

Silver Mountain Condominium Association Lighting Retrofit Project

Summary of Savings and Costs

Forecast annual cost savings	\$2,998
Actual annual cost savings	\$3,041
Reduction in lighting cost	72%
Actual annual energy savings	13,195 kWh
Total project cost (w/o incentive)	\$7,026
PG&E incentive	\$835
Percentage covered by PG&E	12%
Final project cost	\$6,191

Project Description

The Silver Mountain Condominium Association is a 20-unit residential building in Alpine County's Bear Valley resort. In 2015, the property management decided to investigate updating lighting for the building as they learned about potential retrofit incentives offered by PG&E. The Sierra Nevada Energy Watch staff conducted a free energy audit of the building, and the property management staff additionally conducted a feasibility study of their own.



Paul Holzberger Sr., electrical contractor and founder of PH Electric, retrofitted 91 lighting fixtures in total, with 49 of those fixtures incentivized by PG&E. The applications for these fixtures included a stairway, hallways, exit areas, garage, and outdoor lighting. Mr. Holzberger also replaced non-functional occupancy sensors in hallways and the garage. A year after the upgrades were installed, actual savings totaled \$3,041.

“Our retrofit project included upgrading fluorescent lighting to ballast bypass LED lighting and installing lighting sensors. With the help of Sierra Business Council and PH Electric, we analyzed power use for lighting and saw an opportunity for significant cost savings. Before the retrofit, the situation with lighting was not ideal. In the garage, only half the fixtures were used. This strategy saved costs, but affected lighting quality. In hallways, ongoing issues with ballasts resulted in lights burning out prematurely, which increased replacement costs. After the retrofit, all spaces are uniformly lit when occupants and lack of daylight are detected by sensors. The use of lighting controls was especially important for this type of building because of its seasonal use pattern. We also have a much better setup for emergency lighting throughout the building now. We are very happy to have lower energy bills now, and our residents appreciate high quality lighting throughout the building.”



~**Stefaniya Becking, Project Manager (October 2016)**