

Planning Application for a Proposed Battery Energy Storage System (BESS), Transformers, Substations and Associated Infrastructure

Land South of Barns Ness Terrace, Innerwick, East Lothian, EH42 1SE

Planning, Design and Access Statement

On behalf of Braxbess Ltd.

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1. Introduction

- 1.1. This Planning, Design and Access Statement has been prepared by Pegasus Group on behalf of Braxbess Limited ("the applicant") to accompany an application for consent under Section 36 of the Electricity Act 1989 (the Electricity Act) for the installation of a battery-based electricity storage scheme transformers, substations and associated development on land south of Barns Ness Terrace, Innerwick, East Lothian, EH42 ISE. The site location is provided in the submitted Location Plan ref. OO-BRANXTON -101 rev. N.
- 1.1.1. Battery storage technologies are essential to speeding up the replacement of fossil fuels with renewable energy. Battery storage systems will play an increasingly pivotal role to responding to electricity demands. Battery storage, or BESS are devices that enable clean energy from renewables, like solar and wind, excess to requirements to be stored and then released when the power is needed most, rather than being lost.
- 1.2. In 2020, a letter was issued by the Chief Planner regarding consents and variations to planning permission for energy generating ancillary uses. They highlighted that the Scottish Government considers battery installation, which stores electricity, is to be treated as a 'generating station'. Planning permission is needed for the construction of an electricity generating station. For generating stations which have a permitted capacity greater than 50MW, consent is also needed under Section 36 of the Electricity Act 1989 for the construction and operation of the generating station.
- 1.3. As part of the decision-making process, the Scottish Ministers will review whether the applicant has fulfilled the requirements placed upon them by Schedule 9 (3) of the Electricity Act. The decision will require an evaluation of Energy Policy, the relevant aspects of National Planning Policy and the statutory Development Plan.
- 1.4. The description of development is as follows:

"Proposed Battery Energy Storage System (BESS), Transformers, Substations and Associated Infrastructure."

The Applicant

1.5. The applicant, Braxbess Ltd., will be responsible for the development of the proposed battery energy storage facility at Innerwick, with EHD leading the project who manage over 4GW of renewable energy projects and work alongside a variety of organisations and funders.

Supporting Documentation

- 1.6. The following documents are submitted in support of the submission:
 - Completed application forms;
 - Covering Letter (Pegasus Group);
 - Screening Opinion of the Scottish Ministers;
 - Planning, Design and Access Statement (Pegasus Group);



- Landscape and Visual Assessment (Pegasus Group);
- Archaeology and Built Heritage Assessment (Pegasus Group);
- Habitats Regulations Assessment (BSG Ecology);
- Interim Ecological Impact Assessment Report (BSG Ecology);
- Construction Traffic Management Plan (Pegasus Group);
- Flood Risk Assessment (Pegasus Group);
- Drainage Statement (David R. Murray and Associates);
- Acoustic Design Specification (Ian Sharland);
- Fire Strategy Report (ABL); and
- Pre-Application Consultation Report (Pegasus Group).

1.7. The following plans are submitted in support of the submission:

Drawing Description	Drawing No.	
Topographical Survey	15930	
Site Location	00-BRANXTON -101 rev. N	
Fill & Cut Levels	00-BRANXTON -105 rev. E (sheets 1 to 4)	
Site Cross Sections	00-BRANXTON -106 rev. E (sheets 1 to 3)	
Fire Hydrant Cover	00-BRANXTON -107 rev. F	
Cable Route	00-BRANXTON -108 rev. C	
Site Layout	00-BRANXTON -109 rev. B	
Battery Containers	00-BRANXTON 301 rev. A	
Invertor	00-BRANXTON -302 rev. A	
Transformer Arrangement	00-BRANXTON -303 rev. A	
Customer Switchgear Container	00-BRANXTON -304 rev. A	



Customer Control Room	00-BRANXTON -305 rev. A
Auxiliary Transformer	00-BRANXTON -306 rev. A
Unclimbable Palisade Fence	00-BRANXTON -307 rev. B
132kV Substations	00-BRANXTON -309 rev. D Sheet 1 to 4
400kV SPT Substation	00-BRANXTON -310 rev. D
Water Storage Tank	OO-BRANXTON-312 rev. A
Pumping Station Container	OO-BRANXTON-313 rev. A;
Existing Services	00-BRANXTON -401 rev. E
Landscape Masterplan	P23-0094_EN_0001_S1 rev. B
Landscape Masterplan	P23-0093_EN_0001_S2 rev. B
Drainage	E12841 -8c
Indicative Levels	E12841 8c

Statement Approach

1.8. The development management issues relevant to the application proposal are discussed in this statement. The subsequent sections of this statement are divided into:

- Section 2 outlines the application site and the surrounding area;
- Section 3 details the development proposals;
- Section 4 discusses the relevant national and local planning policy;
- Section 5 contains a planning assessment of the development proposals; and
- Section 6 contains the conclusion of the report.

1.9. This Planning, Design and Access Statement will assess in detail all the planning aspects associated within the proposals for the application site. It will demonstrate that the proposals will allow for a straightforward connection to the grid which significantly limits its impact on the landscape and allows for highly effective delivery of stability services to the grid. This



statement is intended to provide the Scottish Ministers with sufficient information that is in accordance with national and local planning policies.



2. Site & Surroundings

Application Site

2.1. The site measures at approximately 20.58 ha in size and is located on land south of Barns Ness Terrace, Innerwick, East Lothian, EH42 ISE. The application site is depicted on the Site Location Plan (Reference OO-BRANXON-101 rev. N) submitted as part of this application. An aerial image of the site is included below at Figure 1.



Figure 1: Aerial Image of Site

- 2.2. The site is located within the administrative boundaries of East Lothian Council and is located approximately 20km east of the administrative centre of Haddington. The site is dominated by agricultural fields that are mostly dedicated to arable crops with a small portion of the site used for grazing. The four parcels of land are separated by a mix of fences, walls, and hedgerows.
- 2.3. In terms of the site surroundings, the village of Innerwick is situated north of the site. Barns Ness Terrace lies to the north of the site which serves the locality. To the east lies two scheduled monuments, Braidwood enclosure and Castledene enclosure, which are approximately within 1km east of the site boundary. The site also sits along the periphery of a special landscape area and biodiversity site toward the south.
- 2.4. There is one main point of access to the site. The main access will be taken from the north east of the site from Barns Ness Terrace. The access off Barns Ness Terrace is the existing Innerwick Farm entrance which currently accommodates large farm vehicles and machinery.



This access will be used for construction and operational purposes. Construction access will be co-ordinated between the applicant and the Local Authority.

Site Context

- 2.5. The key site characteristics are detailed below:
 - According to Scotland's Soils map, the site is located on land capability for agriculture (LCA) Class 3.1 which is "Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common."
 - There is no specific risk of flooding for the site as identified on the Scottish Environment Protection Agency Flood Hazard and Flood Risk Information. According to Scottish Environment Protection Agency (SEPA), the site is not located in an area identified as at risk of flooding from coastal or fluvial sources and surface water flooding. Braidwood Burn and Thurston Mains Burn sit along the periphery of the site boundary in the south. It is an area predicted to have a high likelihood of river flooding.
 - The site is not located within an Air Quality Management Area (AQMA) nor is there one located in proximity.
 - The site is not subject to any national landscape designations. The Outer Firth of Forth and St Andrews Bay Complex which sits north of the site boundary along the coastline is designated as a Special Protection Area. Barns Ness Coast which also sits along the coastline is designated as a Site of Special Scientific Interest (SSSI). Both are situated approximately 4km north west of the site boundary.
 - There are no listed buildings within or immediately adjacent to the site. The nearest historic assets are two scheduled monuments, Braidwood enclosure and Castledene enclosure, which are approximately within 1km east of the site boundary.
 - The Innerwick Conservation Area lies within 300m north of the proposed development site. It is considered that the Conservation Area encompasses the older part of the village and parts of the surrounding farmland and woodlands that contribute to its setting. It is also considered that due to the enclosed nature of the application site, the proposals are not anticipated to impact the heritage asset, and the character and appearance of the Conservation Area and its setting would be preserved.

Planning History

2.6. Regarding the proposals now being considered, a letter requesting a screening opinion under Regulation 8 of the Town and Country Planning (Environment Impact Assessment (Scotland) Regulations 2017 to determine whether the production of an Environment Impact Assessment Report is required was submitted to the Energy Consents Unit (ECU) on 16th October 2023. At the time of writing this report, a formal written response was awaited. However, we conclude that EIA is not required for the proposal as no significant



environmental effects are likely and that the comprehensive submissions made as part of this application address the principal assessment matters.

- 2.7. A site history search has been undertaken for the application site. There does not appear to be any planning history on any of the parcels of land. In terms of the wider context, there appears to be applications relating to renewable energy such as onshore electrical transmission infrastructure north-west of the site boundary. Further details about the applications are as follows. We are aware of other renewable applications in the locality and the cumulative impacts of these applications together with the proposals at Braxbess are discussed later in this statement.
 - 23/01071/P Formation of a battery energy storage system facility and associated works for a temporary period of 25 years. **Pending Decision.**
 - 23/00616/PM Erection of 400KV substation and associated development, including associated temporary infrastructure including construction compounds and access road. **Pending Decision.**
 - 23/00162/PPM Planning permission in principle for electricity transmission infrastructure (substation or converter station) and associated development including buried cabling. **Pending Decision.**
 - 23/00004/PAN Proposed Battery Energy Storage System (Major Development). PAN deemed acceptable in May 2023.
 - 22/00852/PPM Planning permission in principle for a converter station and associated development including a landfall at Thorntonloch and connecting buried cabling, all in association with the Scottish Power Eastern Link 1 project, for a new subsea High Voltage Direct Current (HVDC) link. Granted Planning Permission in Principle in May 2023.
 - 22/00005/SGC Section 36 application for the construction and operation of an offshore generating station (the Berwick Bank Wind Farm). **Pending Decision.**
 - 21/01569/PM Construction of a 400 kilovolt (kV) gas insulated switchgear (GIS) substation and associated works. **Application withdrawn 25 July 2023.**
 - 19/00285/PM Variations of Conditions 4-12, 14-15 and addition of a condition relating to the method statement for the construction of the borehole within area S of planning permission 15/00634/PM to allow phased development works, in respect of the formation of onshore electrical transmission infrastructure between Thorntonloch and Crystal Rig II. Granted Permission.
 - 15/00634/PM Variations of Conditions 4, 7, 8, 9, 10, 11, 12, and 15 of planning permission 12/00922/PM to allow phased development works, in respect of the formation of onshore electrical transmission infrastructure between Thorntonloch and Crystal Rig II. Granted Permission.
 - 12/00922/PM Formation of onshore electrical transmission infrastructure between Thorntonloch and Crystal Rig II, comprising 12.3km of buried cable and new substation at Crystal Rig II. Granted Permission.



- ECU00000607 Crystal Rig Wind Farm (Phase IV). Consented in March 2021.
- ECU00003419 Eastern Link 400kV Overhead Line Diversion. Consented in October 2023.
- ECU00004659 Branxton Energy Storage Facility. Pending Decision.

3. Development Proposals

3.1. This section provides a key overview of the development proposals.

Background, Needs and Benefits

- 3.2. The world's first integrated national grid opened in 1935 with several grid areas created to cover the UK. Rather than having a host of small power stations, these grid areas allowed energy supplies to become more accessible, cheaper, and stable. As the 20th century wore on, majority of power was still powered by coal. Remaining nuclear and coal power plants are in the process of reaching the end of their design lives or reducing in capacity.
- 3.3. The Distribution Network Operator (DNO) is responsible for the operation of the local grid network. The DNO is licensed to distribute electricity provided by the Scottish Power Transmission (SPT) network. They are responsible for the transmission of electricity in central and southern Scotland. SPT take electricity generated from power stations and various other energy sources and transport it through their vast transmission network. These systems are crucial to the delivery of the Government's renewable energy objectives.
- 3.4. There is a requirement to deliver an increasing amount of clean energy through renewable technologies, as acknowledged by the UK Government in the Energy White Paper in 2020. The Climate Change (Scotland) Act 2019 sets targets for the reduction of Scotland's emission of all greenhouse gases to net-zero by 2045. The First Minister of Scotland highlighted that the climate emergency is at the forefront of the Scottish Government programme going forward. The 2021 22 Programme states:
- 3.5. "Energy and industry must be at the forefront of our progress towards net zero securing the necessary emissions reductions, while driving investment and innovation in new technologies across the supply chain and, in turn, creating new, good and green jobs. To help drive that innovation and transition forward, the Scottish Government is investing £2 billion across 2021-22 to 2025-26 in large-scale, low carbon infrastructure."
- 3.6. The biggest challenge facing renewable energy is that if it is not directly fed into the grid or used immediately, it is lost. Capturing excess energy that is ready to use is a fundamental challenge to ensure that all renewable energy systems can efficiently be given the opportunity to capture and store energy.
- 3.7. A battery storage system consists of batteries that can store energy and are able to release or absorb energy from the power network. Being able to absorb and release energy, the battery storage at Innerwick can be used to contribute towards the frequency balancing services, where the power is being generated or absorbed statically or dynamically depending on the system frequency. When there is not enough power, batteries are discharged to balance under frequency preventing black and brown outs. To balance over frequency batteries are charged to prevent dangerous spikes across electricity infrastructure.
- 3.8. In terms of these Development Proposals, a battery storage system is to be treated as a generating station, as per the Chief Planners letter in 2020. Battery storage can help curb climate change by decreasing emissions from electricity and heating needs. Having battery storage systems in place allows for more renewable energy systems to be in place in the future. This would initiate higher levels of energy security through integration of locally



produced energy which is stored and released to the grid. Ultimately, more of these systems will help to reduce the impacts of climate change and meet governmental targets.

Proposal

- 3.9. The applicant is seeking to construct and operate a battery energy storage system (BESS) of up to 650 megawatts (MW). The proposed BESS will be able to store, release or absorb energy from the electricity network. It will supply energy security to the local network during times of peak demand.
- 3.10. The site boundary for the application allows for all development associated with the proposed development including connection to the grid and landscaping features.
- 3.11. There is one main point of access to the site. The main access will be taken from the north east of the site from Barns Ness Terrace. The access off Barns Ness Terrace is the existing Innerwick Farm entrance which currently accommodates large farm vehicles and machinery. This access will be used for construction and operational purposes. Construction access will be co-ordinated between the applicant and the Local Authority.
- 3.12. A cable route will be subject to further consideration by SPT and will be subject to a separate application. The exact point of connection is to be confirmed by SPT.
- 3.13. The site is to be decommissioned after 40 years when it is no longer operational and restored to its former status.
- 3.14. The associated equipment would comprise the following. Further details can be found on the submitted Site Layout ref. OO-BRANXTON -109 rev. B and the submitted Landscape Masterplan.

Battery Site:

- 300 battery storage units battery units arranged in rows 7.5m in length, 2.8m wide, and 3.1m in height;
- Switchgear containers 20m in length, 3.5m wide and 4.1m in height;
- Inverters and transformers local to the batteries will be 2.8m in length, 2.3m wide and 2.9m in height;
- Water storage tanks local to the batteries will be 13.7m in width and 4.7m in height;
- 3 substations and substation equipment, with some elements being in the region of 11.4m in height. Further details are as follows:

<u>132kV S/S:</u>

- Control room 11.4m in length, 3.3m wide and 3m in height;
- 132kV transformers 11m in length, 9m wide and 5.7m in height;



- Removable panels;
- 132kv switch house enclosure 11m in length, 15m wide and 8.2m in height;
- Auxiliary transformer 2.6m in length, 2.5m wide and 2.8m in height; and
- 2.4m high palisade fence with secured access gate.

<u>132Kv S/S:</u>

- Control room 15.5m in length, 3.3m wide and 3m in height;
- 132kV transformers 12m in length, 9m wide and 5.7m in height;
- Removable panels;
- 132kV switch house enclosure 19m in length, 15m wide and 8.7m in height;
- Auxiliary transformer 2.6m in length, 2.5m wide and 2.8m in height; and
- 2.4m high palisade fence with secured access gate.

400kV S/S to be developed by SPT:

- Auxiliary transformer 15.1m in length, 9.2m width and 11.4m in height;
- Customer control room 2.5m in height; and
- 3m high palisade fence.

Other Details:

- Landscape features around the site will include native trees and hedgerow planting;
- Water storage tanks; and
- CCTV and light poles to be 5m high.
- 3.15. As part of the proposal, the applicant is open to discussions regarding entering a developers charter with the local community and also other developers as may be appropriate.

Pre-Application

3.16. A Pre-Application Advice Request for the proposed Battery Energy Storage System (BESS) and Associated Infrastructure was submitted to the ECU on 16th October 2023. An initial response was received on 16th October 2023 from the ECU advised the pre-application is currently pending while a screening opinion is sought from ECU.



3.17. A screening opinion was submitted to the ECU at the same time on 16th October 2023. At the time of writing, no response had been received, although the applicant's position is that an EIA is not required.

Public Consultation

- 3.18. Whilst there are no statutory pre-application consultation procedures for Section 36 applications under the Electricity Act 1989, the minimum expectation is that applicants carry out pre-application consultation. The applicant is asked to set out in advance to ECU how they will carry out pre-application consultation. Applicants for section 36 consents are asked to submit a pre-application consultation report with their application for proposed developments. This is provided within this application, although a summary is provided below.
- 3.19. The proposed plans were made be available to view on a website <u>www.braxbessstorage.co.uk</u>. An initial consultation exhibition was held on 10th October 2023 with all relevant consultation materials present. The website was updated to reflect the current proposals at the time of the second round of consultation.
- 3.20. Feedback from the initial consultation was collated and reviewed. This allowed for changes to the proposed development where appropriate, alongside the design iteration of the scheme by the applicant. This is set out in the Pre-Application Consultation Report. A second consultation exhibition was held on 16th November 2023 with all relevant consultation materials present, and an updated website.
- 3.21. Additionally, virtual meetings were held with the Chair of East Lammermuir Community Council (also in person) and the appropriate Member of Scottish Parliament. The applicant has also engaged with and attended stakeholder meetings arranged by East Lothian Council for members of the council, developers, members of the local community and stakeholders.

Access

3.22. There is one main point of access to the site. The main access will be taken from the north east of the site from Barns Ness Terrace. The access off Barns Ness Terrace is the existing Innerwick Farm entrance which currently accommodates large farm vehicles and machinery. This access will be used for construction and operational purposes. Construction access will be co-ordinated between the applicant and the Local Authority.

Connection to Local Electrical Network

3.23. It is proposed to connect the BESS to the nearby planned Scottish Power Transmission (SPT) Branxton Substation. A planning application for this substation has been submitted to East Lothian Council and is currently under consideration under ref. 23/00616/PM. The proposed site is in close proximity to this substation, which is a nationally significant proposal. Moreover, SPT have statutory rights for cable routes. Thus, the benefits that would flow from this proposal are viable. An indicative cable route can be found in the submitted drawings package (ref: 00-BRANXTON-108 rev. B).



3.24. The cable route is likely to be underground, running under the burn and resurfacing near the proposed Branxton Substation. Landscaping has been considered accordingly. However, this will be assessed as part of a separate application, if required, to be submitted by SPT.

Site Management

3.25. The Construction Traffic Management Plan that is submitted as part of this application sets out the number of traffic movements, construction period and mitigations.



4. Design and Access Matters

<u>Use</u>

4.1. The proposal is for the installation of a battery-based electricity storage scheme on land South of Barns Ness Terrace, Innerwick, East Lothian, EH42 ISE. The description of development is as follows:

"Proposed Battery Energy Storage System (BESS), Transformers, Substations and Associated Infrastructure."

<u>Amount</u>

4.2. The site comprises approximately 20.58 ha in size and is shown on the enclosed Site Location ref. OO-BRANXTON -101 rev. N. The detailed plans for the site are submitted alongside this Planning, Design and Access Statement.

<u>Access</u>

The main access will be taken from the north east of the site from Barns Ness Terrace. The access off Barns Ness Terrace is the existing Innerwick Farm entrance which currently accommodates large farm vehicles and machinery. This access will be used for construction and operational purposes.

- 4.3. The associated equipment would comprise:
 - Battery storage units;
 - Switchgear containers;
 - Inverters and transformers;
 - Substations and substation equipment;
 - Landscape features; and
 - Site fencing, access gate, CCTV and light poles.

An indicative cable route can be found in the submitted drawings package. The cable route is likely to be underground, running under the burn and resurfacing near the proposed Branxton Substation. Landscaping has been considered accordingly. However, this will be assessed as part of a separate application to be submitted by SPT.

- 4.4. The site is to be decommissioned after 40 years when it is no longer operational and restored to its former status.
- 4.5. Further details are provided on the Site Layout ref. OO-BRANXTON -109 rev. B.



5. Planning Policy

- 5.1. Scotland's planning system is plan-led. The 'purpose of planning' is "to manage the development and use of land in the long-term public interest". Development plans set out how places will change into the future, including the long-term vision for where development should and shouldn't happen.
- 5.2. This section sets out the relevant policies of the adopted Development Plan, any material considerations of relevance policies of the adopted Development Plan, any material considerations of relevance to the determination of this planning application and any emerging local plan policy.
- 5.3. Significant changes to development planning were made by the Planning (Scotland) 2019 Act. The statutory Development Plan comprises:
 - The National Planning Framework 4 (adopted 13 February 2023)
 - East Lothian Local Development Plan 2018 (adopted 27 September 2018)

National Planning Framework 4

- 5.4. The National Planning Framework 4 (NPF4) was adopted on 13th February 2023. NPF4 sets out Scotland's spatial principles, regional priorities, national developments and national planning policies which reflect Scottish Ministers' priorities for the development and use of land. NPF4 also relates to preparation of development plans, development design and determination of planning applications and appeals. NPF4 plays a key role in supporting the delivery of Scotland's national outcomes and the United Nations Sustainable Development Goals.
- 5.5. Following the approval by the Scottish Parliament of National Planning Framework 4 (NPF4) on 11 January 2023, the Chief Planner provided advice on NPF4 becoming part of the statutory 'development plan' alongside local development plans (LDPs). The intention for this advice being to support consistency in decision making ahead of new style LDPs being in place.
- 5.6. This means that former Strategic Development Plans, National Planning Framework 3 and Scottish Planning Policy are superseded. Thus, NPF4 forms part of the statutory development plan relevant to the consideration of this development proposal and carries significant weight.
- 5.7. All planning applications in Scotland must be determined in accordance with the provisions of NPF4 and the relevant Local Development Plans unless material considerations indicate otherwise. If there is any inconsistency with NPF4 policies and an LDP adopted before 13 February 2023, NPF4 will take precedence. The Scottish Government expects new LDPs in future to be more place-based. National policies relevant to the site are outlined in NPF4.
- 5.8. Under Annex B: National Development Statements of Need, NPF4 states that *"national developments are significant developments of national importance that will help to deliver our spatial strategy."* Strategic Renewable Electricity Generation and Transmission Infrastructure is one of eighteen national developments within NPF4 that would support the delivery of the spatial strategy.



Given the size of this proposal (exceeding 50MW), this proposal qualifies as a national development and would need to gain consent under Section 36 of the Electricity Act 1989 (the Electricity Act). The scheme therefore attracts significant weight from the policies within NPF4.

- 5.9. The following NPF4 policies are considered applicable to the proposed development:
- 5.10. **Policy 1: Tackling the climate and nature crises –** states proposals should give significant weight to global climate and natural crisis.
- 5.11. **Policy 3: Biodiversity** states development should contribute to enhancing biodiversity, integrating nature-based solutions where possible. Major proposals should demonstrate how they will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. Any potential adverse impacts should be minimised through careful planning and design.
- 5.12. **Policy 4: Natural places** notes how development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported. Point (d) states development proposals that affect a site designated as a local nature conservation site or landscape area in the LDP will only be supported where:

i. Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or

ii. Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.

- 5.13. **Policy 5: Soils** The policy intent is to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development. The Policy supports the generation of energy from renewable sources on prime agricultural land, or land of lesser quality that is culturally or locally important for primary use.
- 5.14. **Policy 7: Historic assets and places –** aims to protect and enhance the historic environment, including protecting heritage assets, listed buildings, conservation areas and scheduled monuments.
- 5.15. **Policy 11: Energy –** This policy seeks 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...' Part a(iii) specifically supports 'energy storage, such as battery storage and pumped storage hydro'.

Point (c) of the policy states development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities

Point (e) sets out a range of impacts which should be addressed through project design and mitigation. Not all are relevant to the proposed development, but includes impacts on communities and individual dwellings, such as residential amenity, visual impact and noise. Other impacts include landscape visual impacts, road traffic, biodiversity and trees.

5.16. **Policy 22: Flood risk and water management** – seeks to strengthen resilience to flood risk. Point (c) notes how development proposals are expected not to increase the risk of surface



water flooding, manage rain and surface water through SUDS and minimise areas of impermeable surfaces.

5.17. **Policy 23: Health and safety –** point (e) states development proposals that are likely to raise unacceptable noise issues will not be supported. The agent of change principle applies to noise sensitive development. A Noise Impact Assessment may be required where the nature of the proposal or its location suggests that significant effects are likely.

East Lothian Local Development Plan 2018

- 5.18. East Lothian Council adopted the East Lothian Local Development Plan 2018 in September 2018. The next Local Development Plan for East Lothian (LDP2) is in the early stages of preparation. However, it is not yet at an advanced enough stage to be a material consideration.
- 5.19. The following East Lothian LDP 2018 policies are considered applicable to the proposed development:
- 5.20. **Policy CH4: Scheduled Monuments and Archaeological Sites –** This policy states that where a proposed development might affect any Scheduled Monument or archaeological site (of known or suspected archaeological interest), the developer must undertake and make available to the planning authority a professional archaeological assessment and, if necessary, a field evaluation.
- 5.21. **Policy DC1: Rural Diversification –**This policy states that proposals for mineral extraction and renewable energy will be assessed against the other relevant policies of the Plan for agriculture, horticulture, forestry, infrastructure or countryside recreation developments.
- 5.22. **Policy DC9: Special Landscape Areas –** This policies indicates that Development within or affecting Special Landscape Areas will only be permitted where it accords with the Statement of Importance and does not harm the special character of the area or the public benefits of the development clearly outweigh any adverse impact and the development is designed, sited and landscaped to minimise such adverse impacts.
- 5.23. **Policy DP1: Landscape Character –** This policy states that all new developments, with the exception of changes of use and alterations and extensions to existing buildings, must:
 - Be well integrated into its surroundings by responding to and respecting landform, and by retaining and where appropriate enhancing existing natural and physical features at the site, including water bodies, that make a significant contribution to the character and appearance of the area and incorporate these into the development design in a positive way;
 - Include appropriate landscaping and multifunctional green infrastructure and open spaces that enhance, provides structure to and unifies the development and assists its integration with the surroundings and extends the wider green network where appropriate.



- 5.24. **Policy DP2: Design –** This policy indicates that the design of all new development must be appropriate to its location. With regards to these proposals, this includes the following:
 - Ensuring privacy and amenity, with particular regard to levels of sunlight, daylight and overlooking, including for the occupants of neighbouring properties;
- 5.25. Be able to be suitably serviced and accessed with no significant traffic or other environmental impacts.
- 5.26. **Policy NH5: Biodiversity and Geodiversity Interests, including Nationally Protected Species –** This policy states that developers must demonstrate, where relevant, how impacts on biodiversity and geodiversity have been addressed as part of their proposals. It is highlighted that proposals should indicate how they have had regard to the mitigation hierarchy, the potential for incorporating biodiversity or geodiversity features within the site into the proposal in a positive way where appropriate, and for providing on-site or off-site enhancements.
- 5.27. **Policy NH7: Protecting Soils –** This policy indicates that proposals for renewable energy generation or mineral extraction on prime quality agricultural land may also be acceptable where provision is made for restoration of the land to its former status and if soil will be reused where feasible.
- 5.28. **Policy NH11: Flood Risk** This policy states that all relevant development proposals will be assessed based on the probability of a flood affecting the site and the nature and vulnerability of the proposed use. Flood Risk Assessments will normally be required for proposals within the medium to high-risk category of flood risk.
- 5.29. **Policy NH13: Noise** This policy states that the impact of noise will be taken into account when assessing relevant development proposals, particularly those that are close to or could become a source of noise. A noise impact assessment will be required where the proposed development may cause or exacerbate existing noise levels or be sensitive to levels of noise in the area. The assessment must specify suitable and appropriate mitigation measures that would make the proposal acceptable. Development proposals that would either result in or be subject to unacceptable levels of noise will not be supported.
- 5.30. **Policy OI2: Torness Consultation Zone** This policy states that all relevant planning applications received within a 3km radius of the Torness Generating Station will be referred to the Office Nuclear Regulation for its observations.
- 5.31. **Policy PROP EGT2: Torness Power Station** This policy highlights that Torness Power Station is expected to remain operational until at least 2030 and continues to be safeguarded for power generation. If power generation ceases during the lifetime of this LDP, the council will seek to facilitate necessary works associated with the site's decommissioning and restoration, including mitigation of impacts on communities and the character of the local area.
- 5.32. **Policy PROP EGT3: Forth Coast Area of Co-ordinated Action –** The Council supports the principle of electricity grid connections on the Forth coast from Cockenzie to Torness. Proposals must be accompanied by project-specific information to inform a Habitats Regulations. In order to facilitate off-shore energy generation, the following criteria need to be met:



- infrastructure is combined wherever possible;
- connection to existing infrastructure at Cockenzie and Torness is prioritised;
- and proposals must not have an adverse effect on the integrity of the Firth of Forth SPA or any other European site either alone or in combination with other projects and plans.
- 5.33. **Policy T1: Development Location and Accessibility** This policy states that new developments shall be located on sites that are capable of being conveniently and safely accessed on foot and by cycle, by public transport as well as by private vehicle, including adequate car parking provision in accordance with the Council's standards. The submission of Travel Plans may also be required in support of certain proposals.
- 5.34. **Policy T2: General Transport Impact** This policy states that new developments must have no significant impact on Road Safety; The convenience, safety and attractiveness of walking and cycling in the surrounding area; Public transport operations in the surrounding area, both existing and planned, including convenience of access to these and their travel times; The capacity of the surrounding road network to deal with traffic unrelated to the proposed development; and Residential amenity as a consequence of an increase in motorised traffic.

The Electricity Act 1989

- 5.35. The Scottish Government set out its position on the granting of energy consents and related planning permissions in Scotland, to clarify current procedural expectations and its position on electrical 'storage' and the appropriate consenting regime for decision making, noting the respective roles of the Town and Country Planning (Scotland) Acts and the Electricity Act 1989 (the Electricity Act). In 2020, a letter was issued by the Chief Planner regarding consents and variations to planning permission for energy generating ancillary uses. The Scottish Government considers that a 'battery installation' generates electricity and is therefore to be treated as a generating station.
- 5.36. As a result, a battery installation should be treated as any other generating station for the purposes of deciding whether Section 36 consent is required for its construction and operation. The Government highlights that battery facilities which are to be constructed as extensions to existing electricity generating stations, should be considered under Section 36 of the Act 1989 where the combined output of the existing generating station and the proposed battery facility would exceed 50MW.
- 5.37. The principal planning statute in Scotland is the Town and Country Planning Act (Scotland) 1997 (the Planning Act). Section 57(2) of the Planning Act provides:
- 5.38. "On granting or varying a consent under section 36 or 37 of the Electricity Act 1989, the Scottish Ministers may give a direction for planning permission to be deemed to be granted, subject to any conditions (if any) as may be specified in the direction".
- 5.39. Schedule 9 of the Electricity Act 1989 sets out the environmental features which the decision maker must have regard to and identifies that mitigation must be considered. Sub-paragraph



1 is relevant to an applicant if they hold a License at the date the application is submitted. Sub Paragraph 1 (1) states:

"In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate, transmit, distribute or supply electricity;

(a) shall 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

(b) shall do what he 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."

5.40. Sub-paragraph 1 (2) applies to all applicants and refers to sub paragraph 1. Sub-paragraph 2 states:

"In considering any relevant proposals for which his consent is required under section 36 or 37 of this Act, the Secretary of State shall have regard to –

(a) the desirability of the matters mentioned in paragraph (a) of sub-paragraph (1) above; and

(b) the extent to which the person by whom the proposals were formulated has complied with his duty under paragraph (b) of that sub-paragraph."

5.41. Sub-paragraph 3 (1) gives advise that a developers should consider the following:

"In formulating any relevant proposals, a licence holder or a person authorised by an exemption to generate, distribute, supply, or participate in the transmission of electricity —

(a) shall 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

(b) shall do what he 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."

5.42. Under sub-paragraph 3(2), in considering proposals, the Scottish Ministers are to have regard to:

"(a) the desirability of the matters mentioned in paragraph (a) of sub - paragraph (1) above; and (b) the extent to which the person by whom the proposals were formulated has complied with his duty under paragraph (b) of the sub-paragraph."

5.43. This sets out a range of environmental matters to which the developer must assess and, if required, mitigate the effects of the proposed development on environmental matters. The Scottish Ministers will determine if an application takes into account the statutory duties in Schedule 9 of the Electricity Act and any other relevant material considerations and relevant aspects of the statutory development plan.



- 5.44. For the purposes of Section 36 decision making, the Town and Country Planning Act (Scotland) 1997 sets out the meaning of the statutory Development Plan, which is indicated to be:
 - "(a) the National Planning Framework,
 - (b) any strategic development plan for the time being applicable to the area, together with-
 - (i) the Scottish Ministers' notice of approval of that plan, and
 - (ii) any supplementary guidance issued in connection with that plan, and

(c) any local development plan for the time being applicable to the area.

(2) A reference in subsection (1) to provisions of a framework or plan is to be construed as a reference to so much of the provisions as are applicable to the area.

(3) In the event of any incompatibility between a provision of the National Planning Framework and a provision of a local development plan, whichever of them is the later in date is to prevail."

- 5.45. In this case, the statutory Development Plan is comprised of:
 - National Planning Framework 4 (adopted 13 February 2023);
 - East Lothian Local Development Plan 2018 (adopted 27 September 2022)
- 5.46. Whether an LDP has been adopted prior to or after the adoption and publication of NPF4, legislation states that in the event of any incompatibility between a provision of NPF and a provision of an LDP, whichever of them is the later in date is to prevail (Town and Country Planning (Scotland) Act 1997; section 24(3)). Provisions that are contradictory or in conflict would be likely to be considered incompatible.
- 5.47. Following the approval by the Scottish Parliament of National Planning Framework 4 (NPF4) on 11 January 2023, the Chief Planner provided advice on NPF4 becoming part of the statutory 'development plan' alongside local development plans (LDPs). The intention for this advice being to support consistency in decision making ahead of new style LDPs being in place.
- 5.48. NPF4 sets out Scotland's national planning policies and the determination of planning applications and appeals. Thus, this forms part of the statutory development plan relevant to the consideration of this development proposal and carries significant weight.

Other Material Considerations

5.49. The following lists the relevant (and extensive) key renewable energy policy and legislation. All are material considerations in the determination of these proposals.

International Agreements and Obligations

The COP21 UN Paris Agreement 15



- 5.50. The Paris Agreement (December 2015) is an international agreement on climate change, of which there are 195 countries, including the UK. The Agreement came into force on November 4th, 2016, having been ratified by at least 55% (the point which triggers ratification) of the 195 countries.
- 5.51. The meeting in Paris was considered a make-or-break opportunity to secure an international agreement on the approach to tackling climate change, commitment to a longer-term goal of near zero net emissions in the second half of the century and supporting the transition to a clean economy and low carbon society.
- 5.52. Governments agreed:
 - A long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels.
 - To aim to limit the increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change.
 - On the need for global emissions to peak as soon as possible, recognising that this will take longer for developing countries.
 - To undertake rapid reductions thereafter in accordance with the best available science.
- 5.53. Countries will also be legally obliged to make new post-2030 commitments to reduce emissions every five years.

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (2021), related Press Release and Statements (2021)

- 5.54. The first part of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) was published on 9 August 2021. The Working Group I (WGI) contribution to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) assesses the physical science basis of climate change. It acknowledges that there is an improved understanding of the current state of the climate, human influence on the climate System, possible climate futures and climate information for risk assessment and regional adaptation.
- 5.55. The key points taken from the report are:
 - It is unequivocal that human influence has warmed the atmosphere, ocean and land.
 - The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years.
 - Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since the last report.



- Global surface temperature will continue to increase until at least mid-century under all emissions scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO2) and other greenhouse gas emissions occur in the coming decades.
- Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.
- With further global warming, every region is projected to increasingly experience concurrent and multiple changes in climatic impact-drivers. Changes in several climatic impact-drivers would be more widespread at 2°C compared to 1.5°C global warming and even more widespread and/or pronounced for higher warming levels.

<u>COP26 – The Glasgow Climate Pact (November 2021)</u>

5.56. The negotiations at the COP26 climate summit held in November 2021 under the UN Framework Convention on Climate Change. The aim of COP26 was to keep alive the hope of limiting the rise in global temperature to 1.5C. After 13 days of intense negotiations, COP26 concluded on Saturday 13th November 2021 with every Party at COP26 – representing almost 200 countries – agreeing the Glasgow Climate Pact. However, even with the action committed both during and before COP26, communities around the world would continue to feel the impact of climate change on the planet, work must continue beyond COP26 with concerted and immediate global effort to deliver on all pledges.

IPCC Second AR6 Report (February 2022)

5.57. The second part of the IPCC's AR6 Report was published on 28 February 2022. It highlights throughout that climate change has already disrupted human and natural systems. Past emissions, development and climate change have not advanced global climate resilient development. It states that societal choices and actions implemented in the next decade determine the extent to which medium and long-term pathways will deliver higher or lower climate resilient development. It importantly confirms that development prospects are increasingly limited if current greenhouse gas emissions do not rapidly decline, especially if 1.5°C global warming is exceeded in the near-term. This can only be enabled by inclusive governance, adequate and appropriate human and technological resources, information, capacities, and finance.

IPCC Third AR6 Report (April 2022)

- 5.58. The third part of the IPCC's AR6 Report 'Mitigation of Climate Change' was published on 04 April 2022. The latest report consequences of the failing to limit the rise of global temperatures and that reducing emissions is a crucial near-term necessity.
- 5.59. Global GHG emissions in 2030 associated with the implementation of Nationally Determined Contributions announced prior to COP26 would make it likely that warming will exceed 1.5°C during the 21st century. Policies implemented by the end of 2020 would be projected to result in higher global GHG emissions than those implied by NDCs. It suggests that limiting warming to below 2°C would then rely on a rapid acceleration of mitigation efforts after 2030.



IPCC AR6 Synthesis Report (March 2023)

- 5.60. The IPCC published 'The Synthesis Report', last of the AR6 products, in March 2023. They warned that the emissions curve is not bending yet and that between 2010 and 2019, the earth experienced the highest levels of emissions in human history.
- 5.61. Climate action and progress has been made, and there are solutions available for mitigation and adaptation. However, this is not enough to respond to this crisis. Immediate and deep emissions reductions across all sectors are needed urgently. According to the IPCC report, limiting global warming to 1.5°C requires a peak before 2025, reduce emissions by 43% by 2030, 60% by 2035 and reach net-zero in early 2050.

United Kingdom Energy matters

UK 2050 Net Zero Target

- 5.62. The UK Renewable Energy Strategy (UKRES) sets out the means by which the UK can meet the legally binding target of 15% of energy consumption from renewable sources by 2023. It presents a 'lead scenario' that more than 30% of electricity should be generated from renewables by 2020.
- 5.63. A key element of the Strategy is that it sets out the EU requirement that progress will be reported to the EU every two years, in terms of the achievement of delivery against the trajectory set for the 2020 target. The purpose of the milestone reporting is to ensure that a trajectory is maintained towards 2020.
- 5.64. Under the Directive, the UK has interim targets to achieve the following shares for renewables in the energy mix as follows:
 - 7.5% in 2015 2016.
 - 10.2% in 2017 2018.

The UK's Sixth Carbon Budget (December 2020)

- 5.65. The Committee on Climate Change (CCC) published their advice on the UK's sixth Carbon Budget 'The UK's Path to Net Zero' in early December 2020. It builds on the previous CCC advice to Government in relation to new zero.
- 5.66. The CCC has set out some recommended priorities for UK policy, including:
 - Sets a Sixth Carbon Budget to require a reduction in UK greenhouse gas emissions of 78% by 2035 relative to 1990 levels;
 - This is seen as a world leading commitment, placing the UK "decisively on the path to net zero by 2050 at the latest with a trajectory that is consistent with the Paris Agreement";
 - It should be accompanied by an ambitious 2030 pledge to reduce emissions by at least 68% from 1990;



- The recommended budget would achieve well over half of the required emissions reduction to 2050 in the next 15 years.
- Key benefits for the UK are seen as including the opportunity for low carbon investment recognised at a time when it is needed to support the UK's economic recovery from the COVID-19 health crisis.
- 5.67. Although the Report recognises that the main policy levers are held by the UK Government it states at Para 23 that "UK climate targets cannot be met without strong policy action across Scotland, Wales and Northern Ireland" and that Scotland can take action through complementary measures at the devolved level including supporting policies such as "planning and consenting".
- 5.68. The CCC is clear in setting out that new demand for electricity will mean that electricity demand will rise 50% to 2035 and "doubling or even trebling by 2050". The CCC advice sets out that reducing emissions and meeting the budget requires action across various areas including expansion of low carbon energy supplies.
- 5.69. Page 29 sets out recommendations for action including "delivering the actions required in the 2020s to meet the Sixth Carbon Budget requires policies to be strengthened now. Matching strong ambition with action is vital for the UK's credibility..."

The UK Energy White Paper (December 2020)

- 5.70. The Energy White Paper 'Powering our Net Zero Future' was published on 14 December 2020. The White Paper builds on the Prime Minister's recently announced 'Ten Point Plan' to set the energy-related measures and a long-term strategic vision for the energy system, consistent with net zero emissions by 2050. It sets out (page 2) that it "puts net zero and our effort to fight climate change at its core."
- 5.71. It also aims to support a 'green recovery' from COVID-19 and confirms that electricity demand could double by 2050. Whilst offshore renewables are expected to grow significantly, the White Paper also sets out that "onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind. We will need sustained growth in the capacity of these sectors in the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios" (page 45).

The UK Net Zero Strategy (October 2021)

- 5.72. The UK Government published the Net Zero strategy in October 2021. The Net Zero Strategy is a UK government strategy that sets out plans to reduce climate-changing emissions and decarbonise all sectors of the UK economy, from transport to agriculture. These plans are needed to meet its target of net zero emissions by 2050, and the shorter-term targets that ensure action starts now, and isn't kicked down the road. The Strategy was submitted to the United Nations Framework Convention on Climate (UNFCC) as the UK's second long-term low greenhouse gas emission development strategy under the Paris Agreement.
- 5.73. The strategy also builds on the Government's Ten Point Plan with a vision to create new jobs and net zero industries to meet climate targets.

UK Renewable Energy Strategy (2009)



- 5.74. The UK Renewable Energy Strategy (UKRES) sets out the means by which the UK can meet the legally binding target of 15% of energy consumption from renewable sources by 2023. It presents a 'lead scenario' that more than 30% of electricity should be generated from renewables by 2020.
- 5.75. A key element of the Strategy is that it sets out the EU requirement that progress will be reported to the EU every two years, in terms of the achievement of delivery against the trajectory set for the 2020 target. The purpose of the milestone reporting is to ensure that a trajectory is maintained towards 2020.
- 5.76. Under the Directive, the UK has interim targets to achieve the following shares for renewables in the energy mix as follows:
 - 7.5% in 2015 2016.
 - 10.2% in 2017 2018.

UK Renewable Energy Roadmap Update (2013)

- 5.77. The Government first published the Renewable Energy Roadmap in July 2011; which sets out the path to achieve the UK's headline renewable energy target. Paragraph 1 of the November Update reaffirms the UK Government commitment towards the delivery of renewable energy.
- 5.78. The Roadmap has been updated on two occasions since July 2011, once in 2012 and most recently in November 2013. The update sets out the progress that has been made against the 15% target introduced in the 2009 EU Renewable Energy Directive and provides an overview of development that has occurred in the sector.
- 5.79. The opening Ministerial Statement to the Update identifies how the Government remains strongly committed to cost effective renewable energy as part of a diverse, low-carbon and secure energy mix. The Minister concludes by emphasising how the Update to the Renewable Energy Roadmap has been produced in collaboration with other Government Departments and Devolved Administrations.

Scottish Energy matters

The Climate Change (Scotland) Act 2009

5.80. The Climate Change (Scotland) Act 2009 initially established long term statutory targets for Scotland of reducing greenhouse gas emissions by at least 80% by 2050, with an interim target of reducing emissions by at least 42% by 2020. The Act also placed climate change duties on Scottish public bodies and included provisions on climate change including adaption, forestry, energy efficiency and waste reduction.

Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

5.81. The Scottish Government set out short, medium, and long-term goals and when they are to be achieved by in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. It sets targets for the reduction of Scotland's emission of all greenhouse gases to net-zero by 2045, in doing so amending the Climate Change (Scotland) Act 2009. The Climate Change Act reaffirms Scotland's commitment to remain at the forefront of global ambition, increasing its reduction in emissions targets to limit global temperature rises to 1.5 degrees Celsius



above pre-industrial levels. Scotland proposes to reduce emissions by 56% by 2020, 75% by 2030, and 90% by 2040.

Scottish Energy Strategy: The future of energy in Scotland

5.82. The Scottish Government published its Scottish Energy Strategy: The future of energy in Scotland in December 2017. The strategy sets out an overall 2050 vision for Scotland:

"A flourishing, competitive local and national energy sector, delivering secure, affordable, clean energy for Scotland's households, communities and businesses."

- 5.83. The strategy sets two new targets for the Scottish energy system by 2030:
 - The equivalent of 50% of the energy for Scotland's heat, transport, and electricity consumption to be supplied from renewable sources.
 - An increase by 30% in the productivity of energy use across the Scottish economy.

<u>The Global Climate Emergency – Scotland's Response</u>

5.84. On 14 May 2019 the Climate Change Secretary Roseanna Cunningham made a statement to the Scottish Parliament regarding Scotland's response to the climate change emergency. Her statement highlighted inter alia:

"There is a global climate emergency. The evidence is irrefutable. The science is clear. And people have been clear: they expect action. The Intergovernmental Panel on Climate Change [IPCC] issued a stark warning last year: the world must act now. By 2030 it will be too late to limit warming to 1.5 degrees...

...It's not too late for us to turn things around, but to do so requires transformative change. This is not just about government action. And it is not something that only affects Scotland... We all have a part to play individuals, communities, businesses, other organisations...

...Earlier this month, the Scottish Government received advice from the UK Committee on Climate Change [CCC] in light of the IPCC report. We acted immediately with amendments to our Climate Change Bill to set a 2045 target for net zero emissions...these will be the most stringent legislative targets anywhere in the world and Scotland's contribution to climate change will end, definitively, within a generation. The CCC was clear that this will be enormously challenging...

...The CCC has been stark in saying that the proposed new targets will require a 'fundamental change from the current piecemeal approach that focuses on specific actions in some sectors to an explicitly economy wide approach'. To deliver the transformational change that is required, we need structural changes across the board: to our planning, procurement and financial policies, processes and assessments...that is exactly what we will do."

Scotland Climate Change Plan (2018)

5.85. The Climate Change Plan (2018) provides the framework for Scotland's transmission to a lowcarbon economy, setting out how emissions will be reduced in every year to 2032.



5.86. The Climate Change Plan highlights that climate change is one of the greatest global threats we face, and that Scotland must play its part to achieve the ambitions set out in the Paris Agreement, which mandates concerted, global action to deal with the threat. It notes that the path towards a low carbon future will require great effort across all parts of our society and economy, but it also presents tremendous opportunities.

<u>The Update to the Climate Change Plan (2018–2032) 'Securing a Green Recovery on a Path</u> to Net Zero' (16 December 2020)

- 5.87. The Scottish Government published a Roadmap to world-leading climate change targets, with more than 100 new policies and proposals to support Scotland's green recovery and help deliver a just transition to Net Zero. They form part of the Climate Change Plan 2018 2032, which has been updated to reflect the world's most ambitious framework of climate targets as enshrined in Scotland's Climate Change Act 2019. The Plan also increases the ambition of more than 40 other policies to cut greenhouse gas emissions across all sectors.
- 5.88. The Scottish Government's vision for 2045 is one of a society that prioritises the environment and the wellbeing of its people, reaching net zero in a way that is fair and just to all. A key part of the plan is the green recovery, and it states (page 1) that: "It is essential that a recovery from the pandemic responds to the climate emergency and puts us on a pathway to deliver our statutory climate change targets and a just transition to net zero, by ensuring our actions in the immediate term are in line with our long-term goals". "The Scottish Government has been clear in its commitment to securing a just and green recovery, which prioritises economic, social and environmental well-being, and responds to the twin challenges of the climate emergency and biodiversity loss".
- 5.89. In terms of electricity, the CCP update announces, "further policies to continue the rapid growth in renewable generation over the past 20 years, moving from a low to a zero carbon electricity system". Reference is also given to the intention to prepare an Energy Strategy update in 2021 and an updated Electricity Generation Policy Statement by 2022.
- 5.90. Page 18 states that "by 2032 our energy system will be in the midst of a major transformation, integrating new ways of producing, transporting and using energy with existing technologies. This transformation will be planned and developed through a systems led approach, ensuring that decisions take account of the benefits across all of the energy sectors as well as the economic and social benefits they create for everyone in Scotland. By 2032 we will generate at least the equivalent of 50% of our energy across heat, transport and electricity demand from renewable sources".

The 2020 Routemap for Renewable Energy in Scotland

- 5.91. The Scottish Government produced the Renewable Action Plan (RAP) in 2009 to drive development of renewable energy and to establish a framework for action relating to specific areas of renewable energy. This is updated annually in order to provide an indication as to the progress being made towards implementing the changes.
- 5.92. The 2020 Routemap for Renewable Energy in Scotland 2011 is an update and extension of the 2009 Action Plan and reflects the Scottish Government's target of meeting an equivalent of 100 % demand for electricity from renewable energy by 2020, as well as the target of 11% renewable heat. The Routemap is therefore an important Scottish Government policy document. In order to achieve the delivery target of 100% renewables, equates to the equivalent of 16GW of installed capacity and that to achieve this target the Routemap states



that this will demand a 'significant and sustained improvement over the deployment levels seen historically' (pg. 26).

5.93. The Executive Summary concludes by stating that:

"Across all scales of renewable generation, from householder to community to large-scale commercial schemes, the Scottish Government is working to make Scotland the renewables powerhouse of Europe. The benefits are not only in terms of energy generation and future security of supply but can underpin our economic recovery over the next decade and beyond. This Routemap for renewable Energy in Scotland sets out how we can meet our challenging targets in harmony with the local environment and make a wider contribution to emission reductions through the displacement of fossil fuel generation."

Electricity Generation Policy Statement (2013)

- 5.94. The Scottish Government published the Electricity Generation Policy Statement (EGPS) on 28 June 2013. It states at paragraph 1 that electricity generation and the economic and environmental benefits which could arise from a shift from fossil fuel generation to a portfolio comprising renewable and cleaner thermal generation are matters of considerable importance to the Scottish Government.
- 5.95. The report summarises the Scottish Government's targets and these are set out as inter alia:
 - Delivering the equivalent of at least 100% of gross electricity consumption from renewables by 2020 as part of a wider, balanced electricity mix.
 - Enabling local and community ownership of at least 500 MW of renewable energy by 2020.
 - Seeking increased interconnection and transmission upgrades capable of supporting projected growth and renewable capacity'.
- 5.96. In terms of economic benefit, the report states that it is expected that there would be, over the decade to 2020, from renewables alone, a provision of up to 40,000 jobs and £30 Billion of investment to the Scottish economy and a transformational opportunity for local ownership and benefits.
- 5.97. Paragraph 17 states that the Government estimates that the 100% target will require around 14–16GW of installed capacity to be deployed.
- 5.98. Page 11 of the report explains that the UK target is to produce 15% of all energy from renewable sources and an estimated 30% of electricity from renewable sources by 2020 and that this:

"will require connection to Scotland's vast energy resource and we will continue to work to connect Scotland to an ever more integrated UKL and EU market' The Report cross refers to the 2020 Routemap for renewable energy in Scotland. Paragraph 32 reiterates the EU context and states that Scotland has the potential to make a 'major contribution to the EU's overall renewables target."

5.99. The Report cross refers to the 2020 Routemap for renewable energy in Scotland. Paragraph 32 reiterates the EU context and states that Scotland has the potential to make a 'major contribution to the EU's overall renewables target'.



The Scottish Energy Strategy Position Statement (March 2021)

- 5.100. The Scottish Government published 'Scotland's Energy Strategy Position Statement' in March 2021. The Position Statement provides an overview of key priorities for energy.
- 5.101. The Ministerial Foreword refers to the challenges of the pandemic which has created an economic crisis. It notes that the Climate Emergency "has continued unabated". It states that "the need for a Just Transition to net zero greenhouse gas emissions by 2045, in a manner that supports sustainable economic growth and jobs in Scotland, is greater than ever".
- 5.102. Since Scotland's last Energy Strategy was published, the Scottish Government has continued to commit to achieving ambitious targets of net zero greenhouse gas emissions by 2045 and a 75% reduction by 2030.
- 5.103. Section 5: A Green Economic Recovery of the document states that "Creating green jobs are at the heart of the Scottish Government's plans for a fair, resilient and green economic recovery." When describing how the support for industries and sectors across the energy landscape would be support, it is highlighted that the continued growth of Scotland's renewable energy industry is fundamental to enable Scotland to create sustainable jobs in order to transition towards net zero.

The Scottish Government & Scottish Green Party: Shared Policy Programme (2021)

5.104. The Scottish Government and the Scottish Green Party published the 'Scottish Government and Scottish Green Party Shared Policy Programme' in September 2021. Upon addressing how to respond to the climate emergency, the energy section states that:

> "The Scottish Government and Scottish Green Party believe that the climate emergency means we need to use the limited powers we have to accelerate the decarbonisation of our energy system. While electricity has already been largely decarbonised, our plans will see a significant increase in electricity demand for heating and transport. To accommodate this, we will support the continued and accelerated deployment of renewable energy."

CCC Report to Parliament 'Progress in reducing emissions in Scotland' (2021)

- 5.105. The Climate Change Committee (CCC) published a report to the Scottish Parliament 'Progress in reducing emissions in Scotland' in December 2021. It looks at Scotland's progress in emissions reduction, policy plans, and delivery of those plans in the last year. The focus is to monitor a set of quantified indicators of decarbonisation progress:
- 5.106. The key messages in the report include:
 - Changes in emissions accounting methodology do not imply the need to change the Net Zero and 2030 and 2040 interim targets, as legislated by the Scottish Parliament
 - Scotland's annual targets in the 2020s should be adjusted and recommend that the annual targets be adjusted to align with a translation of the legislated 2020 target to the new inventory basis.
 - Meeting the 2030 means that policies must go further than the CCC pathway.



• The 2020 interim target was achieved however the fall in emissions in 2020 was largely due to travel restrictions during the COVID19 pandemic, without which it is unlikely the target would have been met.

Draft Energy Strategy and Just Transition Plan (2023)

- 5.107. The Draft Energy Strategy and Just Transition Plan was published on 10th January 2023. It sets out the Scottish Government's plan to transform the way Scotland generates, transports and uses energy. This draft Strategy sets out key ambitions for Scotland's energy future including:
 - A just transition by maintaining or increasing employment in Scotland's energy production sector against a decline in North Sea production.
 - Maximising the use of Scottish manufactured components in the energy transition, ensuring high-value technology and innovation.
- 5.108. It highlights that the following about Battery Storage Systems:

"Utility scale battery storage offers fast responding, dispatchable power when required. As of September 2021, only 124 MW of the total 864 MW of energy storage was provided by Battery Energy Storage Systems (BESS) capacity installed in Scotland. However, there is a further 2.1 GW that has secured planning permission. Typically, these systems use lithium-ion technology, and only contain energy to dispatch full power continuously for a short number of hours. They also provide a number of ancillary services required to maintain stability within the electricity networks. We urge the UK Government to make these markets more accessible for BESS and other low carbon technologies ahead of fossil fuel powered alternatives."



6. Planning Assessment

6.1. This section of the Statement contains a detailed analysis of the proposal against the relevant material planning considerations. These considerations have been derived from an understanding of the site and its surroundings and the policy analysis of the previous section.

Renewable Energy

- 6.2. It is evident within NPF4 that energy-related developments play a crucial role in order to achieve the ambitious goals for renewable energy generation on both a national and local level. As highlighted in the previous section, this proposal qualifies as a national development under 'Strategic Renewable Electricity Generation and Transmission Infrastructure'. NPF4 states that:
- 6.3. "This national development supports renewable electricity generation, repowering, and expansion of the electricity grid;
- 6.4. 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;
- 6.5. 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."
- 6.6. Page 8 of NPF4 identifies the links between policies, it states:
- 6.7. "Our strategy and policies support development that helps to meet greenhouse gas emissions targets;
- 6.8. The global climate emergency and the nature crisis have formed the foundations for the spatial strategy as a whole. The regional priorities share opportunities and challenges for reducing emissions and adapting to the long-term impacts of climate change, in a way which protects and enhances our natural environment.
- 6.9. Policy 1 gives significant weight to the global climate emergency in order to ensure that it is recognised as a priority in all plans and decisions...Policy 11 supports renewable energy development..."
- 6.10. Policy 1 of NPF4 states that proposals should give significant weight to global climate and natural crisis. The policy intent here is to encourage development that addresses the global climate emergency and nature crisis.



- 6.11. Key infrastructure, such as the battery storage scheme proposed, plays a crucial role in order to achieve the ambitious goals for renewable energy generation on a national level and address the global climate emergency.
- 6.12. Policy 5 of NPF4, criterion b) demonstrates that proposals on prime agricultural land will only be supported where it is for:

"iv. The generation of energy from renewable sources or the extraction of minerals and there is secure provision for restoration;"

- 6.13. As mentioned above, these proposals are for renewable energy purposes and accordance with Policy 5 b) is therefore provided.
- 6.14. Out of all national policies within NPF4, Policy 11: Energy is the 'go to' policy, given that it is most specific to the proposals. Policy 11 supports the expansion of renewable, low-carbon and zero emissions technologies. The policy intent here is to encourage, promote and facilitate all forms of renewable energy development.
- 6.15. Policy 11 of NPF4, criterion (a) states the following:
- 6.16. "Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. These include:
- 6.17. iii. energy storage, such as battery storage and pumped storage hydro;"
- 6.18. This proposal qualifies as a national development and would be need to gain consent under Section 36 of the Electricity Act 1989 (the Electricity Act). 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.
- 6.19. Policy 11 of NPF4, criterion (c) states the following:

"Development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated."

- 6.20. The site is within proximity to development relating to onshore electrical transmission infrastructure north-west of the site boundary (allocation ref. PROP EGT2: Torness Power Station). This could present significant opportunities for renewable energy-related investment to ensure that the best use is made of land and infrastructure in this area.
- 6.21. The applicant is willing to accept a condition which indicates that prior to the commencement of the development, a written statement setting out the programme of implementation, local labour, supply chain and procurement measures, which shall be taken by the developer during the scheme's procurement, construction and commissioning phase shall be submitted to and agreed in writing by East Lothian Council, with the approved scheme being implemented and completed. This would allow for local companies to have the opportunity to understand and tender for the economic activities associated with a project of this type.
- 6.22. The proposed development is assessed against project design and mitigation measure each of the criteria from Policy 11 (e) and comparable policies within the Local Development Plan.



<u>i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;</u>

6.23. The most directly comparable policy within the Local Development Plan is Policy NH13: Noise. It states that:

> "the impact of noise will be taken into account when assessing relevant development proposals, particularly those that are close to or could become a source of noise. A noise impact assessment will be required where the proposed development may cause or exacerbate existing noise levels or be sensitive to levels of noise in the area. The assessment must specify suitable and appropriate mitigation measures that would make the proposal acceptable. Development proposals that would either result in or be subject to unacceptable levels of noise will not be supported."

- 6.24. The proposal is supported by an Acoustic Design Specification which is included within this application. Further details on this matter are provided in subsequent sections of this report.
- 6.25. Shadow flicker is not considered relevant to the battery storage proposals here, being more relevant to wind developments. As a renewable form of energy storage, battery storage developments do not create any particulate which would impact upon air quality.

<u>ii. significant landscape and visual impacts, recognising that such impacts are to be expected</u> for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable;

6.26. The closest policies which would refer to these would be DP1: Landscape Character. Policy DP1 states that all new developments must:

"be well integrated into its surroundings by responding to and respecting landform, and by retaining and where appropriate enhancing existing natural and physical features at the site, including water bodies, that make a significant contribution to the character and appearance of the area and incorporate these into the development design in a positive way;

Include appropriate landscaping and multifunctional green infrastructure and open spaces that enhance, provides structure to and unifies the development and assists its integration with the surroundings and extends the wider green network where appropriate".

6.27. The proposal is supported by a Landscape and Visual Assessment (LVA) which is included within this application. It should be stressed that the design has considered feedback from the local community and as a result of the applicant's assessment work. Consequently, the scheme has markedly evolved from that presented to the November 2023 public consultation exercise. Based on the public consultation feedback, the design of the proposal has been reconsidered through design iteration, with the tallest structure of the proposal moved to a different location within the site, so that it is better screened and less visible from outside the site. The updated ZTV submitted as part of the proposal is based on the updated heights of the proposal and shows that the elements will be less visible. Thus, the public consultations helped to establish and address local landscape effects and priority was given to mitigate these issues through design. Arguably the scheme presented to the November 2023 public consultation only had a localised visual effect. However, the feedback received and the subsequent design response has now significantly reduced those localised visual effects even further. The reduction in built development footprint, accommodating the



relocation of the tallest element has also afforded additional land for landscaping, which will further mitigate the impact of the proposal.

6.28. On this basis, it is considered that the proposal clearly accords with this aspect of NPF4, Policy 11.

iii. public access, including impact on long distance walking and cycling routes and scenic routes;

6.29. The most directly comparable policies within the Local Development Plan are Policy T1: Development Location and Accessibility and Policy T2: General Transport Impact. Policy T1 states that:

"New developments shall be located on sites that are capable of being conveniently and safely accessed on foot and by cycle, by public transport as well as by private vehicle, including adequate car parking provision in accordance with the Council's standards. The submission of Travel Plans may also be required in support of certain proposals."

6.30. The proposal is supported by a Construction Traffic Management Plan which is included within this application.

iv. impacts on aviation and defence interests including seismological recording;

6.31. The site is not located in proximity to any military bases. As such, the development will have no impact on aviation and defence interests.

v. impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;

6.32. No known telecommunication or broadcasting installations are located on site or within the immediate area. The scheme will therefore not compromise telecommunications and broadcasting installations and transmission links.

vi. impacts on road traffic and on adjacent trunk roads, including during construction;

- 6.33. The most directly comparable policies within the Local Development Plan are Policy T1: Development Location and Accessibility and Policy T2: General Transport Impact. As mentioned above, Policy T1 states that:
- 6.34. "New developments shall be located on sites that are capable of being conveniently and safely accessed on foot and by cycle, by public transport as well as by private vehicle, including adequate car parking provision in accordance with the Council's standards. The submission of Travel Plans may also be required in support of certain proposals."
- 6.35. Policy T2 indicates that:
- 6.36. "New development must have no significant adverse impact on:
 - Road safety;
 - The convenience, safety and attractiveness of walking and cycling in the surrounding area;



- Public transport operations in the surrounding area, both existing and planned, including convenience of access to these and their travel times;
- The capacity of the surrounding road network to deal with traffic unrelated to the proposed development; and
- Residential amenity as a consequence of an increase in motorised traffic"
- 6.37. The proposal is supported by a Construction Traffic Management Plan which is included within this application. As the site will not be manned, operational traffic is expected to be minimal. The impact of this on the local and wider highway network is therefore expected to be negligible.
- 6.38. The statement considers that the proposed access arrangement and the construction route are suitable to accommodate the low number of construction and operation trips related to the proposed BESS. In summary, it is considered that there are no valid highway or transportation reasons which would prevent the proposed development of this site.
- 6.39. vii. impacts on historic environment;
- 6.40. The most directly comparable policies within the Local Development Plan are Policy CH4: Scheduled Monuments and Archaeological Sites and Policy CH5: Battlefields. Policy CH4 states that:

"where a proposed development might affect any Scheduled Monument or archaeological site (of known or suspected archaeological interest), the developer must undertake and make available to the planning authority a professional archaeological assessment and, if necessary, a field evaluation."

- 6.41. The proposal is supported by an Archaeology and Built Heritage Assessment which is included within this application.
- 6.42. The aim of this iss to identify which heritage assets might be affected by a proposed development. It is highlighted that development proposals that may adversely impact heritage assets where they remove a feature that contributes to the significance of a heritage need to be assessed.
- 6.43. It is concluded that the proposals are not anticipated to impact any historic assets identified in the vicinity through changes to setting.

viii. effects on hydrology, the water environment and flood risk;

6.44. The most directly comparable policy within the Local Development Plan is Policy NH11: Flood Risk where it states that:

> "Flood Risk Assessments will normally be required for proposals within the medium to highrisk category of flood risk. They may also be required in the low to medium category in certain circumstances, for example at the upper end of the probability range or for essential infrastructure and the most vulnerable uses."



- 6.45. The proposal is supported by a Flood Risk Assessment which concludes that the proposed development is in accordance with SEPA's Flood Risk and Land Use Vulnerability Guidance and the site is not considered to be a significant risk of flooding from any source.
- 6.46. Additionally, a Drainage Statement has been prepared which deals with surface water drainage, SUDS, attenuation requirements, treatment requirements, treatment of surface water runoff during construction and provides a fire fighting water run off strategy.

ix. biodiversity including impacts on birds;

6.47. The most directly comparable policy within the Local Development Plan is Policy NH5: Biodiversity and Geodiversity Interests, including Nationally Protected Species. Policy NH5 states that developers must demonstrate, where relevant, how impacts on biodiversity and geodiversity have been addressed as part of their proposals. It is highlighted that:

"Proposals should indicate how they have had regard to the mitigation hierarchy, the potential for incorporating biodiversity or geodiversity features within the site into the proposal in a positive way where appropriate, and for providing on-site or off-site enhancements."

Moreover, it is highlighted throughout the LDP in policies such as PROP EGT3: Forth Coast Area of Co-ordinated Action that:

"Proposals must be accompanied by project-specific information to inform a Habitats Regulations Appraisal and, if necessary, an Appropriate Assessment under the Habitats Regulations."

- 6.48. The proposal is supported by a Preliminary Ecological Appraisal, Habitat Regulations Assessment and Ecological Impact Assessment in accordance with Policy 3: Biodiversity of NPF4 which is included within this application and demonstrates the acceptability of the scheme on these matters.
- 6.49. <u>x. impacts on trees, woods and forests;</u>
- 6.50. The most comparable policy within the Local Development Plan is Policy DC1: Rural Diversification. It states that:

"proposals for mineral extraction and renewable energy will be assessed against the other relevant policies of the Plan for agriculture, horticulture, forestry, infrastructure or countryside recreation developments."

6.51. The sites surroundings and location are factors that would need to be addressed. Schedule 9 of the Electricity Act 1989, sub-Paragraph 1 (1) states:

"In formulating any relevant proposals, a licence holder or a person authorised by exemption to generate, transmit, distribute or supply electricity;

(a) shall 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



(b) shall do what he 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."

6.52. The proposal is supported by a Preliminary Ecological Appraisal, Habitat Regulations Assessment and Ecological Impact Assessment which is included within this application. The conclusions of these reports are set out in the above section.

> <u>xi. proposals for the decommissioning of developments, including ancillary infrastructure,</u> and site restoration;

6.53. The most directly comparable policy with the Local Development Plan is Policy NH7: Protecting Soils. It states that:

"proposals for renewable energy generation or mineral extraction on prime quality agricultural land may also be acceptable where provision is made for restoration of the land to its former status and if soil will be reused where feasible."

6.54. The site is to be decommissioned after 40 years when it is no longer operational and restored its former status.

<u>xii. the quality of site restoration plans including the measures in place to safeguard or</u> <u>guarantee availability of finances to effectively implement those plans; and</u>

6.55. As mentioned in point above, the site is to be decommissioned after 40 years when it is no longer operational and restored it its former status.

xiii. cumulative impacts

- 6.56. In terms of the wider context, we are aware of other planning proposals submitted by others in relation to other battery schemes and major grid infrastructure. A planning history search has been undertaken which confirms the following energy-related projects which are permitted or awaiting determination within the site's locality:
 - 23/01071/P Formation of a battery energy storage system facility and associated works for a temporary period of 25 years. Pending Decision.
 - 23/00616/PM Erection of 400KV substation and associated development, including associated temporary infrastructure including construction compounds and access road. Pending Decision.
 - 23/00162/PPM Planning permission in principle for electricity transmission infrastructure (substation or converter station) and associated development including buried cabling. Pending Decision.
 - 23/00004/PAN Proposed Battery Energy Storage System (Major Development). PAN deemed acceptable in May 2023.
 - 22/00852/PPM Planning permission in principle for a converter station and associated development including a landfall at Thorntonloch and connecting buried cabling, all in association with the Scottish Power Eastern Link 1 project, for a new



subsea High Voltage Direct Current (HVDC) link. Granted Planning Permission in Principle in May 2023.

- 22/00005/SGC Section 36 application for the construction and operation of an offshore generating station (the Berwick Bank Wind Farm). Pending Decision.
- ECU00000607 Crystal Rig Wind Farm (Phase IV). Consented in March 2021.
- ECU00003419 Eastern Link 400kV Overhead Line Diversion. Consented in October 2023.
- ECU00004659 Branxton Energy Storage Facility. Pending Decision.
- 6.57. The proposed development considers the cumulative effects of these proposals on the following:

Transport

6.58. A review of the cumulative impacts on the highway has been undertaken to understand any impacts of the proposal together with other developments proposed in the area through the submitted Transport information.

<u>Noise</u>

6.59. Impacts on technology and practical management of noise will be assessed. The proposal is supported by an Acoustic Design Specification which is included within this application. Consideration of noise affecting adjacent commercial buildings indicates that residual levels from the Battery Storage Facility would be comfortably below BS8233 guideline values. It is therefore concluded that the proposed installation of the Battery Storage Facility, with attenuated noise sources, would not have a significant adverse impact on the neighbouring properties.

<u>Landscape</u>

- 6.60. A Screened Zone of Theoretical Visibility (ZTV) has been prepared as per present understanding of the proposal. The ZTV image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.
- 6.61. The screening effect provided by smaller blocks of woodland and hedgerows/hedgerow trees, particularly those surrounding the site, have not been taken into account, and consequently the actual extent of the area from which the proposed development is visible is likely to be much smaller. Visualisations have also been prepared which shows the different viewpoints looking towards the site. Additionally, the proposed landscaping would further mitigate any effect.
- 6.62. <u>Flood Risk</u>
- 6.63. It is noted that there are several other planning applications for energy developments around the site that have been submitted to either East Lothian Council or the Energy Consents Unit.



- 6.64. It is assumed that each of these applications has been submitted alongside a sufficient FRA and surface water drainage strategy and as a result, will not increase flood risk elsewhere.
- 6.65. The cumulative impact of these additional site proposals is therefore not considered significant. Overall, the above assessment confirms the proposed development fully accords with the criteria of NPF4 Policy 11 with the Local Development Plan. The Local Development Plan underlines that there should be "significant opportunities for renewable energy-related investment" and "support the principle of electricity grid connections on the Forth coast from Cockenzie to Torness in order to facilitate off-shore energy generation". Although the LDP mentions it would be in favour for renewable energy-related investment and is specific to the site, NPF4 arguably would have significant weight as it is able to address and expand on renewable energy development in more detail and lists battery storage as a form of renewable technology that would be accepted.
- 6.66. Moreover, NPF4 addresses the global climate emergency and nature crisis by encouraging these type of developments. The principle of battery storage development is therefore acceptable, and the proposed development will contribute significantly to the renewable energy ambitions and targets.

Site Selection Methodology

6.67. This section outlines the applicant's site selection methodology, which is based on a series of criteria/tests for determining the suitability of land for BESS development. The application site was tested against these criteria before it was selected.

Fundamental Requirements

6.68. There are a number of fundamental considerations for the applicant to understand whether a development of this type can be accommodated on the land as set out within this section.

Capacity of Electricity Network and Ability to Connect

- 6.69. The energy storage development needs to be capable of connecting to the Electricity Network at a location where there is existing capacity. As highlighted earlier, it is proposed to connect the BESS to the nearby planned Scottish Power Transmission (SPT) Branxton Substation. A planning application for this substation has been submitted to East Lothian Council and is currently under consideration under ref. 23/00616/PM.
- 6.70. The applicants have a grid agreement of up to 650MW where the proposed site is in close proximity to this substation, which is a nationally significant proposal. An indicative cable route can be found inn the submitted design package The cable route is to be underground, running under the burn and resurfacing near the proposed Branxton Substation. Landscaping has been considered accordingly. However, this will be assessed as part of a separate application, if required to be submitted by SPT.

Alternative Site Identification

6.71. Policy PROP EGT3: Forth Coast Area of Coordinated Action supports the principle of electricity grid connections on the Forth coast from Cockenzie to Torness in order to facilitate off-shore energy generation, provided certain criteria are met. An Eastern Link Project is proposed by others and will unlock the rich renewable energy capacity of Scotland



and support the drive toward our Net Zero targets in Scotland and across the rest of the UK and run from Torness in East Lothian, Scotland to Hawthorn Pit, County Durham, England. This proposal for battery storage is proposed to link into this.

- 6.72. Dialogue has been taken with multiple landowners. This proposed battery scheme is proposed to connect into the proposed Branxton substation which means it can act as an importer and exporter of energy. Locating the project close to the proposed substation ensures a cost effective and viable connection.
- 6.73. With this one being the closest available to the proposed substation. This is the nearest land for the point of connection to the substation, away from a built-up area. The applicant recognised that this site was the nearest available to the proposed substation.
- 6.74. This site is within proximity to development relating to onshore electrical transmission infrastructure north-west of the site boundary. This could present significant opportunities for renewable energy-related investment to ensure that the best use is made of land and infrastructure in this area.
- 6.75. As is evidenced by the design iteration process, the scheme has evolved itself as a direct consequence of public consultation and also the assessments that have been undertaken. In that sense the scheme has considered alternative forms of the development, arriving at localised effects, capable of mitigation.

Landscape & Visual

- 6.76. The proposed development was assessed earlier against project design and mitigation measures from each of the criteria from Policy 11 (e).
- 6.77. The proposal is supported by a Landscape and Visual Assessment (LVA) and a Landscape Masterplan (the latter to be submitted post submission). Taking this into account, site visit photography and 3D modelling of the scheme, visualisations of viewpoints have been produced and were also showcased at the public consultation.
- 6.78. As highlighted above, a landscape masterplan has been prepared which proposes a minimum of a 10m wide landscape belt around the periphery of the site, combining new native tree planting and native hedgerow planting. Additional landscaping within the sites interior is also proposed, comprised of native woodland scrub plant mixes. Visualisations have also been prepared which shows the different viewpoints looking towards the site.
- 6.79. Thus, since the impacts are localised and an appropriate design iteration process has been applied, the proposed development should be considered to be acceptable. The proposed development complies with the requirements of The Electricity Act 1989 and statutory Development Plan will not unacceptably impact the landscape character of the area.



Ecology

- 6.80. The proposal is supported by a Habitat Regulations Assessment (HRA) and Ecological Impact Assessment (EcIA) within this application.
- 6.81. A Preliminary Ecological Appraisal was undertaken but has not been submitted as part of the application as this is superseded by the EcIA. It was highlighted in the PEA that careful design and construction-phase consideration should be given to the adjacent local wildlife site designations (Thornton Burn SWT, Dunglass Burn LBS, and Thurston Burn Valley LBS), with sufficient stand-off to avoid direct or indirect impacts on their interest.

The proposed development complies with the statutory Development Plan where measures have been proposed to improve the overall biodiversity of the site in line with the Landscape Masterplan.

Noise

6.82. Policy 23 of NPF4, criterion e) states that:

"Development proposals that are likely to raise unacceptable noise issues will not be supported. The agent of change principle applies to noise sensitive development. A Noise Impact Assessment may be required where the nature of the proposal or its location suggests that significant effects are likely."

6.83. As mentioned above, the proposal is supported by an Acoustic Design Specification which is included within this application. The proposed development complies with the statutory Development Plan. Consideration of noise affecting adjacent commercial buildings indicates that residual levels from the Battery Storage Facility would be comfortably below BS8233 guideline values. It is therefore concluded that the proposed installation of the Battery Storage Facility, with attenuated noise sources, would not have a significant adverse impact on the neighbouring properties.

Heritage

6.84. Policy 7 of NPF4, criterion h) and j) demonstrate the need to protect and enhance historic environment assets and to enable positive change for the regeneration of places:

"h) Development proposals affecting scheduled monuments will only be supported where:

i. direct impacts on the scheduled monument are avoided;

ii. significant adverse impacts on the integrity of the setting of a scheduled monument are

avoided; or

iii. exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised;



- 6.85. The proposal is supported by an Archaeology and Built Heritage Assessment which is included within this application. The proposed development complies with the statutory Development Plan.
- 6.86. The aim of this was to identify which heritage assets might be affected by a proposed development. It was concluded that the proposals are not anticipated to impact any historic assets identified in the vicinity through changes to setting.
- 6.87. The proposed development complies with the statutory Development Plan and would not adversely affect the setting of the identified assets, and, in turn, their historic significance, appreciation and understanding would not be negatively impacted.

Transport

- 6.88. Policy 13 of NPF4, criterion d) and f) prioritises the need to travel unsustainably and closely monitor how travel will be facilitated:
- 6.89. "d) Development proposals for significant travel generating uses will not be supported in locations which would increase reliance on the private car, taking into account the specific characteristics of the area;
- 6.90. f) Development proposals for significant travel generating uses, or smaller-scale developments where it is important to monitor travel patterns resulting from the development, will only be supported if they are accompanied by a Travel Plan with supporting planning conditions/obligations. Travel plans should set out clear arrangements for delivering against targets, as well as monitoring and evaluation."
- 6.91. The proposal is supported by a Construction Traffic Statement which is included within this application. The statement considers that the proposed access arrangement and the construction route are suitable to accommodate the low number of construction and operation trips related to the proposed BESS. In summary, it is considered that there are no valid highway or transportation reasons which would prevent the proposed development of this site.

A Transport Assessment is being prepared and submission of this report is to follow.

Flood Risk & Drainage

- 6.92. Policy 22 of NPF4, criterion a) prioritises the need to travel unsustainably and closely monitor how travel will be facilitated:
- 6.93. "a) Development proposals at risk of flooding or in a flood risk area will only be supported if they are for:
- 6.94. i. essential infrastructure where the location is required for operational reasons;

iv. redevelopment of previously used sites in built up areas where the LDP has identified a need to bring these into positive use and where proposals demonstrate that long-term safety and resilience can be secured in accordance with relevant SEPA advice."



- 6.95. The proposal is supported by a Flood Risk Assessment which is included within this application. It highlights that the proposed development is in accordance with SEPA's Flood Risk and Land Use Vulnerability Guidance is not considered to be a significant risk of flooding from any source.
- 6.96. A Drainage Statement and a Drainage Layout (ref: E12841 Drainage-7b) have also been prepared and are submitted as part of this application. The Surface Water Drainage Strategy will be implemented to ensure flood risk elsewhere is not impacted. As such, the proposed development complies with the statutory Development Plan and will not unacceptably pose any significant risks.

Other Matters

<u>Fire Safety</u>

- 6.97. A Battery Safety Management Plan Fire Strategy Report has been prepared and is submitted as part of this application. The report demonstrates the scheme is acceptable in terms of fire safety.
- 6.98. Fire risk within the BESS will be managed in a number of ways (in addition to the base chemistry of the battery cells), including software and hardware fail safes and fire suppression systems. Temperature within each cell of each battery module will be monitored by the Battery Management System (BMS) and any temperature variation within an individual module outside normal operating conditions would trigger a response. Many existing operational BESS projects use air cooling systems, whereas newer technologies incorporate liquid cooling; in either case the fundamental approach to monitoring and control remains the same. Additionally, the containers have HVAC units that aim to maintain a stable temperature. If a temperature increase occurs above the set level, the SCADA system will raise a warning to the monitoring team. If the temperature continues to rise, or there is a failure of the air-conditioning units, the BESS container would automatically shutdown (partially or fully) to mitigate against the risk of thermal runaway and fire. Gas detection systems can be installed which will be able to detect off-gases in low concentrations (a sign that thermal runaway may be starting to occur) and trigger the fire suppression system before a fire event occurs.
- 6.99. The BESS cabinets proposed are not walk-in containers and therefore are exempt from the requirement to have internal fire suppression as there is no risk of occupancy. Nevertheless, fire suppression systems will be employed with the aim of preventing a fire event of occurring in the first instance. Research by FM Global into fire suppression systems in BESS's has identified that water suppression systems can extinguish a battery fire within a rack and, unlike gas suppression systems, are effective in preventing re-ignition and thermal runaway as the water cools the batteries to below the self-ignition temperature due to its high heat absorption capacity.
- 6.100. Additionally, the BESS system will be compliant with UL9540A which tests the fire safety hazards associated with propagating thermal runaway within battery systems in both cell module and rack level. The site layout will be compliant with NFPA855 and guidance from the NFCC in particular with regards to the layout of battery containers and associated



equipment to ensure the lowest possible risk of fire propagation in the unlikely event that should this occur.

- 6.101. Furthermore, the applicant will work with East Lothian Council and the local representatives from the Scottish Fire and Rescue Service in terms of fire safety, subject to separate necessary consents being granted and a fire safety plan will be agreed with the local fire authority in due course.
- 6.102. Fire risk within the BESS will be managed in multiple different ways (in addition to the base chemistry of the battery cells), including software and hardware fail safes coupled with fire suppression systems. Temperature within each cell of each battery module/rack will be monitored by the BESS container monitoring system and any excessive temperature variation within an individual module/rack outside normal operating parameters will trigger a response. Many existing operational BESS projects use air cooling systems, whereas newer technologies incorporate liquid cooling; in either case the fundamental approach to monitoring and control remains the same. Additionally, the containers have HVAC units that aim to maintain stable container operating temperature. If a temperature increase occurs above normal, or there is a failure of the cooling units, the SCADA system will raise a warning to the control system. If the battery/cell temperature continues to rise the BESS container will be automatically shut down (partially or fully) to mitigate against the risk of thermal runaway and fire.
- 6.103. In the very unlikely event of excessive battery fin one of the modules/racks, a fire suppression system would be triggered automatically which would comprise appropriately designed extinguishing medium. This is a waterless fire protection system and as such there is no risk to soils or ground water as a result of operation. The extinguishant medium would be discharged into the fire battery cell/rack to suppress the fire risk by removing the free radicals and heat elements from the fire triangle. (Oxygen, Heat and Fuel). Extinguishant systems are widely used for confined spaces and reach extinguishing levels in 10 seconds or less, minimising fire risk before they cause significant damage. This extinguishes the fire quickly, which means less risk and damage to adjacent battery modules.
- 6.104. Additionally, BESS systems will be compliant with UL9540A which tests the fire safety hazards associated with propagating thermal runaway within battery systems in both cell module and rack level. The site layout will be compliant with NFPA855 in particular with regards to the layout of battery containers and associated equipment to ensure the lowest possible risk of fire propagation in the unlikely event that should this occur.
- 6.105. Furthermore, the applicant will work with East Lothian Council and Fire Brigade in terms of fire safety, subject to separate necessary consents being granted and a fire safety plan will be agreed with the local fire authority in due course.

Community Benefits

6.106. Additionally, as previously mentioned, the applicant is open to discussions regarding community benefits with the local community council following consent of the permission.



Planning Balance

- 6.107. It was highlighted earlier in the statement that Scottish Ministers will determine if an application considers the statutory duties in Schedule 9 of the Electricity Act and any other relevant material considerations and relevant aspects of the statutory development plan.
- 6.108. In the event of any incompatibility between a provision of NPF4 and a provision of an LDP, whichever of them is the later in date is to prevail (Town and Country Planning (Scotland) Act 1997; section 24(3)). Provisions that are contradictory or in conflict would be likely to be considered incompatible.
- 6.109. The statutory Development Plan is comprised of:
 - National Planning Framework 4 (adopted 13 February 2023);
 - East Lothian Local Development Plan 2018 (adopted 27 September 2022)
- 6.110. This assessment has found no incompatibility in relation to this proposal. The main implication of NPF4 is the clarification of significant weight being given to renewable energy schemes, such as this. This quantification of weight being an obvious and clear change from the previous NPF.
- 6.111. Importantly, this assessment has not found any conflict with any Development Plan policy, consequently the scheme should be found acceptable. In fact, the sites location for such purposes identifies the strongest policy support, coupled with NPF4 and its clear intent to address the effects of climate change and the nature crises. The ability to then apply significant weight upon this proposal, in combatting the effects of climate change and cutting Greenhouse Gas Emissions would thus make the application even more acceptable. In the event that any conflict against development plan policy was found, it is considered that the benefits of this proposal more than outweigh any such harm.
- 6.112. A number of key renewable energy government policies and legislation are material considerations in the determination of these proposals. Thus, it is crucial to understand how the statutory Development Plan and key government policies/legislation should be considered under Section 36 of the Electricity Act 1989.
- 6.113. The Update to the Climate Change Plan (2018–2032) 'Securing a Green Recovery on a Path to Net Zero' recognises a growing and increasingly decarbonised electricity sector is critical to enabling other parts of our economy to decarbonise notably transport, buildings and industry.
- 6.114. The Draft Energy Strategy and Just Transition Plan published in 2023 focuses on energy security in light of recent global events and the need to reduce dependency on oil and gas and fast track towards Net Zero by 2045. Focus is placed on generating more than 20GW of additional renewable energy alongside other technologies, including additional energy storage capabilities. The Strategy identifies that utility scale battery storage offers fast responding, dispatchable power when required and provides services required to maintain stability within the electricity networks.
- 6.115. As is evident within NPF4, there is a step change in the significant weight to be applied to the achievement of targets and renewable energy deployment. The urgent need for renewable



energy to tackle the declared Climate Emergency as a material consideration in the determination of planning applications is established by a range of extant Government policies on energy and statutory development plan alongside the suite of national and international legislation which has informed the policy context.

- 6.116. NPF4 identifies that these proposals are a national development and thus garner policy strength toward their principle of development.
- 6.117. It is evident that there has been a persistent underachievement of renewable energy/greenhouse gas reduction targets over a considerable period of time. As more time passes, the imperative to do more and to be more radical in decision making increases at a greater rate.
- 6.118. This must be seen in the growing context of a growing market for electricity as it displaces fossil fuels for transport, commerce, and heat. Sustainable economic growth can only be achieved by ensuring enough energy, which must be produced in line with obligations to reduce greenhouse gas emissions.
- 6.119. Measuring against the targets set out within The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, where Ministers "must ensure" that the net Scottish emissions account for the net-zero emissions target year (i.e., 2045) is at least 100% lower than the baseline. The interim targeting being:
 - 2018 is at least 54% lower than the baseline,
 - 2019 is at least 55% lower than the baseline
 - 2020 is at least 56% lower than the baseline,
 - 2030 is at least 75% lower than the baseline,
 - 2040 is at least 90% lower than the baseline, and
 - 2045 is at least 100% lower than the baseline.
- 6.120. The targets within the Climate Change 2019 Act flow through to the Planning Act 2019, with the purpose of planning being the need to act in the long-term public interest and considering sustainable development.
- 6.121. The achievement of Net Zero by 2050 is clearly a long-term public interest and planning proposals for sustainable development that helps meet that objective (such as this application) must be considered in that context.
- 6.122. NPF4 evidently underlines this theme, clearly stating that:

"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".

- 6.123. The Committee on Climate Change (CCC) published their advice on the UK's sixth Carbon Budget 'The UK's Path to Net Zero' in early December 2020. It builds on the previous CCC advice to Government in relation to new zero.
- 6.124. Although the CCC Report recognises that the main policy levers are held by the UK Government it states at Para 23 that "UK climate targets cannot be met without strong policy action across Scotland, Wales and Northern Ireland" and that Scotland can take action through complementary measures at the devolved level.
- 6.125. The CCC is clear in setting out that new demand for electricity will mean that electricity demand will rise 50% to 2035 and "doubling or even trebling by 2050". The CCC advice sets out that reducing emissions and meeting the budget requires action across various areas including expansion of low carbon energy supplies.
- 6.126. Page 29 sets out recommendations for action including "delivering the actions required in the 2020s to meet the Sixth Carbon Budget requires policies to be strengthened now. Matching strong ambition with action is vital for the UK's credibility..."
- 6.127. For Scotland, the CCC have advised that the interim target for 2030 (i.e. a reduction by at least 75% against baseline levels) will be "extremely challenging". The proposed development would make a direct contribution to achieving renewable energy generation targets in the UK and would support Scottish Government policy to encourage more electricity generation from renewable sources, to secure greenhouse gas reductions and to attain energy security of supply. Noting that the targets are presently being missed, the imperative to reach those targets, particularly over the next decade (to 2030) is ever more challenging.
- 6.128. The proposal will provide a community benefit fund which will be made available for community projects.

Public Consultation

- 6.129. As highlighted in Section 3, there are no statutory pre-application consultation procedures for Section 36 applications under the Electricity Act 1989.
- 6.130. The proposal is supported by a Pre-Application Consultation Report which is included within this application to detail the public consultation process.
- 6.131. It is evident that the proposal has changed as a direct result of the public consultation and the feedback that was received.



7. Conclusions

- 7.1. This statement has been prepared in order to accompany an application for Section 36 consent with deemed planning permission submitted to the Scottish Government's ECU, for the construction and operation of a Battery Energy Storage System (BESS), located on land south of Barns Ness Terrace, Innerwick, East Lothian, EH42 ISE. The Scottish Ministers in determining the application will have to have regard as to whether the Applicant has met its duties in terms of Schedule 9. In the Section 36 determination, the statutory Development Plan and government policies and legislation will be important considerations.
- 7.2. The site near Innerwick would provide a significant amount of flexibility to the grid and at 650 MW. A variety of international, national, and local policy requires a dramatic increase in battery storage if carbon emissions are to be reduced through more renewable energy generation being connected to the grid.
- 7.3. The proposed development fully accords with all the relevant criteria of NPF4 Policy 11: Energy. NPF4 manages to address the global climate emergency and nature crisis by encouraging these type of developments. The principle of battery storage development is therefore acceptable, and the proposed development will contribute significantly to the renewable energy ambitions and targets.
- 7.4. It is understandable that there will be some concerns with the proposed development is sensitive receptors such as nearby residencies. Nonetheless, any impact of the proposed development are considered to be minimal and localised, with there being no significant impact on: heritage, noise, landscape, flood risk and ecology, with relevant assessments having been undertaken.
- 7.5. Overall, the proposal is supported by a number of assessments as mentioned in Section 6. The key features in support of the proposed development are summarised below:
 - It complies with the requirements of The Electricity Act 1989, statutory Development Plan, and a number of material considerations;
 - It is designed to support the flexible operation of the grid network and will provide a significant contribution to a variety of important services to National Grid;
 - It enables the decarbonisation of electricity supply in support of EU targets and national planning policy;
- 7.6. It is therefore respectfully requested that the Scottish Ministers grant consent for the proposed development under Section 36 and the associated deemed planning permission.



Town & Country Planning Act 1990 (as amended) Planning and Compulsory Purchase Act 2004

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