

Opower High Bill Alerts Non-AMI

Opower High Bill Alerts Non-AMI Product Overview



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Oracle Utilities Opower High Bill Alerts Non-AMI Product Overview

Welcome to the Oracle Utilities Opower High Bill Alerts Non-AMI Product Overview. Use this information to learn about the features and capabilities of the High Bill Alerts Non-AMI Cloud Service. Have a question? [Contact Your Delivery Team](#) or visit [My Oracle Support](#).

- [Getting Started](#)
- [High Bill Alerts \(Non-AMI\)](#)
- [Inside Opower](#)
- [Customer Service Interface - Program Management](#)

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Getting Started

The High Bill Alerts (non-AMI) cloud service includes products and services designed to help customers monitor their energy use and avoid high bills.

The following components are available in this service:

- [High Bill Alert \(non-AMI\)](#)
- [Inside Opower](#)
- [Customer Service Interface - Program Management](#)

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

Your utility might not have all of the products or features described in this document. [Contact Your Delivery Team](#) if you have any questions.

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High Bill Alerts (Non-AMI)

High Bill Alerts (non-AMI) are digital communications sent to the customer's email account to inform customers when they are expected to receive a higher energy bill. This forecast is based on fluctuations in weather compared to a previous billing period and a home's sensitivity to these fluctuations. If the calculated energy use forecast exceeds a specific threshold compared to prior usage, an alert is sent. Alerts are delivered with enough time left in the billing cycle so that the customer can reduce energy use and substantially affect their final bill.

Requirements and Limitations

The following data requirements and limitations apply to all utilities and customers in the High Bill Alert (non-AMI) Cloud Service. These requirements must be met for a utility and a customer to participate in the program.

Utility Data Requirements and Limitations

- **Scale:** The minimum scale of the alerts is 30,000 customers. While there is no maximum scale limit, the actual scale of the alerts is affected by the number of customers whose estimated usage exceeds configured thresholds. The actual number of communications sent will also be affected by attrition, opt-outs, customer eligibility, and data availability.
- **Language:** United States and Canadian English are the only locales and languages supported at this time.
- **Data Delivery Frequency:** The utility must be able to send billing-based usage data to Oracle Utilities within one week of the customer's bill period ending.

Customer Requirements and Limitations

- **Billing Frequency:** Customers must be on monthly billing cycles.
- **Service Points:** Customers must have only a single service point per fuel type.
- **Data Requirements:** Usage data and third-party weather data are required to estimate the customer's current usage and calculate a forecast for the rest of the bill period. In order to display cost information in the alert, utilities must send the billed usage amount in the billing data file, as described in the Oracle Utilities Opower Legacy Billing Data Transfer Standards. If the billed usage amount is not included, only energy usage information is displayed.
- **Data History:** A minimum of 90% of the customer's billed usage data from the previous 24 months is strongly preferred to ensure more accurate estimates and year-over-year comparisons. Customers with less than 24 months of billing data can receive the alert, though insights will be less complete, and more likely limited to month-over-month comparisons. A minimum of 90% of 13 months of historical data is required.
- **Supported Fuel Types:** Electric and gas fuels are supported. Email messages are generated separately for each fuel type. There is no combined fuel version. For dual-fuel customers, a separate gas and electric version of the alert can be sent. However, most utilities choose to align the sending of the alerts on a seasonable basis (gas alerts during cold seasons, and electric alerts during warm seasons) to avoid overlapping

communications. Your Oracle Utilities Opower Delivery Team will work with you to determine the best strategy for your program.

- **Communication Delivery:** High Bill Alerts (non-AMI) may only be sent to customers during a specific time period of the current billing cycle. See [Delivery](#) for additional information.
- **Email Address:** Customers must have a valid email address.
- **Email Clients:** Oracle Utilities supports email clients that may be native to a specific device, such as the installed email client on the iPhone 6, as well as email client applications that may be accessed from any device or computer. Oracle Utilities supports and optimizes the following email clients to view High Bill Alerts (non-AMI):
 - iPhone internal email client (iOS 10.0 and greater)
 - iPad internal email client (iOS 10.0 and greater)
 - Apple Mail (Mac OS X 10.10 and greater)
 - Android internal email client
 - Microsoft Outlook (2010 and greater)
 - Outlook.com
 - Yahoo! Mail
 - Gmail.com
 - Samsung Mail

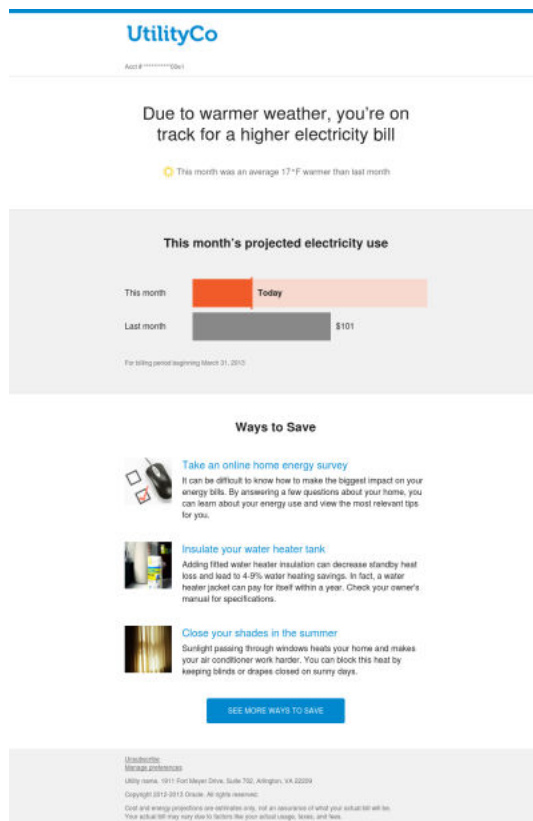
For email clients that support multiple versions operating at the same time (for example, Apple iOS10 on iPhone5 or Microsoft Outlook 2010, 2012, and 2013), Oracle Utilities generally supports the most current major release as well as a number of previous major releases. For email clients that only provide a single version (for example, Gmail.com), Oracle Utilities supports the currently available version. Other email clients are not officially supported or tested by Oracle Utilities. Customers viewing High Bill Alerts (non-AMI) on unsupported devices or applications may see user experience variations in their reports.

Customer Experience

High Bill Alerts (non-AMI) are digital communications sent to the customer's email account to inform customers when they are expected to receive a higher energy bill. This forecast is based on fluctuations in weather compared to a previous billing period and a home's sensitivity to these fluctuations.

By default, the alert is sent if the customer's usage or bill is projected to be 30% or more than the previous usage or bill. If this threshold is not reached, an alert is not sent. Electric and gas versions of the email are generated separately. The appearance of the email alert varies slightly based on factors such as fuel type, what bill period is compared, and whether cost information is included in the comparison.

The email is made up of modules, which are described in the following sections. Additionally, the [Easy Open module](#), which is part of the Proactive Alerts Cloud Service, can be included in the email.



Subject Line, Header, and Footer

The subject line and header are used to engage the customer and brand the communication. The footer provides customers with links to manage preferences and unsubscribe from High Bill Alerts (non-AMI). It also contains the utility address and other necessary legal text.

Subject Line

The subject line is designed to engage customers. The subject line should attract the customer's attention and encourage the customer to open the email. The subject line is automatically selected to provide the correct terminology for warmer or cooler weather. The subject line can be one of the following:

- Alert - Cooler weather is impacting your electricity bill
- Alert - Warmer weather is impacting your electricity bill
- Alert - Cooler weather is impacting your natural gas bill
- Alert - Warmer weather is impacting your natural gas bill

Header

The header contains the utility logo, customer name, and utility account number.

Logo: A logo provided by the utility that informs the customers about who is sending the email. This is the same logo used in the Oracle Utilities Opower web portal.

Utility Account Number: A unique identifier for the customer. Because the account number is required for customers to register on the Oracle Utilities Opower web portal, having the number

on the alert provides a useful reference for customers. To protect the customer's privacy, only the last four digits of the customer's account number are displayed.

Footer

The footer includes components that provide more information about the utility and how to unsubscribe from the alert.

Unsubscribe: A link to a page where customers can unsubscribe from High Bill Alerts (non-AMI). An unsubscribe link must appear due to CAN-SPAM regulations in the US and similar regulations abroad.



Warning

Unsubscribing from alerts in this manner permanently unsubscribes the customer from all Oracle Utilities Opower email communications in the future.

Manage preferences: A link to a page where customers can modify the communication settings.

Utility Name and Address: The utility's mailing address. The mailing address must appear due to CAN-SPAM regulations in the US and similar international regulations.

Legal Text: A copyright statement and any other legal text required by the utility.

Disclaimer: An optional disclaimer that can be added at the request of the utility.

Notification Module

The Notification module introduces the customer to the alert and describes the weather-based reason as to why the customer may be receiving a higher bill than the previous bill period. To produce this forecast, heating and cooling coefficients are calculated for each home. These specific coefficients distinguish which homes are sensitive to changes in the weather. The product then compares the customer's energy use from a previous billing period to the current period in relation to local weather patterns to calculate a forecast of how much energy the customer could potentially use due to weather sensitivity.

Due to warmer weather, you're on
track for a higher electricity bill

 This month was an average 12°F warmer than last month.

Explanatory Statement: The explanatory statement alerts customers that they are on track for a high bill. It includes a weather-based reason for why the bill may be higher than expected. Possible statements include:

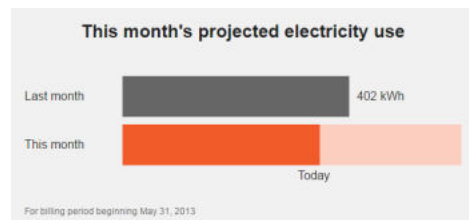
- **Electric Fuel**
 - Due to warmer weather, you're on track for a higher electricity bill
 - Due to colder weather, you're on track for a higher electricity bill
- **Gas Fuel**
 - Due to colder weather, you're on track for a higher natural gas bill

Weather Insight: The weather insight describes the average temperature difference between the current month and the month being compared. The weather insight is highlighted to ensure that the customer sees the message and understands that local weather patterns are a part of the forecast. Possible weather insights include:

- This month was an average X warmer than last month
- This month was an average X warmer than the same month last year
- This month was an average X cooler than last month
- This month was an average X cooler than the same month last year

Forecast Module

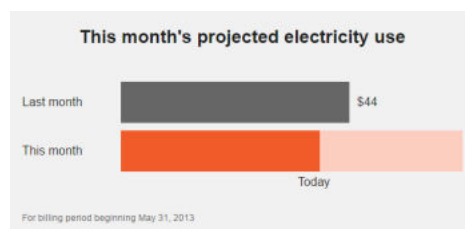
The Forecast module displays the customer's projected energy use for the current bill period and compares it to the energy use from the previous bill period, or to the same bill period from the previous year. The user experience is identical in both scenarios except for minor differences in the messaging. The description below is for a comparison to the previous bill period.



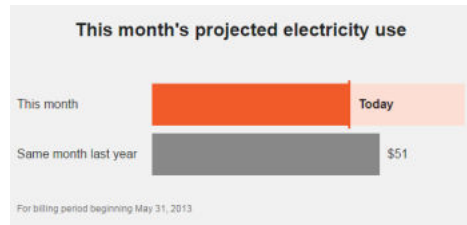
Title: The title describes the fuel type and tells the customer what months are being compared.

Graph: The comparison graph includes two bars that display the customer's energy use from the previous bill period and the customer's forecasted energy use for the current billing period. The forecast calculation is based on historical usage data and weather data. See [Calculations](#) for more information.

- **Last Month:** The Last Month bar contains a numerical value that reflects the actual amount of energy that the customer used.
- **This Month:** The This Month bar estimates the customer's use in the current bill period, as indicated by the Today line. The rest of the bar is a lighter color to indicate the amount of energy that the customer is estimated to use by the end of the billing cycle. The This Month bar does not have a specific amount associated with it. This is because the customer should not associate a specific number with an estimated bill, but should instead be encouraged to reduce their energy use before the billing cycle is complete. Note that this bar is a fixed image that does not adjust dynamically depending on the customer's estimated current usage or cost.
- **Inclusion of Cost Information:** Cost information is displayed in the Last Month bar if the utility sends a billed usage value to Oracle Utilities.



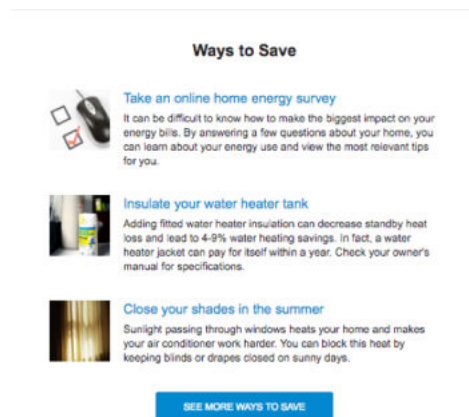
- **Comparison to the Same Month from Last Year:** Depending on your utility's setup and configuration, a comparison to the same month from the previous year may be displayed instead of a comparison to the previous month. In this case, the messaging for the compared bill period is slightly different.



Date Range: The date range displays the beginning of the bill period so that the customer has a time-based reference point. Depending on the utility's setup and configuration, this text region may also include a disclaimer.

Ways to Save Module

The Ways to Save module provides customers with personalized tips on how to reduce their energy use and lower their energy costs. The tips that appear are selected using Intelligent Tip Targeting, which means they are automatically selected and prioritized based on each individual customer's attributes. No more than three tips can be used.



Title: The title reflects the module's focus on saving money and energy.

Tip Content: An individual tip includes a tip image, tip title, and tip summary. Selecting a tip takes the customer to the public-facing tip details page on the Oracle Utilities Opower web portal.

- **Tip Image:** The tip image is a visual representation of the action that the tip recommends. Customers can click on the title to view more detailed information.
- **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.
- **Tip Summary:** The tip summary elaborates on the tip with more explanation about why doing the tip is beneficial.

See More Ways to Save: Selecting this link takes users to the **Ways to Save** page in the Oracle Utilities Opower web portal. Users can see a public-facing version of the page even if they have not signed in.

Marketing Module

The marketing module is a slot at the bottom of the alert that may display promotions and marketing material from the utility or it may display tips that customers can use to help lower their bills. The content of the marketing module is static and selected by the utility, and does not contain any personalized, data-driven insights for the customer. Depending on the program, customers may see more than one marketing module in an alert.

Calculations

The primary calculation used in High Bill Alerts (non-AMI) is the forecast calculation, the result of which is displayed in the [Forecast module](#). The calculation works by determining how sensitive a customer's home is to hot and cold weather. Three major steps are involved in the calculation.

Step 1: Determine the heating, cooling, and baseload coefficients.

1. Get historical weather data and historical energy use data for a customer. Two years of each type of data is strongly preferred. A minimum of 13 months is required.
2. Perform a linear regression analysis on the data to see how a customer's energy consumption fluctuates in relation to changes in the weather. The goal of the regression analysis is to generate heating, cooling, and baseload coefficients.
 - A baseline temperature of 65 degrees Fahrenheit is used for the analysis. The *baseline temperature* is the temperature of the building at which no additional heating or cooling is required. At 65 degrees or less, most buildings require heat to maintain a 70-degree temperature inside. At 65 degrees or more, most buildings require air conditioning to maintain a 70-degree temperature inside.
 - We exclude anomalies from the data model such as average daily electric usage less than 1 kWh or greater than 300 kWh.
3. Based on the results of the analysis, produce the heating, cooling, and baseload coefficients.
 - *Cooling degree day (CDD) coefficient*: The number of degrees above the baseline temperature for a period of time. For example, if the baseline is 65 degrees and the weather is 75 degrees, then you have 10 CDD.
 - *Heating degree day (HDD) coefficient*: The number of degrees below the baseline temperature for a period of time. For example, if the baseline is 65 degrees, and the weather is 60 degrees, then you have 5 HDD.

Note: To calculate the heating and cooling coefficients, we select a model that is specific to your climate zone. That way, the forecast estimates are more accurate and more relevant to customers' local weather patterns. Our Data Science team has created different calculation models for regions with different climates. The models we choose from include:

 - 3-Parameter Heating (3PH): Used for extreme heating climates.
 - 3-Parameter Cooling (3PC): Used for extreme cooling climates.
 - 3-Parameter Heating-Cooling (3PHC): Used for seasonal climates.
 - *Baseload coefficient*: The kWh/day that a home uses minus the consumption due to heating or cooling.

Step 2: Estimate period-to-date energy usage.

1. Get weather data for the bill period to date.
2. Calculate the number of HDD in the bill period to date, and multiply the result by the *heating* coefficient produced in the *Determine coefficients* step above. Then do the same thing for CDD, and multiply the result by the *cooling* coefficient.

For example, let's say that 20 days have passed by in the bill period to date. The calculation looks at each day to count the number of HDD or CDD, and then sums them up. In a winter month, for example, one day might have 5 HDD, another day might have 4 HDD, and so on. The calculation would add the number of HDD for all 20 days, and then multiply the result by the heating coefficient produced in the *Determine coefficients* step above.

3. Calculate the number of baseline days (that is, how many days have passed since the beginning of the current bill period), and multiply them by the *baseload* coefficient produced in the *Determine coefficients* step above.
4. Add the results of the coefficients together to get an estimate of period-to-date usage. For example, let's say that in the first 20 days, we estimate that the household has used 760 kWh.

Step 3: Project the customer's usage for the rest of the billing period and trigger an alert if necessary.

1. Divide the usage-to-date by the number of days in the bill period that have already passed. For example, if 20 days have already passed, we would divide 760 kWh by 20, resulting in a daily average of about 38 kWh per day.
2. Multiply the result by the expected number of days in the bill period. For example, for the month of April, we would multiple 38 kWh * 30 to get a projected usage of 1,140 kWh.
3. Compare the forecasted usage to the total usage of the previous bill period. The previous bill period may be the previous month or the same month from the previous year.
4. Trigger the high bill alert if the forecast is 30% higher than the previous bill period.

Delivery

High Bill Alert (non-AMI) emails are not regularly-scheduled communications. They are triggered based on specific criteria. For example, an alert is triggered when a customer reaches a certain percentage of usage above their typical baseline. The messages must be delivered within a particular delivery window. The rules that govern alert delivery follow.

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

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

Non-Delivery Window: Messages cannot be delivered during the configured non-delivery window, which is during the specified number of days after bill period starts and before a 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.

The default non-delivery window settings specify that alerts should not be delivered within seven days after a new bill period starts or within seven days before the bill period ends.

For example, suppose a customer is billed on the third day of every month. For the July 3rd bill, using 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).

Delivery Frequency: Messages are limited to being sent once per billing period per service point to avoid excessive alerting.

Delivery Tools: Oracle Utilities uses third-party tools to send messages. 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.

Enrollment

Customers can enter the High Bill Alert (non-AMI) Cloud Service through an opt-in or opt-out program. In an opt-in program, customers are given the option to sign up voluntarily, rather than being automatically enrolled. Customers can sign up for High Bill Alerts (non-AMI) in the Oracle Utilities Opower web portal. In an opt-out program, customers are automatically enrolled as long as they meet the eligibility criteria.



Warning

Customers who unsubscribe using the unsubscribe link within the High Bill Alerts (non-AMI) email are also unsubscribed from all other Oracle Utilities Opower email communications.

Providing Customer Support

Customer Service Representatives (CSRs) can perform common support tasks in the Oracle Utilities Opower Customer Service Interface:

- Access a customer's web account to manage preferences and perform troubleshooting
- View copies of previous High Bill Alerts (non-AMI) sent to customers
- Opt a customer in or out of High Bill Alerts (non-AMI)

For more information, see [Supporting High Bill Alerts - Non-AMI](#).

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Inside Opower

The High Bill Alerts (non-AMI) Cloud Service 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

The High Bill Alerts (non-AMI) 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 - Program Management Product Overview](#) for details.

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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](#).