the most energy. The goal of this insight is to encourage the customer to think of ways to avoid using as much energy on the same day in future weeks.

Bar Chart: The bar chart shows the amount of energy used on each day for the previous week. The bar chart starts on Monday and ends on Sunday of the previous week. Each bar represents a day, with the day of the week displayed under the bar. The larger the bar, the higher the customer's energy usage for that day. The feature also reveals each day's usage relative to the other days in the same week.

To highlight the day on which the customer used the most energy, the bar that represents the highest usage is displayed in blue. This makes visual identification of the customer's highest usage clear, even at a glance.

This image shows an example of the module.



Requirements and Limitations

Requirements and limitations are as follows:

 Web Portal Data: Data shown in the Oracle Utilities web portal may be inconsistent with Weekly Energy Update data. The daily usage values (or, if the customer is eligible to receive it, daily cost values) in the Day by Day breakdown do not always match the exact values in the web portal due to the way the values are rounded or when the calculations are performed.



- Web Portal Access: The customer must have access to the Oracle Utilities web portal to be able to follow the link or to click the bar chart and be redirected to the data browser in the web portal.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the <u>Oracle Utilities Opower Rates Engagement Cloud</u> <u>Service Product Overview for more information.</u>

Hourly Breakdown Module

The Hourly Breakdown feature displays the hourly use for a customer's highest use day from the previous week. It allows customers to notice trends in their usage according to the time of day, which helps them identify ways they can save energy. Dual fuel versions of the communication include graphs for both electric and gas use.

User Experience

The module has these components:

Insight Statement: An insight statement at the top of the module indicates the hours of the customer's highest usage day during which they used the most energy.

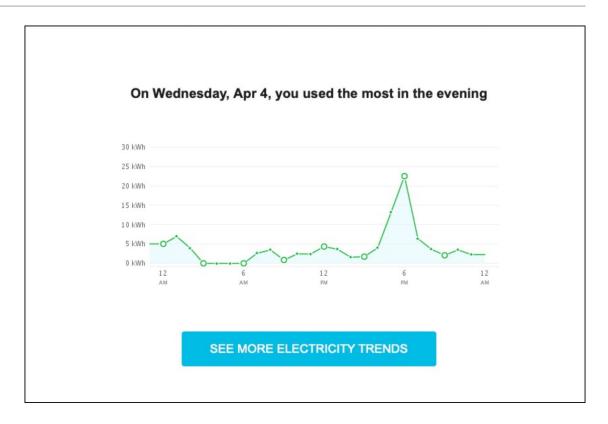
Line Chart: The Hourly Breakdown displays a line chart showing a customer's usage throughout the day for the day that they used the most energy. This makes it easy for the customer to compare their highest hourly usage to their lowest, to notice patterns in their usage, and to begin to form habits to change these usage patterns. The line chart plots hourly usage over a 24 hour period, starting and ending with 12 AM. The chart is depicted with large points every six hours, and smaller points every two hours. The smaller points always represent two hour intervals, even if sub-hourly AMI reads are available for a customer.

This chart gives customers a visual representation of the times of day that they use the most energy, and makes it easy for them to compare their highest hourly usage to their lowest. By making this information clear to the customer, it becomes easier for them to notice patterns in their usage, and enables them to begin to form habits to change these usage patterns.

See More Trends Button: Clicking this link takes customers to the Data Browser in the Oracle Utilities Opower web portal. If the customer is not signed in to the web portal, they are prompted to either sign in to their account or register if they have not previously done so.

This image provides an example of the module:





Post Bill Comparison Module

The Post Bill Comparison module provides customers with an at-a-glance look at their energy costs or usage this period compared to the previous period. Using icons and bar charts, this module is graphic and simple, making it easy to understand whether the customer did better or worse than the previous period. If the customer receives the cost version, a dollar amount is associated with each bar chart. If the customer receives the usage version, their energy usage is displayed in kWh for electricity and therms for gas.

Requirements and Limitations

Requirements are as follows:

 Data Requirements: Two months of billing history is required in order to show the comparison between billing periods.

User Experience

This module includes the following components:

Header: The header of the module varies significantly, depending on many factors. In the dual fuel variation the header reads, "Your spend compared to last bill period".

Charts: The dual fuel version of the module includes two charts, each with two bars that show cost or usage for the last bill and the current bill. Above each chart is a fuel type label to show whether the chart refers to Electricity or Gas. Below each bar, the usage or cost amount appears.

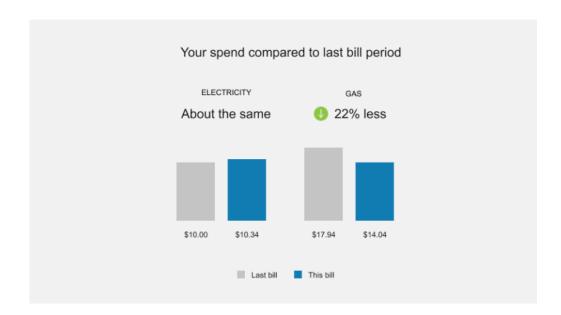
Comparison Insight: Below the fuel type label, an insight shows whether the customer used or spent more, less, or about the same this period as compared to the previous period. If the customer spends or uses more, a gray icon with an upward pointing arrow is included. If the



customer uses or spends less, a green icon with a downward pointing arrow is included. If the customer uses or spends about the same, no icon is included.

Legend: Below the charts, a legend is displayed that shows which color depicts the last bill, and which color depicts the current bill. The legend labels are "Last bill" and "This bill".

The image below is an example of the Post Bill Comparison module:



Post Bill End Uses Module

The Post Bill End Uses module breaks down how energy was used during the current bill period, and shows the customer what their top energy use categories are. Depending on the disaggregation modules the utility is using, the fuel type of the customer, and the customer data that is available, the module can display two or three top uses, and can also list additional categories that contributed to the customer's energy use.

The module explains to the customer how we are able to calculate the breakdown, and directs them to utility resources that can help them find additional information.

Requirements and Limitations

Requirements and limitations are as follows:

- Data Requirements: A complete bill for the previous month must be available.
- Appliance Disaggregation: There are additional AMI data requirements to show advanced insights such as appliance-level disaggregation. Contact your Delivery Team for more information.

User Experience

This module includes the following components:

Top Uses Statement: The top uses statement at the top of the module indicates how much of the customer's energy was used by their top categories. For example, "These top categories made up \$123 of your energy usage this bill".



Personalized Breakdown: The personalized breakdown can show up to three top end-use categories. Each category includes the following elements:

- Category Name: Each category includes a name, such as Cooling, Water Heating, or Electronics. The categories that are available depend on which disaggregation model is used.
- Category Cost: Each category shows a cost rounded to the nearest whole dollar. The costs represent the major portions of a customer's entire energy use, and are not meant to add up to the customer's total bill. The breakdown can also show percentages if cost information is not available.
- Category Icon: Each category is paired with a graphic so that customers have a visual reference and can more quickly understand the meaning of the category.
- Category Order: The categories are shown from left to right, in the order of most expensive to least expensive.

Additional Categories: Below the personalized breakdown, up to 9 additional categories can be listed. Each includes a small icon to the left, the category name, and the cost or percentage to the right.

Energy Breakdown Statement: Below the use categories, a statement tells the customer how we know about their energy breakdown. The statement starts with the heading, "How do we know your energy breakdown?" and is followed by this text:

Thanks to data from your smart meter, we can read certain energy signatures to get an idea of how energy is being used in your home. We match those energy signatures to types of use, such as water heater, refrigerator, and more.

Combined with your past energy use, we're then able to show you a breakdown of your usage so you know where to focus and save.

See More Energy Trends Button: This button should direct users to a page in the utility's website, which could differ depending on the products and additional cloud services that the utility has.

The image below is an example of the Post Bill End Uses module:



These top categories made up \$123 of your energy usage this bill



How do we know your energy breakdown?

Thanks to data from your smart meter, we can read certain energy signatures to get an idea of how energy is being used in your home. We match those energy signatures to types of use, such as water heater, refrigerator, and more.

Combined with your past energy use, we're then able to show you a breakdown of your usage so you know where to focus and save.

SEE MORE ENERGY TRENDS

Post Bill Always On Module

The Post Bill Always On module tells customers how much of their electric use is associated with things that are always on in their home. The amount, which is always displayed as a percentage, is due to electricity that is used by some appliances and electronics that use energy simply because they are plugged in.

The amount is calculated using the Always-on Disaggregation Model, which estimates the electricity consumption associated with appliances and electronics that consistently draw power even when they are off or in sleep mode, such as set-top boxes, gaming consoles, security systems, and digital assistants. It also estimates consumption for appliances which are always running, such as refrigerators.

At the end of the module, utilities can also direct users to a utility website that explains alwayson usage.

User Experience

This module includes the following components:

Header: The module header includes a plug icon, and tells the user that this data will show them how much energy their always-on appliances and electronics used during this bill period. The header reads, "Your always-on use".



Insight Statement: The insight statement indicates the percentage of energy that is considered always-on usage for the bill period, and explains what always-on usage is. The default statement reads:

About <X%> of your electricity costs came from always-on energy use - the small amount of power some appliances and electronics draw simply because they are plugged in. Learn more.

Learn More Link: Note that the Learn more link at the end of the statement can be removed if the utility does not have an appropriate website to direct customers to that can explain always-on usage in more detail.

The image below is an example of the Post Bill Always On module:



About 15% of your electricity costs came from always-on energy use—the small amount of power some appliances and electronics draw simply because they are plugged in. <u>Learn more.</u>

Personalized Tips Module

The Personalized Tips module provides customers with tips on how to reduce their energy use and bills based upon how the customer uses energy.

Requirements and Limitations

Requirements and limitations are as follows:

- Intelligent Tip Targeting: The utility must use the Oracle Utilities Opower Intelligent Tip Targeting mechanism.
- Minimum Number of Tips: The customer must be eligible to receive at least three tips for this module to display. If the customer is eligible for fewer than three tips, this module is not displayed.

User Experience

The module includes these components:

Tip Content: The tips that are displayed offer customers a range of advice about how to reduce their energy usage. Some tips, such as turning off the lights when leaving home, do not require the customer to spend money. Some require more of an investment, such as buying ENERGY STAR appliances. Each tip generally includes the following elements:

- Tip title
- Tip description
- Tip savings amounts

The tips also change as the customer's energy needs change. For example, a customer will only see information about reducing cooling costs during seasons that require them to use their air conditioner.



See More Ways to Save: Clicking this button directs the customer to the **Ways to Save** page in the Oracle Utilities web portal.

This image shows an example of the module:

Reduce your use with these tips



Schedule your pool pump to run during off-peak hours

Pool pumps are some of the top electricity hogs and often run much longer than necessary. Set your pool pump timer to run only during off-peak hours.



Adjust the display on your television

The default display settings on many TVs are energy intensive and often unnecessarily bright. Depending on the model, turning down your TV's brightness can significantly reduce its power use without compromising image quality.

Save up to \$30 per TV per year



Install a solar PV system

Consider installing a solar photovoltaic system to produce some or all of your home's electricity. Federal, state, and local incentives can help the offset upfront cost. Consult a contractor for system recommendations.

Save up to \$620 per year

SEE MORE WAYS TO SAVE

Easy Open Module

The Easy Open module enables customers to easily access the <u>Home Energy Analysis</u> feature from their email communication without needing to sign in to their utility account. Removing this sign-in barrier increases engagement and customer satisfaction, and improves product functionality and the overall customer experience.

User Experience

The module has these components

Heading: The module header tells the customer that they can get tips that are personalized for their home.



Home Energy Analysis Statement: The statement below the header explains how completing the Home Energy Analysis can help the user find out where they are using the most energy, get personalized tips, and save money.

Start The Survey Button: This button directs users to the Home Energy Analysis.

This image shows an example of the Easy Open module:

Get personalized tips for your home

Whether you live in a single-family home, an apartment, or a condo, there are plenty of ways to save that you may not know about.

With our Home Energy Audit, you can answer a few questions to see where you're using the most energy, and find tips to help you start saving right away.

START THE SURVEY

Footer Module

The footer enables users to unsubscribe from the Weekly Energy Updates and includes legal text and utility contact information.

User Experience

The module has these components:

Unsubscribe: A link to a page where customers can unsubscribe from the emails. An unsubscribe link must appear due to CAN-SPAM regulations in the US and similar regulations abroad. The URL this link points to cannot be customized.

Note: Unsubscribing through the link provided in the email is might be permanent, depending on the version of the <u>Account Center</u> the utility is using. Contact your Delivery Team for additional information.

Manage Preferences: A link to the Web Portal page where a customer can edit their communication preferences.

Utility Contact Information: The utility's mailing address. The mailing address must appear due to CAN-SPAM regulations in the US and similar regulations abroad.

Legal Text: This is the copyright and any other legal text required by the utility and/or Oracle Utilities Opower.



Disclaimer Text: This is any additional text the utility wishes to include in the footer statement. This text appears below the copyright text, and is optional.

This image shows an example of the footer:

Unsubscribe from these emails Manage preferences

1234 Main Street, Anytown, USA

Copyright 2019 Oracle. All rights reserved.

Weekly Energy Updates V3

Weekly Energy Updates are email reports sent to customers every week to inform them of their energy usage patterns, trends, and projected energy costs. With these emails, customers can better understand how their actions correspond to their utility bills, get a preview of their bills, and get helpful insights on how to adjust their energy usage. Weekly Energy Updates v3 provide a new, modernized experience with bold colors, a varied layout, and data-driven insights targeted to specific customer attributes.

Customers can receive the standard Weekly Energy Update email, or after their bill is ready, they can receive the Post Bill Report email that provides additional insights about energy costs or usage during the billing period. Customers can also be selected to receive Cost Tracker emails as a replacement for the standard Weekly Energy Update email.

Additionally, you can include Electric Vehicle (EV) Load Shifting insights in your Weekly Energy Update and Post Bill Report emails. For information about these insights, and how to include them in your emails, see EV Load Shifting Insights in Weekly Energy Update Emails.

Requirements and Limitations

This topic discusses requirements and limitations.

Utility Requirements and Limitations

The following requirements and limitations apply to all utilities and customers in the Weekly Energy Updates v3 program.

- Scale Limitation: The number of communications sent may be affected by attrition, optouts, customer eligibility, and data availability.
- Supported Languages: Not all languages and locales are supported at this time. Contact
 your Oracle Utilities Sales Representative to confirm that alerts are available in your
 market.
- Web Access Required: A utility must have Oracle Utilities Web Portal access for all of
 their customers regardless of whether or not certain customers will receive Weekly Energy
 Updates, or all of their customers that receive Weekly Energy Updates must also be report
 recipients. Without these prerequisites, customer service representatives cannot access
 the Customer Service Interface to view non-paper Weekly Energy Update recipients.
- Single Sign-On: The utility must use single sign-on (SSO) to be able to edit customer
 email addresses for non-recipients of the program, or they must edit these via Oracle
 Utilities Opower APIs.
- Data Frequency: The utility must be able to send the customer's data at a daily frequency to Oracle Utilities.
- **Data Transfer Standards**: Data must be sent to Oracle Utilities according to the <u>Oracle Utilities Opower Interval Data Transfer Standards</u>.
- Billing Frequency: Customers must be billed on a monthly or bi-monthly basis.
- **Data Transfer Window**: The utility must be able to deliver customer data to Oracle Utilities within 72 hours (48 hours from the last data read of the day).



- Customer Contact Information: The utility must be able to provide contact information for the customer if auto-enrollment is being used.
- Appliance Disaggregation: There are additional AMI data requirements to show advanced insights such as appliance-level disaggregation and insights about a customer's always-on usage. Contact your Delivery Team for more information.

Customer Requirements and Limitations

These are the customer requirements and limitations:

- Residential Customers Only: The customer must be residential.
- Supported Fuel Types: Electric-only, gas-only, and dual-fuel customers are supported.
- Service Points Limitation: The customer must only have one service point for each meter type. For example, dual-fuel customers must have exactly one electricity and one gas service point, while single-fuel customers must only have one service point.
- Customer Contact Information: The customer must be able to provide their contact information if self-enrollment (as opposed to auto-enrollment) is used.
- AMI Data: The customer must have AMI data for the last two weeks. Hourly or more
 granular data is required. Weekly Energy Updates will not be sent without this level of data
 granularity. By default, at least 50% coverage is required for the last two weeks, the
 highest day in the customer's last week, and the last day of the week.
- Email Address: The customer must have a valid email address.

Customer Service Limitations

Customer Service Representatives may not be able to determine why a customer did not receive a Weekly Energy Update. In such cases, an issue should be logged in My Oracle Support.

Customer Experience

Weekly Energy Updates v3 are email communications that help customers understand their weekly energy use trends and provide personalized tips on how to be more energy efficient. Many areas of the product vary depending on whether or not the customer's rates have been modeled by Oracle Utilities. Depending on when Oracle Utilities receives the customer's data, it is also possible that a customer with their rates modeled will temporarily have the experience of a customer without modeled rates.

Customers can receive different types of Weekly Energy Update v3 emails, including:

- Weekly Energy Updates
- Post Bill Report Emails
- Cost Tracker Emails
- Cost Tracker Post Bill Report Emails

Weekly Energy Updates

Weekly Energy Updates are the original, and most common email reports sent to customers every week. These emails inform customers of their energy usage patterns, trends, and projected energy usage or costs. With these emails, customers can better understand how their actions correspond to their utility bills, get a preview of their use or bill, and get helpful insights on how to adjust their energy use.



Weekly Energy Update emails are made up of individual modules. The following list includes the recommended modules, in the recommended order:

- Subject Line and Header Module
- Weekly Comparison Module
- Bill Forecast Module
- Day by Day and Hourly Breakdown Module
- Personalized Tips Module
- Easy Open Module (Optional)
- <u>Customer Feedback Module</u> (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

Additionally, you can include Electric Vehicle (EV) Load Shifting insights in your Weekly Energy Update emails. For information about these insights, and how to include them in your emails, see EV Load Shifting Insights in Weekly Energy Update Emails.

The following Weekly Energy Update report types are supported:

- **Single Fuel Electric**: Weekly Energy Updates for customers who only have electricity. The energy units are displayed as kilowatt-hours (kWh).
- **Single Fuel Natural Gas**: Weekly Energy Updates for customers who only have natural gas. The energy units are displayed as therms, CCF, or m³.
- Dual Fuel Electric and Natural Gas: Weekly Energy Updates for customers who have both electricity and natural gas. Electric use is displayed as kWh and gas use is displayed as therms, CCF, or m³.

The image below shows an example of an electricity Weekly Energy Update.



UtilityCo

Account #*****7890

Sarah,

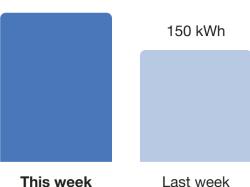
Here's your weekly energy update

April 2 - 8, 2024



You used 33% more electricity this week

200 kWh





Your bill is projected to be \$218

Days until your next bill: 6

This is an estimate.

Your electricity use this week



Post Bill Report Emails

After a bill period is completed, customers can receive the Post Bill Report email, which provides deeper understanding of how much energy each of their major gas or electric end uses consumed during the month. Disaggregated cost or usage is based on the AMI data that is collected during the billing period. Providing this information helps customers understand where they are using the most energy, and provides them with suggestions about how they can reduce use and save money.

The Post Bill Report email uses the information that the utility knows about the customer to determine their energy usage. While Opower's Appliance Detection and Disaggregation models are not required, they can enhance the data that is provided in the Post Bill Report email. Your Delivery Team can provide you with additional details regarding appliance disaggregation.

Customers receive one Post Bill Report email each month. This email replaces the standard Weekly Energy Update email on the week after the customer's bill period ends.

The Post Bill Report email is made up of individual modules, and it is recommended that they are included in the email in the following order:

- Subject Line and Header Module
- Post Bill Report Introduction Module
- Post Bill Bill Comparison Module
- Post Bill End Uses Module
- Post Bill Always On Module
- Personalized Tips Module
- <u>Easy Open Module</u> (Optional)
- Customer Feedback Module (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

Additionally, you can include Electric Vehicle (EV) Load Shifting insights in your Post Bill Report emails. For information about these insights, and how to include them in your emails, see EV Load Shifting Insights in Weekly Energy Update Emails.



UtilityCo

Account #*****7890

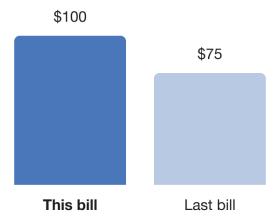
Sarah,

Here's how your bill breaks down

April 16 - May 15, 2024



You spent \$25 more on electricity this bill period



These top categories made up \$80 of your energy cost this bill





Cost Tracker Emails

Cost Tracker emails are designed to help residential customers save more energy by showing them how their energy costs are tracking across the month.

Cost Tracker emails are made up of individual modules. The following list includes the recommended modules, in the recommended order:

- Subject Line and Header Module
- Cost Tracker Module
- Day by Day and Hourly Breakdown Module
- Personalized Tips Module
- <u>Easy Open Module</u> (Optional)
- <u>Customer Feedback Module</u> (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

The image below shows an example of an electricity Cost Tracker Report email.



UtilityCo

Account #*******6789

Mary,

Welcome to your weekly energy update!



December 25 - 31, 2023

Your electricity charges are trending higher compared to the same bill period last year

25 days to end of billing cycle

\$25 \$34

Most Recent Bill Projected Bill \$30

Same Bill Last Year

180

\$99

Your electricity use this week

You used the most on Monday

\$63

\$77

\$77

\$63

August 28, 2025

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\$77

\$63

Proactive Alerts Product Overview E87471-28
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Cost Tracker Post Bill Report Emails

After a bill period is completed, customers who are receiving the Cost Tracker Emails can receive the Cost Tracker Post Bill Report email, which provides deeper understanding of how much energy each of their major gas or electric end uses consumed during the month. Disaggregated cost or usage is based on the AMI data that is collected during the billing period. Providing this information helps customers understand where they are using the most energy, and provides them with suggestions about how they can reduce use and save money.

The Cost Tracker Post Bill Report email uses the information that the utility knows about the customer to determine their energy usage. While Opower's Appliance Detection and Disaggregation models are not required, they can enhance the data that is provided in the Cost Tracker Post Bill Report email. Your Delivery Team can provide you with additional details regarding appliance disaggregation.

Customers receive one Post Bill Report email each month. This email replaces the standard Weekly Energy Update email on the week after the customer's bill period ends.

The Post Bill Report email for customers who receive Cost Tracker Report emails is made up of individual modules, and it is recommended that they are included in the email in the following order:

- Subject Line and Header Module
- Cost Tracker Module
- Post Bill End Uses Module
- Post Bill Always On Module
- Personalized Tips Module
- <u>Easy Open Module</u> (Optional)
- <u>Customer Feedback Module</u> (Optional. Included in the Energy Efficiency Cloud Service.)
- Footer Module

This image shows an example of the email:





Account #*******6789

Sarah,

Here's how your most recent bill breaks down



December 31, 2023 - February 1, 2024

You spent less on electricity this bill period than the same period last year

22 days in billing cycle

\$700.7

Most Recent Bill

\$1,229.2

Same Bill Last Year

These top categories made up \$271 of your energy cost this bill

Appliances

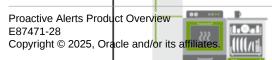
\$118

Water Heating

\$106

Lighting

\$47











Subject Line and Header Module

The Weekly Energy Update subject line indicates that the email contains an update about the customer's energy use. The subject line varies based on report type and fuel type. For example, for electricity customers, the subject line is "Your weekly electricity update."

The Weekly Energy Update header includes the utility's logo, customer name, and customer account number (with only the last four digits displayed).

Standard Weekly Energy Update email headers also include the email title, and date range. The title varies depending on the customer's fuel type. Additionally, in the first Weekly Energy Update email a customer receives, the header includes a short introductory paragraph that explains the purpose of email. The Post Bill Report email does not include these items, and instead, the Post Bill Report Introduction Module is displayed.

If customers have any problems viewing the email, they can click a link to view it correctly in the email browser.

User Experience

This image shows an example of the Header module's design for electricity customers.



Account #*****1234

This image shows an example of the Subject module's design for electricity customers.

Sarah,





April 2 - 8, 2021

Post Bill Report Introduction Module

The Post Bill Report Introduction module appears at the top of the Weekly Energy Update Post Bill Report email, and notifies the customer that this email will provide them with a breakdown of their recent bill. The module also provides the dates of the associated billing period.

User Experience

The module includes these components:



Header: The module header tells the user that this data will show them information about their most recent bill. By default, the header statement reads, "This is how your most recent bill breaks down."

Date Range: The date range below the header tells the user the dates associated with the billing period. If the email includes information about multiple fuels and the date ranges are not the same for each of them, two date ranges are included, each with a label of "Electric:" or "Gas:"

The image below is an example of the Post Bill Report Introduction module:

Sarah,

Here's how your most recent bill breaks down



December 1, 2023 - January 1, 2024

Weekly Comparison Module

The Weekly Comparison module shows a week-over-week comparison of a customer's weekly electric or gas use. If the customer is dual fuel, the module includes graphs for both electric and gas use. If the customer is eligible to receive cost information, a cost comparison is shown instead of a usage comparison.



Note

The Weekly Comparison module is not included in Cost Tracker Report emails.

Requirements and Limitations

Requirements and limitations are as follows:

- Data Requirements: The customer must have AMI data for the last two weeks. See additional details in the global Requirements and Limitations section.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the Oracle Utilities Opower Rates Engagement Cloud Service Product Overview for more information.

User Experience

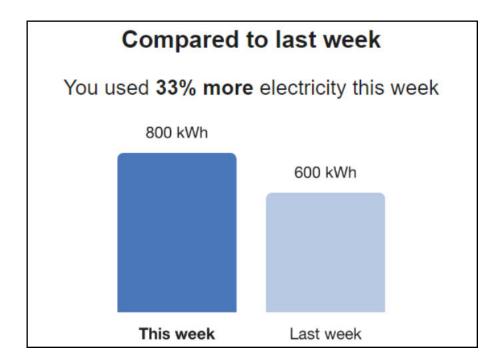
The module includes these components:



Insight Statement: An insight statement at the top of the module explains how the customer's energy use in the current week compares to their use last week in terms of a percentage increase or decrease.

Insight Statement Icon: An icon appears next to the insight statement. If the customer used more energy during the current week than the previous week, no icon is displayed. If the customer used less energy during the current week than the previous week, a green check mark in a circle is displayed.

Bar Chart: The Weekly Comparison displays a visual usage comparison between the customer's usage during the current week and the previous week. Usage per week is displayed in a bar chart, with bars for this week and last week, reducing how many numbers are used to convey information.



Cost Tracker Module

The Cost Tracker module is designed to help residential customers save more energy by showing them how their energy costs are tracking across the month.

Requirements and Limitations

Requirements and limitations are as follows:

- **Data Requirements**: The customer must have AMI data for the last thirteen months. This is required to compare the current bill to the same bill from last year. See additional details in the global <u>Requirements and Limitations</u> section.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the <u>Oracle Utilities Opower Rates Engagement Cloud</u> Service Product Overview for more information.

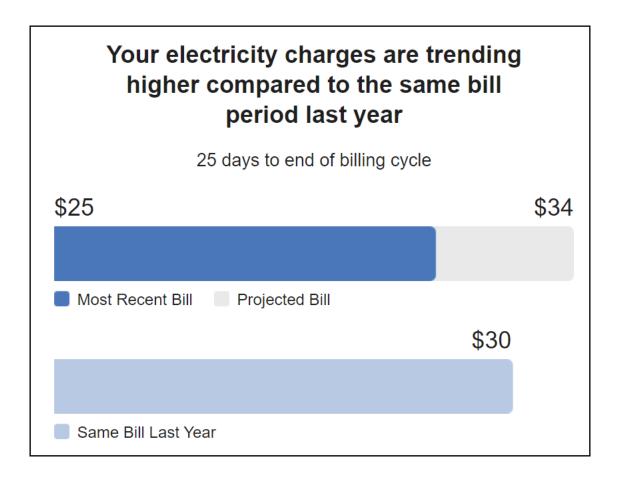


User Experience

The module has these components:

Insight Statement: The current billing period projection is used to provide an insight statement of whether the user is projected to have a higher bill, lower bill, or spend about the same as compared to the same bill from last year. The time left until the end of the billing cycle is also provided.

Bar Chart: A bar chart comparison of energy costs for the current billing period and the same billing period from last year is displayed. The energy costs incurred so far in the billing cycle are provided along with a projection of energy costs at the end of the billing cycle.



Calculations

The Cost Tracker insight is generated by displaying the customer's energy use or costs for the week, a projection of what the customer is forecast to use by the end of the billing period, along with a bill or energy use from the same bill period last year. The customer's current energy use information is collected through their AMI data. If the customer's rate is available, the rate is multiplied by energy use to determine cost. Otherwise, energy use is displayed. The insight calculates the projected difference to alert the customer as to whether they are projected to use more energy, use less energy, or use about the same amount of energy.



Bill Forecast Module

The Bill Forecast module informs customers how much their bill is projected to be by the end of the billing period. Dual fuel customers see a combined bill forecast for both electric and gas use. The purpose of the forecast is to encourage customers to lower their usage before the bill period ends.

(i) Note

The Bill Forecast module is not included in Cost Tracker Report emails, as this forecast is accomplished through the Cost Tracker module.

Requirements and Limitations

Requirements and limitations are as follows:

- Data History: The customer must have AMI data back to the beginning of the current bill period. One historical bill, from any billing period, is required to determine where the customer falls in the billing cycle for a given date.
- Data Coverage: The customer must have non-null reads for 75% of the total possible reads over both the last seven days as well as the total reads-to-date.
- Cost Information Automatically Displayed: Unlike other modules in the email, the Bill Forecast automatically displays cost information for eligible customers.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the Oracle Utilities Opower Rates Engagement Cloud Service Product Overview for more information.
- AMI Data Used: The AMI data used in the rest of the email is based on the data available as of Sunday, but the bill forecast in the email is based on the latest data available at the time that the email is generated. This may result in minor discrepancies between the bill forecast and the rest of the Weekly Energy Update.

User Experience

Bill to Date: The bill to date provides the current charges for a customer's bill so far in the billing cycle. Cost information is automatically displayed if rates are modeled.

Forecast Statement: The forecast statement projects how much the customer's bill could be if they continue their current energy-spending behavior through the end of the billing period. The forecast is based on the estimated length of the bill. Cost information is automatically displayed if rates are modeled.

Estimation Statement: It is clearly stated that the forecast is an estimate to assure customers that their actual billed usage amount may be different. The estimate does not include taxes and fees.

Days Remaining: The number of days remaining in the billing period is shown to reinforce the idea that the customer still has time to save energy.

Calculation: The forecast calculation relies upon Oracle Utilities Opower receiving a sufficient amount of energy use data for the customer. The customer must also meet the minimum



eligibility criteria for the forecast, including the availability of at least one historical bill. At a high level, the bill forecast calculation involves the following steps:

- Calculate the baseline cost that the customer pays for using energy.
- 2. Estimate the customer's billing period end date.
- 3. Calculate how much energy the customer has used to date.
- 4. Take the customer's energy use and project it forward to the billing period's end date.
- 5. Convert the resulting energy use values to cost values, based on the customer's rate plan. The output is an actual cost value (to date) and a projected cost value (going forward).



Your bill to date is \$25

Your bill is projected to be \$34

This estimate is based on 3 days of your billing period.

This is an estimate.

Day by Day and Hourly Breakdown Module

The Day By Day and Hourly Breakdowns module displays these breakdowns one after the other. Refer to each section to learn about each breakdown.

Requirements and Limitations

Requirements and limitations are as follows:

- Web Portal Data: Data shown in the Oracle Utilities web portal may be inconsistent with Weekly Energy Update data. The daily usage values (or, if the customer is eligible to receive it, daily cost values) in the Day by Day breakdown do not always match the exact values in the web portal due to the way the values are rounded or when the calculations are performed.
- Web Portal Access: The customer must have access to the Oracle Utilities web portal to be able to follow the link or to click the bar chart and be redirected to the data browser in the web portal.
- Rate Modeling: Utility rates must be modeled by Oracle Utilities for cost information to appear. If rates are not modeled, energy use information is displayed by default. If the utility chooses to display cost information, rate modeling is required during initial program setup for an additional fee. See the <u>Oracle Utilities Opower Rates Engagement Cloud</u> Service Product Overview for more information.



User Experience - Day by Day Breakdown

The Day by Day Breakdown shows how much energy the customer spent each day of the previous week. For electricity customers, the bars in the graph represent the total electricity consumed on the corresponding day, and the blue bar represents the day on which the most was used. If a customer's rates are modeled, the cost per day can be displayed below each bar in the graph. Dual fuel versions of the communication include graphs for both electricity and gas use.

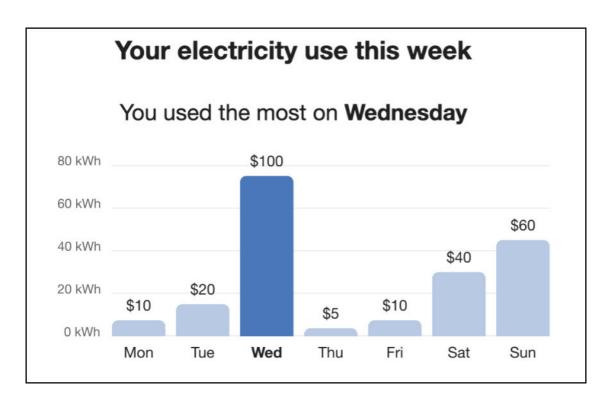
The module includes these components:

Title: The title specifies a fuel type and the fact that the date range is for a week.

Insight: The insight below the title indicates the day on which the customer used the most energy. The goal of this insight is to encourage the customer to think of ways to avoid using as much energy on the same day in future weeks.

Bar Chart: The bar chart shows the amount of energy used on each day for the previous week. The bar chart starts on Monday and ends on Sunday of the previous week. Each bar represents a day, with the day of the week displayed under the bar. The larger the bar, the higher the customer's energy usage for that day. The feature also reveals each day's usage relative to the other days in the same week.

To highlight the day on which the customer used the most energy, the bar that represents the highest usage is displayed in blue. This makes visual identification of the customer's highest usage clear, even at a glance.



User Experience - Hourly Breakdown

The Hourly Breakdown feature displays the hourly use for a customer's highest use day from the previous week. It allows customers to notice trends in their usage according to the time of



day, which helps them identify ways they can save energy. Dual fuel versions of the communication include graphs for both electric and gas use.

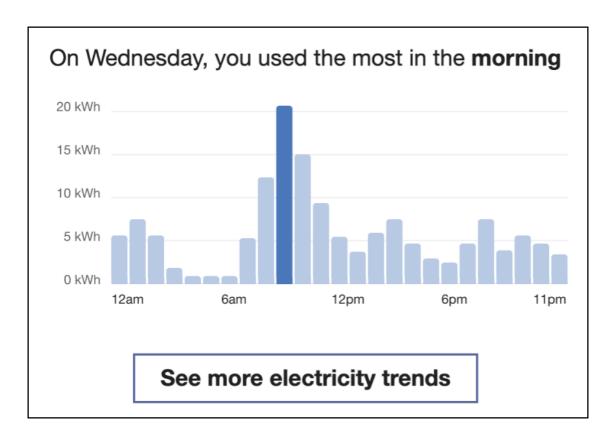
The module has these components:

Insight Statement: An insight statement at the top of the module indicates the hours of the customer's highest usage day during which they used the most energy.

Bar Chart: The Hourly Breakdown displays a bar chart showing a customer's usage throughout the day for the day that they used the most energy. This makes it easy for the customer to compare their highest hourly usage to their lowest, to notice patterns in their usage, and to begin to form habits to change these usage patterns. The bar chart plots hourly usage over a 24 hour period, starting and ending with 12 AM.

This chart gives customers a visual representation of the times of day that they use the most energy, and makes it easy for them to compare their highest hourly usage to their lowest. By making this information clear to the customer, it becomes easier for them to notice patterns in their usage, and enables them to begin to form habits to change these usage patterns.

See More Trends Button: Clicking this link takes customers to the Data Browser in the Oracle Utilities Opower web portal. If the customer is not signed in to the web portal, they are prompted to either sign in to their account or register if they have not previously done so.



Post Bill - Bill Comparison Module

The Post Bill - Bill Comparison module provides customers with an at-a-glance look at their energy costs or usage this period compared to the previous period. Using icons and bar charts, this module is graphic and simple, making it easy to understand whether the customer did better or worse than the previous period. If the customer receives the cost version, a dollar



amount is associated with each bar chart. If the customer receives the usage version, their energy usage is displayed in kWh for electricity and therms for gas.



(i) Note

The Post Bill - Bill Comparison module is not included in Cost Tracker Report emails.

Requirements and Limitations

Requirements are as follows:

Data Requirements: Two months of billing history is required in order to show the comparison between billing periods.

User Experience

This module includes the following components:

Header: The header of the module varies significantly, depending on many factors. In the dual fuel variation shown here, the header reads "Compared to last bill period".

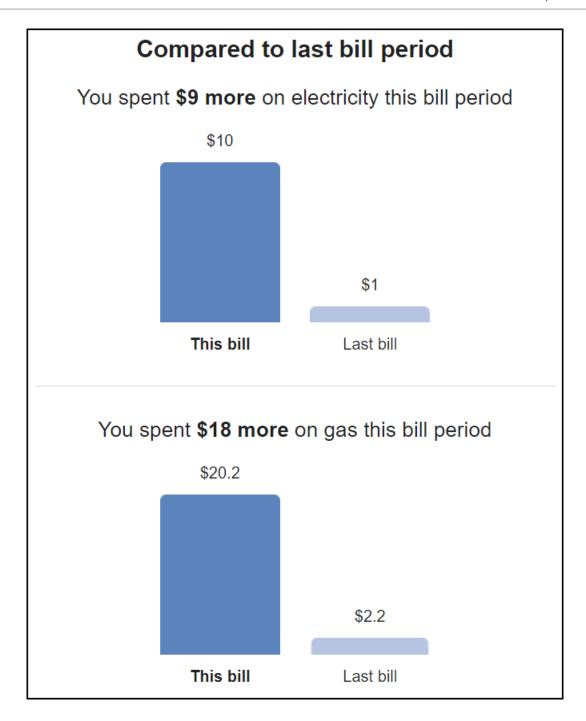
Comparison Insight: For the dual fuel variation, an insight statement is displayed over each chart, and tells whether the customer used or spent more, less, or about the same this period as compared to the previous period.

Charts: The dual fuel variation of the module includes two charts, each with two bars that show cost or usage for the last bill and the current bill.

Bar Labels: Below the charts, labels are displayed that show which bar depicts the current bill, and which bar depicts the last bill. The labels are "This bill" and "Last bill".

The image below is an example of the Post Bill Comparison module:





Post Bill End Uses Module

The Post Bill End Uses module breaks down how energy was used during the current bill period, and shows the customer what their top energy use categories are. Depending on the disaggregation modules the utility is using, the fuel type of the customer, and the customer data that is available, the module can display two or three top uses, and can also list additional categories that contributed to the customer's energy use.

The module explains to the customer how we are able to calculate the breakdown, and directs them to utility resources that can help them find additional information.



Requirements and Limitations

Requirements and limitations are as follows:

- Data Requirements: A complete bill for the previous month must be available.
- Appliance Disaggregation: There are additional AMI data requirements to show advanced insights such as appliance-level disaggregation. Contact your Delivery Team for more information.

User Experience

This module includes the following components:

Top Uses Statement: The top uses statement at the top of the module indicates how much of the customer's energy was used by their top categories. For example, "These top categories made up \$123 of your energy usage this bill".

Personalized Breakdown: The personalized breakdown can show up to three top end-use categories. Each category includes the following elements:

- Category Name: Each category includes a name, such as Cooling, Water Heating, or Electronics. The categories that are available depend on which disaggregation model is used.
- Category Cost: Each category shows a cost rounded to the nearest whole dollar. The costs represent the major portions of a customer's entire energy use, and are not meant to add up to the customer's total bill. The breakdown can also show percentages if cost information is not available.
- Category Icon: Each category is paired with a graphic so that customers have a visual reference and can more quickly understand the meaning of the category.
- Category Order: The categories are shown from left to right, in the order of most expensive to least expensive.

Additional Categories: Below the personalized breakdown, up to 9 additional categories can be listed. Each includes a small icon to the left, the category name, and the cost or percentage to the right.

Energy Breakdown Statement: Below the use categories, a statement tells the customer how we know about their energy breakdown. The statement starts with the heading, "How do we know your energy breakdown?" and is followed by this text:

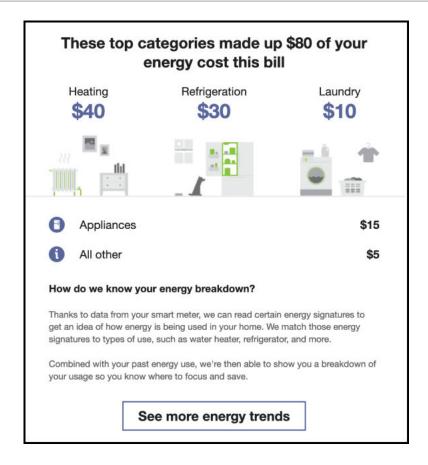
Thanks to data from your smart meter, we can read certain energy signatures to get an idea of how energy is being used in your home. We match those energy signatures to types of use, such as water heater, refrigerator, and more.

Combined with your past energy use, we're then able to show you a breakdown of your usage so you know where to focus and save.

See More Energy Trends Button: This button should direct users to a page in the utility's website, which could differ depending on the products and additional cloud services that the utility has.

The image below is an example of the Post Bill End Uses module:





Post Bill Always On Module

The Post Bill Always On module tells customers how much of their electric use is associated with things that are always on in their home. The amount, which is always displayed as a percentage, is due to electricity that is used by some appliances and electronics that use energy simply because they are plugged in.

The amount is calculated using the Always-on Disaggregation Model, which estimates the electricity consumption associated with appliances and electronics that consistently draw power even when they are off or in sleep mode, such as set-top boxes, gaming consoles, security systems, and digital assistants. It also estimates consumption for appliances which are always running, such as refrigerators.

At the end of the module, utilities can also direct users to a utility website that explains alwayson usage.

Requirements and Limitations

Requirements and limitations are as follows:

- Fuel Type: Because this module is specific to electricity use, it is included only in electric
 and dual fuel communications, and is excluded from gas-only communications.
- Always-On Insights: There are additional data requirements to show advanced insights such as always-on usage. Contact your Delivery Team for more information.



User Experience

This module includes the following components:

Header: The module header includes a plug icon, and tells the user that this data will show them how much energy their always-on appliances and electronics used during this bill period. The header reads, "Your always-on use".

Insight Statement: The insight statement indicates the percentage of energy that is considered always-on usage for the bill period, and explains what always-on usage is. The default statement reads:

About <X%> of your electricity costs came from always-on energy use - the small amount of power some appliances and electronics draw simply because they are plugged in. Learn more.

Learn More Link: Note that the Learn more link at the end of the statement can be removed if the utility does not have an appropriate website to direct customers to that can explain always-on usage in more detail.

The image below is an example of the Post Bill Always On module:



Your always-on use

About 15% of your electricity costs came from always-on energy use—
the small amount of power appliances and electronics draw simply
because they are plugged in. <u>Learn more</u>.

Personalized Tips Module

The Personalized Tips module provides customers with tips on how to reduce their energy use and bills based upon how the customer uses energy.

Requirements and Limitations

Requirements and limitations are as follows:

- **Intelligent Tip Targeting**: The utility must use the Oracle Utilities Opower Intelligent Tip Targeting mechanism.
- Minimum Number of Tips: The customer must be eligible to receive at least three tips for this module to display. If the customer is eligible for fewer than three tips, this module is not displayed.



User Experience

The module includes these components:

Tip Content: The tips that are displayed offer customers a range of advice about how to reduce their energy usage. Some tips, such as turning off the lights when leaving home, do not require the customer to spend money. Some require more of an investment, such as buying ENERGY STAR appliances. Each tip generally includes the following elements:

- Tip title
- Tip description
- Tip savings amounts

The tips also change as the customer's energy needs change. For example, a customer will only see information about reducing cooling costs during seasons that require them to use their air conditioner.

See More Ways to Save: Clicking this button directs the customer to the **Ways to Save** page in the Oracle Utilities web portal.

This image shows an example of the module:



Top recommended tips for you



Schedule a free, virtual home energy assessment

Save money and reduce energy usage with the free, online HomeIntel Savings Program. Enroll now at join.hea.com to start seeing the benefits and save an average of \$350 this year.



Install efficient showerheads

Showering accounts for up to 40% of your home's hot water use. Installing an energy-efficient showerhead can help reduce hot water use without compromising water pressure.

Save up to \$100 per year



Set your thermostat to 68°F in the winter, health permitting



Easy Open Module

The Easy Open module enables customers to easily access the Home Energy Analysis feature from their email communication without needing to sign in to their utility account. Removing this sign-in barrier increases engagement and customer satisfaction, and improves product functionality and the overall customer experience.

Requirements and Limitations

Requirements are as follows:

Related Cloud Services: In order to utilize this module, utilities must also have the <u>Digital Self Service - Energy Management Cloud Service</u>. The Home Energy Analysis is part of this cloud service.

User Experience

The module has these components

Home Energy Analysis Statement: The statement below the header explains how completing the Home Energy Analysis can help the user find out where they are using the most energy, get personalized tips, and save money.

Start The Survey Button: This button directs users to the Home Energy Analysis.

This image shows an example of the Easy Open module:

Get personalized tips for your home

Whether you live in a single-family home, an apartment, or a condo, there are plenty of ways to save that you may not know about.

With our Home Energy Audit, you can answer a few questions to see where you're using the most energy, and find tips to help you start saving right away.

Start the survey

EV Load Shifting Insights in Weekly Energy Update Emails

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



Load shifting EV insights are provided within Load Shifting EV modules that are purpose-built to be included in the WEU V3 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.

These are the Load Shifting EV modules you can add to a Weekly Energy Update email:

- <u>EV Habits Checklist in Weekly Energy Update Emails Module</u>: This module is included in the first EV-specific Weekly Energy Update email the customer receives, and then again every six months.
- EV Best Time Off-Peak in Weekly Energy Update Emails Module: This module is included
 in the second EV-specific Weekly Energy Update email the customer receives, and then
 again every six months.
- EV Load Shifting Main Insight in Weekly Energy Update Emails Module: This module is
 included in the Weekly Energy Update Post Bill Report email each month after the
 customer begins receiving the EV-specific emails.

Footer Module

The footer enables users to unsubscribe from the Weekly Energy Updates and includes legal text and utility contact information.

User Experience

The module has these components:

Unsubscribe: A link to a page where customers can unsubscribe from the emails. An unsubscribe link must appear due to CAN-SPAM regulations in the US and similar regulations abroad. The URL this link points to cannot be customized.

Note: Unsubscribing through the link provided in the email is might be permanent, depending on the version of the <u>Account Center</u> the utility is using. Contact your Delivery Team for additional information.

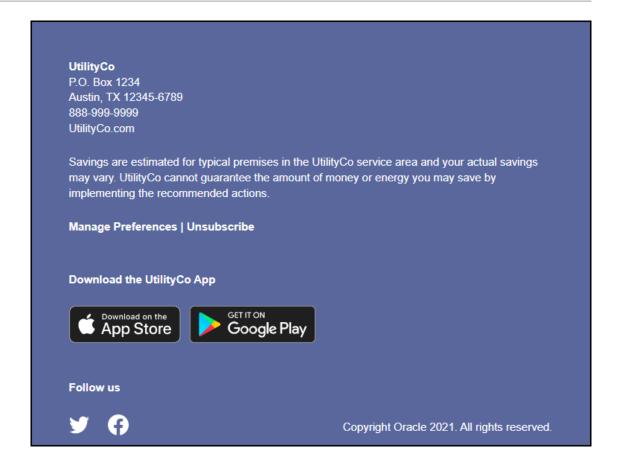
Manage Preferences: A link to the Web Portal page where a customer can edit their communication preferences.

Utility Contact Information: The utility's mailing address. The mailing address must appear due to CAN-SPAM regulations in the US and similar regulations abroad.

Legal Text: This is the copyright and any other legal text required by the utility and/or Oracle Utilities Opower.

Disclaimer Text: This is any additional text the utility wishes to include in the footer statement. This text appears below the copyright text, and is optional.





Enrollment

Eligible customers can be enrolled in one of two Weekly Energy Update programs: opt-in or opt-out. In either program, customers can unsubscribe from emails at any time.

Opt-In Program: In an opt-in program, customers are given the option to sign up voluntarily, rather than being automatically enrolled. In this scenario, Oracle Utilities and the utility must coordinate to determine how to promote the emails and encourage customers to sign up. Customers can use the Oracle Utilities web portal to enroll in Weekly Energy Updates.

Opt-Out Program: In an opt-out program, customers are automatically enrolled as long as they meet the eligibility criteria. In this scenario, Oracle Utilities coordinates with the utility to select which customers to enroll.

Delivery

This section provides general information about the delivery of the Weekly Energy Updates, such as the frequency of delivery, what defines a "weekly cycle," the timing for the delivery day, and customer email preferences.

Frequency: The Weekly Energy Update email is sent weekly. The Weekly Energy Update Introduction email is sent once when a customer is sent their first Weekly Energy Update.

If customers also receive the Post Bill Report email, it is limited to being sent once per month to avoid excessive alerting. The standard Weekly Energy Update is not sent during the week that the Post Bill Report email is sent. The Post Bill Report should be sent within 10 days of the customer's bill cycle ending.



If customers are selected to receive the Cost Tracker email, this email is the Weekly Energy Update email that the customer receives on a weekly basis. A Cost Tracker Post Bill Report email is also included, and is sent once per month to avoid excessive alerting. The standard Cost Tracker email is not sent during the week that the Post Bill Report email is sent. The Post Bill Report should be sent within 10 days of the customer's bill cycle ending.

Weekly Cycle: The weekly cycle for the emails starts on Monday at 12:00:00 AM (midnight) and ends on Sunday at 11:59:59 PM. Emails are sent to customers as soon as possible after the end of a weekly cycle. Basing communications on a weekly basis is consistent with how people typically think about their personal and family schedules, and allows customers to better analyze their weekday usage against their weekend usage. 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.

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 Day: Ideally, customers will receive their Weekly Energy Update shortly after the end of a weekly cycle. This is typically 2-4 days after the data is received by the utility.

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

Analytics: Oracle Utilities uses a third-party vendor to send Weekly Energy Updates. This tool allows Oracle Utilities to collect information on the number of bounces, opens, opt-outs, and click-throughs.

Email Preferences: Customers who enroll in the program through the Oracle Utilities web portal can sign up to receive Weekly Energy Updates at a single email address. Customers can be enrolled to receive the email at multiple email addresses through the Customer Notification API. See the <u>Oracle Utilities REST API for Digital Self Service Energy Management</u> for more information.

Providing Customer Support

Customer Service Representatives can do the following in the Oracle Utilities Opower Customer Service Interface (CSI):

- View some components of Weekly Energy Updates sent to customers.
- Manage a customer's Weekly Energy Update preferences.
- Help a customer update their email address.

See Supporting Weekly Energy Updates for details.

Inside Opower

The Load Shifting Cloud Service, Electric Vehicle includes access to Inside Opower. Inside Opower is an online, utility-facing suite of tools to help users across a utility stay informed of and manage their Oracle Utilities Opower program. Utility users can access key data such as program insights, analytics, reports, contact information, and documentation.

See the Oracle Utilities Opower Inside Opower Product Overview for details.

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Customer Service Interface - Program Management

This cloud service includes access to the Customer Service Interface - Program Management tool. The Customer Service Interface (CSI) is an online support tool that provides utility support staff with the information and functionality they need to manage the Oracle Utilities Opower program and answer customer questions. See the Oracle Utilities Opower Customer Service Interface - Product Overview for details.

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.