



November 28, 2016

RE: LED Upgrade Project Results

E&J Energy Solutions was introduced to The Morgan Group by their utility provider Infinity Power Partners to take a look at the 24/7 parking garage at one of their premier properties at 2121 Mid Lane in Houston, TX. The issue was the existing lighting system was nearing the end of its useful life and there was interest in upgrading to LED fixtures. The existing system had a combination of Metal Halide for general purpose lighting and strip fluorescents with emergency battery packs for egress all to be swapped out one for one to new LED fixtures.

The Morgan Group's requirements were straightforward:

- Maintain light levels and increase uniformity
- Lower utility costs
- Eliminate maintenance expenses
- Fit within an acceptable payback period

With these items in mind E&J presented the Deco LED product line first for approval. Deco is the first and only manufacturer to offer LED products that come standard with a 10yr warranty that includes labor costs. This eliminates maintenance expenses and thus reduces payback period both of which were requirements for the project. Once approved after comparing performance with other like products, we selected a fixture that would increase light levels and reduce energy consumption.



Before with 150W Metal Halide fixtures.



After with 35W LED fixtures

In the end, the project reduced energy consumption over 75%, provided more uniformed light levels and met the required payback period of three years. Moving forward the yearly maintenance expenses they were previously paying can now be directed to other things. And should a fixture fail over the next 10yrs E&J and Deco will step in to fix at no cost to the client.

E&J Energy Solutions has extensive experience in energy conservation and LEED design practices for new and existing buildings and assisting our clients in reducing energy and maintenance costs. E&J is committed to Sustainable Lighting: Lighting that meets users' needs with the least consumption of energy and other resources. We assess your facility to create a baseline energy model and provide you with sustainable solution options based on your needs and budget. We support you in selecting the best option to meet your needs and complete the installation. This process includes engineered documents, permits, coordination with and completing of all applicable utility and tax form's thus providing you with an optimum solution. Our goal is to eliminate any paperwork and coordination issues with others and provide you with a single point contact. Please feel free to contact us at 832-732-5892 for additional information.



Energy Consumption & Conservation

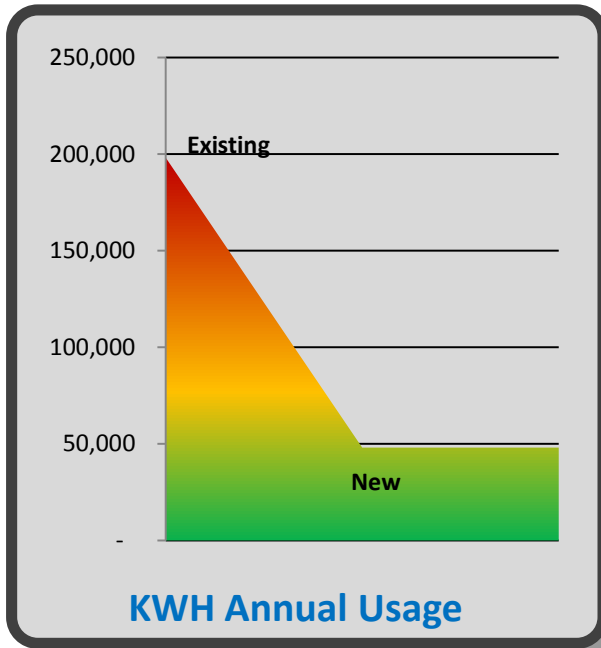
2121 Midlane Parking Garage LED Upgrade

2121 Mid Lane
Houston, TX


11/28/2016
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REV -


CONSUMPTION:

Existing Annual KWH Use 198,195
New Annual KWH Use 48,136

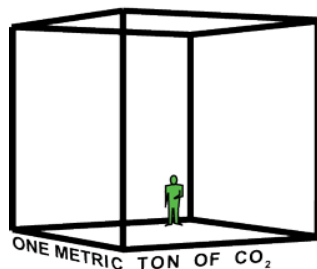


Annual Energy Savings

KWH Savings per Year	150,059	
Displaced capacity KW	17	
Displaced capacity MW	0.02	

Equivalent single family homes powered for a year:	13.26	
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Conservation Equivalencies:



Metric Tons of CO2 saved 173

Carbon Dioxide Reduction Equivalent to...



Gallons of Gasoline Saved/Year: 12,388



Removing Number of Cars from Road: 24



Acres of Trees Planted: 40