HVDC – DC Protection Engineer (m/f/d)

Roles & Responsibilities

- Responsibility for the preparation of quotations as well as for the engineering phase, performance and customer acceptance tests. Support during the system commissioning phase from the office up to handover to the customer worldwide
- Development of DC protection concepts of self-guided multilevel converters with half-bridge and full-bridge modules for different applications such as symmetrical monopole, bipole, offshore connections or multi-terminal systems
- Performance of protection coordination studies of HVDC systems using the simulation tool EMTDC/PSCAD, incl. determination of DC protection settings and preparation of study report
- Programming the software of DC protection and measurement system in MATLAB/ SIMULINK and CFC on the SIMATIC TDC multiprocessor automation system and PLUSCONTROL platform
- Functional and performance testing: Model-Based-Testing (MBT) in SIMULINK and Hardware in the Loop (HiL) with Real-Time Simulation Systems (RTDS)
- Customer training and acceptance tests as well as submission of lessons learned for improvement as a central contact person for your project as a protection engineer
- Support in research and development topics for HVDC projects and first point of contact for troubleshooting and after sales

Required Skills

- University degree in electrical engineering or a comparable field of study; a PhD in the field of protection technology is of advantage
- 3+ years of professional experience in the areas of control and protection, especially in the development of DC protection concepts for HVDC, FACTS or large-scale converter applications
- Experience in software engineering and testing of SRS systems (open/closed loop controls and system dynamics) and very good knowledge of MATLAB/SIMULINK, ideally in connection with real-time and embedded software
- Solid knowledge in modelling and simulation studies with the industrial power system program PSCAD/EMTDC
- Ideally knowledge of Git for version control, IEC61850 and data modelling as well as Simatic Manager and CFC
- Excellent English language skills
- Strong communication and teamwork skills for result-oriented and creative development of our projects, focus on high quality execution of our solutions

Benefits

- Unlimited employment with individual training and development opportunities
- Exciting projects at a high technical level
- Flexible working hours including overtime compensation
- Strong teams with an open and friendly working atmosphere as well as flat hierarchies
- New and modern equipped office building
- Attractive company pension schemes

- A subsidized membership with Urban Sports Club
- Regular employee events (Summer party, Christmas party)