



Accelerating your journey to Net Zero

Blake Clough Consulting is a specialist energy consultancy with a focus on the electricity networks. We cover a range of areas relating to power systems analysis, feasibility studies, project engineering, innovation, regulation and technical strategy, with a strong emphasis on our customer relationships.

We are passionate about the decarbonisation of the energy system and the transition to “Net Zero” and aim to support our clients to accelerate this change as effectively as possible, whether that be local authorities, large network companies, or private developers.

Our work is underpinned by solid analysis and modelling, including techno-economic assessment, cost benefit analysis, power systems analysis and network modelling.

Providing Project Engineering and Owner’s Engineer services to a range of clients. Spanning large, ongoing contracts to small, specific scopes of work, depending on client requirements.

We have a diverse skill set, which includes electrical engineering and preliminary design but also includes project management, procurement support, cost benefit analysis, cost assessment and stakeholder engagement.

Examples of the types of services that we can provide are given below, but we have delivered a large variety of different scopes and would be delighted to discuss specific needs.

Offshore Wind

Our recent track record and capability includes providing Electrical Package Management services for major offshore wind farms. Specific services include:

- Analysis of potential grid connection options (including capacity, route, coordination with the HND process)
- Engagement and discussions with the client and other stakeholders such as National Grid and Ofgem
- Preparation of technical papers, including outline programme of works and grid connection options papers
- Technical assessment of tenders for pre-FEED activities
- Cost benefit analysis for HVAC versus HVDC solutions and various connection options
- Develop and implement the procurement strategy for the Electrical and Cables packages
- Establish contacts with the supply chain, evaluate their capacity, and ensure that fabrication and logistic optimisation and constraints are taken into account in the design process
- Draft and manage the drafting of the required ITT packages
- Assess contractor proposals, coordinating and assisting in negotiating contracts
- Ensure interfaces with other packages, contractors and stakeholders are identified and appropriately managed

Onshore Renewables

Below are some of the services that we are typically being requested to deliver for onshore renewable projects:

- Cost benefit analysis for various connection options
- Assisting with the selection of Independent Connection Providers (ICPs)
- Preparation of ITTs and review of the ITT submissions
- Initial power systems studies (load flow, fault level, reactive power) to de-risk the connection design solution
- Review of ICP tenders and assessment of any technical risks that could lead to cost escalation
- Preparation of Single Line Diagrams, substation layouts and substation elevations
- Provision of technical data to feed into planning and consenting submission

Corio Generation (CG) appointed Blake Clough Consulting to lead on the electrical engineering package for the Skerd Rocks offshore wind farm, and to provide engineering support for discussions with EirGrid.



In fulfilling this role, Blake Clough has demonstrated strong technical competence for offshore wind farm electrical design, whilst at the same time, showing a good understanding of the developing grid code requirements in Ireland.

Blake Clough has provided the necessary leadership within the package to ensure the electrical design is processed in accordance with the developing Grid Code, and with a view to continuously optimising the project LCOE.

Blake Clough demonstrates a professional approach when interacting with contractors, is competent to facilitate multi-contractor meetings as well as engaging with the authorities in a professional capacity on behalf of Skerd Rocks.

Ocean Winds (OW) appointed Blake Clough, in partnership with TNEI, to provide support for discussions with National Grid Electricity System Operator (NGESO) and to manage electrical system design matters with key contractors.



Throughout the work, Blake Clough has demonstrated a detailed technical knowledge of offshore wind farm electrical design and Grid Code requirements, providing the necessary due diligence to ensure that OW's contractors are delivering designs in accordance with their contracts and the Grid Code.

Blake Clough has a professional approach in interactions with contractors and NGESO and efficiently chaired / facilitated multi-contractor meetings to ensure that all participants remained focused on the purpose of the meeting and developed a clear action plan to deliver the necessary results.

Early Stage Project Engineering

We are ideally suited to supporting clients with early-stage project engineering for new generation and renewables projects, both at transmission and distribution level. We have experience in providing initial concept designs suitable for planning and consenting, providing technical inputs for planning submissions, and helping clients to optioneer their projects at the early concept or pre-FEED stages.

Our well-honed communication skills ensure that we are able to write effectively for input into planning and consenting submissions, as well as supporting clients through discussions and negotiations with third parties, for example the electricity network owners and operators. With our consultants' long track record of engagement in this sector, we are well placed to represent our clients and help to achieve their goals.

Customer Focused

Our team is extremely customer focused, flexible and efficient. We are able to respond quickly and ultimately to deliver work in compressed timescales, to a high quality.

Our clients range from electricity network operators, regulators and public sector organisations through to private developers, both onshore and offshore, looking to develop projects connecting into the electricity networks.

We have a wide range of skills within our team and wider network, covering both technical and commercial, and can therefore cover a range of project requirements and also interface effectively between various project teams, such as consenting and engineering. Our capabilities range from power systems and engineering design through to cost assessment, cost benefit analysis, procurement support and preparation of board papers and recommendations.

