

LED Outdoor Lighting Project Profile

Georgia Power – Savannah Operating Headquarters

Savannah, GA

Situation

Georgia Power’s Coastal Region, headquartered in Savannah, serves over 280,000 customers in a 15-county area of southeast Georgia. One of the fastest-growing regions in the state, it has a diverse mix of residential, commercial, industrial and military base customers.

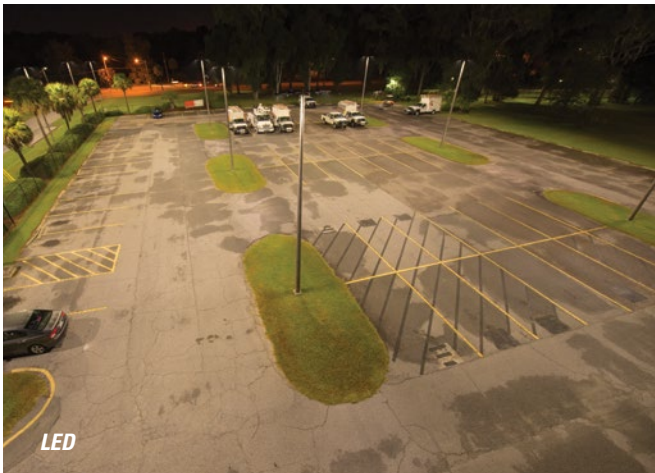
In addition to providing its customers with safe, reliable and affordable energy, Georgia Power also makes its mark, both statewide and in the Coastal Region, through environmental stewardship, and supports a number of projects and initiatives to protect the environment and promote energy efficiency. One of these initiatives is the embracing of LED outdoor lighting technology and installing it at company facilities statewide.

Action Plan

In the summer of 2014, plans were finalized to convert the parking lot lighting at the Savannah Operating Headquarters from the current metal halide (MH) lighting to light-emitting diode (LED) lighting. The converted lot would serve as a showcase of LED outdoor lighting technology for customers in the Coastal Region.

The 22 existing 400-watt (nominal) metal halide shoebox fixtures would be replaced with 22 new 146-watt LED fixtures. The LED fixtures would provide energy savings along with improved site lighting while retaining the white light currently in use. LED lighting would also provide energy savings, long fixture life and reduced maintenance requirements, and would minimize or eliminate light trespass.

Removal of the old MH lighting and installation of the new LED lighting was completed in September 2014. The *continued >*



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new lighting utilized 22 American Electric Lighting 146-watt Autobahn LED lights from Acuity Brands. The LED fixtures have a correlated color temperature (CCT) of 4000K and a color rendering index (CRI) of 70. All existing poles and pole locations were used. Pole height is 30 feet.



Results/Benefits

- **Old Metal Halide System:**

22 – 400-watt (472 system watt) MH shoebox fixtures = 10,384 watts

- **New LED system:**

22 – 146-watt LED area fixtures = 3,212 watts

- 69 percent reduction in energy usage related to outdoor lighting
- Enhanced the safety and security of employees, visitors and property
- LED lighting is directional – all light is directed toward the area to be illuminated
- Minimized/eliminated light trespass
- Improved lighting uniformity (eliminated dark spots, hot spots and pole shadow)
- Long fixture life and reduced maintenance requirements
- Environmentally friendly (no hazardous materials to recycle; reduced energy usage lowers greenhouse gas emissions)
- Instant-on/no warm-up time

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