

HVDC Operators' Forum 2019

On 26-27th June 2019, The National HVDC Centre is hosting the 5th annual HVDC Operators' Forum. Day one focuses on bringing together owners and operators of HVDC schemes in GB to share knowledge and experiences, while day two showcases HVDC innovations.

With the collective experience in the room, of deploying three new HVDC schemes over the last year, along with significant HVDC innovations, and the context of the future of HVDC in GB, this year's forum provides an important opportunity to foster co-operation and knowledge sharing.



Oluwole Daniel Adeuyi

PROMOTiON WP9 – Project Update

The goal of the PROMOTiON project is to advance innovation and technologies relevant to the deployment of meshed off-shore HVDC grids (www.promotion-offshore.net). The objective of WP9 (Work Package 9) is to demonstrate the operation of the DC grid protection systems developed in the project using hardware-in-the-loop real-time methods.

During 15-17th April, The National HVDC Centre held a face-to-face event for PROMOTiON WP9 (led by the Centre for SHE Transmission). This meeting included attendees from Japan, Sweden, Belgium and the UK, representing both industry and academic partners who are directly contributing to the delivery of WP9.

Key decisions on the scope, expectations, timelines and collaborations opportunities for WP9 were set during this meeting, while also providing an opportunity for the delivery and handover of the IED (Intelligent Electronic Device – pictured) developed in WP4 for use in the testing and demonstrations here at the Centre.



From 11–13th June, we attended the half-yearly PROMOTiON consortium event; which included meetings and progress updates from all of the consortium members. This event was kindly hosted by consortium member RWTH, in Aachen Germany, and included a tour of its newly established MMC test facility. This includes a full PHIL (Power Hardware In the Loop) setup combining real time simulation and physical valves.

Ian Cowan

Testing of AC Protection Relay with Grid simulation in RTDS®

The National HVDC Centre is expanding its capabilities to meet the demands of testing the coordination of AC protection relays in a simulated AC network with HVDC connections. The Centre has demonstrated the feasibility of testing AC relays in a simulated grid (using RTDS®).



This was achieved by amplifying the current and voltage signals from RTDS® I/O cards using an amplifier which was further injected to the AC Protection relay. Such a setup will be used in the innovation project which the Centre is sponsoring with EPRI. The power amplifier setup (with RTDS®) will also be used to support future testing of protection relays in collaboration with transmission operators for the upcoming HVDC projects in the GB Network.

Testing of the AC Protection relays that are in operation in the GB Grid supports the Centre's strategy to mitigate risks of integration and operation of existing and upcoming HVDC projects connecting to the GB network.

Bharath Ponnalagan

To find out more, please contact us to discuss or to arrange a visit:

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