

MTTE Close Down Report

Peer Review Process

April 2022

The following Network Licensees have reviewed the MTTE Close Down Report, and have confirmed that it is clear, understandable and provides sufficient information to enable a Network Licensee to effectively consider whether and how to implement the Project's learning in to its business as usual activities:

- SP Energy Networks;
- SSEN Transmission;
- National Grid Electricity Transmission; and
- National Grid Electricity System Operator.

Copies of these confirmation letters are provided below (with the signatures redacted).

The MTTE Closed Down Report can be found at: <https://www.hvdccentre.com/library/>

Confirmation Letter from SP Energy Networks



Network Planning & Regulation

Simon Marshall
The National HVDC Centre
11 Auchindoun Way,
Wardpark,
Cumbernauld,
G68 0FQ

Date
25 April 2022

Contact
Eric Leavy
07753 623 808
Eric.Leavy@spenergynetworks.co.uk

Dear Simon,

MTTE Project Close Down Report

SP Energy Networks (SPEN) represents the distribution licensees of SP Distribution plc and SP Manweb plc and the transmission licensee SP Transmission plc. We own and operate the electricity distribution networks in the Central Belt and South of Scotland (SP Distribution) which serves two million customers, and Merseyside and North Wales (SP Manweb) which serves one and a half million customers. We also own and maintain the electricity transmission network in Central and South Scotland (SP Transmission). As an owner of both transmission and distribution network assets, we are subject to the RIIO price control framework and must ensure that we develop an economic, efficient and coordinated onshore electricity system.

We have reviewed the close down report for the Multi-Terminal Test Environment for HVDC (MTTE) project, as required by the Network Innovation Competition (NIC) governance. I provide this letter so that it might be published alongside the final version of the report as confirmation of our review.

Based on that review, I confirm that the close down report is clear, understandable and provides sufficient information to enable Network Licensees, including those not closely involved in the project, to effectively consider whether and how to implement the project's learning into business as usual activities.

SPEN has supported the National HVDC Centre (and the MTTE project that established it) from its inception through to its current position at the forefront of modelling, simulation and analysis in support of HVDC and related technologies in GB. Through our engagement with the Centre on various technical activities and as members of the Technical Advisory Board (TAB), we are delighted to see how the project team have:

- Delivered successfully against all project objectives and SDRCs;
- Delivered within budget and returned significant funds to customers;
- Been an example of best practice in project management and dissemination of project learning; and
- Delivered an enduring benefit to the industry and GB consumers by establishing the HVDC Centre.

SP House, 320 St Vincent Street, Glasgow. G2 5AD

Telephone: 0141 614 5213

www.spenergynetworks.co.uk

SP Transmission plc, Registered Office: SP House, 320 St Vincent Street, Glasgow, G2 5AD Registered in Scotland No. 189126 Vat No. GB 659 3720 08

SP Manweb plc, Registered Office: 3 Prenton Way, Prenton, CH43 3ET Registered in England and Wales No. 2366937 Vat No. GB659 3720 08

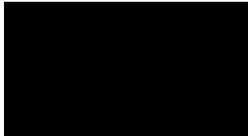
SP Distribution plc, Registered Office: SP House, 320 St Vincent Street, Glasgow, G2 5AD Registered in Scotland No. 189125 Vat No. GB 659 3720 08



Network Planning & Regulation

The MTTE project, in establishing The National HVDC Centre and through the wide range of technical outputs and knowledge sharing already delivered, is de-risking HVDC projects, enhancing skills and GB capability, supporting innovation, and enabling the Net Zero transition of GB energy networks. We look forward to continuing to work with the Centre through RIIO-T2 and beyond.

Yours sincerely,



Eric Leavy
Head of Transmission
Network Planning & Regulation
SP Energy Networks

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SP Distribution plc, Registered Office: SP House, 320 St Vincent Street, Glasgow, G2 5AD Registered in Scotland No. 189125 Vat No. GB 659 3720 08

Confirmation Letter from SSEN Transmission



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18th April 2022

Simon Marshall
HVDC Centre Manager
11 Auchindoun Way
Wardpark
Cumbernauld
G68 0FQ

Dear Simon,

MTTE Project Close Down Report

As the MTTE Project Technical Advisory Board (TAB) representative for SSEN Transmission, I have reviewed the MTTE Project Close Down Report. I am pleased to confirm that, in our view, it provides clear evidence that the National HVDC Centre has made a significant contribution to facilitating the understanding and integration of HVDC technologies within the GB transmission system.

The National HVDC Centre has firmly become established as a leader in its field with this report highlighting both the breadth and depth of activities undertaken. The support provided during the development, commissioning, and operation of our Caithness – Moray HVDC link has been instrumental in its successful delivery. This technical leadership continues with your staff providing key technology reviews and simulation capabilities for our Shetland and Eastern HVDC projects. A key benefit from engagement with the National HVDC Centre has been the refinement of R&D capabilities into practical and timely guidance for network licensees.

We look forward to continuing our engagement with the National HVDC Centre within the RIIO-T2 price control period and beyond.

Yours Sincerely,



Dr Ryan M Tumilty

System Performance Manager

Inveralmond House, 200 Dunkeld Road, Perth PH1 3AQ  ssen.co.uk

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No. 1 Forbury Place 43 Forbury Road Reading RG1 3JH which are members of the SSE Group www.ssehl.co.uk

Confirmation Letter from National Grid Electricity Transmission

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27th April 2022

RE: Request for Confirmation Letter

Dear Sir/Madam,

As the representative for National Grid Electricity Transmission, I have reviewed the MTTE Project Close Down Report, and confirmed that it is clear, understandable and provides relevant information to enable Network Licensees to consider its outputs in future HVDC network planning activities.

Establishing The National HVDC Centre de-risks HVDC projects, supports innovation and the Net Zero transition of energy networks.

We look forward to continuing to work with The National HVDC Centre though RIIO-T2 and beyond.

Yours sincerely



Owen Wilkes
Network Development Manager

Confirmation Letter from National Grid Electricity System Operator



Simon Marshall
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27th April, 2022

Dear Simon,

As the National HVDC Centre Technical Advisory Board representative for National Grid ESO, I can confirm that we have reviewed the MTTE Project Close Down Report and that it provides clear evidence of the benefits that MTTE project has brought to facilitating and de-risking the integration of HVDC to the GB Transmission System. It is also clear that the establishment of the National HVDC Centre through the project, and the engagement that the Centre has pursued with industry and academia will be a great benefit to the design and operation of the transmission system, and to the work and direction of the Centre going forward.

The report also makes clear the depth of experience that the National HVDC Centre has achieved since it was established, and how they have sought to disseminate their learning to industry through various activities and trainings. It is also clear that the National HVDC Centre will play a key role in supporting innovation and the transition to net zero.

We look forward to continuing to work with and support the National HVDC Centre through the RIIO-T2 period, and in to the future.

Yours sincerely,

David Gregory, BEng (Hons), MSc, MIET
Power System Engineer
Network Operability