Kiwanis Ice Arena

Saugerties, NY

Background

The Kiwanis Ice Arena is located within the Cantine Veteran's Memorial Complex in the Town of Saugerties, New York. The full size ice rink is fully enclosed and is open from mid-September through March. The facility contains heated bleachers, locker rooms, restrooms, a concession area, and provides skate and equipment rentals as well as skate sharpening. The Town contacted the New York State Energy Research and Development Authority (NYSERDA) to assist it in reducing energy usage, reducing greenhouse emissions, and upgrading the ice rink at the complex.

Recommendations

The Town of Saugerties applied to NYSERDA for technical assistance and funding for the Kiwanis Ice Arena through the New Construction Program. Science Applications International Corporation (SAIC), an energy services company, provided a technical assistance study of the rink, prepared a design assistance report, and recommended the following measures:

- The installation of a high efficiency brine chiller,
- The installation of an infrared ice temperature monitoring system that accurately measures the ice temperature,
- The installation of a Smart Drive pumping system that reduces pumping requirements and energy usage. The Smart Drive technology uses a variable speed motor on the Brine pump and a 7-day programmable ice temperature scheduler, and
- The installation of a reverse osmosis demineralization machine (Clear Ice) that removes minerals from the water. The result is lower refrigeration costs due to the higher freezing temperature of the demineralized water.

"Never in my wildest imagination would I have thought our energy costs would decrease to the degree they have, and never did I realize the tremendous reduction in environmental impacts. We are also constantly getting positive remarks on the quality of our ice. Without the incentive from NYSERDA I am certain many of the improvements made would not have been possible."

- Greg Chorvas, Superintendent of Parks and Buildings, Town of Saugerties

Initiatives and Results

With $49,961 in incentives provided by NYSERDA for the installation of the recommended measures, the Kiwanis Ice Arena will realize an estimated $25,000 in annual energy savings.

Also, the mechanical systems in the Kiwanis Ice Arena were replaced and a 7,640-square-foot locker room/concession and rest room area was constructed.

nyserda
Energy. Innovation. Solutions.

To find out how you can reduce your energy consumption and costs, visit NYSERDA.NY.GOV.

EES-CI-kiwanis-cs-1-v1 12/11