

OpenADR Connectivity to DRAS

YOUR QUESTIONS. ANSWERED.

What is Open Automated Demand Response (OpenADR)?

OpenADR is a worldwide adopted internet messaging protocol used by many utilities including SCE, to communicate with equipment at customer facilities. When you sign up for our Demand Response (DR) programs, we will use the OpenADR protocol to automatically drop demand during DR program events.

To learn more about the technology behind ADR, visit **openadr.org**.

How does OpenADR work? What is an OpenADR client?

It's pretty simple. We send you an OpenADR event notification through our Demand Response Automation Server (DRAS). To take advantage, you just need to install and set up a client device communications via the OpenADR protocol. Once you do, the client device logs into DRAS to establish connectivity. When we start a DR event, the DRAS sends a signal to your client and follows the response you programmed into it.

What is the Demand Response Automation Server and what are the system capabilities?

DRAS is the communication tool we use to communicate a DR event or price signal with your OpenADR equipment. You can configure your DRAS account to receive DR event notifications, adjust shed signals, and allow your OpenADR client to automatically signal your energy management system (EMS).

Does my OpenADR client need to be certified?

Yes, to work with a specific profile, it does. Make sure whatever client device you choose is certified "OpenADR 2.0" by the OpenADR Alliance.

Which SCE programs use OpenADR?

A lot of our programs use OpenADR. Here's a list:

RESIDENTIAL

- Save Power Day (SPD)
- Critical Peak Pricing (CPP)

COMMERCIAL AND INDUSTRIAL

- Critical Peak Pricing (CPP)
- Capacity Bidding Program (CBP)

- Base Interruptible Program (BIP)
- Real Time Pricing (RTP)

Visit **sce.com/drp** for more detials.

Will you pay me to install OpenADR equipment?

We may have non-residential incentives through our Auto-DR program that could help. To be eligible, first enroll in our price-responsive program. Then go to **sce.com/drp** to review the Auto-DR program materials.

How much will it cost to install OpenADR equipment?

Costs depend a lot on your circumstances. We recommend that you get in touch with a third-party engineering or consulting firm to review your needs, budget, and operational requirements. At the very least, you'll want a client device that provides event notification. Typically, that will run you between \$3,000 to \$5,000 for purchase and installation. If you also want functions like real-time load monitoring or programmed load reductions, you'll likely need a more expensive, advanced system.





Where can I get OpenADR equipment and services?

If you have an EMS, get recommendations from your system's installer or the company that maintains it. We can also refer you to firms we use on Auto-DR programs. Since they work with our DRAS and are familiar with using OpenADR for DR programs, they're great assets.

Another option is to visit the OpenADR Alliance website. Just go to **openadr.org/certifiedproducts** for their list of certified vendors and OpenADR-compliant equipment.

Do you provide or install OpenADR equipment or services at SCE? Do you offer customer support for these systems?

No, we don't offer installation or service for OpenADR equipment. However, we do offer some perks to our Auto-DR program participants. We have financial incentives available, plus we can connect you with professionals who can help you choose and set up your devices.

If you are not part of the Auto-DR program, we can still offer you OpenADR connectivity and DRAS accounts as a courtesy notification. That's because we believe this technology is worthwhile for all of our customers. Unfortunately, we can't provide you with financial incentives and support due to the CPUC's requirements for cost effectiveness.

| I have my equipment. How do I get started?

To start, contact your SCE Account Manager directly or call the Auto-DR Help Desk at **1-866-238-3605**. You can also email **autodr@sce.com** to learn how to set up your DRAS account.

How many service accounts can I control with an OpenADR client?

We advise you to only control one service account with your OpenADR client. You can contact our Auto-DR Help Desk at **1-866-238-3605** or email **autodr@sce.com** for more details.

Can I monitor my electrical load in real time?

Yes, there are a couple of ways to upload data in near real time to your DRAS account:

• Ask us to install an interface box. The box will translate your meter's KYZ output into a signal your OpenADR client can understand.

• Purchase an advanced OpenADR client with that functionality built-in

Before you begin, talk to a third-party consultant or technical coordinator for guidance. A pro can help you assess your needs and find the right solution.

What if my OpenADR client fails during an event? Is OpenADR an official form of event notification?

Since OpenADR is a courtesy notification, we're not liable for equipment malfunctions. If that happens, we suggest contacting the manufacturer or your installer for help.

For notification details, please refer to the tariff of each DR program to understand the program's compliance requirements and the means of event notification we will use for billing purposes.

We're ready to answer any questions! Contact our Auto-DR Help Desk at 1-866-238-3605 or visit sce.com/drp.



This fact sheet is meant to enhance your understanding of SCE's Open Automated Demand Response (OpenADR). This program/service is funded by California Utility ratepayers and administered by SCE under the auspices of the California Public Utilities Commission. Program/service may be modified or terminated without prior notice. ©2017 Southern California Edison. All rights reserved.