

<b>Job Description</b>	
<b>Job Details</b>	
Job Title	Lead Electrical Design Manager
Business Unit	Iberdrola Renewables Japan <a href="https://www.iberdrola-renewables.jp/about/">https://www.iberdrola-renewables.jp/about/</a>
Location	Japan (Tokyo)
Number of Immediate Subordinates	0 to 10
Number of Subordinates	0 to 50
BUSINESS LINE MANAGER	Electrical Department Manager

<b>Main Purpose of Job</b>
<p>The Lead Electrical Design Manager is a key role within the Offshore Renewables Business, focussing on the delivery of large-scale offshore wind projects in Japan and the Asia region.</p> <p>Belonging to the Project Services team and reporting to the Electrical Department Manager, the Lead Electrical Design Manager will be responsible for implementing robust and cost effective engineering strategies and plans, tendering, negotiating and managing offshore supply, installation and maintenance contracts, planning and implementing delivery sites and logistics, complying with company and business engineering standards and technical acceptance criteria, and ensuring quality, best practices and excellent health, safety and environmental performance are applied.</p>

<b>Accountability Statements</b>
<ul style="list-style-type: none"> <li>• Provide key electrical engineering advice, assessment and recommendations to ensure delivery of an offshore wind project within time, to budget and quality following industry best practice and observing the maximum respect for Health, Safety and the Environment to ensure regulatory and legal compliance;</li> <li>• Provide professional advice on engineering strategies, risk levels and commercial agreements to the package, to ensure that cost effective technical solutions are identified, fully evaluated and the risk profile is fully understood by the project;</li> </ul>

- Ensure that all assessment, advice and recommendations are fully documented in accordance with all internal procedures and industry best practice, and that sufficient technical and commercial due diligence (whether internal or external) exists to support those business decisions;
- Support the business and project teams on any electrical engineering topic and participate in internal and external meetings;
- Support quality management of the scope of works providing technical advice when required for management and closure of non-conformities arisen during the various stages of project execution;
- Support as required the certification process with independent verification bodies (where applicable) to reduce design risk and enhance asset value;
- Ensure that health and safety and environmental requirements are fully considered and adhered to in design to ensure compliance with legislation and industry best practice;
- Ensure that appropriate lessons learnt are captured and transmitted within the organization;
- Act as the electrical design authority and focal point between packages and project management team(s) in an offshore wind project;
- Ensure a safe and robust electrical system design with consideration of energy yield, CAPEX and OPEX factors;
- Ensure that the overall electrical system is designed to best engineering practice, project specific requirements and relevant codes and standards;
- Manage and implement the technical requirements of the local grid operator and ensuring Grid Code Compliance of each project;
- Manage electrical design programmes adhering to project programme requirements;
- Ensure that the relevant electrical design information is provided to other project teams (e.g. OSS, Foundations, Installation) for design of interfaces when needed;
- Provide a point of coordination and interface to the Engineering Manager(s) in the project;
- Support Project Engineering Managers to develop the electrical design of the project assets;
- Manage consultants or suppliers in undertaking electrical system studies and other technical electrical input to the project including provision of required input data from TSOs and other packages;

- Ensure the required number and iterations of the electrical system studies are optimised to reduce Variation Orders using engineering judgement in order to suitably validate the electrical design basis and provide relevant inputs to all Packages tendering main electrical equipment;
- Review and approve key electrical system studies and design changes. Ensure management of design variations to the system design basis (e.g. through design review workshops etc.);
- Definition of main design criteria and functional design requirements of all main HV and MV systems including main electrical equipment, IAC and Export Cable, managing the work of a team of specialists in the aforementioned areas;
- Ensure that the electrical system design process is recorded and justified, in collaboration with the Project and respective Engineering Manager, in order to provide design justification;
- Ensure Grid Code compliance of the wind farm and wider electrical system. Ensure the required electrical system studies are carried out to demonstrate compliance. Coordinate the review and approval of all electrical designs, inputs and studies;
- Manage the interface with the grid operator (Electrical System Operator and/or Transmission Owner):
  - Lead meetings with ESO/TO.
  - Arrange technical meetings / workshops as required.
  - Submit (modification) applications as required to align the connection agreement with project programme, capacity and connection design.
  - Control submission of relevant project data to the Grid Operator as required by relevant agreements.
- Ensure the correct implementation of standard and non-standard Employer's requirements documentation in all electrical system tender packages;
- To review the suitability of designs and ratings proposed by suppliers of electrical equipment in accordance with electrical studies;
- Identify and manage risks and interfaces associated with the electrical design;
- Ensure compliance with IBERDROLA/ SPR design procedures and guidelines, or document and agree variations to them;
- Utilise existing IBERDROLA/ SPR standard specifications and contribute to future revisions;



- To report to the business line manager status of all activities, risks and lessons learned on a regular basis;
- Ensure the promotion of innovation in the project if at all possible and share amongst other Electrical Design Manager's and projects.

### Skills, Knowledge & Experience

- At least 8 years work experience in engineering and construction projects in onshore or offshore wind
- Knowledge and experience in the high voltage electrical engineering field, especially in electrical design management.
- Significant experience in managing a team of highly skilled persons.
- Educated to degree level in a relevant engineering discipline.
- Pro-active and diligent approach.
- Substantial experience in dealing with health and safety and environmental legislation associated with construction, marine and offshore projects.
- Proven experience in delivery of electrical designs for large scale capital projects, including programme management, cost and risk control.
- Sound relationship management skills and confidence working with Senior Management.
- Proven communication and interpersonal skills. Ability to influence and develop key engineering decisions.
- Excellent report writing, presentation skills and ability to summarize key parameters and drivers impacting the package.
- Ability to work under pressure and to tight deadlines
- Sound planning and analysis skills with the ability to look forward and see / anticipate problems and thereafter plan and implements mitigating solutions to negate the effect of such problems.
- Innovative and creative thinking
- Problem solving – dealing with conflicting requirements
- Tenacity, persistence and determination to succeed in overcoming obstacles.
- High capacity for change and experience of leading others through change.
- Ability to identify resource constraints and provide recommendations to mitigate capacity or capability gaps.

### Internal and External Relationships

**Internal:**

- To support colleagues within the project, specifically the Engineering Manager(s) and Package Managers (for FOU, WTG, OSS, IAC and Export Cable), as well as all electrical engineering resource in a project;
- To support and liaise with other members of the Electrical Department in a cross-functional manner across and/ or beyond projects;
- To support and liaise with *Systems Integration, Onshore and Offshore Platforms* departments;
- To provide support to the *Fabrication* department in the development of the OSS packages;
- To provide support to the *Installation* department in the development of the Offshore packages;
- To provide support to the *Commissioning* department as and when required;
- To provide support to the *Operation and Maintenance* department as and when required;
- To ensure collaboration and best practice from other projects and shared across business;
- To bring in and share lessons learned internally and with wider business as appropriate.

**External:**

- To manage the interface with the Grid Operator in the relevant project;
- To work with and manage appointed consultants and contractors;
- To work with suppliers at all stages in the tender process (through wider electrical team support and Electrical Service Support contract);

### Special Requirements/Personal Qualities *(not mandatory)*

Criteria	Essential/Desirable
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<ul style="list-style-type: none"> <li>• Knowledge of high voltage electrical transmission systems and their design</li> </ul>	Desirable
<ul style="list-style-type: none"> <li>• Knowledge and experience of renewable generator connections to electricity transmission systems</li> </ul>	Desirable
<ul style="list-style-type: none"> <li>• Knowledge and experience of power system analysis</li> </ul>	Desirable
<ul style="list-style-type: none"> <li>• Cultural awareness</li> </ul>	Desirable
<ul style="list-style-type: none"> <li>• Language skills</li> </ul>	Desirable
<ul style="list-style-type: none"> <li>• Chartered Engineer or equivalent professional status.</li> </ul>	Desirable

### Minimum Criteria (*mandatory*)

Criteria	Essential/Desirable
<ul style="list-style-type: none"> <li>• Fluent in English and Japanese</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Excellent communication and interpersonal skills.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Educated to Degree level in relevant engineering discipline.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• IT literate with the ability to operate MS Office systems and other IT based project management software.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Comprehensive knowledge of health, safety and environmental legislation associated with offshore/marine construction projects.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Comprehensive knowledge of engineering procedures, standards and guidance.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Experience of electrical engineering design management associated with high-voltage electricity transmission or power plant projects.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Experience of working in and managing highly skilled teams.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Ability to work independently and in a team environment.</li> </ul>	Essential
<ul style="list-style-type: none"> <li>• Flexible to travel around Japan and overseas.</li> </ul>	Essential

**About Iberdrola Renewables Japan:**

Iberdrola Renewables Japan (formerly Acacia Renewables K.K.) was established in February 2014 as renewable energy developer and is now part of the Iberdrola group. We are currently developing 3.3GW offshore windfarm and has experiences of windfarm development in terms of commercial, technologies and engineering.

With over 170 years of history Iberdrola is a global energy leader, the number one producer of wind power, and one of the world's biggest electricity utilities in terms of market capitalisation.

**About Iberdrola:**

Iberdrola is a global energy leader, the number-one producer of wind power, and one of the world's biggest electricity utilities by market capitalisation. The group supplies energy to almost 100 million people in dozens of countries including Spain, the United Kingdom (ScottishPower), the United States (AVANGRID), Brazil (Neoenergia), Mexico, Australia (Infigen), Germany, Portugal, Italy and France. With a workforce of more than 35,000 and assets in excess of €122 billion, it achieved a turnover of €36.4 billion and a net profit of over €3.4 billion in 2019.

Iberdrola is leading the transition towards a sustainable energy model through its investments in renewable energy, smart grids, large-scale energy storage and digital transformation, to offer the most advanced products and services to its customers. Thanks to its commitment to clean energy, Iberdrola is one of the companies with the lowest emissions and an international benchmark for its contribution to sustainability and the fight against climate change.

Iberdrola announced a joint venture with Macquarie's Green Investment Group (GIG) to co-develop a 3.3 GW portfolio of offshore wind projects in Japan, and increased its commitment with a new 600MW project, following the agreement with Cosmo Eco Power and Hitz (Hitachi Zosen) to jointly develop the Seihoku-oki project in Aomori prefecture.

Find out more about Iberdrola Group and Iberdrola Renewables Japan K.K. at <https://www.iberdrola.com/about-us> and <https://www.iberdrola-renewables.jp>