

Frequently Asked Questions

Water Heaters

1. What is this program about?

Optimal Time Rewards is a demand response program to help reduce peak electric consumption and create a more resilient and sustainable grid.

2. How does a water heater help reduce electric consumption on the grid?

The water heater is the second largest energy-consuming appliance in a home, after the equipment to heat or cool the house. By allowing Pacific Power to temporarily switch off the water heater during peak usage periods, participants help ensure more energy is available and there is less strain on the grid.

3. Who is Armada Power?

Pacific Power has selected Armada Power as its implementation partner for water heater enrollment in Optimal Time Rewards.

4. How does the Armada Power device work?

It is a smart device that connects to electric resistive tanked water heaters. It cycles the water heater on and off in conjunction with demand response events called by Pacific Power to help support the grid. The smart aspect is in its ability to ensure the water in your tank is hot prior to the demand response event occurring, thus ensuring you have plenty of hot water to get you through the event. Note: customers enrolling a heat pump water heater with a CTA-2045 port will receive a different device that operates in a similar manner.

5. Do I have to take action to respond to each demand response event?

No. Once you are enrolled, Armada Power and Pacific Power will handle everything with no additional steps on your part.

6. What is a demand response event?

A demand response event is a short period (between 5 minutes and two hours in duration) when Pacific Power wants to reduce electric consumption to avoid price spikes or stabilize the grid. For participants in this program, the water heater will automatically cycle off during a demand response event and then cycle back on once the event has concluded.

7. Will I have hot water?

Yes, you will still have hot water. Hot water heaters are insulated so the hot water in your tank remains hot even when power is temporarily off. There will likely be no impact on your ability to have access to hot water during a demand response event.



8. How often will a demand response event be called?

Pacific Power may call water heater demand response events for up to two hours in duration, once per day, and a maximum of twice per week. However, the actual number of events may be lower. Demand response events are typically called when the electric grid is under strain from extreme weather conditions.

9. Will I know when a demand response event occurs?

No. Since there is no action required on your part, and the event should not affect your hot water availability, you will not receive notifications when demand response events occur.

10. Is there any financial benefit to enrolling?

Yes. For residents with a Pacific Power account, there is an incentive to enroll, and then a participation incentive paid once a year. Property managers that sign up to offer the program to their tenants may also be eligible for incentives. Specific details on current incentives can be found at www.pacificpower.net/OTR.

11. Are there any additional benefits to the program?

Ongoing participation in the program reduces a participant's carbon footprint and helps your community become more reliable and sustainable.

12. How do I qualify for the program?

To enroll a water heater, you must be an Oregon or Washington residential Pacific Power customer in good standing and have an electric resistive tanked water heater (120/208/240V single phase with up to 5500 Watts elements) or heat pump water heater with a CTA-2045 port. Water heaters must have a minimum tank size of 30 gallons, and be in good working condition and properly installed. Renters should contact their property manager to learn more.

13. How do I enroll?

Renters should contact your property manager to learn if your property is participating, and for instructions on enrollment.

14. Do I have to participate in the program all the time?

Once enrolled, you will automatically participate in any demand response events. However, you can suspend your participation in the program by setting the water heater device to bypass mode. Setting the device to bypass mode for an extended period will result in unenrollment and may affect eligibility for future incentives.



15. How do I suspend my participation in the program?

For participants who have access to the Armada Power app: Open the app and sign in. In the top left corner select the three bars to bring up the navigation menu. Select "Modes," then select "Bypass." This will put your device into bypass mode which will remove you from event participation. Armada Power will deactivate the Armada Power device associated with your account, and stop receiving data on your water heater energy use. Setting the device to bypass mode may affect future incentives you receive. Devices that are continuously in bypass mode may be unenrolled from the program.

For participants who do not have access to the Armada Power app, or who have a heat pump water heater: **Call Armada Power directly at 855-820-7500.** Or call the Pacific Power customer support line at 888-221-7070.

16. Can I enroll both my smart thermostat and my water heater in the Optimal Time Rewards program?

Yes, you can enroll both your smart thermostat and your water heater.

17. Can I enroll a gas water heater?

No. Only Pacific Power customers with a tanked electric or heat pump water heaters with CTA-2045 port are eligible for this program.

18. Can I enroll a tankless electric water heater?

No, the device that enables participation requires the thermal storage capacity of a tanked electric water heater to operate properly.

19. Can I enroll a heat pump water heater?

Yes, heat pump water heaters in good condition with CTA-2045 port are eligible. Customers enrolling a heat pump water heater will receive a device similar to the Armada Power device, but will not have access to the Armada Power mobile app.

20. Is any electric water heater eligible?

Eligible equipment includes electric resistive tanked water heaters (120/208/240V single phase up to 5500 watt elements) and heat pump water heaters with a CTA-2045 port. Water heaters must have a minimum tank size of 30 gallons, be in good working condition and properly installed.

21. Does installing the device affect the water heater's warranty?

No, it does not affect the water heater's warranty.

22. Is the water heater device UL listed?

Yes.



- 23. Does the water heater device pierce the tank or require the removal of any tank parts? No, it does not.
- 24. How long does it take to install the water heater device?

Typically, installation requires just 20 minutes.

- 25. Does the water heater device require any changes to tank plumbing or the water supply?

 No, the device runs in line with the power supply of the tank and does not affect the plumbing in any way.
- **26.** Does the water heater device change or impact the existing water heater thermostats? No, the water heater device does not change the set temperature of your water heater.
- 27. Will the water heater device reduce the life of a water heater?

No, the water heater device has been demonstrated to not reduce the life of a water heater. The lifespan of water heaters and water heater components is almost entirely dependent upon water quality such as hardness and scale; the water heater device only affects the electric consumption of the water heater.

- 28. Does the water heater device increase the amount of energy usage by a water heater?

 No, the water heater device changes when the energy is consumed and does not increase energy usage. Most water heaters operating in demand response programs see a very slight reduction in total energy usage over time.
- 29. How does the water heater device communicate?

The water heater device uses Wi-Fi and secure data connections.

30. Can the water heater device see other energy usage in my home?

No, the device can only read the energy usage by the water heater.

31. How do I use/see the energy consumption information recorded by the Armada Power device?

Eligible participants with the Armada Power device can see their energy usage information on the Armada Power consumer app found on the Apple App store and Google Play store.

32. Can I remove the device?

Renters and multifamily housing residents: No, you are not permitted to remove the device. The device was installed by your landlord.

Homeowners – We do not recommend removing the device. However, if you choose not to participate, you can put the device into "Bypass" mode and Armada Power will deactivate the



device. If you are replacing your water heater, or would like the device removed, please call the number on the device label, or call the Pacific Power customer support line at 888-221-7070.

33. If the device is deactivated will my water heater still get power?

Yes, if the device has been deactivated, the device serves as a pass-through and your water heater will operate normally.

34. A plumber/service person was here and removed the device, what should I do?

For fastest service, please contact Armada Power at 855-820-7500 to reinstall the device. Or call the Pacific Power customer support line at 888-221-7070.

35. My water has been cold since you installed the Armada Power device.

A baseline of hot water available was done after installation; your Armada Power app will show you how much hot water you have available. If this problem persists, please contact your property manager. Single family homeowners please contact **Armada Power at 855-820-7500.**

Smart Thermostats

1. What is this program about?

Pacific Power is running a demand response program to help reduce peak electric consumption and create a more resilient and sustainable grid.

2. How does a Smart Thermostat help reduce electric consumption on the grid?

Cooling and heating systems are the largest energy-consuming appliance in a home. By using thermostats to reduce the amount of energy that these appliances consume during peak usage periods, more energy is available and there is less strain on the grid.

3. What is a demand response event?

A demand response event is a period during which the utility acts to reduce electric consumption by temporarily adjusting the setpoint on your enrolled thermostat. Demand response events will likely occur only a few times a year. Pacific Power will automatically adjust your thermostat setpoint during a demand response event and then return it to its scheduled setting once the event has concluded.

4. Will my air conditioning/heating still operate?

During a demand response event only, the setpoint on your thermostat may be adjusted by up to 3 degrees. Your air conditioning/heating system will continue heating or cooling the home based on this temporary setpoint. Upon completion of the demand response event, your device will revert back to its programed setpoint.

5. Is there any financial benefit to enrolling?

Yes. Visit www.pacificpower.net/OTR for details on the current available incentives.



6. Do I have to take action to respond to each demand response event?

No. Your Smart Thermostat manufacturer, Program Administrator OATI, and Pacific Power will handle everything with no additional steps after you enroll.

7. What happens during a demand response event?

You will receive a notification via email, text, and/or your smart thermostat manufacturer app 20 minutes prior to the start of a demand response event. If you take no action, your thermostat will be automatically adjusted by up to three degrees from the current temperature setting.

- You can opt out of an event at any time from your mobile device, web browser or thermostat by simply adjusting your setpoint.
- Once the event is over, your thermostat will return to its normal setpoint and/or schedule.
- In some cases, your thermostat may be adjusted up or down by up to three degrees prior to a demand response event to pre-heat or pre-cool your home.
- For the majority of devices, when you opt out of the pre-cool or pre-heat, you are also
 opting out of the temperature adjustment. If you own an ecobee device, you must also
 opt out of the temperature adjustment.

8. How often will a demand response event be called? How long will they last?

For this program, events can be no more than four hours in duration, a maximum of three times per week, and a maximum of 30 times per year. However, events may occur only a few times a year. Demand response events for thermostats can only be called between 12 PM and 9 PM on weekdays, and not at all on weekends. Demand response events are typically called when the electric grid is under strain from extreme weather conditions.

9. How will I know when a temperature adjustment is in progress?

Depending on your thermostat provider, notifications may appear on the thermostat or in your web or mobile application. You will also be able to see that the setpoint of your device has changed. Contact the manufacturer of your thermostat for more information.

10. Will participating in this program compromise my comfort?

Demand response events will only affect the temperature by a few degrees, with minimal impact on comfort. You can easily opt out of an event at any time, for any reason, from your mobile device, web browser or by changing the setpoint of your thermostat. Your participation is voluntary and you will retain control of your thermostat.

11. How do I qualify for the program?



You must be an Oregon or Washington residential Pacific Power customer in good standing, have an eligible smart thermostat in your home, and have an electric resistance furnace, heat pump, or central air conditioning controlled by the thermostat.

12. Which smart thermostats can be enrolled in the program?

The supported smart thermostat manufacturers for this program are ecobee, Emerson, Honeywell Home, Honeywell Home TCC (Total Connect Comfort), and Google Nest.

Provider	Approved Thermostats
ecobee	ecobee3, ecobee3 Lite, ecobee4, ecobee Smart Si, ecobee Smart, ecobee
	SmartThermostat with voice control
Emerson	Sensi™ Wi-Fi Programmable Thermostat, Sensi Touch Wi-Fi Thermostat
Honeywell Home TCC	Wi-Fi Smart Color Thermostat, Wi-Fi 7-Day Programmable Thermostat,
	Wi-Fi 9000 7-Day Programmable Thermostat, 9000 Smart Thermostat, 7-
	Day Programmable Smart Thermostat, VisionPro 8000 Smart Thermostat
Honeywell Home	T9 and T10 Pro Smart Thermostat
	T5+ and T6 Pro Smart Thermostat
	Round Smart Thermostat
Google Nest	Nest Learning Thermostat, Nest Thermostat E

13. Are there any additional benefits to the program?

Ongoing participation in the program reduces a participant's carbon footprint and helps your community become more reliable and sustainable.

14. How do I enroll?

Customers should enroll through their smart thermostat manufacturer's website or app. Links to eligible manufacturer websites are available at www.PacificPower.net/OTR.

15. How long does it take to enroll my smart thermostat?

Typically, enrollment only takes a few minutes if you have an existing account with your smart thermostat manufacturer.

16. Can I enroll both my smart thermostat and my water heater in the Optimal Time Rewards program?

Yes, you can enroll both your smart thermostat and your water heater.

17. Do I have to participate in the program all the time?

No. You may opt out of demand response events by adjusting the temperature on your smart thermostat. Opting out too many times may result in disenrollment from the program.



18. How do I leave the program?

Customers can typically unenroll through the manufacturer app. Or, contact Pacific Power Customer Support at 888-221-7070.

19. Can customers with gas or oil furnaces enroll their smart thermostat?

If the thermostats controls *just* a gas or oil furnace, it is not eligible. However, if the thermostat *also* controls an electric central air conditioning or a heat pump, you are eligible. Customers must have central air conditioners, heat pumps, or electric resistance furnaces controlled by the smart thermostat to be eligible.

20. Where can I purchase a Smart Thermostat?

Smart thermostats are commonly available in a variety of retail stores and online. There are also discounts available for smart thermostats for Pacific Power customers.

Oregon: The Energy Trust of Oregon sells Smart Thermostats at discounted prices at: https://www.energytrust.org/residential/incentives/thermostat

Washington: Washington Pacific Power customers are eligible for instant discounts: https://wattsmartsavings.net/washington-residential/find-savings-heating-and-cooling/smart-thermostat/

21. I need help installing, operating or troubleshooting my smart thermostat.

We are unable to provide troubleshooting or technical assistance. Please refer to the instructions included with your device, or contact the manufacturer.

22. How do I register my smart thermostat with the manufacturer?

Please refer to the instructions included with your device, or contact the manufacturer.