VOLUME 2: CHAPTER 1 – INTRODUCTION AND BACKGROUND

Figures and Visualisations (Volume 3a and 3b of this EIA Report)

Appendices (Volume 4 of this EIA Report)

1. INTRODUCTION AND BACKGROUND

1.1 Overview

This Environmental Impact Assessment Report ("EIAR") has been prepared by ERM on behalf of Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission ("SSEN Transmission"), own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands. In this EIAR the Applicant and SSEN Transmission are used interchangeably unless the context requires otherwise. The EIAR has been prepared to accompany an application for permission under the provisions of the Town and Country Planning (Scotland) Act 1997 (as amended) ('the 1997 Act')[1].

The application seeks full planning permission from The Highland Council (THC) under the provisions of the 1997 Act to construct and operate a new strategic transmission hub approximately 12 km to the south of Thurso and near the small settlement of Spittal in Caithness, Scotland (as shown in **Volume 3, Figure 1.1 Proposed Development Infrastructure**).

The electricity transmission project is described as the "Banniskirk Hub" (and hereafter also referred to interchangeably as "the Proposed Development"). The Proposed Development is required to connect a proposed new 400 kilovolts (KV) overhead line between Spittal and Beauly, a new Spittal to Peterhead High Voltage Direct Current (HVDC) link which is part onshore cable and part subsea cable, and the existing 275/132 kV substation at Spittal[2] (existing Spittal Substation).

The key components of the Proposed Development would be a 400 kV substation and a HVDC Converter Station. The Proposed Development would also include the following:

- ancillary works: site clearance, temporary construction compounds and laydown areas;
- earthworks (including landscaping);
- permanent access from the public road network;
- formation of internal access roads, drainage;
- permanent water supply;
- lighting;
- security fencing; and
- biodiversity enhancement measures.

An overview of the Proposed Development is shown on **Figure 1.1: Proposed Development Infrastructure**.

An Environmental Impact Assessment ("EIA") has been undertaken for the Proposed Development in accordance with The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations'[3]) to assess the likely significant effects of the Proposed Development. The findings of the EIA are presented in this EIAR, including the measures which would be taken to prevent, reduce and, where possible, offset predicted likely significant adverse effects.

The Proposed Development is defined as being the electrical infrastructure, buildings, landscaping, drainage and other elements included within the Red Line Boundary (RLB) as depicted in **Figure 1.1**. Future cable connections into the Proposed Development following its completion are accounted for in the assessment of cumulative effects, as appropriate to their individual completion timescales. In the case of the cable connection from the existing Spittal Substation to the south-west of the Proposed Development, this connection will be constructed within the same timescale. Planning permission is not sought for this project, and it will be carried

[1] Town and Country Planning (Scotland) Act 1997. [Online] Available at: https://www.legislation.gov.uk/ukpga/1997/8/section/46 [Accessed: February 2024].

[2] Further details of these developments are available at https://www.ssen-transmission.co.uk/projects/2030-projects/

[3] Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. [Online] Available at: https://www.legislation.gov.uk/ssi/2017/102/contents/made [Accessed :February 2024].

out as Permitted Development under Class 40(1)(a) of the General Permitted Development Order[4]. It is treated as a development within a proximity where cumulative effects could arise and is assessed as such.

1.2 Background

The Applicant owns and maintains the electricity transmission network across the north of Scotland and holds a transmission licence under Section 6(1)(b) of the Electricity Act 1989 ('the 1989 Act')[5]. In terms of section 9(2) of the 1989 Act, the Applicant has a statutory duty to develop and maintain an efficient, co-ordinated and economical system of electrical transmission, and a separate duty to facilitate competition between current and new generators of electricity. Where there is a requirement to extend, upgrade or reinforce its transmission network, the Applicant's aim is to achieve an environmentally aware, technically feasible and economically viable option which would cause the least disturbance to the environment and the people who use the area.

The United Kingdom (UK) Government launched the offshore transmission network review (OTNR) in 2020 to ensure that the transmission connections for offshore wind generation are delivered in the most appropriate way, and to find the appropriate balance between environmental, social and economic costs[6]. The National Grid, the electricity system operator (ESO) published the Holistic Network Design (HND) Report in July 2022[7] providing detail on a recommended approach for connecting offshore wind farms, including the associated offshore and onshore transmission network requirements.

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50 GW and 11 GW respectively. The Scottish Government has also set ambitious targets for an additional 12 GW of onshore wind by 2030. Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

As a result, SSEN Transmission has analysed the needs case and system planning requirements for the project to ensure the approach for upgrading the transmission network identifies the best sustainable long-term solution. A more detailed explanation of project need is set out in **Chapter 2 Project Need.**

As part of that process, SSEN Transmission has undertaken studies during each stage of identifying the site options and the proposed design solution for the electricity transmission project that involved consideration of environmental, technical and economic factors. This work was carried out prior to selecting a proposed site and finalising the design solution for the Proposed Development. Consultation has been undertaken during all stages of the site selection process to seek comments from stakeholders, including members of the public, on the options put forward prior to finalising the design of the Proposed Development as described in this EIAR. Further detail on the site selection stages of the project is contained within **Chapter 4 Site Selection Process and Alternatives**.

Stage 1 of the SSEN Transmission Site Selection process required a list of feasible site options to be identified. The first step of this process was to undertake a multi-criteria analysis (MCA) using publicly available GIS datasets to provide a high-level environmental constraints map within a 10 km area of search.

Using the data from the MCA, sixteen site options were identified due to the large size of the potential substation, and the challenging and remote nature of the terrain. The initial sixteen site options are shown on **Volume 3 Figure 1.2**. Based on the assessment detailed above, Sites 7, 11 and 12 were identified to be taken forward to Stage 2 Site Selection.

At Stage 2, a detailed site selection appraisal was undertaken to further refine the three options from Stage 1 and identify the preferred site to be taken forward for consultation. The three shortlisted sites were assessed in

[4] The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (legislation.gov.uk)

[5] Electricity Act 1989. [Online] Available at: https://www.legislation.gov.uk/ukpga/1989/29/contents [Accessed: February 2024].

[6] UK Government. Offshore transmission network review. Available at: https://www.gov.uk/government/groups/offshore-transmission-network-review [Accessed: April 2024].

[7] National Grid Electrical System Operator (ESO), 2022. Pathway to 2030 – A holistic network design to support offshore wind deployment for net zero. [Online] Available at: https://www.nationalgrideso.com/document/262676/download [Accessed: March 2024].

accordance with SSEN Transmission guidance document PR-NET-ENV-502[8] from an engineering, environmental and economic standpoint.

Following a period of public consultation between February-March 2023 (undertaken as part of Stage 2), Site 12 was considered to be the overall preferred option. This option provided good corridor availability for an overhead line (OHL) connection as part of the Spittal to Beauly scheme, underground cable connection from the existing substation at Spittal, connection to the Spittal to Peterhead HVDC, third party developer connections and access from the A9 trunk road. Following consultation, the orientation of Site 12 was changed in response to micro-siting requests, which is detailed further in **Chapter 4 - Site Selection Process and Alternatives**. Currently the majority of the preferred site comprises rough grassland used for cattle/ sheep grazing, of Land Capability for Agriculture (LCA) grade 4.2 (land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops)[9], with a small (approximately 6 ha) area of coniferous woodland present along the western edge bordering the A9 highway.

National planning policy and energy policy objectives are summarised in **Chapter 7 - Planning and Energy Policy Context** of this EIAR**.**

A more detailed explanation of project need is set out in **Chapter 2 - Project Need** of this EIAR.

1.3 Legislative and Statutory Context

Full Planning Permission for the project is sought from THC under the 1997 Act.

The Applicant, as a transmission licence holder under the 1989 Act, has a statutory duty under paragraph 3 of Schedule 9 to the 1989 Act[2] when formulating relevant proposals to:

- *"have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest"; and*
- *"do what [it] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects".*

Information is provided in this EIAR to assist the competent authority's appropriate assessment of the likely significant effects of the Proposed Development on European sites under The Conservation (Natural Habitats, &c.) Regulations 1994[10] (as amended).

1.4 The Need for EIA

The requirement to undertake an EIA is determined by where the Proposed Development falls in relation to the screening criteria in the EIA Regulations. The EIA Regulations contain two schedules of development types. Schedule 1 lists projects where EIA is mandatory. Schedule 2 identifies projects where EIA may be required where a project listed on that Schedule is '*likely to have significant effects on the environment by virtue of factors such as its nature, size or location'*. The Proposed Development is not covered under the developments listed within Schedule 1 to the EIA Regulations. The Proposed Development is also not directly identified within Schedule 2 of the EIA Regulations. The substations and converter stations proposed as part of the ASTI projects will be large in scale and in most cases connect directly into the new ASTI OHLs which are Schedule 1 EIA development. It is on this basis that we have taken the view that ASTI substations connecting into new ASTI OHLs (which are EIA development) should be treated as EIA development.

A request for an EIA Scoping Opinion was made to THC under Regulation 17 of the EIA Regulations in December 2023. A Scoping Report (**Volume 4 Appendix 1.1**) (Planning Reference 23/05829/SCOP) was submitted to support the request, which sought input from statutory and non-statutory consultees regarding the

[8] SSEN Transmission (2022) Substation Site Selection Procedures for Voltages at or above 132kV

9 Scotland's Soils, National scale land capability for agriculture, 2023, accessed at: https://soils.environment.gov.scot/maps/capability-maps/national-scale-land-capability-for-agriculture/

[10] https://www.legislation.gov.uk/uksi/1994/2716/contents/made

information to be provided within this EIAR. The Scoping Report stated the view that the following environmental topics should be included in the EIAR:

- Landscape and Visual Impact Assessment;
- Ecology, Ornithology and Nature Conservation;
- Archaeology and Cultural Heritage;
- Traffic and Transport;
- Hydrology, Hydrogeology, Geology and Soils;
- Noise and Vibration; and
- Land Use, Amenity and Socio- Economics.

The Scoping Opinion of THC was issued in February 2024 (refer to **Volume 4 Appendix 1.2**) confirming the scope of the EIAR as above. Further details are contained in **Chapter 6 - Scope and Consultation** of this EIAR.

1.5 EIAR Structure

The EIAR contains the environmental information required by the EIA Regulations and comprises a number of volumes as outlined below:

- **Volume 1** – Non-Technical Summary;
- **Volume 2** – Environmental Impact Assessment Report;
- **Volume 3** – Figures; and
- **Volume 4** – Technical Appendices.

Volume 1 is a standalone Non-Technical Summary ("NTS") which describes the Proposed Development and summarises the contents of Volume 2, particularly the predicted likely significant effects, in a concise, non-technical manner for the general public to read.

Volume 2 of the EIAR provides an introduction and need for the Proposed Development. Volume 2 also provides a description of the key components of the Proposed Development, including construction and operation access requirements, and the main alternatives considered during the development of the project. Volume 2 also contains detail on the approach to the EIAR, the consultations that have been undertaken to define the scope of the EIA and an overview of relevant planning and energy policy. The Volume also includes a summary of the likely significant effects of the Proposed Development, with reference to the detailed assessments. This is followed by a series of technical topic-based reports that each include an assessment of the likely significant effects of the Proposed Development on the particular receptors of relevance to each of the topic-based assessments, a description of the proposed mitigation measures relevant to those assessments, and confirmation of the predicted residual effects. The consideration of cumulative effects is also discussed where relevant in each specialist topic chapter

Volume 3 contains supporting figures referred to in Volume 2 of the EIAR. Figures offer a visual summary of key themes or data referred to in the chapters, to aid understanding.

Volume 4 comprises supporting appendices referred to in Volume 2 of the EIAR. Appendices include technical assessments and provide a greater level of detail on key themes or data underpinning the impact assessment. Appendices include the following:

- General Environmental Management Plans;
- Species Protection Plans;
- Construction programme;
- Photomontages;
- Baseline Habitat Survey Report;
- Planning Statement;

- Cultural Heritage Baseline;
- Cultural Heritage survey report;
- Cultural Heritage Setting Assessment Tables; and
- EIA Team

1.6 Supporting documents

A Planning Statement is also included with the application as supporting information and in accordance with the request of THC in their scoping response. The Planning Statement considers the compatibility of the Proposed Development in the context of existing and emerging development plan and national energy and planning policies. **Chapter 7 - Planning and Energy Policy Context**, provides an overview of the relevant planning and energy policy context for the Proposed Development and the separate Planning Statement contains an assessment in respect of the Proposed Development against relevant planning policy.

Other reports, drawings and documents that will be submitted as part of the planning application will include:

- Habitat Regulations Assessment (HRA) Screening Report;
- Design and Access Statement;
- A series of technical design drawings; and
- Pre-application Consultation Report.

1.7 EIA Quality/ Statement of Expertise

Regulation 5(5) of the EIA Regulations states that:

"In order to ensure the completeness and quality of the EIA report -

> *(a) the developer must ensure that the EIA Report is prepared by competent experts; and*
>
> *(b) the EIA Report must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts"*

SSEN Transmission appointed ERM to coordinate the EIA Report for the Proposed Development on behalf of SSEN Transmission. The EIA Report has been compiled and approved, on behalf of SSEN Transmission, by professional EIA practitioners at ERM, holding relevant undergraduate and post-graduate degrees, and membership of the Institute of Environmental Management and Assessment (IEMA). The EIAR meets the requirements of the IEMA EIA Quality Mark scheme. This is a voluntary scheme operated by IEMA that allows organisations to make a commitment to excellence in EIA and to have this commitment independently reviewed on an annual basis. In addition, SSEN Transmission and ERM can confirm that each of the topic-based impact assessment chapters has been prepared by competent experts, with the details being provided in **Volume 4 Appendix 1.3**.

1.8 IEMA Quality Mark

As with environmental assessment, good practice in the preparation of the EIAR is defined in a number of sources, with more specific issues covered by EIAR review checklists. Many of these checklists are very detailed and go to some length. In terms of widely applicable and practical guidance, the IEMA Quality Mark scheme provides best practice review criteria against which all EIARs are evaluated.

Best practice guidance as set out within the IEMA Quality Mark scheme requires identification of key limitations affecting the EIA process and the resultant EIAR. Limitations in methods are identified and discussed particularly where this is likely to affect the outcomes of the assessment. As with any environmental assessment, there will be elements of uncertainty. Where relevant these are identified and reported, together with a statement on any implications on the assessment and conclusions.

1.9 Notifications

In accordance with the 1997 Act (as amended), and Part 5 of the EIA Regulations, the application and this EIAR will be advertised by the Highland Council.

Notice of the planning application, including this EIAR and associated documents and figures, will be available for viewing on the Highland Council e-planning webpage, Simple Search (highland.gov.uk).

Notice of the application and details of the project are available on SSEN Transmission's website: https://www.ssen-transmission.co.uk/projects/project-map/new-spittal-area-400kv-substation/.

This EIAR is available in other formats if required. For details, including costs, contact:

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