

Case Study

United Utilities

Background

Contractors working on multi-million-pound water and wastewater treatment projects currently underway for United Utilities in Cumbria have discovered how Prolectric's solar lighting technology can help them to deliver project goals in environmentally sensitive locations.

The project will see the construction of a 100km pipeline to bring water from Thirlmere reservoir to West Cumbria via a new treatment works, two new pumping stations and two new service reservoirs.

Challenge

With the project being delivered across environmentally sensitive locations it was critical for the team to find equipment that aligned with the project goals. The units also needed to support operational health and safety and provide reliable, bright lighting.

To align with the project objectives the units needed to be sustainable and emission-free. Furthermore, the units needed to limit or negate the risk of spills associated with conventional diesel generator alternatives.

With the locations being remote the lighting required needed to work autonomously as there's no access to mains power.

Environmental protection is at the heart of this project, working through the heart of the Lake District National Park, this is one of the biggest and most environmentally challenging projects in United Utilities' history and it is vital that we minimise the impact of the work.

The ProLight is a great example of some of the innovative thinking the team has employed.

John Hilton
Project Director



The Solution

Trials of the innovative ProLight mobile solar lighting tower have been concluded at two sites by United Utilities' delivery partner Advance – a Joint Venture between Balfour Beatty and Stantec (MWH).

The ProLights successfully protected onsite operations, health and safety with reliable, bright lighting, without the emissions or risk of spills associated with conventional diesel generator

alternatives during a 6-month period ending in May 2018.

ProLights have been used to illuminate access routes and pedestrian walkways at the Williamsgate construction compound, near Cockermouth, where 80 staff are currently employed between 7am to 7pm every day to construct a 48 megalitre underground service reservoir as part of United Utilities

£300m West Cumbria Water Supplies Project.

The Advance JV deployed ProLights successfully at United Utilities' £40 million wastewater treatment upgrade project at Bowness-on-Windermere where a new 6.5km large diameter rising sewer main is being built to reduce the risk of sewer flooding and overflows at the lakeside pumping station during heavy rain.

Solar lighting provides illumination for vehicle and pedestrian access around the construction compound where there is no access to mains power.

The Advance JV further used Prolectric ProTemp LED Solar Lighting Columns to provide powerful and reliable lighting around the Windermere compound.

The ProTemp is mounted on a concrete block and easily manoeuvred into place by forklift or sack barrow.

As it does not use mains power, the ProTemp dispenses with the need for a contractor to dig trenches, install trunking or cables and saves significantly on groundworking and installation costs.



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Why choose Prolectric?



No Emissions
No fumes or greenhouse gas emissions.



No Noise
Ideal for urban, residential or night time projects.



No Refuelling
No fuel costs, spills or refuelling labour costs.



Minimal Maintenance
Setup and forget technology.



Advanced Technology
Remote control, monitoring and reporting capabilities.