

Grid connection specialist services for new 19 MW Waste-to-Energy generator

Client	Wheelabrator Technologies	111_
Country	UK	Wheelabrator
Year	2018 - ongoing	

WTI are experts in planning, building and operating waste-to-energy (WTE) facilities. Their expertise is proven by their 45-year track record of providing reliable, WTE services to hundreds of customers in the US and UK. Their technology reduces carbon emissions by offsetting the need for energy from fossil fuel sources and reduces dependence on landfills.

Wheelabrator Parc Adfer is an WTE facility commissioned in 2019 which generates 19MW (gross) / 17MW (net) of clean, sustainable electricity and has the capability of providing valuable steam or heat to local homes and businesses in Flintshire in north-east Wales.

Challenge

During the development of the Parc Adfer site, WTI required technical support in discussions with their local Distribution Network Operator (DNO). The new site was required by the DNO to operate with a flexible connection due to constraints on the upstream distribution network. This was unfamiliar territory for WTI and its EPC, so they turned to PSC for specialist support.

Project solution

PSC's team provided support across a range of areas relating to the 33 and 11kV substations and major electrical infrastructure. Due to its extensive distribution and transmission system knowledge, PSC was well equipped to explain the technical requirements clearly and ensure the successful grid synchronisation.

PSC provided electric system connection technical and regulatory support from the initial concept through the design and construction phases. PSC continues to provide ongoing technical guidance and support to the WTI engineering team for the operational facility.

PSC advantage

As PSC specialists were engaged across multiple WTI projects, collaboration and learning was shared, bringing insights and added efficiency to overall project management and engineering solutions.

PSC's team of specialist engineers have deep domain expertise in all aspects of the electrical system. This ensured any issues or queries raised by either WTI, their EPC or the DNO could be readily addressed, resolved and clearly explained.

In order for WTI to do business as a renewable energy producer under Great Britain's Renewable Energy Guarantees of Origin scheme, WTI must confirm that a portion of the electricity comes from renewable sources. PSC provided the necessary technical support to register the generator with the Regulator as a renewable energy producer and gave ongoing guidance to maintain the renewable status of the facility.



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