

## JOB DESCRIPTION

**Job Title:** Graduate Transmission & Distribution Engineer

**Business Line:** Transmission & Distribution

**Locations:** Dublin, Birmingham, Bristol, Cardiff, London, St Albans (Location and requirements subject to change)

**Salary:** Competitive

**Opening & Closing Date:**

Applicants are encouraged to apply as early as possible since CVs will be reviewed, and candidates selected on a rolling recruitment basis for either immediate or advanced offer start

## JOB SUMMARY

Committed to addressing the complete spectrum of energy challenges, we offer expertise in the following sectors: renewable energy (wind and solar), hydropower, bio-energy (including energy from waste), energy efficiency and carbon management, thermal power generation, nuclear power and transmission and distribution.

The Transmission & Distribution (T&D) Engineering team provides a range of services from the initial concept through High Voltage Power Systems Analysis, Cabling, Substations, Transmission and Distribution Infrastructure, System Balancing and Compensation, Protection Systems, SCADA, Communications, Converter Station Design, HVDC Systems and Interconnectors including overseas links.

We provide development, design, maintenance and project management for all services and comply with client and other stakeholder's quality, technical, commercial, safety and environmental requirements.

An example project is a hyper scale datacentre. AECOM completed the planning application to ABP for the first contestably built 220 kV substation in Ireland. This required system studies and preliminary electrical design. We then acted as owners engineer for the 18-month construction phase for the 220-kV substation. AECOM has completed the second planning application for another 220-kV substation at the same site and completed the owners engineer role for the construction. This second substation will be energised by early Q1 2021.

The successful candidate will primarily be working on transmission assets in the Republic of Ireland or the UK, but the team is working on multiple projects in Europe and further afield and some international travel may be required.

Regular site visits to construction sites for substations, cables and overhead lines would be a feature of this role.

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organisations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and

environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, see how we deliver what others can only imagine at [aecom.com](https://www.aecom.com) and @AECOM.

## JOB RESPONSIBILITIES

We encourage membership and networking activities in industry bodies including the IEE and sector specific bodies like CIGRE as part of our team's personal development.

As a Power Engineer within our T&D team you would be involved in a selection of activities potentially including:

- Conceptual Design
- Power Network Design, Power System Analysis & Studies
- Load & Demand Forecasting, System Stability Analysis
- Substation Site Selection
- Substation Design
- Ground Resistivity Measurement & Earthing System Design using CDE3D Substation & Switchyard Layout Visualization
- Lightning Protection System Design
- Overhead & Underground Cable System Design
- Interconnector Studies & Design
- Transformer & Switchgear Selection & Installation
- Options Selection & Evaluation
- Value Engineering
- HV Cable studies using CYMCAP

## REQUIREMENTS

- **BSc/BEng in Electrical/Power Engineering, with a 2:1 classification (or equivalent) or above**
- **MSc/MEng in Electrical/Power Engineering would be an advantage**
- **Must have completed HV & Power related course work or module options**
- **Experience with AutoCAD and AutoCAD 3D is essential**
- Ability to structure & prioritise work effectively through close cooperation with the team as a whole
- Ability to work in a team and independently without losing initiative & focus
- Good numerical skills
- Ability to communicate effectively to internal and external clients, both verbally & in writing with the confidence to engage with a variety of people (clients, colleagues, stakeholders and sub-contractors alike) and the aptitude to rationally explain, explore and discuss technical issues and capture feedback
- Good Microsoft Office skills essential such as Word, Excel & PowerPoint
- Excellent research and report writing skills
- Strong attention to detail
- Ability to work in a team and independently without losing initiative & focus.
- Enthusiastic, hard-working, with ambition and drive

Desirable

- Full driving license and willingness to travel on occasion is desirable (some site travel with equipment may be required)

## TRAINING

Our Graduate Development Programme (ADVANCE), along with our huge scope of projects across the globe, will challenge and inspire you to make a real difference to the world we live in. Our programmes form a core part of our business strategy globally, designed to develop the best talent across numerous disciplines to lead our business into the future. We have over 1,000 graduates on our programmes across the UK & Europe, from over 30 different disciplines, and each one of them makes a tangible difference to the environment we all live and work in.

We will provide you with all the tools and support you need to achieve your professional development ambitions, including chartership with the relevant international professional institution – where we have graduates working towards over 30 professional institutions in the UK&I. We demand the highest standards and expect our graduates to pass their professional review first time. You will be assigned a mentor to support and guide your development and undertake regular training modules throughout the programme. There will be on-the-job and classroom training where required, and the opportunity to work on live client projects with significant multi-disciplinary exposure.