

Crinan Canal: installation of wind turbines



The old lighting column at lock no 3 has been replaced and its power is now supplied from a small canalside wind turbine

Renewable energy provides lockside lighting and annual cost savings too

British Waterways has installed canalside lighting on the Crinan Canal powered by small but effective wind turbines. Fifteen locks help carry the canal across the Kintyre Peninsula between Ardrishaig and Crinan Basin, and the third lock was originally lit from a 150Kw floodlight which allowed the walkways on the lock gates to be used as a locally important right of way. The electricity supply came from a property next to the lock, but when this was sold the new owner did not wish to continue the arrangement and a new solution was therefore required.

Coats to supply electricity to the lock were investigated and priced at £6,000, with an additional £1,800 to cover ancillary equipment. Comparison costs were obtained for a supply based on renewables, including a light column to incorporate a small wind turbine, photo-voltaic panels, batteries and fluorescent light fittings. Although such light columns were available to supply remote locations, a bespoke design was requested which would respect the heritage importance of the canal. Also, in order to avoid cables across the lock, a scheme was suggested with two columns on either side, and the anticipated cost was £4,500.

British Waterways opted to pursue the renewables option, but there was initial concern from Historic Scotland that wind turbines could appear out of place adjacent to the canal, which is a scheduled ancient monument. Consequently, the original application for monument consent was refused, but was approved following further discussions and the production of a photomontage of the proposed installation. It was also important to provide information to local residents before work commenced, and efforts were made to show that the end result would be unobtrusive whilst guaranteeing that the footpath over the canal would remain lit.

The successful approved scheme has resulted in reduced capital costs as well as savings of £75 per annum in operational costs. Cost comparisons between the two options reveal that whole life costs over a ten year period are £10,100 for standard supply and £ 5,500 for the renewable option – a substantial difference of £4,600 in addition to the installation savings of £3,300.