

Hawaiian Punch: Hospital Fights Rising Energy Costs



In the Miller Street Garage, a total of 7 floors were outfitted with 93 54-watt T5 linear fluorescent lamps. These replaced 173 150-watt standard metal halide lamps. According to QMC, lowering the watts per fixture and number of fixtures on each level of the garage amounts to a 30-percent reduction in electrical consumption.

As a bonus, the retrofit has netted QMC over \$25,000 worth of rebates from Hawaiian Electric Company. After the forecasted 18-month payback period for the full project—11 buildings plus the garage—QMC will continue to realize comparative savings of \$250,000 every year (based on a rate of \$0.14 per kWh).

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Dennis J. Burns and Michael Kim Seu of The Queen’s Medical Center (QMC) in Honolulu, Hawaii are ever aggressive about using advanced technologies to cut operating costs. Both agree it was a simple cost-of-light tool from GE Consumer & Industrial, presented by GE Lead Account Manager Glenn Sameshima, that planted the seed a couple years ago for the hospital’s latest, enterprise-wide energy initiative.

Electric bills averaging \$375,000 a month in 2004 previously had been increasing three to five percent every year, while oil price increases were regularly passed on to energy users such as QMC through utility bills in the form of “energy cost adjustments.”

“We had plenty of motivation for this comprehensive lighting retrofit,” says Kim Seu, manager of general maintenance for the 146-year-old hospital. “Our base kilowatt consumption wasn’t increasing substantially, but our energy costs were just climbing and climbing. Still, we knew our administrative council would want solid proof that spending big money on new lighting technologies would provide a fast and generously proportioned payback.”

Mark Battaglia of Grainger, a leading distributor of facilities maintenance supplies, and his team worked in tandem

with GE’s Sameshima to inform both Kim Seu and Burns, manager of facilities and biomedical engineering, about how a new mix of GE Consumer & Industrial lighting products could lower QMC’s overall cost of light.

Both companies hosted Kim Seu and Burns at a Grainger Industrial Supply VIP conference at the Lighting Institute on GE’s Nela Park campus in Cleveland, where new GE technologies and products could be demonstrated alongside existing solutions in use at QMC. The icing on the cake, according to Burns, was an extensive lighting audit conducted by Darren Kimura of Energy Industries, an energy services company.

OUT WITH THE OLD, IN WITH THE NEW

About 90 percent of the QMC lighting retrofits, excluding the 7-story Miller Street Garage, involved the removal of over 22,300 F32T8 linear fluorescent lamps and over 15,000 standard electronic ballasts and the installation of highly efficient F28T8 linear fluorescent lamps and UltraMax™ ballasts from GE Consumer & Industrial.

The initiative also involved newly installed reflectors for enhanced light output and energy-saving occupancy sensors, components of the comprehensive new lighting system recommended by Kimura.



Equal or better light output and better color rendering delivered by the F28T8 UltraMax™ System.

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Based on their track record of achievement, Burns and Kim Seu will likely be finding more ways to save QMC money leading up to and beyond the payback period of the retrofit. “It’s a never-ending quest,” concludes Burns.

