

Parris European Antiques 1241 and 1251 Dyer Rd., Santa Ana, CA

As part of Parris European Antiques commitment to sustainability and energy efficient design, Parris European Antiques engaged Ice Energy to provide thermal storage and high efficiency HVAC units. In May 2019, 30 tons of aging, inefficient air conditioning units were replaced with 2 brand new Ice Bear 40 thermal storage units and 30 tons of new High Efficiency Carrier packaged units. With the addition of the Ice Bears, this property is offsetting an additional **7,000 lbs** \mathbf{CO}_2 per year. The Ice Bear 40 units, combined with new HVAC delivered \$1,693 in savings month-over-month, a 51% reduction in the monthly cost of electricity.

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 June 2018, Parris European Antiques, which had 12 year old HVAC equipment, spent \$3,349 on their electricity bill.

Solution

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

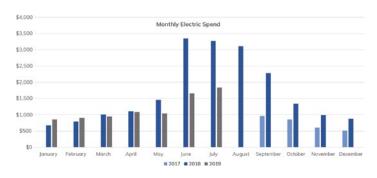
Despite extreme summer heat, which drove temperatures above 100°F, the new Ice Bears worked flawlessly. Demand dropped by up to 25kW during peak hours from June 2018 to June 2019, which translates into a 51% decrease in monthly demand costs. Also as a result of these upgrades, in June 2019, they spent only \$1,656 on electricity.

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



Size	18,530 ft² Retail Space
Property Manager	Voit Realty
Installing Contractor	Facility Resource Group

Comparison of 2017-2019 electric bills from 150 El Camino Real



One day demand comparison before and after Ice Bear deployment

