

Greenlaw-Park 55 Buildings

1241 and 1251 Dyer Rd., Santa Ana, CA



Situation

As summertime temperatures increase, air conditioners work overtime, straining the grid to peak demand levels and making everyone a lot less comfortable. Air conditioning systems running during the hottest part of the day draw the most power. At the same time, they experience degraded comfort cooling performance. In July 2018, the Greenlaw buildings, which had 20 year old HVAC equipment, were spending \$53,289 on their electricity bill. In July 2019, Greenlaw spent \$33,285.

Solution

In May 2019, 220 tons of aging, inefficient air conditioning units were replaced with 22 brand new Ice Bear 40 thermal storage units and 220 tons of new High Efficiency Carrier packaged units. The Ice Bear 40 thermal storage units were offered at drastically reduced pricing as part of the Ice Energy SoCal Thermal Storage Program, while installation efficiency also allowed Ice Energy to offer rock-bottom pricing on the HVAC units.

Ice Bears take over cooling from the power-hungry HVAC equipment everyday from 2 p.m.–6 p.m. During that time, the building is cooled by the Ice Bears. At all other times of the day, the packaged units work as normal.

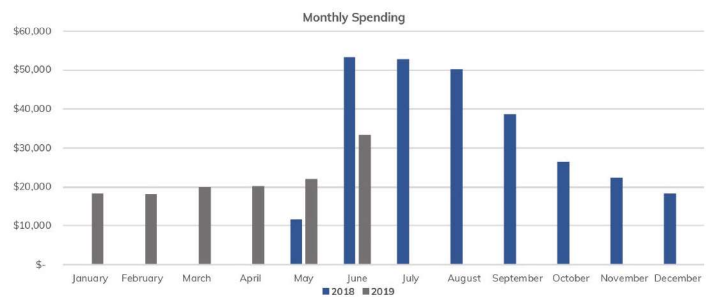
Results

Despite the extreme summer heat, which drove temperatures above 100°F, the installed Ice Bears worked flawlessly. The Ice Bear 40 units, combined with new HVAC delivered \$20,000 in savings month-over-month, a 37% reduction in the monthly cost of electricity. Demand dropped by up to 311kW during peak hours from July 2018 to July 2019, which translates into up to 57% decrease in monthly demand charge costs.

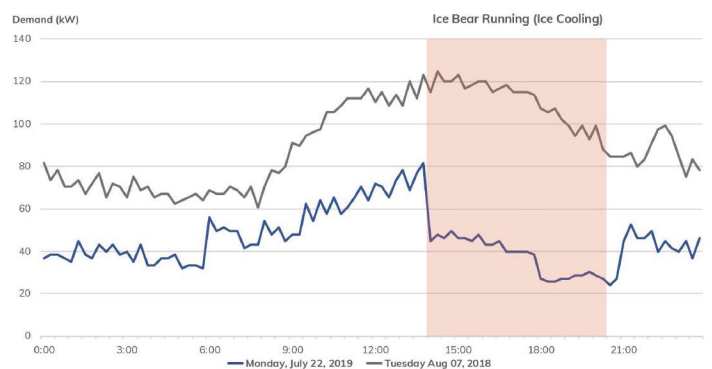
The Ice Bear thermal storage units are covered by a bumper-to-bumper zero-cost 20-year service contract, while the new HVAC equipment lowers Greenlaw's on-going O&M costs and reduces the net operating costs of the buildings.

Size 70,000 ft² Industrial Manufacturing and Office Space

Comparison of 2018 & 2019 electric bills from the Greenlaw buildings



One day demand comparison before and after Ice Bear deployment



Ready to learn more? Contact us today to find out how Ice Bear thermal storage can help your business reduce your yearly energy costs.

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