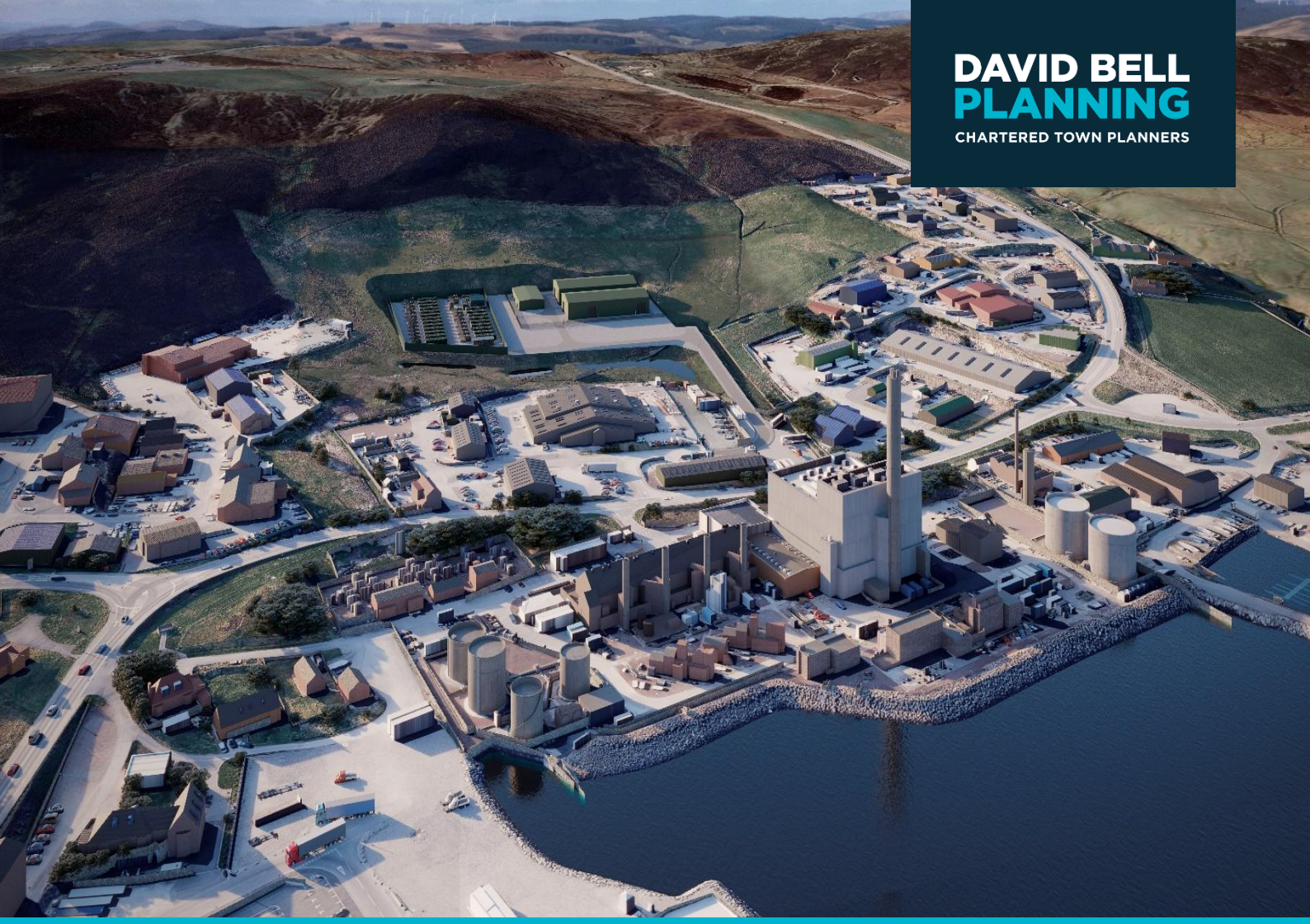


DAVID BELL PLANNING
CHARTERED TOWN PLANNERS

Lerwick Greener Grid Park
BESS - Shetland Standby Facility

Planning Statement

February 2023

Statkraft

dbplanning.co.uk

Contents

1. Introduction & Overview

1.1 Background

1.1.1 Scottish Hydro Electric Power Distribution (SHEPD) owns and operates the electricity network on the Shetland Islands. The islands' network is currently not connected to the Scottish mainland electricity network. SHEPD therefore acts as System Operator for the Shetland Islands.

1.1.2 Lerwick Power Station (LPS) is nearing the end of its operational life as a full duty power station and supply from any other main island source is not certain beyond 2024.

1.1.3 From November 2024, Shetland will be connected to the mainland electricity system via Scottish and Southern Electricity Networks (SSEN) Transmission's 600MW HVDC link and associated transmission network.

1.1.4 Planning permission for a new 132/33kV Grid Supply Point (GSP) substation on land located within Black Hill Industrial Estate, Lerwick was granted on 15 April 2022 and work commenced on site in late November 2022 and is currently ongoing. The GSP is required to connect the existing island 33 kV distribution network to the new 132 kV Transmission Network and the HVDC link back to the GB Mainland.

1.1.5 In addition to the GSP, there is a requirement for additional standby services to provide stability and voltage support to SHEPD's Shetland network until generators are operational. SHEPD therefore require a Standby Solution Backup Unit for Shetland, including fast response and inertia provision.

1.1.6 Statkraft UK LTD (the 'Applicant') has been shortlisted to deliver this scheme (the 'Proposed Development'), with contracts due to be awarded in early 2023. To this end, the Applicant is submitting a planning application to Shetland Islands Council (SIC) for a 50 MW Battery Energy Storage System (BESS) on land, at Gremista in Lerwick (the 'Site').

1.2 Approach

1.2.1 Planning applications are required to be determined under the provisions of section 25 of the Town and Country Planning (Scotland) Act 1997 (the "1997 Act"), which requires that decisions are taken in accordance with the development plan unless material considerations indicate otherwise.

1.2.2 Revised draft National Planning Framework 4 (NPF4) was approved by the Scottish Parliament on 11th January 2023. Regulations are to be put before the Scottish Parliament to commence the provisions of the 2019 Planning Act so that NPF4 will become part of the statutory Development Plan. The Chief Planner advised on 16th January 2023 that NPF4 would come into force on 13th February 2023.

1.2.3 As such, the key questions for the proposed development of a BESS Standby solution are:

> Is the development, as proposed, consistent with Development Plan policy as set within the adopted Local Development Plan and NPF4?

> Are there material considerations that determine a decision should be made contrary to the Development Plan? or do material matters further support the position that the proposed development should be approved?

1.2.4 In answering these questions, consideration is given to whether:

> the proposal is in the National Interest?

> the proposal contributes positively to national or local policy priorities?

> there is an identifiable need for the proposed development?

1.2.5 The planning application is supported by **series of assessments and appraisals which examine the environmental effects** of the proposed development and a **Design and Access Statement** (DAS) which explains the siting, design and mitigation approach followed.

1.3 Key Facts

1.3.1 The key facts relevant to this planning application are:

> The proposed development is for up to **50 MW battery energy storage to support the new Grid Supply Point substation** being constructed by SHEPD at Gremista to **provide security of supply and voltage support to the network without reliance upon diesel powered generators**.

> The proposed development is located **on allocated industrial land where the principle of use is acceptable, immediately adjacent to the consented GSP and associated consent which will deliver the platform upon which the BESS will be located.** The use is compatible with the immediate and wider environment.

> The proposed development **is required to enable the delivery of a standby solution for the wider upgrade to enable connection to the GB mainland grid for the Islands and facilitate renewables connections to the wider Transmission network** which form an **essential element of the Government's targets for renewable energy, electricity and 'net zero'. Security and balancing of supply are integral to the delivery of the project.**

1.4 Planning History

1.4.1 The site and its immediate adjoining site have recent and relevant planning history. An application by SHEPD for a 132/33 kV GSP facility on the adjacent site to the north was granted planning permission on 15th April 2022 (ref: 2021/353/PPF). Following the discharge of all pre-commencement conditions, a site start was made in late November 2022.

1.4.2 In October 2022 SHEPD submitted a separate planning application (ref: 2022/260/PPF) for the construction of a development platform immediately to the south of the GSP development and on the same site as the Applicant's current proposal. This development platform was designed specifically to accommodate the required 'standby' solution to support the transmission and distribution works for Shetland and the mainland and was progressed in order to enable a joint civils construction package with the GSP. Planning permission for the platform was granted on 17th January 2023. It is understood SHEPD is currently in the process of discharging the relevant pre-commencement conditions prior to its commencement of development of the development platform.

1.4.3 It is intended that the Applicant will deliver their proposed infrastructure on top of, and within the footprint of the consented (and to be constructed) development platform.

1.4.4 A Proposal of Application Notice (PAN) for the Proposed Development (encompassing a potential split site solution and enhanced scope of infrastructure) was submitted to SIC on 29th August 2022 (ref: 2022/224/PAN) and consultation was undertaken with the community on 22nd September 2022. A pre-application meeting with Council Officers was undertaken on 21st September 2022. No significant issues arose and further information of the consultation process is provided within the PAC Report which accompanies this submission.

1.4.5 During the pre-application period ongoing technical reviews established that there was no longer a requirement for previously proposed synchronous condenser technologies as part of the proposals and this has resulted in the removal of proposed plans for development on a land area to the north of the GSP.

1.4.6 A request for an Environmental Impact Assessment (EIA) Screening Opinion was submitted on 17th October 2022 (ref: 2022/270/SCR). SIC confirmed that an EIA would not be required on 7th November 2022.

1.5 Structure of Planning Statement

1.5.1 This report seeks to address the pertinent issues relevant to the determination of the application to aide decision makers in their assessment and conclusions on the proposals.

1.5.2 The report is structured as follows:

> Chapter 2 sets out a summary description of the site and Proposed Development;

> Chapter 3 addresses whether the Proposed Development is in accordance with the Development Plan, referencing key policy and drawing upon the findings of the supporting environmental and technical appraisals and other supporting documentation;

> Chapter 4 deals with relevant material considerations including national planning and energy policy matters; and

> Chapter 5 presents overall conclusions and a recommendation with regard to section 25 of the 1997 Act.

2. The Proposed Development

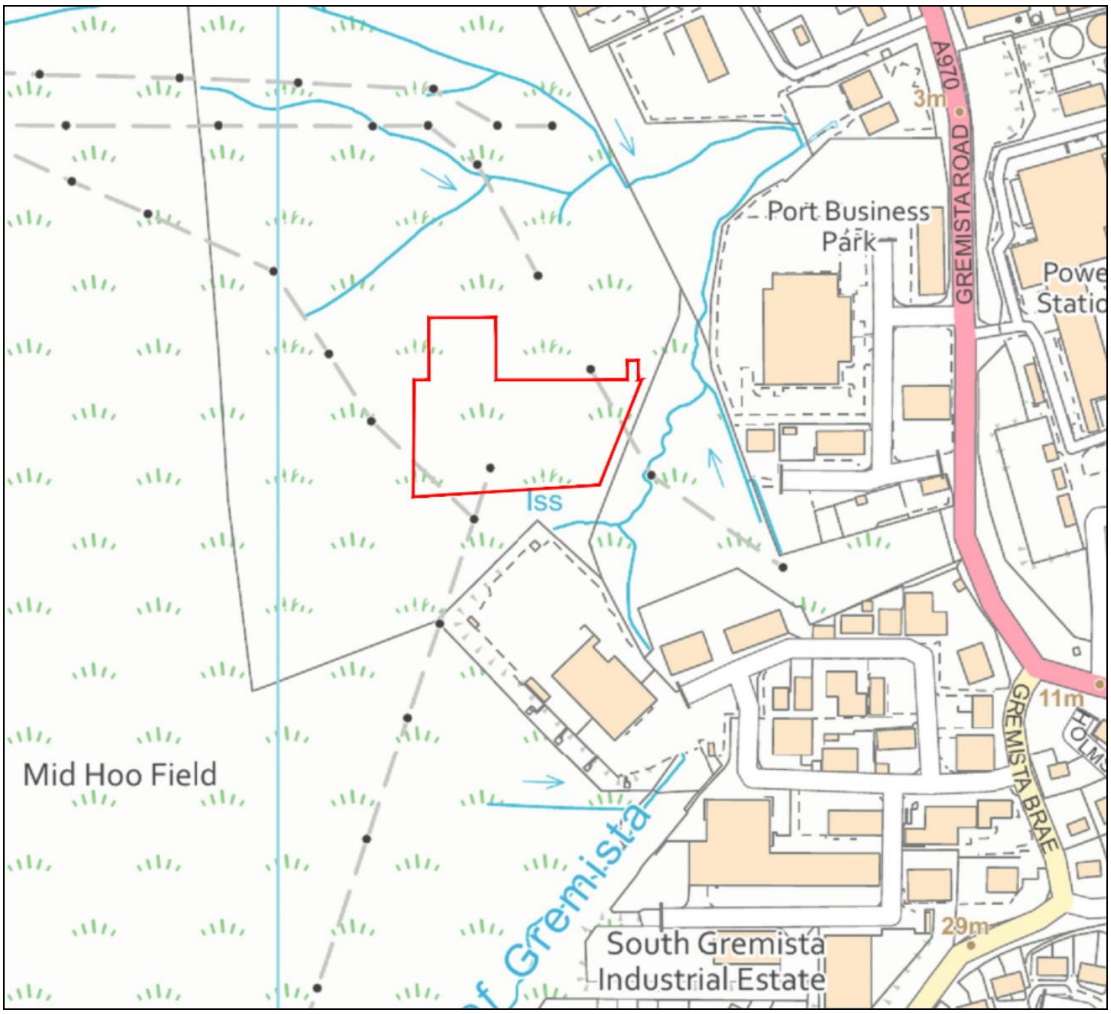
2.1 Introduction

2.1.1 This chapter provides summary information on the site and its location, a description of the Proposed Development, and design approach to deliver the BESS proposed to support the Gremista GSP and associated major network capacity improvements and connection to the UK mainland.

2.2 Site Location & Description

2.2.1 The Proposed Development site is located on land within Local Plan allocation LK006 owned by the Lerwick Harbour Authority, sited to the west of the existing Black Hill Industrial Estate, off Gremista Road. See **Figure 2.1** for extract of the submitted Site Location Plan.

Figure 2.1: Extract of Site Location Plan



2.2.2 The site benefits from planning permission (ref: 2022/260/PFF) for the construction of a development platform and associated earthworks and drainage as granted in January 2023. It sits immediately adjacent to the Gremista GSP consented in April 2022 (ref: 2021/353/PPF) which is under construction. The principle of development / use as electricity grid infrastructure, is therefore set. There is no requirement for new site access or construction compounds over and above those consented already.

2.2.3 The location benefits from access and drainage as set within the preceding consents. Further consideration of additional drainage requirements, construction effects and noise are provided within application package to address the effects of the infrastructure during construction and on operation.

2.2.4 The site comprises rough grassland and is allocated for industrial use. Upon delivery of the Proposed Development the site groundworks will have been completed and the GSP will also have been delivered, as such the site will be developed.

2.3 The Proposed Development

2.3.1 The Proposed Development comprises of the installation of the following on the consented development platform:

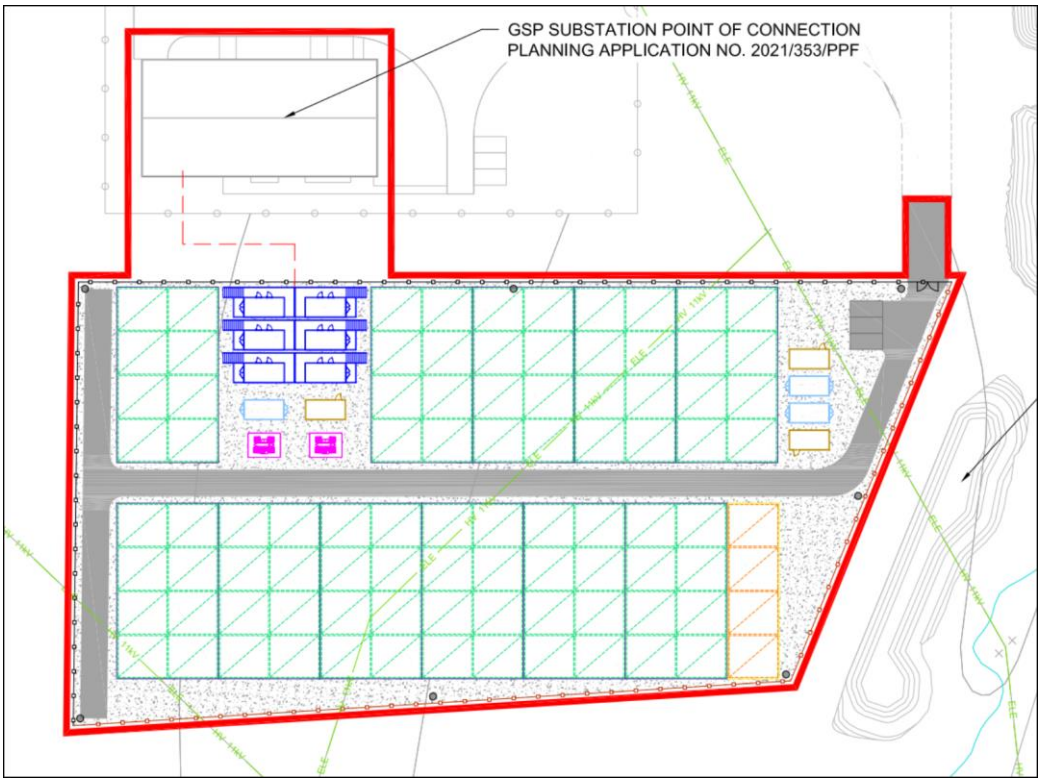
- Installation of 11 no. of BESS Blocks (i.e. each measuring 15m wide by 26m in length by 3.8m high); and 1 no. of BESS Half Block (i.e. measuring 7.5m wide by 26m in length by 3.8m high). Total export capacity of up to 50MW.
- 3 no. of 'Stores' container-type structure measuring 3m wide by 6m in length by 2.6m high. These are used for the general storage of spare parts for Operational and Maintenance (O&M) purposes. Material of the structure will be powder-coated steel and to be coloured olive green (RAL 6003).
- 3 no. of 'Office' container-type structure measuring 3m wide by 6m in length by 2.6m high. These are used as site offices. Material of the structure will be powder-coated steel and to be coloured olive green (RAL 6003).
- 6 no. of LV/MV Rooms, each measuring 3m wide by 6m in length by 5.5m high. These structures are clustered close together and raised 2m above ground via poles and with a platform served by stairs for access. It is raised 2m above ground to enable ease of cabling storage and access beneath the structures without needing to create a basement level. These structures are mainly to store essential electrical equipment. Material of the structure will be powder-coated steel and to be coloured olive green (RAL 6003).
- Palisade perimeter fencing at maximum 3.4m high and to be located along the northern and western boundary. Associated double-door gates at 3.4m high located to the north-eastern corner of the site. Material of the structure will be powder-coated steel and to be coloured olive green (RAL 6003).
- Noise attenuation perimeter fencing at maximum 4m high and to be located along the eastern and southern boundary. Material of the structure will be of either composite material or powder-coated metal and to be coloured olive green (RAL 6003).
- Underground cable connection between the BESS and the GSP; and
- Associated hard landscaping and ancillary works.

2.3.2 As procurement of BESS is on-going with no specific supplier nor detailed design of the battery layout selected at the planning stage, we seek flexibility by proposing to secure just the maximum development parameters/extent of the BESS Blocks during the determination of this application and for any detailed layout, appearance/elevations of the BESS to be submitted by way of a discharge of condition application. This flexibility in approach of consenting the BESS has been accepted by Scottish Government via its approval of the s.36

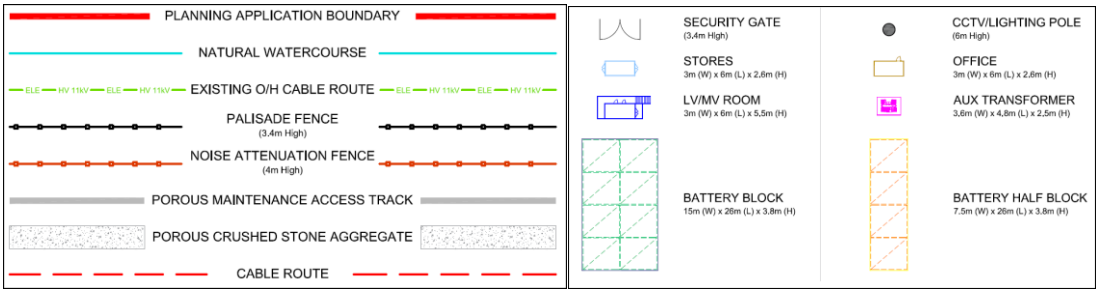
application (ECU Ref. ECU00003404) on 30 Sept 2022 that relates to the 300MW BESS with synchronous compensator proposal near Blackhillock Substation, Keith (LPA is Moray Council).

2.3.3 The design allows for the installation of more BESS units than are necessary to provide the 50MW in this application. Permission to utilise the remaining potential capacity would be subject to a future Section 36 application to Scottish Ministers.

Figure 2.2: Extract of Proposed Site Layout



Key



2.3.4 Consent is not sought for the development platform and associated engineering works as this has already been secured and will be constructed by SHEPD within the existing civils contract which as noted, is currently underway.

2.3.5 It is intended that the works will be delivered using the temporary site compounds and laydown areas already established for the GSP and development platform works by SHEPD, and agreements are in place between the operators to this effect.

2.3.6 It is noted that once operational, the Greener Grid Park will be unmanned and controlled/monitored remotely with only occasional access by staff needed from an Operations and Maintenance (O&M) perspective.

2.4 Design Approach

2.4.1 Due to the nature of the Proposed Development, the design principles of the project have been largely technically driven. A Design and Access Statement has been prepared to support the Planning Application. Where applicable, certain principles have been adopted to ensure sensitive siting and design compatible with the environment and surroundings to which the development is located.

2.4.2 The final design, layout and landscaping is developed with reference to environmental and technical surveys and consideration of the wider site context and environment.

2.4.3 The following design principles were applied during the design process:

- Ensuring the design is safe, efficient, and meets the requirements of whole life operation and maintenance alongside buildability;
- Minimising the amount of land take and impact on the use of surrounding land;
- Consideration of any future extensions of existing users of the adjacent industrial area through leaving appropriate space / buffers;
- Consideration of potential future development of the site, and the area in which the Proposed Development is located;
- Integration of the Proposed Development into the surrounding landscape and urban context to mitigate potential visual or amenity impacts to an acceptable level;
- Utilisation of existing access, temporary construction compounds / land; and
- Designing a development which is easily and cost effectively maintained in the long term.

2.4.4 The buildings and equipment on site are proposed to be clad in dark green metal in order to assist mitigate any potential landscape effects and to match the consented GSP.

2.4.5 The BESS platform is already consented and has been set at a level which, within the constraints, optimises the re-use of excavated materials and minimises the need for import or export of material to site, thus reduced traffic movements in the area.

2.4.6 Due to the nature of the operation the site has not been designed to accommodate access to external parties or users and site security is key. Where maintenance or emergency access is required this is facilitated via the creation of appropriate external and internal access roads designed to standard and with appropriate separation between infrastructure on site to ensure health and safety and enable appropriate manoeuvrability around core functions.

2.4.7 Where noise attenuation measures are required as mitigation, sensitivity in design and colour of materials has been proposed in order to minimis visual intrusion and to protect amenity of neighbouring users.

3. Is the Development in accordance with the Development Plan?

3.1 The Development Plan

3.1.1 National Planning Framework 4 (NPF4) comes into effect on 13th February 2023 and at that time will form part of the statutory Development Plan. It is on this basis that this planning application will be assessed.

3.1.2 The extant Development Plan for Lerwick therefore comprises:

> NPF4 (2023); and.

> The Shetland Local Development Plan (LDP) 2014.

3.1.3 The LDP is supported by a range of Supplementary Guidance documents providing additional guidance on core topics.

3.1.4 The Shetland LDP sets out the general planning policies for the Council area. A new LDP is in the very early stages with a Main Issues Report having been expected during 2021. No confirmed date for issue and consultation are currently set.

3.1.5 Approval of NPF4 enacts key parts of the 2019 Planning Act. One key provision of this is that in the event of any incompatibility between the provisions of NPF4 and a provision of a LDP, then whichever of them is the later in date will prevail. This will include where a LDP is silent on an issue that is now provided for in NPF4.

3.1.6 There are no significant inconsistencies in the Development Plan pertinent to this proposal.

3.2 NPF4 – Summary

3.2.1 NPF4 has been subject to consultation and Parliamentary Committee scrutiny over the last year and was first laid before the Scottish Parliament in November 2021. On 8th November 2022, the Revised Draft NFP4 was laid before Parliament for approval.

3.2.2 NPF4, in the same form as the Revised Draft NPF4 laid before the Scottish Parliament on 8 November 2022, was approved by resolution of the Scottish Parliament on 11 January 2023. In the Parliamentary debate, the Planning Minister stated that NPF4 represented the biggest change to the Scottish Planning system since the Town and Country Planning (Scotland) Act 1947.

3.2.3 Regulations are to be put before the Scottish Parliament to commence the provisions of the 2019 Act so that NPF4 will become part of the statutory Development Plan. As explained NPF4 becomes the new statement of national planning policy at 9am on 13 February 2023.

3.2.4 Annex A (page 94) of the document explains how NPF4 is to be used. It states:

"*The purpose of planning is to manage the development and use of land in the long-term public interest … Scotland in 2045 will be different. We must embrace and deliver radical change so we can tackle and adapt to climate change, restore biodiversity loss, improve health and wellbeing, reduce inequalities, build a wellbeing economy and create great places*."

3.2.5 Annex A states that NPF4 is required by law to set out the Scottish Ministers' policies and proposals for the development and use of land. It adds:

"It plays a key role in supporting the delivery of Scotland's national outcomes and the United Nations Sustainable Development Goals1. NPF4 includes a long-term spatial strategy to 2045."

3.2.6 NPF4 contains a Spatial Strategy and Scottish Government development management policies to be applied in all consenting decisions, and it identifies national developments which are aligned to the strategic themes of the Government's Infrastructure Investment Plan[2] (IIP).

3.2.7 NPF4 therefore for the first time, introduces centralised development management policies which are to be applied Scotland wide. It also provides guidance to Planning Authorities with regard to the content and preparation of LDPs.

3.2.8 Annex A adds that NPF4 is required by law to contribute to six outcomes. These relate to meeting housing needs, health and wellbeing, population of rural areas, addressing equality and discrimination and also, of particular relevance to the proposed development "*meeting any targets relating to the reduction of emissions of greenhouses gases, and, securing positive effects for biodiversity*".

3.2.9 NPF4 identifies a range of 'National Developments' which are described as "*significant developments of national importance that will help to deliver the spatial strategy … National development status does not grant planning permission for the development and all relevant consents are required*".

3.2.10 National Development 3 (NAD3) is for 'Strategic Renewable Electricity Generation and Transmission Infrastructure'.

"This national development supports renewable electricity generation, repowering, and expansion of the electricity grid.

A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Certain types of renewable electricity generation will also be required, which will include energy storage technology and capacity, to provide the vital services, including flexible response, that a zero carbon network will require. Generation is for domestic consumption as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.

The electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity to consumers in Scotland, the rest of the UK and beyond. Delivery of this national development will be informed by market, policy and regulatory developments and decisions."

3.2.11 The location for NAD3 is set out as being all of Scotland and in terms of need it is described as:

"Additional electricity generation from renewables and electricity transmission capacity of scale is fundamental to achieving a net zero economy and supports improved network resilience in rural and island areas."

3.2.12 Reference is made to the designation and classes of development which would qualify as NAD3, and it states in this regard:

[1] The 17 UN Sustainable Development Goals are set out at page 95 of NPF4 and include *inter alia* 'affordable and clean energy' and 'climate action'.

[2] The Scottish Government's five-year Infrastructure Investment Plan (2021-22 to 2025-26) was published in February 2021. It set out a vision for Scotland's future infrastructure in order to support and enable an inclusive net zero emissions economy.

> **"*A development contributing to 'Strategic Renewable Electricity Generation and Transmission' in the location described, within one or more of the Classes of Development described below and that is of a scale or type that would otherwise have been classified as 'major' by 'The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009', is designated a national development:***
>
> ***(a) on and off shore electricity generation, including electricity storage, from renewables exceeding 50 megawatts capacity;***
>
> ***(b) new and/or replacement upgraded on and offshore high voltage electricity transmission lines, cables and interconnectors of 132kv or more; and***
>
> ***(c) new and/or upgraded Infrastructure directly supporting on and offshore high voltage electricity lines, cables and interconnectors including converter stations, switching stations and substations*.**"

3.2.13 In light of the Proposed Development being for up to 50 MW of BESS, it does not benefit from national development status. However, the statement of need for the type of land use as per NAD3 is considered material. The Proposed Development does form part of the wider major electricity transmission upgrade for Shetland and the mainland, and this link and the important role the BESS has to play in providing a critical standby facility to this upgrade, should be afforded significant weight.

3.3 NPF4 Policy Provisions

3.3.1 Part 2 of NPF4 (page 36) addresses national planning policy by topic with reference to three themes formulated with the aim of delivering sustainable, liveable and productive places.

3.3.2 In terms of planning, development management and the application of the national level policies, NPF4 states:

> **"*The policy sections are for use in the determination of planning applications. The policies should be read as a whole. Planning decisions must be made in accordance with the development plan, unless material considerations indicate otherwise. It is for the decision maker to determine what weight to attach to policies on a case by case basis. Where a policy states that development will be supported, it is in principle, and it is for the decision maker to take into account all other relevant policies*".**

3.3.3 In terms of "sustainable places" relevant policies to the proposed development include the following:

- Policy 1: Tackling the Climate and Nature Crisis;
- Policy 3: Biodiversity;
- Policy 4: Natural Places;
- Policy 5: Soils;
- Policy 7: Historic Assets and Places; and
- Policy 11: Energy.

3.3.4 Policy 1 states *"When considering all development proposals significant weight will be given to the global climate and nature crisis".*

3.3.5 Policy 4 seeks to protect locally, regionally, nationally and internationally important natural assets. Proposals which will have an unacceptable impact on the natural environment will not be accepted. Where negative effects are identified, support can be given if any significant adverse effects on the qualities for which a designated is made, are clearly outweighed by social, environmental or economic benefits of importance relative to the stature of the designation (e.g. national, local etc).

3.3.6 Policy 11 deals with 'Energy' directly and its intent is stated *as "To encourage, promote and facilitate all forms of renewable energy development onshore and offshore. This includes energy generation, storage, new and replacement transmission and distribution infrastructure and emerging low-carbon and zero emissions technologies including hydrogen and carbon capture utilisation and storage"*.

3.3.7 Policy 11 Part a) states that "*development proposals for all forms of renewable, low-carbon and zero emissions technologies* [including energy storage, such as battery storage] *will be supported*".

3.3.8 Policy 11 Part e) provides guidance on how projects should demonstrate their impact on various receptors and assets including nature, landscape, visual, communities, biodiversity, trees etc.

3.3.9 Critically Policy 11 states that: *"In considering these impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets*".

3.3.10 A summary of the key policy provisions as applicable to the Proposed Development is presented in **Table 4.1**.

3.4 National Planning Policy Appraisal

3.4.1 The following table provides a summary assessment of accordance with NPF4 policies and demonstrates the strong support for the Proposed Development of BESS as a viable system in this location to contribute to reducing emissions and helping to achieve Net Zero.

3.4.2 The Proposed Development forms a key element of a wider national development delivering new and enhanced grid infrastructure enabling a substantial increase in renewable capacity and essential standby solutions for the Island and wider grid in this key location. This is wholly consistent with the aims and objectives of Policy 1 and 11 and is delivered such that there is no conflict with Policies 3, 4, 5 and 7 which focus on the impact or delivery of development and its effects thereof.

Table 4.1: NPF4 Key Policy Assessment Summary

NPF Policy	Policy Summary	Summary Assessment of Proposed Development
Policy 1 – **Climate and Nature Crisis**	When considering all development proposals significant weight will be given to the global climate and nature crisis. *Intent: To encourage, promote and facilitate development that addresses the global climate emergency and nature crisis.* *Outcome: Zero carbon, nature positive places.*	The Proposed Development seeks to address the global climate emergency as a critical element, as a standby facility, within a wider grid transmission project to deliver an upgraded and reinforced transmission grid network to accommodate increased capacity and renewable energy connections between Shetland and the mainland and delivering a mainland grid connection to the Islands. The development is fundamental to delivering the required grid transmission infrastructure to enable a zero carbon economy. Due regard has been given to the potential effects on nature and the application is supported by a summary Environmental Appraisal Report (EA).

NPF Policy	Policy Summary	Summary Assessment of Proposed Development
Policy 11 **Energy**	Proposals for all forms of renewable, low carbon and zero emissions will be supported including enabling works such as grid transmission and distribution infrastructure. Where proposals impact on international or national designations Policy 4 is applicable. A full assessment on how a proposal impacts on communities, landscape and visual, access, aviation and defence, road traffic, historic environment, hydrology, trees soils, and biodiversity is required. Cumulative effects must also be considered. In considering impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. Grid capacity should not constrain renewable energy development. *Intent: To encourage, promote and facilitate all forms of renewable energy development onshore and offshore. This includes energy generation, storage, new and replacement transmission and distribution infrastructure.* *Outcome: The expansion of renewable, low-carbon and zero emissions technologies.*	The Proposed Development forms part of the wider grid transmission upgrade for Shetland and supports the recently consented GSP. The project enables a critical standby facility to the Islands to ensure security and stability of supply and it will enhance capacity and resilience of the grid. A full assessment of potential impact has been completed as part of an EA process. The ground works for the site will be completed by SHEPD and have been fully assessed and consented. The above ground works do not give rise to any adverse effects on the considerations listed in Policy 11 Part e). The design process is fully reflective of the known environmental constraints and opportunities on site and in the wider vicinity and appropriate design mitigation is provided to minimise potential adverse impacts and to ensure optimal integration and screening in the existing landscape / townscape. The delivery of the Proposed Development is a key element of the required grid connection and capacity in this location for committed and future renewable generation providers and to deliver secure mainland supply to the Islands. The importance of this transmission infrastructure relevant to key energy policy targets is addressed in Chapter 4.

NPF Policy	Policy Summary	Summary Assessment of Proposed Development
Policy 3: Biodiversity	Provides that proposals will require to contribute to the enhancement of biodiversity, including where appropriate restoring degraded habitats and building and strengthening nature networks and the connections between them. Proposals for national or major or EIA development will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity. Proposals of this nature should: (i) Be based on understanding of existing; (ii) Where feasible, integrate nature based solutions into proposals and make best use of; (iii) Provide an assessment of potential negative effects which should be fully mitigated in line with the mitigation hierarchy prior to identifying enhancements; (iv) Significant enhancements should be provided in addition to mitigation and should include timescales, management and monitoring; (v) Demonstrate that local community benefits of biodiversity and/or nature networks have been considered. Potential adverse impacts should be minimised through careful planning and design. *Intent:* To protect biodiversity, and reverse biodiversity loss with a view to deliver positive effects from development and to strengthen nature networks. *Outcomes: Biodiversity is enhanced and better connecting including through strengthened nature networks and nature-based solutions.*	The Proposed Development has been screened as non-EIA development. An EA has been prepared and is submitted to provide clarity on potential environmental effects. No significant adverse effects on habitats or nature networks are predicted. In terms of the reference to biodiversity enhancement, it should be noted that Policy 3 does not provide any guidance on how 'significant enhancements' will be measured and assessed, simply referring to "best practice assessment methods". In addition, in relation to the relevant wording in Policy 3, the Scottish Government Explanatory Report (issued alongside Revised Draft NPF4) states: "*The Scottish Government have commissioned research to explore options for developing a biodiversity metric or other tool, specifically for use in Scotland. This work is at early stages, we will work with NatureScot on a programme of engagement with stakeholders as this work progresses*." Policy 3 also references, for some types of development, the need to examine enhancements wherever feasible and references the need for measures to be proportionate to the nature and scale of development. The Proposal is for above ground infrastructure equipment sitting on a development platform consented and delivered by SHEPD. The consented works incorporate landscaping / planting which will deliver a level of biodiversity on completion. The infrastructure works are directly associated with the wider works and benefit from that delivery. As such it is reasonable to consider that BNG delivery in relation to these specific works would not be proportionate as per policy.

NPF Policy	Policy Summary	Summary Assessment of Proposed Development
Policy 4 - **Natural Places**	Directed at protecting, restoring and enhancing natural assets, making best use of nature-based solutions. Proposals which have an unacceptable impact on the natural environment will not be supported. Where significant adverse effects arise on nationally important designations they must be clearly outweighed by social environmental or economic benefits of national importance. Where local designations are affected benefits must be of at least local importance. Provides that the precautionary principle will be applied and states that where adverse effects on species protected by legislation occur, proposals will only be supported where they meet the relevant statutory tests. *Intent: To protect, restore and enhance natural assets making best use of nature-based solutions.* *Outcome: Natural please are protected and restored, and, natural assets are managed in sustainable way that maintains and grows their essential benefits and services.*	The Applicant's design and siting of development is informed and directed by the location of the existing GSP and development platform which will be constructed in advance. No significant effects on the natural environment have been predicted as a result of these, or the proposed development. The design and siting of the proposal does not give rise to an adverse effect on national, regional or local designated sites. The development is of strategic importance for the Islands by way of delivering essential new grid transmission infrastructure to support renewable generation projects and enhance security of supply. No designated sites are affected by the Proposed Development.
Policy 5 - **Soils**	Policy to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development. Where development on peatland or carbon rich soils or priorities peatland habitat is proposed, a detailed site specific assessment is required to identify baseline, likely effects and net effects. *Intent: To protect carbon rich soils, restore peatlands and minimise disturbance to soils from development.* *Purpose: Valued soils are protected and restored, soils, including carbon-rich soils are sequestering and storing carbon, soils are healthy and provide essential ecosystem services for nature, people and our economy.*	The Proposed Development does not give rise to any disturbance or loss of carbon-rich soils. The Proposed Development is for above ground works only with the development platform and main access to site developed as part of the wider GSP / platform developments.
Policy 7 – **Historic Assets and Places**	Seeks to protect assets to enable positive change as a catalyst for regeneration of places. Proposals which have potential significant impact must be accompanied by an assessment and identify clearly their	A desk based Cultural Heritage Assessment has been completed for the wider site which demonstrates no significant adverse effects on assets within the site, or the study area arise as a result of the Proposed Development.

NPF Policy	Policy Summary	Summary Assessment of Proposed Development
	impact and provide sound basis for managing the impact of change. Development affecting scheduled monuments will only be supported where direct impacts and significant adverse impact on integrity of setting are avoided, or, where exceptional circumstances have been demonstrated and effects have been shown to be minimised. *Intent: To protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places.* *Outcome: the historic environment is valued, protected and enhanced, supporting the transition to net zero and ensuring resilience to current and future impacts of climate change. Recognising the social, environmental and economic value of the historic environment to our economy and cultural identity.*	No excavation or ground works are required as part of the Proposed Development.

3.4.3 The assessment demonstrates that the Proposed Development is in accordance with the provisions of NPF 4 and sets out how environmental interests have been considered within the design mitigation and delivery of this key strategic electricity infrastructure which will play a critical part in the drive to grid enhancement and facilitating the drive to net zero in this location.

3.4.4 Importantly **Policy 11** provides clear support for proposals of all forms of renewable, low carbon and zero emissions including enabling works such as grid transmission and distribution infrastructure. Policy states that in considering impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets and confirms that grid capacity should not constrain future renewable energy development.

3.4.5 The Proposed Development delivers a system in which to balance the electrical grid and is designed to store electricity during periods of high generation and low demand and release in the opposite conditions. The contribution BESS can make to reducing greenhouse gas emissions and enhancing grid capacity is explained in more details below.

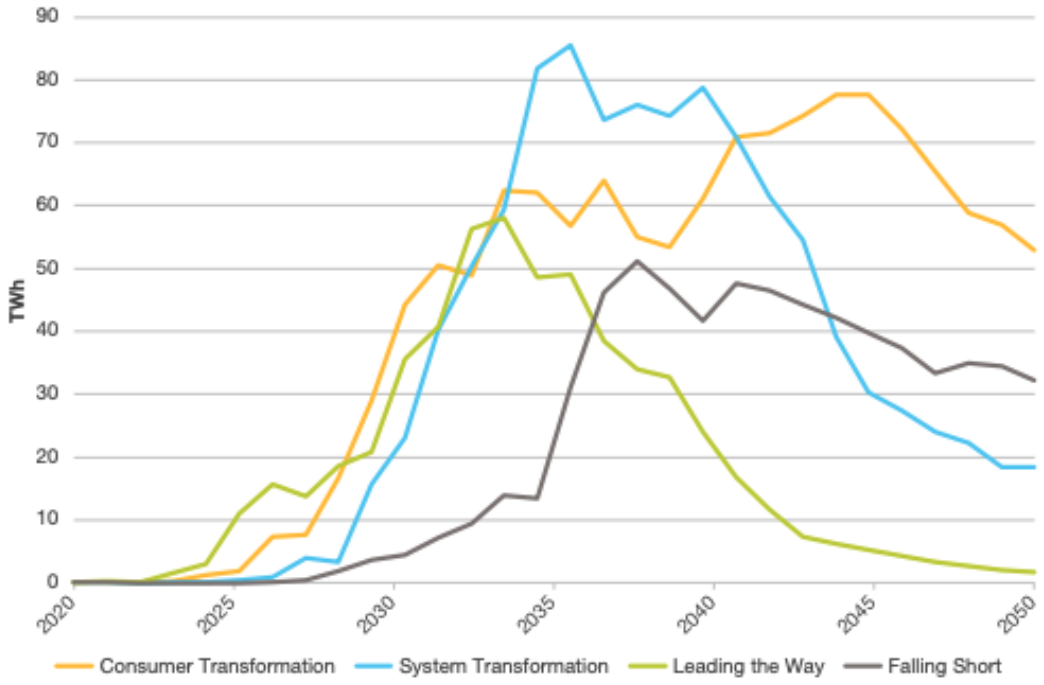
3.4.6 The latest (July 2022) National Grid Electricity System Operator (NGESO) Future Energy Scenarios Report (National Grid ESO, 2022) states that:

"Today's electricity mix is made up primarily of gas, renewables and nuclear, supplemented by a few other sources. Even with increased renewable generation, we are still heavily dependent on fossil fuels to meet peak demand and to operate a reliable electricity system. The electricity system today is built around the core principle of being able to adjust supply smoothly to match demand as it changes through the day and year. Fossil fuel generation is dispatchable, meaning it can be turned on and off to match demand. In winter, coal generation plants have been used to help meet peak demand, but coal use has been declining sharply in recent years bringing carbon emissions down as a result."

3.4.7 The report also states that currently 35 TWh of electricity is being exported from Scotland to areas with a generation deficit such as the Midlands, South East and South West of England. This is anticipated to increase to 124 TWh by 2030.

3.4.8 The report explains that there is currently a high level of curtailed electricity on the Great Britain (GB) grid, and this is predicted to remain the case and intensify in the short to medium term under all NGESO modelling scenarios (Refer to Chart 1).

Chart 1 – Annual Curtailment (National Grid ESO, 2022)



3.4.9 At a regional level (i.e. Scotland) the Renewable Energy Foundation (Renewable Energy Foundation, 2022) states that "*on an annual basis since 2015, when the wind fleet reached substantial levels, Scotland has been discarding around 13% of all wind energy that it could have generated. This figure rose to a high of 19% in 2020, when demand fell due to lockdown and other public health measures, before falling back to 13% in 2021, a low wind year with recovering levels of consumer demand".* They also explain that some Scottish wind farms discarded extremely high fractions of their potential output in 2020 (up to 51%) and 2021 (up to 35%).

3.4.10 Based on the above it is therefore clear that there is a need to create flexibility options in the network such as interconnectors, electrolysis, BESS etc.

3.4.11 A detailed life cycle assessment (LCA) of BESS with lithium-ion batteries (MDPI, 2021) concluded that most of the GHG emissions associated with BESS with lithium-ion batteries are attributable to the resource-intensive production of the lithium-ion cathode. Most of the emissions therefore relate to the manufacturing process of the BESS.

3.4.12 A similar statement can be made for wind turbines; their production and development result in relatively high GHG emissions. This is mainly due to the manufacturing phase (materials and energy used), as well as the emissions associated with the construction phase of the windfarm (land use, plant emissions, materials etc.). A 2015 study by the University of Edinburgh found that *"Estimates for the carbon payback of onshore wind range from 6 months to 2 years but construction on forested peatlands suggests this can approach 6 years (2012 values). Harmonised estimates for the carbon payback of offshore wind range from 5 months to 1 year."* (University of Edinburgh, 2015). It is therefore clear that the operational

emission savings of wind turbines far outweigh the manufacturing and construction phase emissions.

3.4.13 Unlike wind turbines; BESS cannot produce low emission electricity which would offset the embodied carbon in the lithium-ion batteries. BESS should however be considered as an enabling technology which will help reduce the need to curtail renewable energy production therefore resolving the intermittency issues associated with renewable electricity generation. BESS will also fast-track the decarbonisation of the grid by contributing to reducing the need to use fossil fuel electricity generation systems during peak demand period.

3.4.14 Overall the Proposed Development will indirectly result in a reduction in GHG emissions and contribute to Scottish and UK net-zero targets and it is clear significant weight should be given to this within the determination process as stated within Policy 11.

3.5 Key LDP Policy Provisions

3.5.1 The key Shetland LDP policies relevant to the Proposed Development are addressed below.

> Policy GP1 'Sustainable Development'.

3.5.2 Policy GP1 provides that *"development will be planned to meet the economic and social needs of Shetland in a manner that does not compromise the ability of future generations to meet their own needs and to enjoy the area's high quality environment. Tackling climate change and associated risks is a major consideration for all development proposals".*

3.5.3 Justification for this policy states "…*planning decisions should favour the most sustainable options, promoting development that safeguards and enhances the long-term needs of the economy, society and the environment. All relevant issues must be considered together before a decision is made, looking at long-term implications as well as short-term effects*".

> Policy GP2 'General Requirements for All Development'

3.5.4 The Policy provides the requirements that all new building or conversions of buildings should meet setting out key aspects such as:

- No adverse effect on the integrity of viability of designated sites for their landscape and natural heritage value;
- Design and construction to minimise the use of energy and adapt to impacts arising form climate change;
- Provide for appropriate water, waste and surface water drainage;
- Avoidance of projected greenhouse gas emissions from use through installation and operation of low and zero-carbon generating technologies;
- Provision of suitable access, parking and turning;
- Non sterilisation of allocated sites;
- No significant adverse effect on existing uses;
- Development should not compromise acceptable health and safety standards;
- Consistency with national planning policy, other LDP policies and Supplementary Guidance.

> Policy RE1 'Renewable Energy' – the Council confirms *its "commitment to delivering renewable energy developments that contribute to the sustainable development of Shetland. Proposals for renewable energy developments will be supported where it can be demonstrated that there are no unacceptable impacts on people, the natural and*

water environment, landscape, historic environment and the built environment and cultural heritage of Shetland".

3.5.5 The LDP written statement continues in support of this policy to set out the Scottish Government's targets to reduce emissions (note these have now been substantially updated since the LDP was adopted) and notes that "*Development Plans have a duty to contribute to sustainable development and encourage zero and low carbon developments*". Further, it is noted that "*Shetland demonstrates a number of strengths that support the development of renewable technologies and the Plan seeks to support these opportunities ensuring that Shetland's renewable energy potential is optimised*".

3.5.6 These policies, whilst somewhat dated, are considered consistent with the over-riding policy themes and Spatial Strategy stated in NPF 4. There are considered to be no incompatibilities in policy or requirements between the two documents relative to the Proposed Development, rather the position is reinforced within NPF 4 which provides even stronger support for delivery of grid transmission which supports renewable generation and helps deliver net zero and emissions reductions.

3.6 LDP Policy Appraisal

General

3.6.1 It is considered that the key planning matters to be considered for the determination of the application, with reference to key LDP policies are as follows:

Strategic Importance of the Site

3.6.2 It has been explained that the delivery of the proposed standby solution forms a critical part of the wider 132/33kV GSP delivery which in turn is a key element within the wider transmission and security of supply proposals for Shetland to connect to the main GB link. The proposal provides the critical storage and standby facility to support the GSP link between the distribution and transmission networks which in turn enables increased capacity and enhanced security of supply. The proposals fall just outwith the definition of 'National Development' within NPF4 by virtue of being of less than 50 MW capacity. However, when considered as a part of the overall electricity grid upgrade and enhancement project being delivered for Shetland, the Proposed Development is of strategic importance for the Islands.

3.6.3 The design and location of the infrastructure is critical and utilises allocated industrial land in close proximity to existing and proposed cabling and overhead line infrastructure, therefore minimising re-routing and associated wider disruption. The equipment has been designed to minimise noise and visual intrusion.

3.6.4 The development of such critical infrastructure at a strategic location in the growing transmission network is a key planning consideration. The maintenance and capacity of such infrastructure is essential for supply and to ensure efficient transmission of increasing sources of renewable generation central to the delivery of Net Zero emission reduction targets. This matter is further referenced below in the context of the latest Scottish Government policy pronouncements on Net Zero and the climate emergency.

3.6.5 The current Shetland LDP does not provide specific policy directly pertinent to the consideration of the Proposed Development for electricity infrastructure, but the industrial nature of the proposal is consistent with the LDP land use allocation. NPF4 provides clear support for electricity grid upgrade and enhancement and is founded upon the principles of delivering Net Zero and sustainable places in line with NPF4's Spatial Strategy.

3.6.6 The key consideration in terms of proposed use relative to LDP policy can be read within Policy RE1 which provides support for renewable energy proposals. The Proposed Development seeks to facilitate the renewable agenda by enabling transmission and secure supply of renewable energy capture on Shetland and upgrading the transmission and

distribution network to benefit current and future developments and supply locally and nationally. Whilst Policy RE1 does not seek to deal with the transmission infrastructure directly this is a core element of the overall Net Zero and renewables delivery agenda and is an essential component thereof. As such the Proposed Development is considered consistent and supported by Policy RE1.

3.6.7 The strategic importance and need for the development is therefore clear and is considered to be a matter that should be afforded substantial weight as supported by both NPF4 and the LDP.

Impact on the Environment, Siting and Design

3.6.8 The LDP provides support for development where there is a demonstrated need in appropriate locations led by allocations and by way of specific policies.

3.6.9 The Proposed development is located within **Local Plan allocation LK006** (industrial land) and as such the principle of use is therefore supported.

3.6.10 Policies GP1 and GP2 provide more specific general guidance on how proposals will be assessed in terms of their design and potential impacts socially and environmentally. Underlying these presumptions is detailed topic specific policies which provide the basis upon which key issues such as potential impact on the historic environment assets, or natural heritage assets will be assessed and considered.

3.6.11 The potential effects of the development on a range of other environmental issues have been given consideration and are reported within the accompanying summary Environmental Appraisal. As the location of the Proposed Development largely falls within the existing GSP and Development Platform site boundaries, both developments which have been fully assessed and permission granted, the findings of studies undertaken to support these proposals have been relied upon to inform assessments for the current application. A summary of findings and confirmation of additional assessments or considerations are summarised below for completeness.

3.6.12 No significant adverse effects have been identified.

3.6.13 Given the site's allocated status as an industrial land opportunity and its adjacency and direct linkage to existing consents for the GSP and development platform upon which it will sit the use is compatible with its surroundings and no designations or allocations that could restrict the operation or development as proposed are identified within studies undertaken.

3.6.14 The two main considerations for the Proposed Development are noise and transport. A Noise Impact Assessment (NIA), and Construction Traffic Management Plan (CTMP) have been prepared and are submitted as part of the application. A summary of each is provided within the EA. The key findings, relative to planning policy and effects are provided below.

Noise

3.6.15 The NIA identifies the new sound sources the Proposed Development will introduce to the area with the dominant sound sources considered as 160 liquid-cooled battery cubes and 22 inverter/transformer units. The nearest noise sensitive receptors (NSRs) are residential properties at varying distances to then north east and south. The closest residential receptors is approximately 300 m to the south of the nearest noise emitting plant.

3.6.16 Noise modelling was completed taking account of the measured background noise levels at the Site. An acoustic barrier has been included in the design to reduce emissions levels at NSRs. The barrier has been modelled at a height of 4m and would be positioned along the eastern and southern boundaries. Noise from the adjacent GSP, under construction, has been accounted for within modelling.

3.6.17 The modelling concluded that the noise from the Proposed Development, together with the noise from the adjacent GSP is expected to have no adverse impact on any nearby NSR.

3.6.18 It is proposed that a condition is attached to any consent to control noise output and to protected residential amenity such that the rating level from the operation of the Proposed Development shall not exceed 5 dB above background sound levels as measured or calculated at the nearest occupied residential NSR. This is consistent with British Standard Best Practise and the principles of the LDP in requiring protection of amenity and appropriate assessment thereof.

Transport

3.6.19 A Construction Traffic Management Plan (CTMP) for the Proposed Development is submitted as part of the SEIR. Construction is predicted to generate approximately 79 vehicle movements per day at the peak of construction, expected in month 2. An estimated 45 two-way HGV movements per day are expected. A further 34 trips are created by construction staff in cars and light goods vehicles. Total traffic increase on the nearby A970 would be no more than 0.6%. Such an increase, due to construction, is not significant and impact is therefore assessed as negligible.

3.6.20 Traffic management procedures are proposed which replicate the outline Construction Environmental Management Plan (CEMP) submitted in support of the planning application. The procedures would ensure safe operation of the approach route to the Site during construction. Determination of the final details of the procedures would occur once the Contractor has been appointed and can be secured via an appropriately worded condition.

3.6.21 The Proposed Development will not be manned once operational and as such traffic associated within the use at this stage is minimal, estimated to be approximately two trips per week. The impact thereof is negligible.

3.6.22 The assessment and proposed approach to traffic management associated with the Proposed Development is consistent with LDP policy and with the approach taken and approved with the adjoining GSP and platform developments currently under construction on the adjoining land.

3.6.23 **Other Environmental Topics**

3.6.24 **Flood Risk and Drainage** – a Flood Risk Assessment (FRA) for the development platform was undertaken by Mott MacDonald in September 2022 and an FRA Report and Drainage Strategy were submitted in support of the platform application. The FRA concluded that the Site is not at risk of fluvial flooding and that with the implementation of proposed SUDS features there is no significant risk of pluvial flooding. It was recommended that critical equipment levels for any new development on the platform should be constructed at least 0.4m above ground level.

3.6.25 The Proposed Development would be constructed on the development platform and is designed in line with these parameters. No new sources of flood risk will be introduced as a result of the development proposal. There would therefore be no effect on flood risk as a result of the Proposed Development. The approach to drainage and flooding has been assessed and designed such that it is considered wholly consistent with Policies WD1, 2 and 3 of the LDP

3.6.26 **Archaeology and Cultural Heritage** – A Heritage Assessment of the development platform area was completed as part of the platform application submission. The report concluded that there is limited potential archaeological deposits and that the potential for these to have survived is low to negligible. Notwithstanding the findings of the assessment a condition on the platform consent requires a Written Scheme of investigation to be in place for the site.

3.6.27 The Proposed Development does not entail intrusive works other than a short circa 20 m stretch of buried cable to connected the BESS with the GSP. Given this area will have been

subject to works to construct the GSP and the platform it is not considered any further archaeological works will be required to facilitate the Proposed Development. There are no other predicted effects on heritage receptors. The proposal is considered consistent with LDP policies HE4 and GP2, and NPF4 Policy 7.

3.6.28 **Ecology** – an ecological appraisal of the development platform proposal was undertaken in September 2022. No significant effects were identified as a result of that development. The installation of the BESS equipment on the development platform is not considered to give rise to any effect on ecological receptors on the Site or the surroundings. The buried cable connecting would be trenched within an area of semi-improved acid grassland of only local ecological importance and reinstatement of this feature would occur over time. Standard measures to protect any ecological interests (likely to be limited to potential for breeding birds) are set out in an Outline Construction Environmental Management Plan (CEMP) submitted in support of the application. The approach to the review of potential effects and provision of a CEMP is consistent with national and local policy.

3.6.29 **Landscape** – a scheme of landscape planting is approved as part of the consent for the platform which includes natural grasslands and minimal tree planting around the platform of an extent and mix to be agreed with SIC. The Proposed Development would comprise a set of industrial structures in-keeping with the prevailing character of the area, as an industrial area.

3.6.30 **Sustainable Urban Drainage (SUDs)** has been addressed within the platform application and no further works are required in relation to the Proposed Development constructed on the delivered development platform.

3.7 Development Plan Conclusion

3.7.1 The proposals form an important part of the ongoing upgrade to the transmission network infrastructure for the Shetland Islands. The environmental impact of the development has been fully assessed and no significant effects are identified. In light of the main civils and earthworks being undertaken by SHEPD and the proposed development being for works from above platform level only, the scope for further unidentified environmental effects is considered low.

3.7.2 The need for the Proposed Development is clear and important, providing support and critical back up to the increased infrastructure capacity required to meet the committed renewables' connection. As part of the wider upgrade and enhanced capacity to the network, there is a requirement to secure safe and efficient supply of energy to customers and to meet Net Zero targets nationally. This proposal seeks to deliver a further important element the grid upgrade in this location and will deliver security of supply and standby facilities.

3.7.3 The proposed design solution has been developed in response to the findings of environmental and technical appraisals to ensure that the development does not give rise to any unacceptable adverse effects. The Proposed Development is considered to be consistent with NPF 4 Policies 1, ,4,5, 7 and 11, including in its contribution overall to reduction in greenhouse gases and drive to deliver net zero, and LDP Policies GP2 and GP3 in terms of general requirements and design and does not conflict with any adopted environmental policy or provision. The opportunities for specific BNG enhancement are limited on site due to the nature of the proposals – infrastructure on a completed earthworks platform constructed by others, and as such we would promote that it is appropriate to set aside that provision in these circumstances.

3.7.4 Based on the above appraisal, the effects of the Proposed Development have been satisfactorily addressed and the proposals are consistent with the Development Plan allocation and policies. The design approach is well considered and provides for an appropriate development and site which will deliver this key infrastructure. It is considered the Proposed Development is acceptable and accords with Development Plan when read as a whole.

4. Do Material Considerations Indicate Otherwise?

4.1 Introduction

4.1.1 Having established that the Proposed Development would be consistent with the Development Plan, it is necessary to pose the questions –

> are there material considerations that determine a decision should be made contrary to the Development Plan? or,

> do the relevant material matters further support the position that the proposed development should be approved?

4.2 Energy Policy

4.2.1 This section refers to the relevant energy policy for Scotland and the UK. Government renewable energy policy and associated renewable energy and electricity targets are important considerations. It is not necessary for new Government policy, where relevant, to find explicit expression in national planning policy for it to be or become a material consideration.

4.2.2 The weight given to any policy, subject to taking a reasonable and rational approach, is a planning judgement and a matter for the decision maker.

4.2.3 The urgent need for electricity infrastructure to enable an increase security of supply and facilitate an increased ability to capture and transmit renewable energy technology is supported through a number of national planning and energy policy documents. The proposed development must therefore be considered against a background of material UK and Scottish Government energy and climate policy and legislative provisions, as well as national planning policy and advice. These taken together provide very strong support for the development.

4.2.4 The proposed development would make a valuable contribution to help Scotland meet its renewable electricity production targets, while supporting emissions reduction to combat global heating in the current Climate Emergency.

4.2.5 This imperative has only increased since a 'climate emergency' was declared by the Scottish First Minister in April 2019, in line with the recommendations made by the Committee on Climate Change CCC (2019) 'net zero' publication. Furthermore, the drive to attain net zero emissions is now legally binding at the UK and Scottish Government levels by way of amendments to the Climate Change Act 2008 and in Scotland with the provisions of the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.

4.2.6 It is considered that increased weight can be given to benefits the Proposed Development would help deliver on the basis of the new material considerations that have arisen within a number of very recent national policy statements, including the publication in January 2023 of '**The Draft Energy Strategy and Just Transition Plan'** which will replace the previously published 2017 Energy Strategy.

4.2.7 The Ministerial Foreword of the draft strategy states:

"*The imperative is clear: in this decisive decade, we must deliver an energy system that meets the challenge of becoming a net zero nation by 2045, supply safe and secure energy for all, generate economic opportunities, and build a just transition…*

The delivery of this draft Energy Strategy and Just Transition Plan will reduce energy costs in the long term and reduce the likelihood of future energy cost crises.

It is also clear that as part of our response to the climate crisis we must reduce our dependence on oil and gas as that Scotland is well positioned to do so in a way that ensures we have sufficient, secure and affordable energy to meet our needs, to support economic growth and to capture sustainable export opportunities.

***For all these reasons, this draft Strategy and Plan supports the fastest possible just transition for the oil and gas sector in order to secure a bright future for a revitalised North Sea energy sector focused on renewables.*"**

4.2.8 The Foreword adds that the draft Strategy sets out key ambitions for Scotland's energy future including:

- More than 20 GW of additional renewal electricity on and offshore by 2030.
- Accelerated decarbonisation of domestic industry, transport and heat.
- Generation of surplus electricity, enabling export of electricity and renewable hydrogen to support decarbonisation across Europe.
- Energy security through development of our own resources and additional energy storage.
- A just transition by maintaining or increasing employment in Scotland's energy production sector against a decline in North Sea production.

4.2.9 Overall, the energy policy framework is a very important consideration and one that should attract great weight in the balance of factors in the determination of the application..

4.2.10 The function and benefits of the Proposed Development should be seen in the context of the current Climate Emergency– the infrastructure would help address the issue of global heating and very challenging 'net zero' targets and moreover, would deliver economic benefits at a time of economic recovery.

4.2.11 There are a number of key zero carbon targets and dates as set out in **Table 4.1** below.

Table 4.1: Key Zero Carbon Targets

Year	Target	Summary	Current Position
2050	Net Zero in the UK	Means no net carbon emissions in UK. Given there will be some residual emissions remaining (e.g. from agriculture) therefore an equal amount of carbon removal will be required by means such as carbon capture, storage or usage.	In 2021 total greenhouse gas emissions were 47.3% lower than they were in 1990[3].
2045	Net Zero in Scotland	Scotland has already largely decarbonised electricity production, therefore the primary challenge is to replace fossil fuels used in industry, heating of buildings and transport, which will mostly require substitution of fossil fuels with zero carbon electricity, meaning a big expansion of generation, transmission, distribution and supply of renewable energy.	The Scottish greenhouse gas account 'GHG Account' reduced by 58.7% between the baseline period and 2020[4].

[3] Department for Business, Energy & Industrial Strategy, 2021 UK Greenhouse Gas Emissions, National Statistics (2022).
[4] Scottish Government, Official Statistics, Scottish GHG Emissions 2020, (June 2022).

Year	Target	Summary	Current Position
2035	Zero Carbon Electricity in the UK	The UK Government target is for all electricity in 2035 to be generated zero carbon, i.e. with no unabated fossil generation.	In 2021 fossil fuels generated 45% of UK electricity[5], hence a large increase in renewables is required for this target.
2030	50% renewable energy in Scotland	Renewable energy generation to account for 50% of energy demand across electricity, heat and transport. This will mean a significant expansion of renewable energy sources and associated needs for energy storage, flexibility and stability services.	Total Scottish energy consumption from renewables was 26.7% in 2020[6].
2030	75% Interim Emissions Reduction Target in Scotland	Key interim target as set out in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. 75% reduction in emissions lower than the baseline of 1990 levels.	The Scottish greenhouse gas account 'GHG Account' reduced by only 58.7% between the baseline period and 2020[7].

4.2.12 The trajectory, in terms of the scale and pace of action to reduce emissions, is steeper than before and it is essential that rapid progress is made through the 2020s. The rate of emission reductions must increase otherwise the legally binding target of an interim 75% reduction of GHG emissions by 2030 will not be met.

4.3 Conclusions on Material Considerations

4.3.1 The proposed development would make a valuable contribution as part of wider decarbonised grid network infrastructure to help Scotland and the UK attain Net Zero, security of supply, network resilience and related socio-economic objectives. It is submitted that significant weight should be given to this contribution when weighing the need for the development and its identified effects within the planning balance. The proposal is consistent with the wider energy policy framework and this is an important material consideration with further supports the position that the Proposed Development should be approved.

[5] Department for Business, Energy & Industrial Strategy, UK Energy in Brief, National Statistics (2022).
[6] Scottish Government, Energy Statistics for Scotland, Q2 2022 Figures (September 2022).
[7] Scottish Government, Official Statistics, Scottish GHG 2020, (June 2022).

5. Conclusions & Recommendation

5.1 Conclusions

5.1.1 The answers to the key questions posed are:

> The Proposed Development is consistent with the relevant policies of the Development Plan and with the plan when read as a whole.

> The relevant material considerations further support the position that the Proposed Development should be granted planning permission.

5.1.2 The Proposed Development has been demonstrated to be in accordance with the Development Plan and wider UK and Scottish energy policy.

5.1.3 The Proposed Development is required to strengthen the security of supply and capacity of the existing main transmission system providing an important standby solution to the grid connection to the Shetland Islands. The overall transmission and distribution project being delivered for Shetland, which this proposal is part of, enables the transmission of extensive renewable generation to the main Grid network and facilitates connection of further low carbon generation to the Transmission system satisfying obligations to deliver an economic, efficient and coordinated Transmission system for Net Zero. Furthermore, the grid connection with the addition of the standby BESS solution further enables the removal of reliance on unsustainable diesel generators and other sources of energy generation relied upon currently for energy supply on the Shetland Islands.

5.1.4 The development forms a core part of a strategically important whole system proposal construct a 600MW HVDC link between Shetland and the mainland GB grid, aiming to support development of a significant amount of wind generation on and in the vicinity of the Islands, and accommodate security of supply to the Shetland distribution network.

5.1.5 The development is therefore a strategically important element of national transmission infrastructure, essential to support the capture of the energy production of renewable energy generators in the area and to reinforce existing transmission infrastructure for supply. Both these factors are important material considerations supported at the national and local policy levels.

5.1.6 The proposals are consistent with local policy in that the development is located on an allocated industrial site where the use is compatible with the allocated land use and its surroundings. The design and delivery of the Proposed Development is sensitive to its environs and no unacceptable effects are considered to arise. The Proposed Development can confidently be regarded as “the right development in the right place”, with limited environmental effects and no issues that would outweigh the benefits. The development is located on a development platform already consented and under development. No further groundworks or disturbance are required to deliver the required infrastructure and service.

5.1.7 The delivery of this infrastructure will substantially assist in facilitating existing and future transmission of energy in the Islands and throughout the wider country to help the delivery of the net zero policy imperative. It is therefore concluded that the Proposed Development is in accordance with relevant policies, with the Development Plan overall, and that there are material considerations of considerable importance which further support the delivery of this key development within the electricity transmission network which will support and enable the Net Zero policy imperative. On this basis it is recommended that planning permission be granted for the Proposed Development, subject to appropriate conditions.

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