

Cool Cases: From the files of Ice Energy



This well-known national discount clothing retailer doesn't cut corners when it comes to protecting the environment and investing in energy efficiency improvements. The company is committed to finding new ways to improve its conservation efforts, investing heavily in new technologies to reduce costs and limit its environmental impact.



“We’re looking forward to using Ice Bear energy storage in applications where we can offset electrical load and there is a benefit from load shifting.”

Corporate Property and Energy Manager

Customer: National Retail Chain	Utility: Nevada Power (NV Energy)
Location: Las Vegas, Nevada	Building Type/Size: Retail Facility/22,500 sf
Energy Shifted (kWH): 7kWH daily from each installed Ice Bear unit	
Situation: With an ambitious corporate sustainability program to manage its environmental footprint, and aggressive annual targets for reducing its energy, waste and water use, the company is committed to exploring the use of sustainable new technologies. Management was eager to evaluate how Ice Energy’s Ice Bear energy storage technology could help reduce their stores’ daytime energy consumption while offering a cushion against rising building cooling costs.	
Solution: The company embraced the opportunity for one of its new flagship Las Vegas-area stores to participate in an energy storage pilot program sponsored by local utility Nevada Power (NV Energy) that offered the no-cost installation of two Ice Bear energy storage units. Of the fifteen air-conditioning units on the store’s roof top, the Ice Bear systems were connected to two Carrier Weathermaster high-efficiency 4-ton and 5-ton units. Providing an alternative to traditional demand response programs as a solution for reducing peak demand, Ice Bear storage technology shifts energy consumption from daytime hours to night-time hours – peak to off-peak. In the process, it drastically reduces peak electricity use and shrinks the environmental footprint for buildings like this one — all without any operational or behavioral change.	
Results: The extreme desert heat conditions, which normally degrade an AC system’s operation, had no effect on the energy storage units. The hotter the temperature, the better the Ice Bear unit’s relative performance. The data concluded that the Ice Bears delivered 15-20 % greater cooling efficiency than a typical roof top AC unit during peak hours while using a fraction of peak electricity.	