

Pacific Power

Keeping Warm Workshop

Helping Customers Manage Costs by utilizing Smart Meter Technology

March 14, 2019



We're here for our customers, every step of the way.

- From high tech startups to young families just starting out, your dreams drive our innovation
- We're investing today in the technology and infrastructure to power the next 100 years
- We never stop looking for new ways to deliver the most affordable, sustainable, reliable electricity
- We're committed to protecting and preserving the land we all call home

Helping you power your greatness.



AMI (Advanced Metering Infrastructure) -

an integrated system of smart meters, communications networks, and data management systems that enables two way communication between utilities and customers.



Project Scope:

- Installation of 590,000 smart meters in Oregon – In Progress
- Construction of a Field Area Network - Completed
- Integration of new AMI software with legacy systems - Completed
- Implementation of customer energy usage web pages - Completed

Meter Installations - Schedule

Area	Date	Status
Willamette Valley	January 2018 – May 2018	Complete
Lincoln City	February 2018 – May 2018	Complete
Klamath Falls	May 2018 – June 2018	Complete
Crescent City, CA	June/July 2018 – September 2018	Complete
Yreka/Mt Shasta - CA	September 2018 – November 2018	Complete
Medford	June 2018 – September 2018	Complete
Grants Pass	September 2018 – November 2018	Complete
Coos Bay	November 2018 – December 2018	Complete
Roseburg	December 2018 – January 2019	Complete
Portland	January 2019 – April 2019	In Progress
Astoria	February 2019 – April 2019	In Progress
Hood River	March 2019 – May 2019	In Progress
Central Oregon	May 2019 – July 2019	Not Started
Eastern Oregon	June 2019 – September 2019	Not Started

Smart Meter Benefits

Smart Meters enable Pacific Power to continue moving toward a smarter grid and be a more responsive, efficient and resilient partner.

The Smart Meter rollout is a part of our larger, longstanding effort to upgrade and modernize the power grid. Smart Meters will help Pacific Power respond rapidly to outages, reduce operational costs (saving money for our customers) and set the stage for a cleaner, greener energy systems. For over 100 years, Pacific Power has balanced a bold, pioneering spirit with a commitment to a reliable, efficient performance. As we roll out these Smart Meter upgrades, we are preparing for another century of community partnership and innovation.

Additional Customer Benefits:

- Greater insight into their energy usage, allowing them to make informed choices
- Customers can setup monthly bill thresholds and we'll send them an alert if they start to go over
- Meters are read remotely, allowing customers to start and stop service without scheduling a visit.

Tested & proven technology

Smart meters are already used safely and successfully in over 70 million homes

- Use RF but at levels well below the limits set by the FCC
- And much lower than other common items: cell phones, baby monitors and microwave ovens
- Fire concerns were related to early model smart meters



Offering you peace of mind

- Use a secure wireless network
- Captures the same information as your existing meter
- No personal information, such as name or address, is ever transmitted
- Cannot track or record individual appliance usage



Smart features for you

Your new smart meter comes with some exciting features.

- Sign in to your online account to see your daily energy use

www.pacificpower.net/smartmeter

- Access tips and tools to give you more control over your monthly bill
- Connect to conservation efforts like paperless billing and Blue SkySM renewable energy

Visit: <https://www.pacificpower.net/ya/smart-meters/MeetYourSmartMeter.html>

Web – Your Account

- Daily usage is displayed 7 days after bill is generated, until then, last 13 months of usage is presented.
- Average temperature is presented in both daily and monthly view.
- Customer can select from any meter on their account. Up to two years of data are available to view.

Your Account

- View & Pay Bills
- Payment & Billing Options
- Your Alerts
- Usage Details
- Online Profile & Account Information
- Start, Stop or Move
- Landlords & Property Managers
- Report Power Outage
- Smart Meters

View bill inserts with the latest updates and offers for your state.

Pacific Power App

Report outages and stay informed with our free mobile app. Get it on the App Store® and Google Play™.

Your Account Secure Site

Show account info **Electric Account** active

Account Options

- Manage alerts
- ✓ Paperless billing
- ✓ Automatic payments
- ✓ Renewable energy Equal pay

Your Current Bill

Billed on 11/29/18 [View Current Bill](#)

Current due	\$0.00
Past due	\$0.00
Total due	\$0.00

Automatic payments scheduled

[Need more time to pay?](#)

Your Usage

Usage Calculator [Usage Details](#)

Projected bill : \$93 - \$114 You are 18 days into your billing cycle

Projected bill alert: \$170

Site address: [About your smart meter](#)

Any time frame that occurs without energy usage will not show on this graph.

Daily Usage

Usage Average Temperature

Date	Usage (kWh)	Average Temperature (°F)
11/28	28	45
11/29	25	45
11/30	23	44
12/01	15	42
12/02	25	40
12/03	26	38
12/04	18	38
12/05	21	38
12/06	18	36
12/07	23	34
12/08	23	36
12/09	18	36
12/10	20	40
12/11	24	44
12/12	30	44
12/13	24	44
12/14	18	40
12/15	15	40

Your Alerts

Smart Meter Customers see the option for projected bill

Your Account Residential Business Contractors Efficiency & Environment

Home > Your Account > Your Alerts

Your Account

- View & Pay Bills
- Payment & Billing Options
- Your Alerts**
- Usage Details
- Online Profile & Account Information
- Start, Stop or Move
- Landlords & Property Managers
- Report Power Outage
- Smart Meters

Your Alerts Secure Site

Show account info **Electric Account** active

Select your alert preferences below.

Billing & Payment

Billing Notice Email Text
Includes the amount due and due date when your bill is ready. This alert does not change your paperless status.

Attach a copy of my bill Yes (Email only)
Terms and conditions apply.

Projected Bill Email Text
Get an alert when your energy bill is projected to be higher than a threshold you set.

Projected bill threshold \$

Payment Due Reminder Email Text
Get an alert a few days before your payment is due if your bill has not been fully paid.

Payment Confirmation Email Text
Get an alert when a payment is applied to your account.

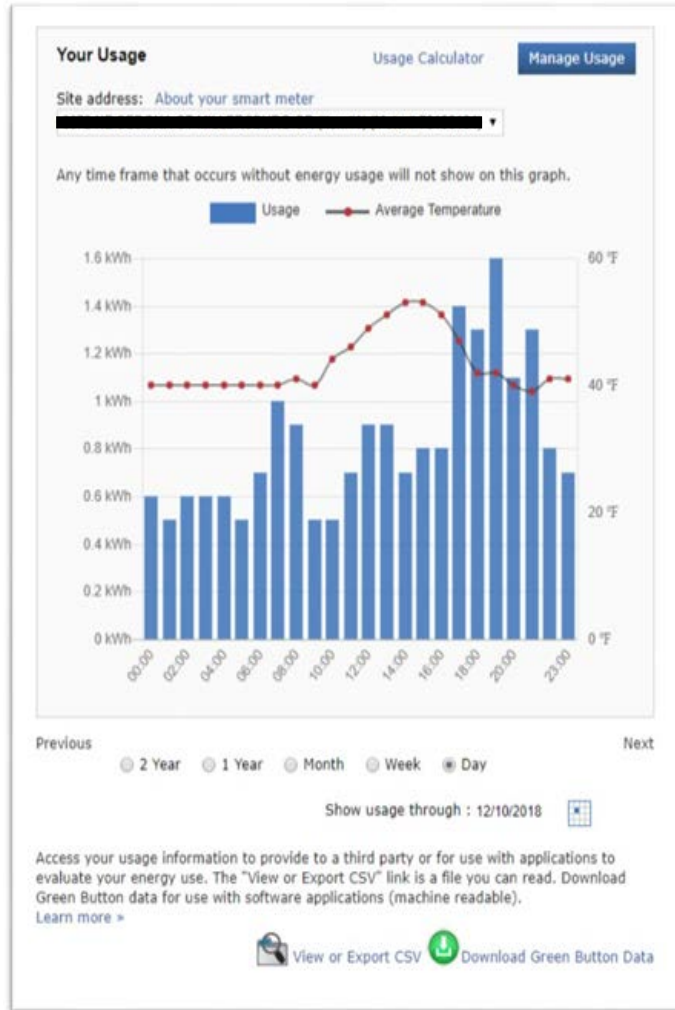
Power Outage

Reported Outage Follow-Up Email Text Call
When you report an outage, we'll provide status update alerts.

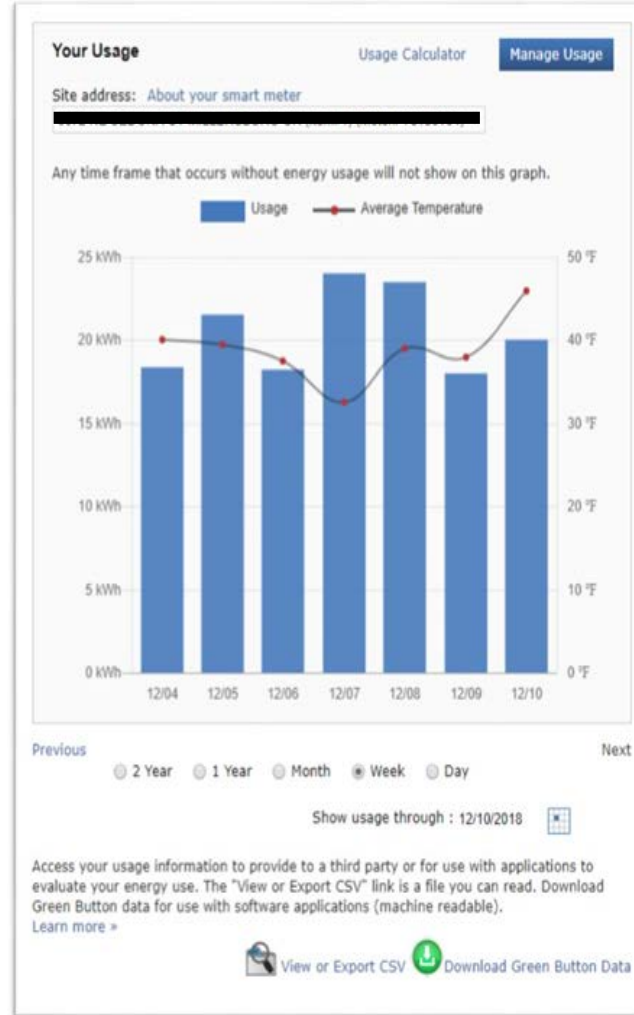
Programs & Services

Account Services & Energy News Email Text
Information and services to help you save energy, support renewable power and more. This may include newsletters.

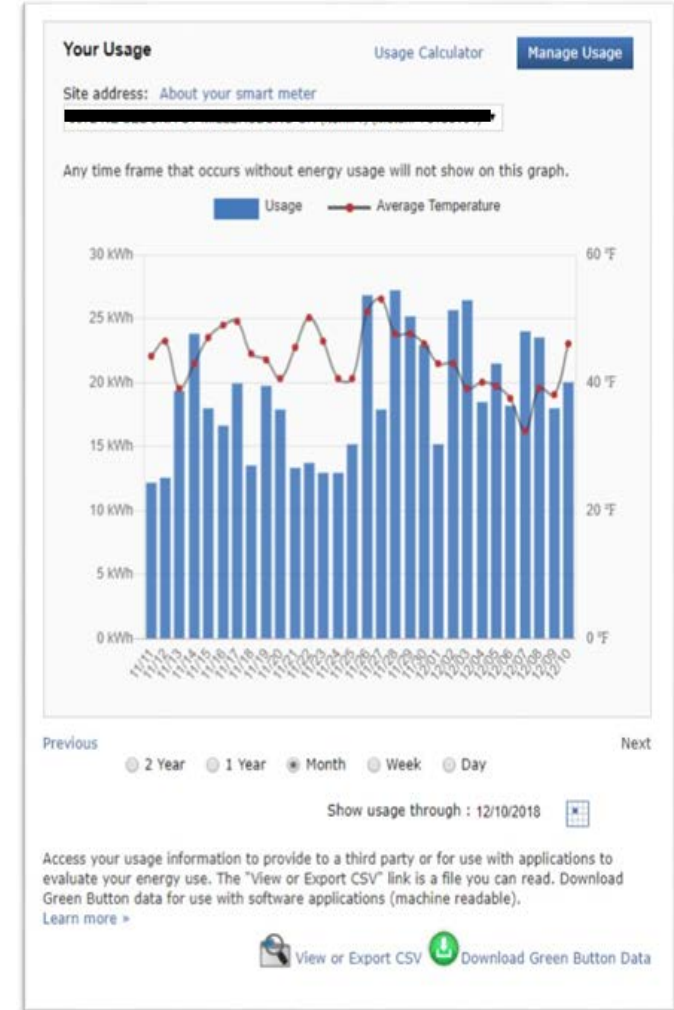
View Energy Usage



Day (By Hour)



Week



Month

View Energy Usage (For non-residential) Customers)



- 15 minute intervals for non-residential meters
- 1 hour intervals for residential meters



Manage Usage


Allows you to manage your projected bill alert and review your projected bill

Manage Usage

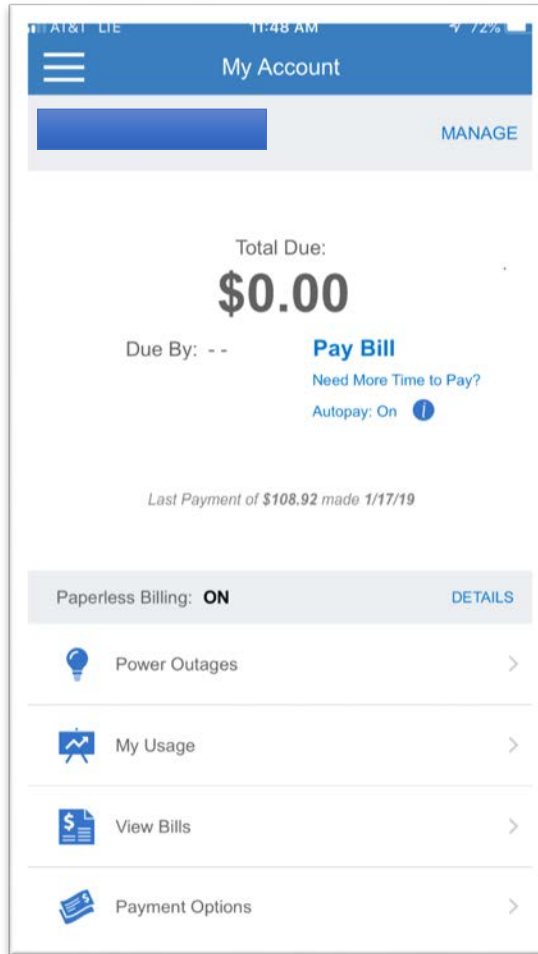
 Secure Site
 Print This Page

[Show account info](#)
KENNETH L RICHARDS

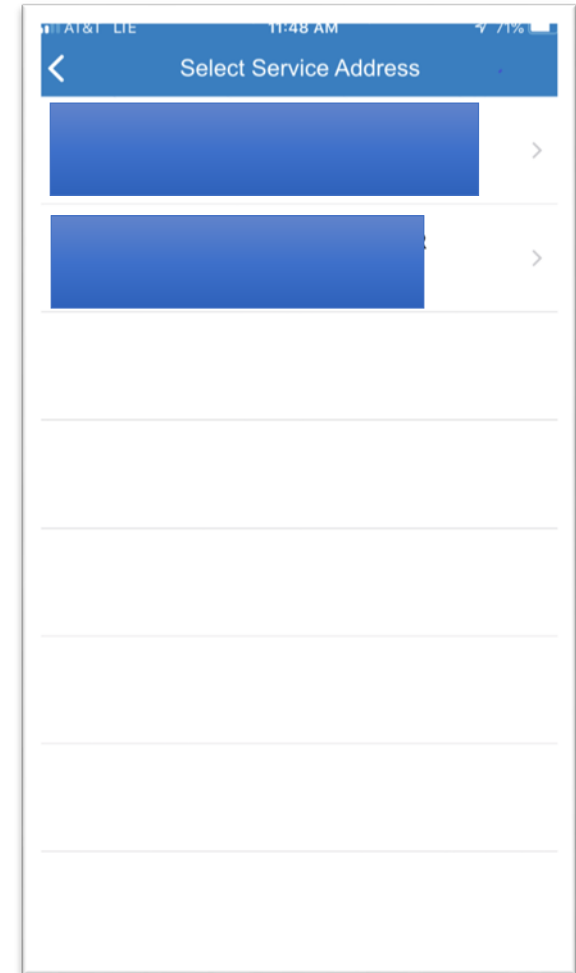
Electric Account Home

- [Manage your projected bill alert](#)
- [Review your projected bill](#)
Projected bill \$111 - \$123  You are 29 days into your billing cycle
- [Ways to save](#)
- [Discounts and cash incentives for energy upgrades](#)
- [Online tools to evaluate energy use](#)
- [Energy assistance and weatherization services](#)

Mobile – Your Account

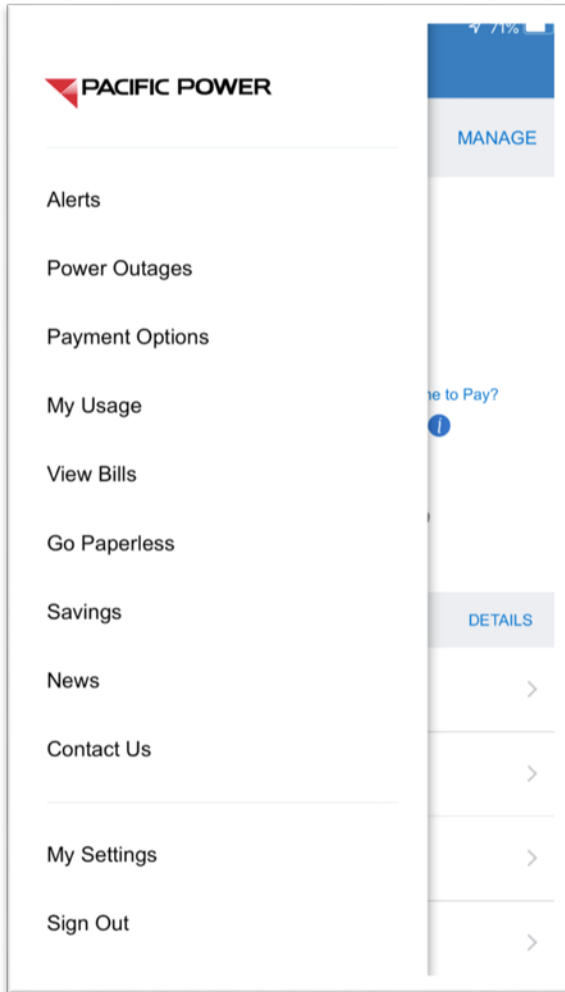


Home Screen – My Account

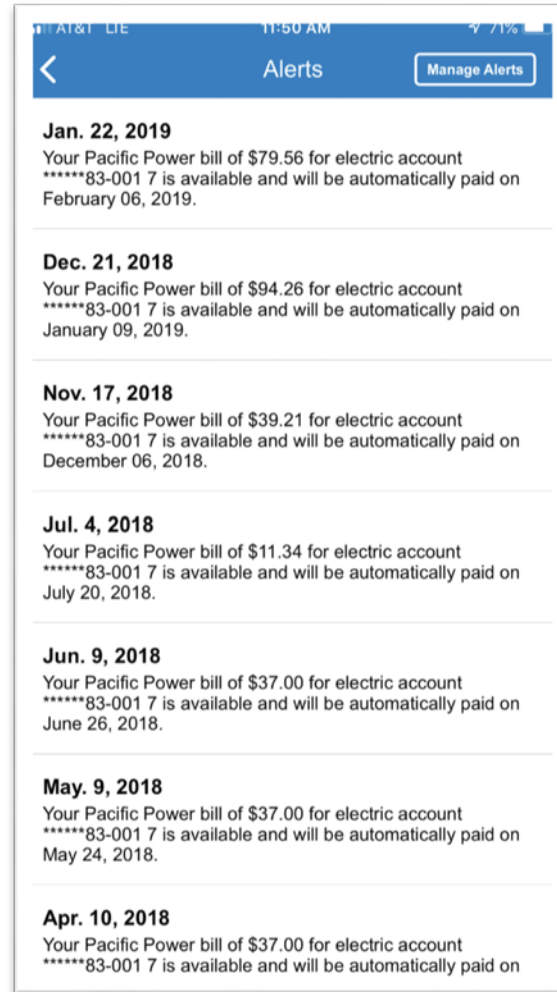


Select Service Address

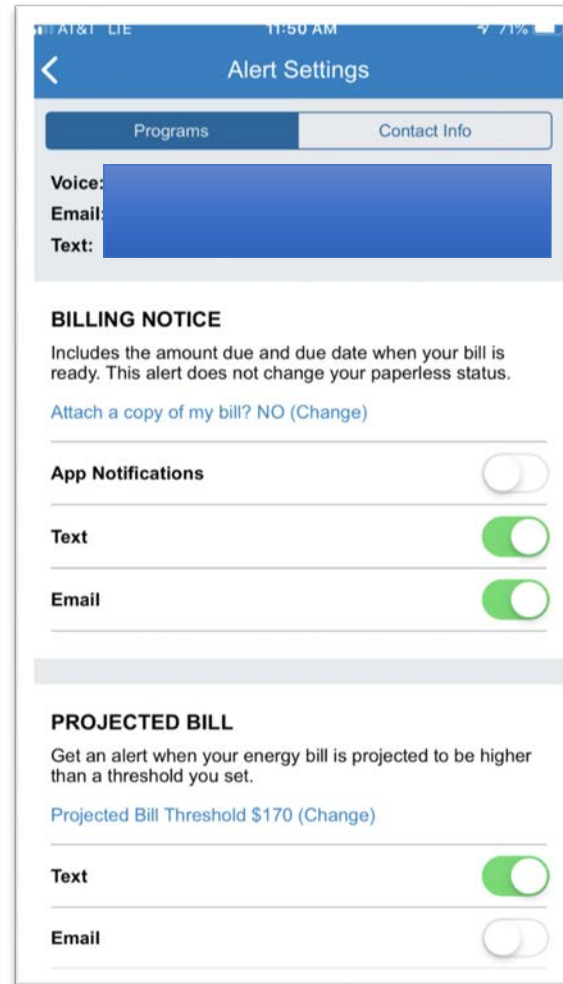
Alerts



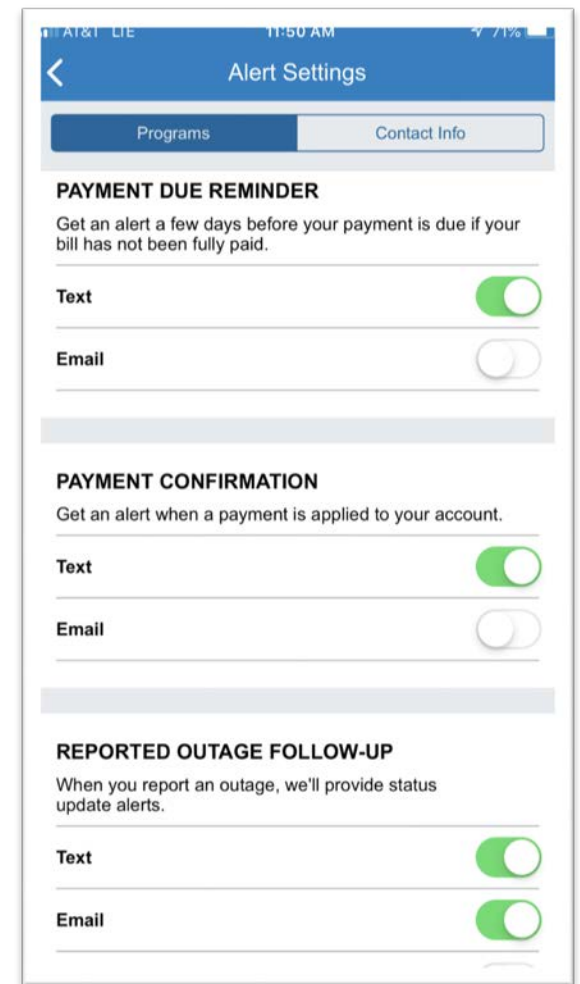
Set Alerts



Alerts Sent

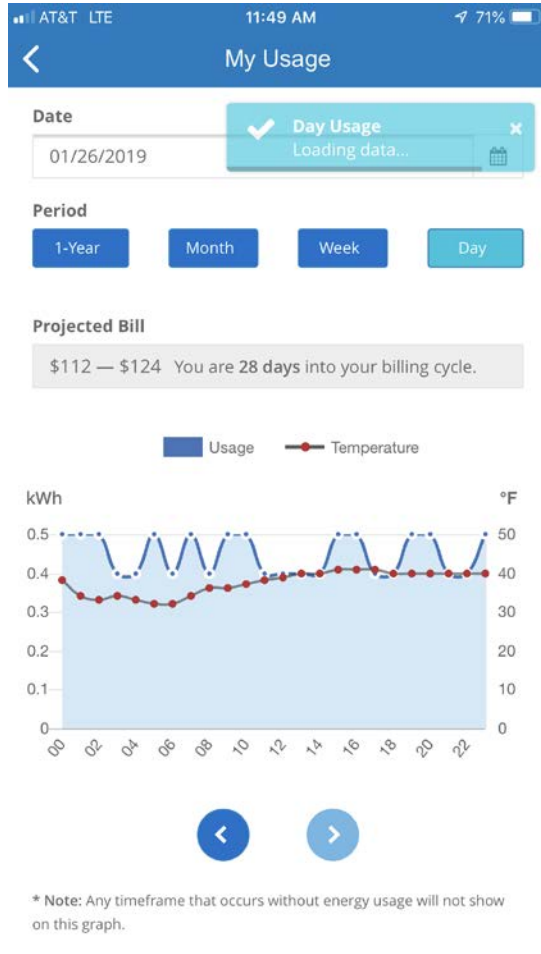


Alert Settings

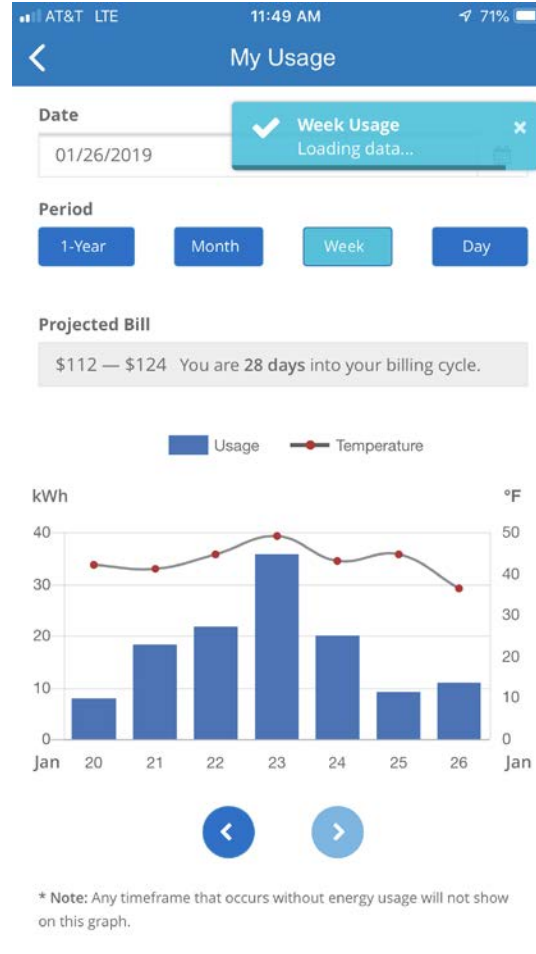


Alert Settings

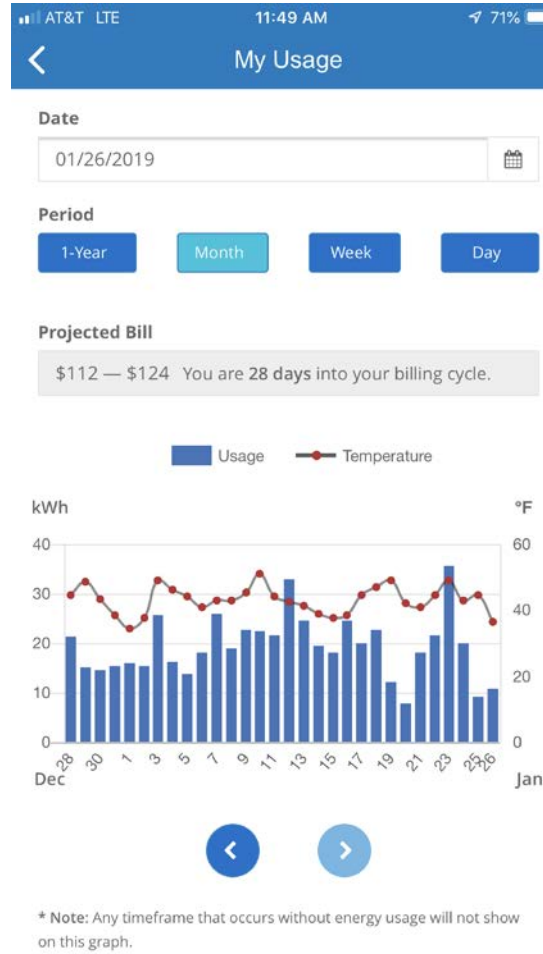
View Energy Usage



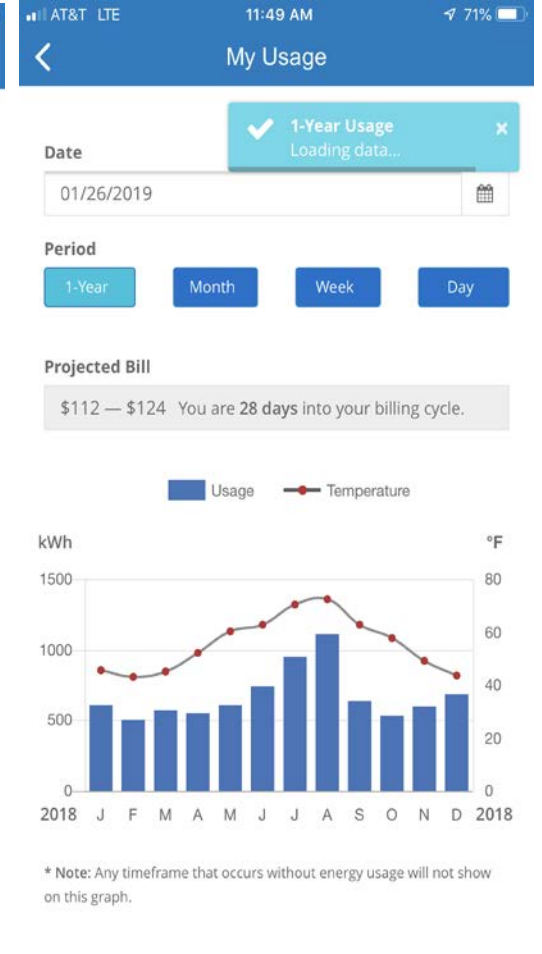
Day (By Hour)



Week



Month



Year

SETTING UP YOUR ACCOUNT

To get started, if you don't already have one, you'll need to sign up for an account on the Pacific Power website (www.pacificpower.net) or on our mobile app.

The process is quick and easy to do:

- Enter your name
- Create a user ID and password
- Enter your email address
- Check your email inbox for a confirmation link
- Return to enter your Pacific Power account number (found on your bill)

And that's it! You now have access to many energy and money-saving options you may not have been aware of!



PAYMENT OPTIONS

DISCOVER SEVERAL OPTIONS FOR BUDGETING



PAPERLESS BILLING

Sign up to conveniently receive bill notifications, payment confirmations, past-due notifications and copies of your bill in your email inbox.

AUTOMATIC PAYMENT

You can sign up to have your bill paid automatically from your checking or savings account on your due date.

EQUAL PAY

For more predictable billing, we can average your last 12 payments into equal monthly charges.

PREFERRED DUE DATE

Request a due date that works best for your monthly budget. We will do our best to accommodate your request.

NEED MORE HELP?

For more information, visit www.pacificpower.net/pay



SMART SAVINGS

Save energy and money by utilizing your online account to its fullest.



MORE INNOVATION MEANS MORE SAVINGS OPPORTUNITIES.

Did you know Pacific Power offers a variety of ways to look at your energy usage and account information? We also offer several easy-to-use tools to guide and advise you on how to use that information to be more energy efficient and lower your bill.

These tools are all available through your personal Pacific Power account homepage.

STAYING INFORMED SAVING MORE

Near real-time financial and service tools are just a click away.

PROJECTED BILL

To help inform your monthly budget, we provide an estimated cost of your next bill that is based on an average of your previous usage.

This number is an estimate and cannot anticipate unforeseen jumps in household usage. For more information visit www.pacificpower.net/TBD

BILL THRESHOLD ALERT

Set a monthly dollar threshold for your bill. If your projected bill nears that amount, you will be alerted, providing you the opportunity to make adjustments to your daily usage.

BILLING & PAYMENT ALERTS

You can sign up for an alert when your bill is ready, as well as reminders for when your payment is due and confirmation, once it has been paid.

OUTAGE UPDATES

During an outage, receive alerts letting you know when power is expected to be restored and when it is actually back on.



MANAGING YOUR USAGE

Easy-to-read yearly, monthly, daily and hourly usage charts allow you to see how much energy you are using and when. Use these to determine how you may want to adjust your usage, saving you money in the short and long term. For instance:

Heating and Cooling Adjustments

A spike during the day, while no one is home, could mean your furnace or air conditioner is turning on automatically. Programming it to remain off during the day may save you energy and money.

Simple Energy Upgrades

If you notice your usage increases dramatically after dark, take a look at how many and what type of lights you use in your home. Turning off unused fixtures and replacing old light bulbs with energy-efficient LED bulbs can make a dramatic difference.

wattsmart®

Visit www.bewattsmart.com to find many opportunities to save big money over time. Discover easy energy-saving tips and a long list of cash incentives for home energy upgrades.



Thank you for your time.

PacificPower.net/SmartMeter