



Resi-Station

A distributed clean power plant delivering urgently needed capacity to California’s grid — and savings to California residents.

I. Addressing Stress on the Power Grid with the Largest Residential Virtual Power Plant in the World

Power grids are being pressured like never before in California and around the U.S., with unprecedented shifts in demand, and the need for clean energy driven by climate change. In August 2020, California experienced severe heat waves and a series of rolling blackouts as the state’s electricity system struggled to keep up with demand surges and unexpected outages of fossil-fueled assets. California residents also pay among the highest residential power prices in the nation at 21 cents per kWh, relative to 13 cents nationally.

In response to these challenges, [Sidewalk Infrastructure Partners](#) (SIP), the company building the future of infrastructure, and [OhmConnect](#), a leading residential demand response and energy services technology company that predicts, incentivizes, and coordinates consumer energy savings, have partnered to create Resi-Station, the largest residential virtual power plant in the world. Based in California, the 550 MW Resi-Station project will be funded by an \$80 million commitment from SIP and developed in partnership with OhmConnect. Resi-Station will comprise hundreds of thousands of active customers with a fleet of in-home, smart devices that can deliver targeted energy reductions, orchestrated by OhmConnect technology that predicts, incentivizes, and coordinates energy use.

II. Building on a Record of Relief for California’s Grid & Residents

At peak stress on the California power grid, between August 13 and 20, 2020, OhmConnect engaged its customers to [reduce almost one GWh of total energy usage](#), the equivalent of taking more than 600,000 homes off the grid for an hour. OhmConnect toggled its customers’ smart devices and appliances off and on 739,000 times to save energy and reduce stress on the grid, [paying out \\$1 million to users](#), and helping avoid additional blackouts. SIP’s commitment will expand these capabilities through the Resi-Station project.

At scale, Resi-Station could provide 5 GWh of energy conservation, five times what OhmConnect provided this past August, equal to the full amount of the energy shortfall in this year’s blackouts, and the equivalent of not burning 3.8 million pounds of coal. The state’s key energy agencies - the California Energy Commission (CEC), California Public Utilities Commission (CPUC) and CAISO - [jointly recommended](#) in an analysis of the August blackouts to “develop additional resources that can be online by 2021...focus[ing] on ‘demand side’ resources such as demand response...” Resi-Station is one of the few clean, sustainable resources that can come online at scale by 2021 and address the urgent need for capacity to prevent outages in the next peak season in California - while delivering millions of dollars in savings for California residents.

In order to scale up Resi-Station, provide savings to California residents, and make intelligent home energy devices more accessible, SIP and OhmConnect will be teaming up with leading home device companies like Google to offer smart thermostats to new participants in the OhmConnect software program enabling Resi-Station. These partnerships are expected to provide free smart thermostats to hundreds of



thousands of customers enrolling in OhmConnect, with these devices delivering even more value when connected to Resi-Station through the OhmConnect platform.

III. Solving Immediate Challenges while Creating a Long-term Solution

Resi-Station is a virtual power plant operating in the California market that dynamically aggregates, manages, and sells the energy savings of hundreds of thousands of homes. Resi-Station will provide immediate, clean capacity for California's grid that is responsive to near-term needs consistent with climate goals for bringing additional local, clean resources online in advance of the 2021 peak season. And it will offer an innovative, long-term solution to shift stress on the grid away from peak demand.

Resi-Station will provide a technology-enabled user experience that will incentivize OhmConnect customers to reduce their electricity consumption via real-time communication prompts. For instance, a customer may receive a text asking her to adjust her thermostat for a few hours in exchange for a reward payment, presenting benefits to the customer, the power grid, and the environment.

Resi-Station will provide scaled emissions-negative energy and capacity resources to California's utilities, including both the large incumbent utilities and California's growing number of Community Choice Aggregators (CCAs), responsible for local procurement of more sustainable resources.

IV. The Future of the Power Grid

The launch of Resi-Station and SIP's \$80 million commitment to the company, coupled with SIP's \$20 million investment in OhmConnect, represents the first initiative of SIP's Resilia advanced power grid platform, which seeks to make the nation's electrical grids more distributed, dynamic, and transactional. Because energy use can be shaped through distributed resources like rooftop solar, smart devices and electric vehicle batteries, it is now possible for connected residences and offices to leverage IoT to scale electricity consumption up or down to stabilize the power grid. This constellation of technology and tools allows for improved energy efficiency and the ability to build a power grid that is responsive to 21st century needs. Resi-Station, by enabling residents to dynamically participate in reducing peak demand on the grid, is a critical step in realizing the future of a cleaner and more innovative power grid.

V. How You Can Sign Up

Resi-Station is expected to deliver significant savings for Californians, which can be used to offset costly electricity bills. Visit www.Resi-Station.com to learn more, and OhmConnect.com to sign up to Save Energy and Get Paid.