SLT pool retrofit to provide ice rink electricity



By Kathryn Reed

Every year the South Lake Tahoe Parks and Recreation Department writes checks for about \$140,000 to cover its utility bills. That's about to be cut by 40 percent.

With the approval this month by the City Council to spend \$797,461 to retrofit the city's swim complex that was built in 1975, the city expects to see a savings in the first year.

Lighting at the 55,000-square-foot building will be replaced with high efficiency low wattage electronic ballasts. T8 extended performance fluorescent lamps are also part of the changes.

Installation will take place outside of normal business hours so the work doesn't disrupt the operation of the swim center.

Another major change is to the boilers and how the system will generate electricity to enable the nearby ice rink to operate off the grid.

A trench will be built this spring to link the pool and ice rink. A driveway separates the two buildings.

The turbine being installed to heat the pool will create electricity. That electricity will then be used to operate the ice rink.

Aircon Energy out of Sacramento was selected to do the work.

Seventeen companies were considered. The process started two years ago, with the council selecting Aircon in April 2008.

"The Aircon Energy design includes improved lighting and energy efficiency, building heating systems and air handlers, swimming pool water heating, movements and filtration, also the pools air structure [bubble] blower and air heating exchanger," Gary Moore, Parks and Rec director, wrote in his Jan. 12 staff report. "The greatest component of the project is the install of a Micro-turbine which will produce the electrical power to run the Ice Arena while capturing 100 percent of the heat for usage. All systems equipment is premium high efficiency in relation to energy savings."

The city is paying for this through \$100,000 from the Rec Department's capital improvement fund, with the remainder being a 3 percent 15-year loan from the California Energy Commission.

Projections show the energy savings will more than pay for the loan. Moore expects to have a net savings of \$1.4 million during the 25-year life of the equipment. Energy savings will be more than \$2.26 million in that time or more than \$90,000 a year.

"It is a huge savings, but think about the 200 tons of carbon – the pollution – we are eliminating on those two facilities," Moore told *Lake Tahoe News* after the council OK'd the expenditure.

The city looked into solar and wind power, but neither would work well at the recreation complex off Rufus Allen Boulevard.

With the pool and ice rink in high demand seven days a week, Moore knows it will take a coordinated effort to make sure patrons are not too inconvenienced as the work commences this summer.