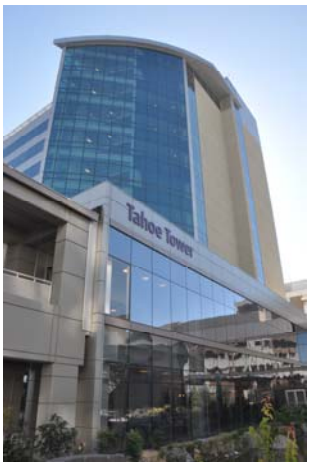
SURE BET PROGRAM

NV Energy

Renown Health
Lighting Power Density Approach-New Construction

Project Description

Renown Health is a key healthcare provider in the Greater Reno/Sparks Area. As part of the new 10-story Tahoe Tower that Renown built, Renown installed energy efficient lighting fixtures throughout the facility. These include 1 and 2-lamp T-8 fixtures, 2-foot, 3-foot, and 4-foot 1-lamp T5HO fixtures, and compact fluorescent fixtures of various wattages. Additionally, throughout this half million square foot facility Renown has installed wall-mounted and ceiling-mounted occupancy sensors in offices, break rooms, conference rooms, and other spaces.



Application

The energy efficient lighting system installed by Renown was eligible for an incentive through the Sure Bet New Construction Program. The program uses a lighting power density approach to calculate the customer's incentive. Lighting power density (LPD) is defined as the total wattage for all luminaires (light fixtures) in a facility (or sub-space) divided by the total square footage. The LPD calculation does not include exit signs or exterior lighting fixtures. In this approach, the facility's design LPD is compared to a code required standard for what a new facility must meet, based on the type of occupancy. In this case, the standard that defined the baseline requirement was the International Energy Conservation Code (IECC), version 2003. The IECC provides a list of building/space types and the allowable LPD for each type. To qualify for an incentive, the Sure Bet Program requires that new facilities actually be at least 10% better than the IECC required value.

For Renown's new medical center tower, the IECC required LPD was 1.20 watts/square foot. The Sure Bet requirement of 10% better equates to a required value of 1.08 w/sf to qualify. The

LPD for the new tower was calculated to be 1.03 w/sf. This value was calculated taking into account that two of the tower floors were only set up for future build-out, with minimal lighting installed, and not available for acute healthcare. These floors, and their associated square footage) were not included in the calculation. The incentive was based on the difference between the 1.20 w/sf code required LPD and the 1.03 w/sf installed, applied to 445,00 square feet of occupied floor area.

As a result of the energy efficient lighting system installed, the facility can expect energy savings of over 436,000 kWh annually and a reduction in peak demand of approximately 76 kW. At current electric rates, the facility will realize an overall annual savings potential of approximately $48,000. Renown received an incentive of $26,478 from NV Energy through the Sure Bet Program (actually received $34,000 total rebate, additional $7,524 was for occupancy sensors described above).

Project Results

Peak Demand Reduction	**75.7 kW**
Annual Energy Savings	**436,652 kWh**
Annual Energy Cost Savings	**$48,032**
Sure Bet Incentive	**$26,478**