

Lighting Conversion Case Study

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Fountain Grove Corporate Center One is one of Santa Rosa's premiere office properties and now features state-of-the-art energy efficient lighting.

Fountain Grove Corporate Center One

Lighting Conversion Project Exceeds Expectations

In November of 1995, North Coast SolarResources completed the installation of a 700+ fixture lighting conversion project at the exclusive Fountain Grove Corporate Center One office complex in Santa Rosa.

All fixtures were retrofitted with the enhanced aluminum Dielectric Coating Industries(DCI) OM94 Mirror Optical Reflector after the building's property manager conducted tests of different types of reflector materials. Sample fixtures were first converted in the building's different office areas to evaluate the performance of the DCI reflector, which was excellent in each case.

The fixture types included 2X4 recessed fixtures with prismatic and paracube lens, 1X4 and 2X4 deep cell parabolic lens fixtures, and even the wall-mounted stairwell fixtures. 43-58% energy savings per fixture was realized with the custom designed DCI reflector. Acceptable light levels were achieved despite delamping fixtures 4 to 3, 3 to 2, and 2 to 1 lamps.

The modified fixtures produced less glare and higher color rendition with the T8 lamps providing noticeable improvement in visual comfort in the offices.

The project earned a 1995 PG&E rebate of \$13,749 and is now expected to have a payback period shorter than the originally estimated 3.0 years.

Energy Cost Savings Summary Comparing 1995 with 1996

	<u>KWHR USAGE</u>	<u>COST</u>	<u>KWHR USAGE</u>	<u>COST</u>
J	64,640	\$ 5,629	49,120	\$ 4,226
F	62,720	\$ 5,550	54,400	\$ 4,352
M	69,120	\$ 6,068	61,440	\$ 4,904
A	70,400	\$ 6,162	61,440	\$ 4,914
M	70,240	\$ 6,994	69,120	\$ 6,110
J	66,880	\$ 8,489	63,040	\$ 7,484
J	74,720	\$ 9,388	72,160	\$ 8,029
A	88,320	\$10,819	66,728	\$ 7,825
S	78,880	\$ 9,891	70,560	\$ 7,933
O	79,200	\$ 9,956	73,120	\$ 8,322
N	76,640	\$ 8,916	60,160	\$ 6,901
D	74,400	\$ 6,226	57,920	\$ 4,643
	876,160	\$94,088	759,208	\$ 75,641