

Overview

Title	Training Course Introduction to HVDC and Project De-risking
Provider	The National HVDC Centre ("HVDC Centre") <i>Part of Scottish Hydro Electric Transmission plc (Company Number SC213461), working together with Scottish Power Transmission (SPT), National Grid Electricity Transmission (NGET), and the Electricity System Operator (ESO)</i>
Provider Contact	Mohamed Elgenedy mohamed.elgenedy@sse.com
Dates and Times	<ul style="list-style-type: none">• In-person delivery format: One-day course, 9:30 AM to 4:00 PM, on dates to be agreed.• Online delivery format: Half-day course, 9:00 AM to 1:30 PM, on dates to be agreed. <p><i>Both delivery formats typically run once per quarter, with additional ad-hoc sessions available upon request.</i></p>
Summary	The course covers: <ul style="list-style-type: none">• Introduction to HVDC technologies• HVDC converter station components• Typical project lifecycle and delivery challenges• Typical simulation and testing processes for HVDC systems

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Introduction to HVDC and Project De-risking [In Person]

1) Welcome and Introduction

- Overview of the HVDC Centre
- Plan for the day

2) Introduction to HVDC

- Applications: interconnectors, offshore wind, multi-purpose
- LCC, VSC, converter topologies (benefits and limitations)
- Main plant components

3) Overview of HVDC control and protection

- Basic components
- Functions and control hierarchy
- Protection and DCCB overview

4) Project delivery and other challenges

- Project lifecycle, from planning to operation
- Supply chain and resource constraints
- Civil works, including cable laying

5) Tour of the Centre with demos

- Showing examples of current and past analysis and de-risking activities

6) How to de-risk projects

- Key challenges
- Role of modelling, simulation and analysis
 - Different types of models and their uses, challenges, and limitations
 - New and emerging approaches
- Examples from HVDC Centre experience

7) Review and Wrap-up

- Further resources
- General Q&A

Introduction to HVDC and Project De-risking [Online]

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