Proposed Energy Storage System on land at Tyddyn Forgan

784-B068934

Planning, Design and Access Statement

Net Zero Twenty-Six Limited

February 2025

Document prepared on behalf of Tetra Tech Limited

TETRA TECH Planning

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Acronyms/Abbreviations

Acronyms/Abbreviations	Definition
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
ESS	Energy Storage System
FCA	Flood Consequences Assessment
LVA	Landscape and Visual Assessment
PDAS	Planning, Design and Access Statement
PPW	Planning Policy Wales
SLA	Special Landscape Areas
SSSI	Sites of Special Scientific Interest

1.0 Introduction

1.1 This Planning, Design and Access Statement (PDAS) has been prepared by Tetra Tech, on behalf of Net Zero Twenty Six Ltd ('the Applicant') (managed by Firstway Energy) in respect of a proposal for temporary planning permission for a period of 40 years for the erection of an Energy Storage System (ESS), together with associated infrastructure, site access, landscaping and ancillary works on land at Tyddyn Forgan, Llanddeiniolen, Caernarfon, LL55 3AN.

1.2 This statement comprises a description of the Site and its surroundings in section 2; the relevant planning history is set out in section 3; section 4 sets out the key legislation relative to flexible energy storage schemes within the UK and provides an understanding of the important role and function of battery storage in promoting the aim of a net zero energy system; the development proposals described in section 5; section 6 explains the design and access of the proposal; with section 7 setting out the planning policy context; and an appraisal of the main matters are set out in section 8; lastly, the conclusions are set out in section 9.

1.3 The following drawings are submitted for consideration:

Drawing number	Title
FST016-SP-01 Rev 04	Site Location Plan
FST0216-PL-00 Rev 04	Existing Site Layout Plan
FST016-PL-01 Rev 06	Proposed Site Layout Plan
FST016-SD-01 Rev 02	132kV Substation (Plan)
FST016-SD-02 Rev 02	132kV Substation (Section)
FST016-SD-12 Rev 02	DNO Control Room
FST016-SD-14 Rev 01	40ft welfare container
FST016-SD-13 Rev 01	40 ft customer switchgear
FST016-SD-03 Rev 01	40 ft spares container
FST016-SD-08 Rev 01	ESS unit
FST016-SD-06 Rev 01	Twin skid (TX)

FST016-SD-07 Rev 01	PCSK inverter
FST016-SD-04 Rev 02	ESS interface cabinet
FST016-SD-05 Rev 01	Aux transformer
FST016-SD-11 Rev 01	240,000L water tank
FST016-SD-15 Rev 01	Water hydrant
FST016-SD-09 Rev 01	2.4m palisade fence and security gate
FST016-SD-15 Rev 01	Access track

1.4 The following documents are also submitted as part of this application for consideration:

Report name	Author
Pre-application consultation report (including Statement of Community Involvement)	Tetra Tech
Archaeological and Heritage Desk-Based Assessment	Tetra Tech
Construction Traffic Management Plan	Tetra Tech
Noise Assessment	Tetra Tech
Flood Consequence Assessment (including drainage strategy)	Tetra Tech
Arboricultural Impact Assessment	Barton Hyett
Tree Survey	Barton Hyett
Landscape and Visual Impact Assessment	Tetra Tech
Illustrative Landscape Masterplan	Tetra Tech
Ecological Impact Assessment	Engain

Outline Energy Storage System Safety Manage Plan	Firstway Energy

2.0 Site and surroundings

The site

2.1 The Site is located on land at Tyddyn Forgan, Llanddeiniolen, Caernarfon, LL55 3AN and comprises a parcel of 4 ha of pasture land which includes significant vegetation along the south and southwestern boundaries. The Site contains some limited vegetation and a drain which runs northwest to southeast. The Site is bounded by the B4547 to the southwest. An existing single way access track runs from the B4547 along the northwestern boundary of the Site, connecting to the Pentir substation to the northeast. To the east of the Site is further arable land which contains a pylon, supporting overhead power cables.

2.2 The immediate surroundings are characterised by land used mainly for agriculture including ancillary buildings. With the exception of the Pentir substation, the area beyond the immediate surroundings is also characterised as largely rural and utilised for agricultural purposes. A small woodland encompasses the Pentir substation. The B4547 extends southwards approximately 280m from the main area of the site and joins the A4244. A farmstead is located approximately 350m to the west along the B4547.

2.3 The site is in an area of open countryside with no formal designations in the Anglesey and Gwynedd Joint Local Development Plan (LDP).

2.4 The Site is located within The National Landscape Character Area of Arfon as designated within the Local Plan. Further details of the NLCA are provided in the planning policy section.

2.5 There are no Scheduled Monuments within a 1km radius of the proposed site, the Ty’n Llwyn farm however is 600m from the site and contains 9 Grade II listed Buildings:

- Ty'n Llwyn Farm - Hay Barn outside Yard to NW (83283)
- Ty'n Llwyn Farm - NW range of Yard (83284)
- Ty'n Llwyn Farm - Cartshed and Granary (83170)
- Ty'n Llwyn Farm - Bothy and Bakehouse (83169)

- Ty'n Llwyn - Barn and Cowhouse at W of Yard (83281)
- Ty'n Llwyn Farm - Barn outside yard to SW (83282)
- Ty'n Llwyn Farm - Cattle Sheds at S of Yard (83280)
- Ty'n Llwyn Farm - Cattle Sheds at SE of Yard (83279)
- Ty'n Llwyn Farm - Detached barn outside Yard to E (83285)

2.6 Coed Tyddyn-Forgan is located directly to the north of the site and Coed Pen-y-Graig is located to the southwest of the site. Both are woodland areas, classified as areas of Ancient Woodland.

2.7 The land at Tyddyn Forgan is predominantly Grade 3a agricultural land as per the Natural Resource Wales Agricultural Land classification.

3.0 Planning history

3.1 The Planning history for land at Tyddyn Forgan Farm includes works carried out to the farmhouse at the wider site. These records are available via the Gwynedd council website and are as follows:

Planning Reference	Proposal	Decision
C15/0470/18/LL	Full Planning Permission: Application for conversion of existing outbuilding to associated annex to existing property together and conversion of existing outbuilding to existing outbuilding to existing dwelling, together with conversion of existing outbuilding into existing dwelling together with inclusion of existing annex as part of the existing dwelling, together with alterations to vehicular access	Approved with Conditions – 24/07/2015
C13/1139/18/YA	Prior Approval: Creating A New Track / Prior Notification For The Creation Of A New Track	Approved without conditions – 19/12/2013
C02A/0751/18/LL	Full Planning Permission: Demolition Of Existing Outbuilding And Construction Of Existing Outbuilding Extension To Existing Dwelling (Amended Application To Permitted Under Number C02a/0356/18/Ll / Demolition Of Existing Outbuilding And Construction Of Annexe Extension To Existing Dwelling To That Approved Under Code Reference C02a/0356/18/Ll	Approved with conditions – 10/01/2003

Planning Reference	Proposal	Decision
C02A/0338/18/YA	Prior Approval: Agricultural Building	Approved with conditions – 17/07/2002
C02A/0356/18/LL	Full Planning Permission: Conversion Of Attached Building To Provide Annexe Extension To Existing Dwelling/Conversion Of Attached Building To Provide An Annexe Extension To Existing Dwelling	Approved without conditions – 30/06/2007

3.2 On 21st January, a pre-application enquiry was submitted to Gwynedd Council for consideration. At the time of writing, some consultation responses are still due to be submitted to the Planning Officer and therefore the Council's response to the applicant's request is pending.

3.3 On 29th January 2025, an EIA Screening request was submitted to Gwynedd Council for their consideration. On 19th February 2025, we received the Council's Screening Opinion, concluding that under Regulation 6 of the EIA Regulations (2017), the likely impact of the development on the environment will not require the submission of an Environmental Statement.

Pentir substation

3.4 It is proposed that should this application be consented, once live, the proposal will connect to the Pentir substation, which is located directly north, of the site. The substation is responsible for both collecting and transmitting energy from around Wales supporting the countries energy security. There is an agree grid connectiong with Scottish Power Energy Networks.

3.5 Pentir substation has been identified as strategically important at a regional and national level, because of its position on the network that receives energy from large solar installation on Anglesey and off existing land windfarms and others that have received permission in the Irish Sea. The land within the vicinity of Pentir substation is considered a top rated opportunity area for future renewable energy generation,

according to Appendix B of the Assessment of the potential for solar PV farms in Gwynedd and Ynys Môn (2016).

3.6 A full planning application (ref. **C24/0532/25/LL**) was submitted in July 2024 to Gwynedd Council for a "Proposed Energy Storage facility, related access, landscaping, infrastructure, ancillary equipment, with a grid connection import and export capacity of 57MWac." on Land at Pentir Substation. The application site is located 175m north of Tyddyn Forgan farm.

3.7 The application was subsequently approved in September 2024 and as per the associated conditions should be constructed within 5 years. The energy storage facility is of a similar size to the proposed development, incorporating 96 units and 12 inverters.

3.8 The Officer's report is provided in Appendix C. it highlights that, "The current substation in Pentir is strategically important at a regional a national level".

3.9 The application was recommended for approval at committee. The application was considered to have complied with local and national policy, the major relevant points raised at committee are summarised in the paragraphs below.

3.10 The development was considered to have not have an unacceptable impact on the landscape character and visual amenity of the area due to its concealed location and screening with existing trees and vegetation. Furthermore the development was considered favourably because of the utilisation of land that is surrounded by existing energy infrastructure, including pylons and the Pentir substation.

3.11 Due to the lack of intervisibility and presence of screening, the development was not considered to have an unacceptable impact on the settling of nearby heritage assets, including two scheduled monuments within 1km of the site boundary.

3.12 With regards to traffic, it was concluded that given the low frequency of traffic movements post construction, estimated to be 2 – 4 visits per month, there would be no long-term impacts on highway safety arising from the development. The construction phase was estimated to involve 20 – 30 HGV movements per day. With mitigation measures in place, detailed within the CTMP, it was considered there would be limited impact on the road network during the construction period.

Pre-application consultation

3.13 The Planning (Wales) Act 2015 introduced a mandatory requirement to undertake pre-application consultation for major developments in Wales. This is to be carried out by the applicant/developer in accordance with the requirements of Section 61Z of the Town and Country Planning Act 1990. In this case the applicant is required to undertake pre-application consultation as the development area is over 1 hectare in size.

3.14 The pre-application consultation period ran from the 25th February and concluded on the 25th March. During this period local residents, community consultees and specialist consultees were able to provide comments to the applicant regarding the development. Further details of the consultation approach and results are provided within the accompanying Pre-Application Consultation Report submitted with this application.

4.0 Need for development and the role of energy storage

Prosperity for all: A low carbon Wales (2019)

4.1 This document comprises 100 policies and proposals which seek to achieve Wales's 2016-2020 carbon budget and 2020 emissions targets. Of particular importance is the Low Carbon Delivery Plan which is set out below.

4.2 Policy 10 refers to Energy Systems Planning including approaches that seek to maximise grid usage and defining and creating a zero carbon area.

4.3 Policy 26 states "Planning is a key lever for Wales in determining the sources of fuel for power generation".

4.4 Policy 27 emphasises the importance that energy storage plays in helping to balance our energy system. It acknowledges the role these uses play in terms of decarbonising the energy industry and increase energy efficiency. It continues "The cost, efficiency and advancement of storage, particularly batteries, means it is becoming a common and viable part of our energy networks. We support the removal of barriers to such technology.". The text continues that it wishes to remove the need for such applications to be removed from the DNS process and allow decisions to be taken at a local level.

4.5 Policy 31 reiterates the Welsh governments renewable energy target of 70% of Wales's electricity consumption to be generated from renewables by 2030.

4.6 Policy 35 places emphasis on the need for energy innovation to increase flexibility and utilise storage technology to match supply and demand. Application of this policy, "will maximise power infrastructure assets and build in flexibility that provides affordability, security and low carbon solutions."

4.7 Policy 36 focuses on market regulation and investment in smart technologies to encourage the development of energy storage and demand-side response. The supporting text states that the move towards cleaner, low carbon generation provide wider benefits to society including a decentralised system which allows householders and businesses from high energy costs by locating generation near to demand, thereby improving the resilience and flexibility of the energy system.

4.8 The document makes big pledges to reducing carbon emissions/footprint which will improve the well being of residents. The use of renewable energies play a large part in this and therefore sufficient and efficient storage of energy produced by such means is integral to this ambition.

Energy Act (2023)

4.9 The Energy Act (2023) received Royal assent on 26th October 2023 and was revised on 31st January 2024.

4.10 The Act amends the Energy Act 1989 to provide that generating electricity from stored energy is included as a definitive subset of generation.

4.11 The Act also inserts a new definition of 'stored energy', being energy that has been converted from electricity and is stored for the future reconversion into electricity.

Wellbeing of Future Generations (Wales) Act 2015

4.12 This Act was first approved in June 2015, with the most recent updates being approved in July 2024. The Act sets out 7 wellbeing goals for national and local government, local health boards and other public bodies in Wales to adhere to:

- A globally responsible Wales;
- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and thriving Welsh language.

4.13 The Act puts in place a "sustainable development principle" which informs organisations how to meet their duty under the Act, it includes the importance of balancing short-term needs with the need to safeguard the long-term needs.

4.14 The Act includes the following definitions:

- Prosperous: "an innovative, productive and low carbon society which

recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change)…"

- Globally responsible: "A nation which when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being."

4.15 The Act includes provision for requiring public bodies to, in their powers, aid in increasing the capacity of renewable energy equipment installed. In 2017, the Welsh Government announced a target of meeting the equivalent of 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030. The Act therefore requires public bodies to assist in meeting this target through their decision making powers.

Clean Power 2030

4.16 Most recently, the Government recently announced Clean Power 2030 and on 13th December 2024 published the Clean Power 2030 Action Plan, which sets out how the UK Government will achieve Clean Power by 2030.

4.17 The Action Plan states as of 2024, the UK has 4.5GW of installed energy storage, this needs to increase to 23-27GW by 2030 to support the shift to low carbon and renewable energy.

4.18 This will necessitate 3GW of installed, operational ESS capacity coming online every year, almost double the highest annual installation so far – 1.7GW of installed capacity was achieved in 2023.

Gwynedd Council Climate and Nature Emergency Plan (March 2022)

4.19 As an organisation, Gwynedd Council declared a climate emergency in March 2019, making a commitment to become a net zero Council by 2030. The council sets out their approach to achieving this target in their Climate and Nature Emergency Plan that was adopted in March 2022. The plan includes a wide range of projects to reduce carbon emissions and annual reports are published annually detailing the progress made towards reaching targets.

5.0 The proposed development

5.1 The proposed development seeks temporary planning permission for a period of up to 40 years for the erection of a 100MW (Megawatts) ESS, together with associated infrastructure, site levelling works, site access, landscaping and ancillary works.

5.2 An EIA Screening decision received from the Council concludes that the proposed development does not constitute EIA development.

5.3 There is presently no formal vehicular access to the Site. The proposal includes a new 5m wide access to be taken directly from the B4547. Vehicular tracking drawings are submitted as part of this application and demonstrate that appropriate vehicles can move into and out of the Site safely. Visibility splays are also achieved by the proposed access. A ConstructionTraffic Management Plan is submitted to support the application which sets out the routing for construction traffic and how these will be managed entering and exiting the Site.

5.4 The proposed development, save for maintenance access, will be unmanned. Once operational, it is anticipated that there would be approximately two maintenance visits per month.

5.5 Within the proposed compound there are 100 ESS units; arranged predominantly in clusters of 4, with 2 clusters of 2. A 132kV substation is also proposed on the north of the Site.

5.6 Two storage containers will be located to the southeast of the Site, one measuring 20ft and the other 40ft. A 40ft switchboard and 40ft Welfare Office will also be located within the Site's main compound.

5.7 A 240,000-litre water tank is located at the main entrance of the Site for ease of access for the emergency services. Fire hydrants are also proposed around the ESS compound.

5.8 Any operational lighting will be motion activated for security reasons.

5.9 A package of landscaping mitigation measures are proposed as part of the development including:

- Screen planting adjacent to the site entrance;

- Woodland edge planting planting along the sites southwestern boundary; and,
- Selective colour tones of the ESS units to blend it with the immediate surroundings;

5.10 A security fence will surround the site.

5.11 With regards to mitigation measures in respect of flooding and drainage, the following are proposed to be included as part of the development:

- Filter drains which provide treatment and increase the time of concentration delaying peak runoff;
- Open ditches/swales which provide open water conveyance, attenuation and treatment;
- An attenuation basin.

6.0 Design and access

6.1 As highlighted in both local and national planning policy, design is a vital consideration for new development.

6.2 ESS structures are relatively standard facilities which tend to have limited scope on the size of the individual units and associated infrastructure. However, the design approach taken by the Applicant for this proposal seeks to limit the impact on the landscape and amenity of the area; taking into consideration local heritage assets, residential properties, rights of way within proximity of the Site.

6.3 This section of the report sets out to describe and evaluate the following elements of the proposal:

- Scale
- Layout
- Height
- Materials
- Landscape
- Appearance
- Access

Scale and layout

6.4 The Site has been configured for operational requirements and has been situated in the best location with regards to proximity to the Pentir Substation and the Distribution Network Operator.

6.5 The proposed ESS will comprise 100 ESS units arranged predominantly in clusters of 4. Each ESS unit will measure approximately 7.810m long, 2.438m wide and 2.795m in height.

6.6 A 132kV substation is proposed which will enable the stored electricity to be released onto the wider distribution network. The point of connection will be via an underground cable to the Pentir Substation north along the road.

6.7 In addition to the above, the proposed development will include;

- 100 ESS units;
- 1 sub-station;
- 25 inverters linked to 13 MV skid units;
- 25 interface units;
- 1 aux transformer;
- 2 storage containers;
- 1 customer switchgear;
- 1 welfare office;
- A water tank with a capacity of 240,000 litres;
- Security gates, security fencing and CCTV cameras; and,
- Parking provision for maintenance vehicles;
- An attenuation basin.

6.8 An extract of the proposed site layout is detailed in Figure 1 below.

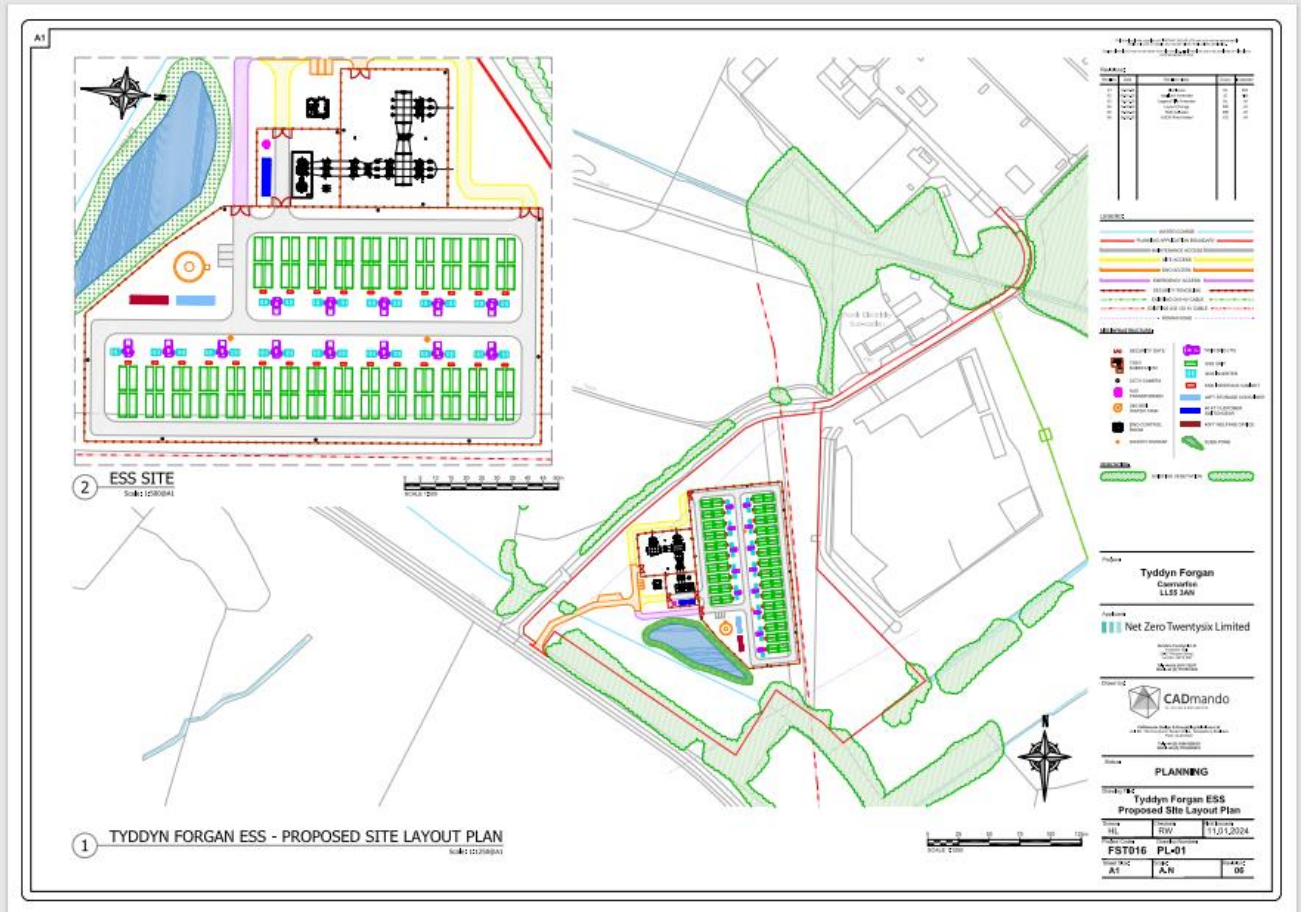

Figure 1: Proposed site layout

Height

6.9 The ESS units are single storey to reduce visual impact and allow the proposed development to be sufficiently screened from views. The proposal would be predominantly at a height of 2.6m, with the associated infrastructure (132kV substation) reaching a maximum height of 6.7m. However, the substation only comprises a small portion of the Site, as shown in the submitted section drawing FST016-SD-02_rev02.

Materials

6.10 The final specification and details are to be secured via planning condition.

Landscaping and appearance

6.11 Landscape and visual mitigation is proposed to help integrate the development into the local landscape and filter views to the site.

6.12 The accompanying Landscape and Visual Impact Assessment (LVA) considers the likely effects of the proposed development on the landscape character and visual amenity within the study area. It sets out how the proposal has been located and developed to minimise landscape and visual impacts to the surrounding area, including:

- The cable connection is located below ground, so as to avoid any operational impacts;
- The Proposed Development would not be lit in operation, thereby avoiding any change to the character of the night-sky;
- Woodland edge planting along the southwestern site boundary and screen planting adjacent to the site entrance.
- The scheme would include establishment of grassland in areas surrounding the proposed compound and the creation of SuDs features. The planting proposals also aid in retaining the baseline habitats found on the site.
- Avoids long term landscape and visual impacts by seeking temporary planning permission. Upon decommissioning the structures will be removed and the land restored to baseline conditions;
- The location of the ESS compound has been selected close to the existing Pentir Substation, so following the construction phase of the development, it would be viewed within the context of this development and not in isolation.

6.13 The LVA confirms that the site is not within proximity to nationally designated landscapes and benefits from the presence of existing trees belts. Although it is located within 1.4km and 2.1km of two Special Landscape Areas (SLA), it is considered that due to the distance and intervening vegetation, neither landscape nor visual receptors would experience an impact greater than minor adverse at any stage of the development proposals.

6.14 Due to the siting and mitigation measures outlined above, the LVA concludes that the development is unlikely to result in major adverse effects on the landscape or visual amenity of the area.

Access

6.15 The proposed development will be accessed from a new access point along the B4547 and the southwestern corner of the site. This access point will be used for construction and decommissioning as well as for operational servicing throughout the lifetime of the development.

6.16 The new access is approximately 24 metres to the east of the existing National Grid Pentir Substation access.

6.17 Swept path assessment and access arrangements are provided in greater detail within the accompanying Construction Traffic Management Plan (CTMP).

7.0 Planning policy

7.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that planning applications must be determined in accordance with the development plan unless material considerations indicate otherwise.

7.2 The Site is located within the administrative area of Gwynedd where the Development Plan currently comprises:

- Anglesey and Gwynedd Joint Local Development Plan (2011-2026)
- Future Wales: The National Plan 2040 (2021)

7.3 Other material considerations include Planning Policy Wales, Edition 12 alongside the policy and guidance set out in Section 4 of this statement.

7.4 Since the publication of Future Wales: The National Plan, Technical Advice Note (TAN) 8: Renewable Energy has been revoked, meaning there is no longer an energy specific TAN.

Anglesey and Gwynedd Joint Local Development Plan (2011 – 2026)

7.5 The policies set out below are considered to be of particular relevance to the proposed development.

7.6 **Policy PS 6: Alleviating and Adapting to the Effects of Climate Change -** This policy emphasises the need for proposals to demonstrate consideration of the energy hierarchy, this includes reducing energy demand and improving energy efficiency. The policy also states there is a need to, “use low or zero carbon energy technologies wherever practical, viable and consistent with the need to engage and involve communities; protect visual amenities, the natural, built and historic environment and the landscape.” The policy sets out an energy hierarchy that all developments must adhere to;

- Reducing energy demand;
- Energy efficiency;
- Using low or zero carbon energy technologies wherever practical, viable and

consistent with the need to engage and involve communities; protect visual amenities, the natural, built and historic environment and the landscape.

7.7 **Policy PS 7: Renewable Energy Technology -** Gwynedd Council aims to promote the use of renewable or low carbon energy technologies within development proposals. This includes supporting energy generation from a variety of sources. The Policy states, “installations outside designated areas provided that the installation would not cause significant demonstrable harm to landscape character, biodiversity, or amenity of residential or holiday accommodation, either individually or cumulatively.”

7.8 **Policy PS 5: Sustainable Development -** Development proposals should align with sustainable development principles. This includes alleviating the causes of climate change and adapting to unavoidable impacts. This policy also encourages effective use of land and existing infrastructure.

7.9 **Policy PCYFF 3: Design and Shaping Place -** This policy states that all proposals will be expected to demonstrate high quality design and respects the context of the site and its place within the local landscape.

7.10 **Policy PCYFF 4: Design and Landscaping** - All proposals must demonstrate how they integrate into the surrounding landscape. Proposals must also demonstrate how the development has given due consideration to the Landscape Character Area Assessment or Seascape Character Area Assessment. Local and strategic views and the contours of the wider landscape must also be protected under this policy.

7.11 **Policy PCYFF 5: Carbon Management -** This policy states that development must demonstrate how the contribution from renewable energy is maximised. The policy justification states that developers are encouraged to consider all aspects of the Plan area’s capacity to contribute to reducing national carbon emissions within the energy sector.

7.12 **Policy ADN 3: Other Renewable Energy and Low Carbon Technologies** – This policy clarifies that low carbon technologies, not including solar or wind will be permitted if it can be demonstrated the development would not have an unacceptable significant impact on visual amenities or sensitive use located nearby. Proposals of

this nature will also be supported provided, where appropriate, existing buildings or previously developed land is used.

Future Wales: The National Plan 2020 (April 2021)

7.13 Adopted in April 2021, the document sets out a national framework for development up to 2040. It sets out a strategy to address key national priorities through the planning system. This includes achieving decarbonisation and climate resilience. The document emphasises the ambition for Wales to become a world leader in renewable energy technology and notes the potential for solar energy. It also commits to ensuring the planning system provides a strong lead for renewable energy development, support the renewable sector and reduce carbon emissions.

7.14 The Plan builds upon the seven goals as set out within the Well-being of Future Generations (Wales) Act 2015 (see Section 4 of this statement). The Plan seeks to embed the principles of the Act including five ways of working (long-term thinking, prevention, collaboration, integration and involvement).

7.15 Page 48 refers to renewable energy, stating that Wales can become a world leader in renewable technologies. It continues “our support for both large and community scaled projects and our commitment to ensuring the planning system provides a strong lead for renewable energy development, means we are well placed to support the renewable sector, attract new investment and reduce carbon emissions.”.

7.16 **Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure**: expresses strong support for the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. It also states that decision makers must give significant weight to the need to meet Wales’ international commitments and target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency when determining planning applications for renewable and low carbon energy development.

7.17 The supporting text continues, that generating renewable energy is a key part of Wales’ commitment to decarbonising and tackling climate emergency. It sets out the following targets:

- 70% of electricity consumption to be generated from renewable energy by 2023;
- For one gigawatt of renewable energy capacity to be locally owned by 2030;
- For new renewable energy projects to have at least an element of local ownership from 2020.

7.18 Page 97 highlights the role the planning system plays in the provision of new renewable and low carbon energy by effecting the national targets, setting overall strategic framework and direction within which developers can propose new energy infrastructure projects. It also recognises that landscape areas across Wales which have intrinsic value should be protected. It states that sites in National Parks and Areas of Outstanding Natural Beauty are not considered suitable for large scale wind or solar developments but that outside of these areas, a positive policy framework exists.

7.19 Page 99 states “The Welsh Government will work with stakeholders, including national grid and distribution network operators, to transition to a multi-vector grid network and reduce the barriers to the implementation of any necessary new grid infrastructure.” It continues “The boundaries between systems are also becoming blurred with energy being converted into (and stored in) different forms to address a range of needs. There is also a need to consider large-scale energy storage as part of the energy system to provide gird balancing.”.

Planning Policy Wales Edition 12 (2024)

7.20 National planning policy in Wales is set through Planning Policy Wales (PPW). Edition 12 is the most recent edition and was published in February 2024. It contains guidance for decision makers as well as sets out the Government’s planning policies for Wales and how these are expected to be applied.

7.21 Section 5.7 of the document relates to energy, with paragraph 5.7.1 explicitly stating that low carbon electricity must become the main source of electricity in Wales, with the future energy mix being dependent on a range of established and emerging technologies.

7.22 Paragraph 5.7.12 states that energy storage has an important part to play in managing the transition to a low carbon economy and proposals for new storage facilities should be supported wherever possible.

7.23 Paragraph 5.7.7 states “the planning system should…optimise energy storage.”

7.24 Paragraph 5.7.12 states that energy storage has an important part to play in managing the transition to a low carbon economy and proposals for new storage facilities should be supported wherever possible.

7.25 Paragraph 5.7.15 states that the planning system has an active role to help ensure the delivery of these targets, in terms of new renewable energy generating capacity and the promotion of energy efficiency in buildings.

7.26 Section 5.9 covers the facilitation of renewable and low carbon energy and requires local authorities to ensure full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved.

7.27 Paragraph 5.9.14 states that local planning authorities should support and guide renewable and low carbon energy development to ensure their area’s potential is maximised.

7.28 Paragraph 5.9.15 states that outside identified areas, planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposals.

8.0 Planning appraisal

Principle of development

8.1 As set out earlier in this statement, following changes to the Energy Act in 2023, energy storage is considered to constitute energy generation and therefore policies relating to renewable energy are applicable.

8.2 National policy is strongly supportive of renewable energy as a means of meeting our increasing energy demands, tackling climate change and transitioning to a prosperous and low carbon sustainable economy.

8.3 Local policy also encourages the use of development of renewable energy technology and measures to alleviate and adapt to climate change. Proposals that assist in providing clean energy will be supported and expected to demonstrate they respect the context of their surroundings and the local landscape.

8.4 The proposed development helps to address intermittency issues associated with renewables and will allow a reduction in the role that fossil fuels play in energy provision, enabling renewables to be the main energy source. The proposal helps to ensure energy security. The proposal is considered, therefore, to comply with policies PS 6, PS 7 and ADN 3 in relation to combatting climate change.

Design considerations

8.5 High quality design is a key consideration in all planning applications. Whilst the function of the proposal dictates its height, scale and massing, there are mitigation measures that have been explored, considered and put into place such as landscaping to help screen the proposals from views. The ESS infrastructure will be finished in a dark green matt finish to enable the proposed to fit in with the surrounding environment.

8.6 As per ‘Policy PCYFF 3 - Design and Shaping Place’ of the Local Plan, the proposal will seek to achieve high quality design as it respects the context of the site and its place within the local landscape

8.7 Policy PS7 also explains that Development Proposals will be supported where “Gwynedd Council aims to promote the use of renewable or low carbon energy

technologies within development proposals. This includes supporting energy generation from various sources" The ESS is designed to provide support to renewable energy storage and therefore complies with PS7.

Heritage

8.8 Development proposals which impact upon sites of architectural and / or historical merit and sites of archaeological importance will only be permitted where it can be demonstrated that the proposal would preserve or enhance the character and appearance of the site.

8.9 An Archaeological and Heritage Desk-Based Assessment (DBA) has therefore been prepared which examines the cultural heritage potential of the proposed development Site and the surrounding areas.

8.10 The DBA explores the Site and a wider study area of 1km to assess the nature of the surrounding cultural heritage sites and place the recorded sites within their context.

8.11 Ty'n Llwyn farm is located 600m north east of the site and contains the 9 listed buildings referenced in section 2 of this report. These are predominantly post-medieval farmsteads. There is a potential for minor negative impacts to the setting of these assets, dependent on the final design. However, adequate screening in the form of trees and vegetation is likely to mitigate this low level of harm. The road east adjacent to the site is identified to be a roman road.

8.12 The potential for unrecorded archaeological remains within the site is considered to be high. This is due to the presence of a Roman road that runs through the site. As a consequence, the DBA recommends a geophysical survey is undertaken to better understand any remains that are found. Trial trenching may be required following the results any geophysical survey.

Ecology

8.13 An Ecological Impact Assessment has been prepared to support this application. The Site is identified as comprising mainly of grassland with scattered gorse scrub and acid grassland. It is also identified as suitable for a range of nesting birds but it is not used by nesting skylarks or lapwings.

8.14 In the absence of avoidance, mitigation or compensation, the main potential ecological impacts during construction and operation of the project are the temporary loss of grassland and the risk of injury to common lizards and nesting birds.

8.15 The assessment continues that the potential impacts during construction will be avoided through the translocation of common lizards away from the construction areas and timing of works to avoid the nesting bird season.

8.16 It is proposed to deliver a net benefit in terms of biodiversity.

Landscape impact

8.17 A Landscape and Visual Assessment (LVA) has been prepared and is submitted for consideration as part of this application.

8.18 The LVA demonstrates that the proposed development would result in generally low tiers of landscape and visual effects due to its close proximity to the Pentir Substation as ultimately this proposal will be visualised as an extension of this substation therefore having no further impact on the area.

8.19 In addition, the proposal has demonstrated consideration for enhancing the local landscape by including planting at the site access and along the southwestern boundary, respecting the context of the local surroundings.

8.20 The site does not sit within, or in close proximity to, a national designated landscape area. There are 2 SLA's approximately 1.4km and 2.1km but it is not considered that the development would result in an impact greater than minor adverse, either during the construction or operational phase.

8.21 **I**t is therefore considered that the proposal demonstrates that it seamlessly integrates into the surrounding landscape, complying with both Policy PCYFF 4 and Policy PCYFF 3 of the LDP that seek to preserve and enhance local landscapes.

Flood risk and drainage

8.22 A Flood Consequence Assessment (FCA) is submitted alongside the application for consideration.

8.23 The existing flood risk for the Site is indicated as low. The majority of the site is located in Flood Zone A, which is the lowest risk classification and compatible with the proposed development. A small part of the Site is considered to be in Flood Zone B. However given that the proposed built form avoid these areas and do not alter the topography of the area, there will be no change to the flood regime.

8.24 The majority of the Site is located in Flood Zone 1 in respect of fluvial flooding which equates to a low risk from this form of flooding.

8.25 The most viable SuDS option for the development is a combined solution of ditches and filter trenches discharging through an attenuation basin. As such, the following measures are proposed to be included as part of the development:

- Filter drains which provide treatment and increase the time of concentration delaying peak runoff;
- Open ditches/swales which provide open water conveyance, attenuation and treatment;
- An attenuation basin.

Construction traffic impact

8.26 The proposed development, save for maintenance access, will be unmanned. Therefore, the main consideration in terms of traffic impact is in relation to construction traffic.

8.27 The ESS units will be transported to the Site individually, but multiple interface cabinets, inverters and twin skids can be transported together. It is anticipated that 2 vehicular movements a day will occur during construction and a once operational, there will be 1-2 visits by maintenance staff in light vehicles. A container for storage and the Customer Switch Gear cabinet will be transported individually to the Site.

8.28 Once operational, it is anticipated that there would be approximately two to four maintenance visits per month. These would typically be made by vans, cars and pick-up type vehicles

8.29 Any interaction with the public and the public highway is minimised using a single vehicle access point off the B4547 and the use of trained bankspersons, as appropriate. The use of bankspersons will allow for:

- Vehicle manoeuvres into and out of the site to be monitored and assisted.
- Vehicles, wherever possible, to not stop at inappropriate locations on the highway causing disruption to traffic and local residents.
- All loading / unloading to be undertaken within the site.

8.30 A temporary warning signage would also be provided within the vicinity of the site access during construction.

8.31 The CTMP concludes that for this type of development, the primary traffic is associated with the initial construction phase, which involves the delivery of equipment and materials. Once operational, the site will require minimal maintenance, resulting in infrequent visits by maintenance personnel.

Arboricultural impact

8.32 An Arboricultural Impact Assessment (AIA) has been prepared and submitted for consideration. Details of this will be provided at the time of the full planning application. However 5 trees (of low and moderate quality) are proposed to be felled as result of the proposed. Two trees require protective fencing to be installed around them.

8.2 Noise impact

8.1 A Noise Assessment has been prepared and is submitted as part of this application. An assessment of the impact of the proposed development against existing background sound levels at the closest noise receptors demonstrates that for both daytime and nighttime periods, the noise levels are predicted to be below the existing background levels which is considered to represent a low impact.

8.2 A noise intrusion assessment also predicted day and night-time noise levels to be below the standard internal noise criteria.

8.3 The proposed scheme is predicted to result in a +0.1dB in the existing ambient noise levels which is deemed to be a negligible short-term impact.

8.4 In conclusion, the development will not be significant and therefore will have a negligible impact in relation to noise.

9.0 Conclusion

9.1 The proposed development is for temporary planning permission for a period of 40 years for the erection of an ESS, together with associated infrastructure, site levelling works, site access, landscaping and ancillary works on land at Tyddyn Forgan.

9.2 Changes to the Energy Act in 2023 mean that energy storage is considered to constitute energy generation and therefore policies relating to renewable energy are applicable. National and local planning policy is supportive of schemes of this type.

9.3 An ESS stores excess energy from both renewable energy developments and the grid when there is low demand for electricity. It then discharges the electricity at a later time when there is excess demand. ESS schemes therefore help provide energy security.

9.4 The proposed development would be located within a large compound split between a 132kV substation and an energy storage area populated by 100 ESS units and associated infrastructure.

9.5 Overall, the impacts of the development have been mitigated and the principle of development is considered to be acceptable, with strong support from both local and national planning policy. Moreover, the proximity of the site to the Pentir Substation demonstrates that proposals such as this are considered acceptable in principal in this location.