

JOB DESCRIPTION



Title:	HVDC Converter Engineer
Location:	Flexible, in parts at project office Oslo, in part at suppliers', available to travel, possibly at site during commissioning.
Closest superior / reporting	HVDC Manager

Main objectives

- Work will be planned and coordinated with HVDC Manager
- Assist in and take responsibility for parts of:
 - HVDC Converter FEED
 - technical specification of HVDC Converters
 - evaluation of HVDC Converters pre-qualification and tenders.
 - Support the overall development of the project
 - Investigation and analysis of HVDC converter performance to assist with specification, tender evaluation, and supplier clarifications as required by NorthConnect.
 - Assisting with the specification and tender evaluation of the converter control systems.
 - The analysis of AC and DC temporary overvoltages to coordinate the converter/grid interface and the converter/cable interface.
 - Investigation and design of control system functions such as Frequency Control and AC Voltage control as required by NorthConnect.
 - Investigation and analysis of HVDC converter performance to assist with specification, tender evaluation, and supplier clarifications as required by NorthConnect.
 - The development of DIgSILENT and EMTDC/PSCAD models for the NorthConnect HVDC system
 - Investigation and modelling of HVDC cable overload capability to enable matching with converter characteristics and NorthConnect's business requirements.

Required qualifications and competencies

Formal education:

- College or university degree with post graduate research experience In HVDC control technology

Professional experience:

- Required:
 - Over 10 years' experience in the high voltage electricity industry
 - Power system analysis capability including HVAC and HVDC systems
 - HVDC model development experience using Matlab, PSCAD, RTDS, DIgSILENT and Python
 - HVDC systems experience, including control system design and specification writing.
 - Significant hands-on project experience from HVDC Controls FAT and commissioning HVDC
 - Experience with design and implementation of dynamic loading controls for HVDC Systems
 - Access to licensed engineering analysis- and design software
 - Located in Europe
- Advantageous:
 - Earlier employment on HVDC projects in the Norway or the UK
 - Experience from tendering and tender evaluation
 - Experience as HVDC Commissioning Engineer

Further knowledge:

- Very good understanding of planning and engineering process for HVDC projects
- Very good understanding of HVDC converters and advanced analysis techniques

Personal skills:

- Structural approach and goal oriented
- Experienced team player
- High standards in writing technical English
- Communication skills English, oral and reporting.
- Communication in Scandinavian is advantageous but no requirement