CASE STUDY

Obstruction Lighting Increases Aviation Safety for Major USA Utility

New York State, USA
"Avlite takes pride in helping Central Hudson Gas & Electric increase the visibility of their electrical transmission systems for enhanced aviation safety."

Brandon Higgins
Sales Executive, Obstruction & Helipad Lighting

Project Overview

Application
Increase Aviation Safety By Upgrading Obstruction Lighting

Product
A-0 Obstruction Lighting Kits

Location
New York State, USA

Date
2019

Background
Central Hudson Gas & Electric (CHG&E) delivers electricity to 307,000+ customers in the 2,600 mile service region north of metropolitan New York City. The company's delivery area runs through the central Hudson River Valley, adjacent to the Catskill Mountains. The New York based company has a mission statement that includes maintaining infrastructure and delivering cleaner energy. The almost 100-year-old company is owned by Fortis, one of the top 15 utilities in North America, which strives to be a strong energy partner for all the communities it serves.

Challenge
Central Hudson's electric transmission system of 600 pole miles of line. It also has an electric distribution system of 7,200 pole miles of overhead lines to serve its residential, commercial and industrial customers. Infrastructure replacement initiatives identified a critical safety area that needed attention: obstruction lighting on some transmission and distribution towers was unreliable, intermittently operated, and required ongoing maintenance. Access to the affected transmission and distribution towers was difficult due to the 4,000-foot peaks of the nearby Catskill Mountains.

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Towers supporting CHG&E's transmission lines utilize Avlite's A-0 Obstruction Light Kits.
Solution

To ensure a reliable electrical grid, to satisfy CHG&E’s infrastructure replacement initiatives, and to ensure the aviation safety of passing aircraft in the greater Hudson River Valley, the Company needed to deploy new, reliable LED obstruction lighting on its electrical transmission and distribution towers.

To satisfy that requirement CHG&E chose Avlite’s A-0 Obstruction Lighting Kits for their towers up to 150’. Designed as turnkey lighting solution right out of the box, the A-0 Obstruction Lighting Kit consists of a dual L-810 light and control unit. The system is designed to be easy to install and maintain, and meets the FAA requirements (AC 150/5345-43).

CHG&E also opted to power the obstruction lighting with Avlite’s solar power supplies thereby minimizing the power consumption while maximizing the efficiency of each light.

The A-0 Obstruction Lighting Kit is immune to high voltage EMI (electromagnetic emissions), is waterproof to IP65 standards and capable of continuous operation between temperatures of -40°F – 131°F.

All of Avlite’s obstruction lighting products are available in AC, DC and solar versions. Options include cable kits, mounting brackets and remote monitoring.

Outcome

With the installation of Avlite’s A-0 Obstruction Lighting Kits, Central Hudson Gas & Electric was able to help increase the safety of aircraft operations in the surrounding areas, meet its corporate objectives of maintaining infrastructure by upgrading to full functioning obstruction lighting, and be a strong energy community partner as Avlite’s LED technology operates with minimal power consumption.

Avlite’s A-0 Obstruction Lighting Kit consists of a dual L-810 light and control unit and is designed as a turnkey lighting solution, ready to use out of the box.
All Avlite Systems products are manufactured to exacting standards under strict quality control procedures. Avlite's commitment to research and development, investing in modern equipment and advanced manufacturing procedures has made us an industry leader in solar aviation lighting. By choosing Avlite Systems you can rest assured you have chosen the very best.