





# Planning Statement Llandyfaelog Substation

October 2025

Prepared for: National Grid Electricity Transmission

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Project Number: 331201429

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# **Revision Schedule**

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
001	Draft Planning Statement	JOR	September 2025	JC	September 2025		
002	Draft Planning Statement	JC	September 2025	SH	September 2025		
003	Planning Statement	JOR	October 2025	SH	October 2025		



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### 1 Introduction

#### 1.1 Introduction

- 1.1.1 This Planning Statement (PS) has been prepared by Stantec UK Ltd (Stantec) on behalf of the applicant National Grid Electricity Transmission ('NGET') (the Client) to support the delivery of a new 400kV substation (including the substation platform, access road and associated infrastructure) (the Llandyfaelog Project), near Llandyfaelog, Carmarthen, South Wales.
- 1.1.2 The Site is located in the administrative boundary of Carmarthenshire County Council (the Council) (CCC).
- 1.1.3 The Llandyfaelog Project is comprised of the following principal elements:
  - Platform and Air Insulated Substation (AIS), measuring 260 metres by 640 metres the
    platform comprises of hardstanding with drainage and earthing for electrical equipment. It
    will be surfaced with grey stone chippings. The National Grid 400 kV AIS substation will
    be located on the level platform in a fenced compound measuring 155 metres by 602
    metres.
  - The remaining space on the platform will be used for two smaller 132 kV substations, built
    and operated by NGED and Green Gen Cymru respectively. NGED and Green GEN
    Cymru will apply for separate consent to construct their proposed substation compounds,
    as well as the connections into the proposed 400 kV substation.
  - Access to the A484, with operational access road to connect the platform to the A484.
- 1.1.4 Modification works to the existing 400kV Overhead Line (OHL) to connect the substation to the existing OHL involving the installation of two new towers and one replacement tower circa 18m and 62m.
  - Associated drainage and hard and soft landscaping.

#### 1.2 Purpose of this Statement

1.2.1 The purpose of this PS is to assist CCC in its assessment of the Proposed Development against the development plan and any other relevant material considerations in accordance with Section 38(6) of the Planning and Compulsory Purchase Act (2004).

#### 1.3 Background

#### **NGET's Statutory Responsibilities**

- 1.3.1 The Applicant is the only company licensed to transmit electricity in England and Wales. Under Section 9 of the Electricity Act, the Applicant is required, in this capacity, to develop and maintain an efficient, coordinated and economical system of electricity transmission to facilitate competition in the supply and generation of electricity. The system operates mainly at 400kV and 275kV, connecting the electricity generators to substations where the high voltages are transformed to lower voltages, enabling the power to be distributed to homes and businesses by Distribution Network Operators ('DNO') who operate at a maximum of 132kV.
- 1.3.2 Transmission of electricity in Great Britain requires permission by way of a licence granted under Section 6(1)(b) of the Electricity Act 1989 ("the Electricity Act"). The Applicant has been granted a transmission licence and is bound by legal obligations, which are primarily set out in the Electricity Act and in the transmission licence.

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- 1.3.3 NGET has a legal obligation to connect customers to the network when a connection is requested and when existing substations do not have the capacity for the size of the connection required, NGET is required to build a new one to meet the need. When developing proposals for new network infrastructure NGET has a duty under the Electricity Act 1989 to do so in an efficient, coordinated and economical way. National Grid is also required, under Section 38 of the Electricity Act 1989, to comply with the provisions of Schedule 9 requires licence holders, in the formulation of proposals to transmit electricity to:
  - Schedule 9(1)(a) "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
  - Schedule 9(1)(b) "do what 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."
- 1.3.4 NGET also has a statutory duty under Section 9 (2) of the Electricity Act 1989:
  - "(....) to develop and maintain an efficient, coordinated and economical system of electricity transmission; and
  - (...) to facilitate competition in the supply and generation of electricity."

#### The Llandyfaelog Substation

- 1.3.5 The Llandyfaelog substation is proposed to provide connections for two customers; Green Gen Cymru (GGC) an Independent Distribution Network Operator (IDNO) customer, requiring 4 new 400/132kV Supergrid Transformers (SGTs) to connect 1540MW of onshore wind generation, and National Grid Electricity Distribution (NGED), Distribution Network Operator (DNO) customer, requiring three new 400/132kV SGTs for a 480MVA connection. This will improve power management between Pembroke and Swansea North, alleviate constraints, and reduce curtailment in the Swansea North Active Network Management (ANM) system.
- 1.3.6 Additionally, based on its Beyond 2030¹ study for the Celtic Sea NESO National Energy System Operator) has recommended Llandyfaelog as a connection point for 1.5GW of offshore wind which was previously reserved at the Site.

#### 1.4 Consenting

#### **Town and County Planning Act**

1.4.1 This planning application has been submitted under the Town and Country Planning Act (1990) to CCC for the development of the proposed substation and platform. The proposed works constitute 'major development', as defined in article 2 of the Town and County Planning (Development Management Procedure) (Wales) Order 2012 (Ref. 1-1), as it constitutes development carried out on a site having an area of 1 hectare (ha) or more.

#### **Overhead Lines**

- 1.4.2 Section 37 of the Electricity Act 1989 establishes the statutory consenting process to install and keep installed OHL. It requires the consent of the Secretary of State for Energy Security and Net Zero (SoS) to install an electric line above ground unless the electric line either:
  - a) has a nominal voltage of less than 20kV and is used for supplying a single customer; or

<sup>&</sup>lt;sup>1</sup> Beyond2030: Celtic Sea, (13 August 2024) published by National Grid Electricity System Operator Limited ('NGESO').



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- b) is within premises either occupied or controlled by the person responsible for the installation. The equipment required to connect the proposed substations to the transmission network would be above 20kV and not located on land currently occupied or controlled by National Grid.
- 1.4.3 Therefore, these components of the development fall under Section 37 of the Electricity Act and the Applicant is to seek consent (including deemed planning permission) from the SoS for the OHL works.
- 1.4.4 Planning permission is not being sought from CCC for the OHL works required to connect the proposed substation to the existing 400kV overhead line as a different consenting route applies for such works.

#### 1.5 Habitats Regulations Assessment

1.5.1 The Habitats Regulations Assessment (HRA) is a mandatory part of the consenting process for any plan or project that is likely to have a significant effect on a European-designated site. A shadow Habitat Regulations Assessment (sHRA) Report (October 2025) has been prepared by Stantec which forms part of this planning submission.

# 2 Site Location, Description and Surrounding Area

#### 2.1 Site Location

- 2.1.1 The Site is located approximately 6km south of Carmarthen, South Wales. The Site is located within a predominantly agricultural setting, north of the village of Llandyfaelog and 700m northeast of Upland Arms. The area of the proposed works is centred on E:241868 N:213542.
- 2.1.2 The Site location is shown in **Figure 1** outlined in red.

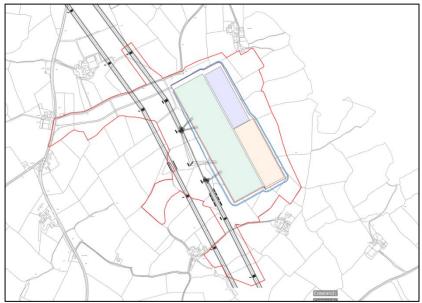


Figure 1: Site location plan

#### 2.2 Site Description and Accessibility

- 2.2.1 The Site covers a total area of approximately 52 hectares (ha) and comprises of several agricultural fields, in use as grazing and arable farmland. The Site occupies an elevated plateau within which is an area of relatively flat landform.
- 2.2.2 The Site is bounded by a range of natural landscaping including trees and large hedges.
- 2.2.3 The existing access to the Site is from a narrow country road the C2074 which is roughly 630m long that branches off the A484. There are multiple existing access points to the fields forming part of the Site from this road.
- 2.2.4 For the Proposed Development, a new site access road will be built approximately 600m in length. A new junction with the A484 will be created around 50m south from the existing C2074.
- 2.2.5 Public Right of Way (PRoW 29/14/2) crosses the southern part of the Site, running east to west and directly intersects the Site beneath the existing OHL.

#### 2.3 Surrounding Area

2.3.1 The Site is generally surrounded by agricultural land. The C2074 is single-track asphalt road located immediately to the north of the Site, leading to the west and north. To the east and south, the Site is bound by further agricultural land and grassland for grazing.

- 2.3.2 The settlement pattern comprises of dispersed farmsteads, the nearest of which are located approximately 170m to the northeast of the Site. The closest residential settlement approximately 700m northeast of the Site and the village of Llandyfaelog is approximately 900m south of Site.
- 2.3.3 Two existing high voltage overhead power lines run parallel to the Site boundary
- 2.3.4 There are a number of Public Rights of Way (PRoW) surrounding the Site, these include:
  - The Wales Coastal Path (and NCN Route 4) is located approximately 1.4km further west following the River Twyi estuary
  - PRoW 29/10/1 to the northeast of the Site
  - PRoW 29/13/1 to the east of the Site
  - PRoW 29/15/1 to the east of the Site
  - PRoW 29/14/1 & 2 to the south and east of the Site and intersecting the Site
  - PRoW 29/16/1 to the south of the Site
  - PRoW 29/18/1 to the south of the Site

#### 2.4 Site Technical Constraints

2.4.1 The Site is not subject to any statutory ecological, historical or landscape designations and is not covered by any local plan designations within the adopted Carmarthenshire Local Development Plan (CLDP) 2006-2021 as shown on figure 2. Note, the Site boundary is shown as a redline on the image below.

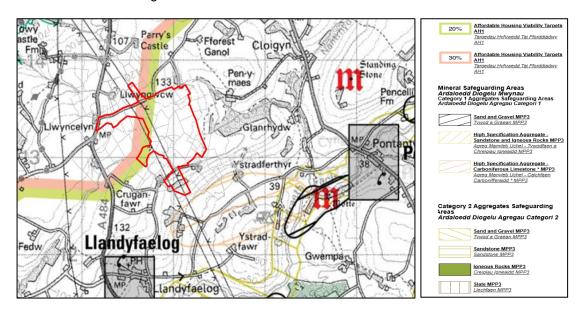


Figure 2: Extract of the CLDP 2006-2021 (accessed September 2025) and corresponding key.

2.4.2 The Site is not located within a designated landscape. The Tywi Valley Special Landscape Area (SLA) is located approximately 1.8km to the west. Further, the Site is located within the National Landscape Character Area (NLCA) 33: Gwendraeth Vales which is described as an area of rolling hills, ridges and minor valleys, the area between the coastal and valley parts of the Tywi, the South Wales valleys and the black mountain part of the Brecon Beacons.

- 2.4.3 There are two European designated areas for nature conservation within 5km of the Site. Carmarthen Bay and estuaries / Bae Caerfyrddin ac Aberoedd Special Area of Conservation (SAC) approximately 1.5 km northwest of the Site and Twyi River/Afon Twyi SAC which is approximately 4.6km north of the Site. One national statutory designated area for nature conservation, the River Twyi / Afon Twyi Site of Special Scientific Interest (SSSI) is located 1.5km northwest of the Site.
- 2.4.4 There are eight designated historic assets within a 3km study area of the Site, including the following six listed buildings (including two bridges), all of which are listed at Grade II:
  - Glanrhydw (Georgian rubble stone house) located c.1.3km east of the Site (26769);
  - Pont Anwyn (rubble stone bridge) located c.2km east of the Site (82287)
  - Church of St Maelog located c.1.3km south of the Site (26768);
  - Pont Rhydyronnen (rubble stone bridge), located c.1.8km south of the Site (82400)
  - Upland (Georgian, three storey house) and Former Stables at Upland, located c.1.4km west of the Site (21456 and 21457)
- 2.4.5 There are two scheduled ancient monuments within the 3km study area comprising:
  - Castell y Domen, Gwempa, the remains of a motte and ditch of medieval date, located c.1.7km south-east of the Site (CM240); and
  - Pen Celli Standing Stone, the remains of a standing stone of probable Bronze Age date and assumed to be of funerary and / or ritual function, located c.1.7km east of the Site (CM122)
- 2.4.6 The nearest Registered Park and Garden is the Grade II Llechdwnni, located just over 3km south of the Site (PGW(Dy)21(CAM)) associated with the Grade II listed Old House at Llechdwnni (14553). The closest conservation areas to the Site comprise Llansteffan c.7km to the west and Carmarthen Town Conservation Area c.6km to the north.

# 3 Environmental Impact Assessment Screening

#### 3.1 Environmental Impact Assessment Screening Opinion Requests

3.1.1 The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 as amended (the "EIA Regulations"), make provision for applicants to seek a screening opinion from the LPA on whether EIA is required. Applicants are advised to secure a screening opinion early on, before they undertake any statutory pre-application publicity and consultation.

#### EIA Screening: SCO/02163 (May 2024)

3.1.2 An EIA Screening Opinion (LPA Ref. SCO/02163) was requested for the erection of a new 400kV substation at the Site in May 2024. CCC adopted the opinion that the Proposed Development was not EIA development, and that the application need not be accompanied by an Environmental Statement (ES).

#### **EIA Screening: SCO/02929 (May 2025)**

- 3.1.3 As the design evolved, a single platform design was preferred for engineering reasons and to enable NGET to develop a holistic drainage strategy for the Site. As a result, the Site area also increased. To follow due process a subsequent formal screening opinion was sought.
- 3.1.4 The EIA Screening Opinion Request was submitted to the Council on the 20 May 2025 and subsequently an EIA Screening Request Response (CCC ref: SCO/02929) was received on 2 June 2025. The decision of the EIA Screening Opinion Request was that an EIA Scoping and Environmental Statement (ES) was not required.
- 3.1.5 The Council adopted the following opinion:

"In conclusion, the Authority is of the opinion that the proposal, either alone or in combination, is unlikely to have a significant adverse effect on the environment. As such, the likely effect of the proposals is unlikely to be significant and does not amount to EIA development. This is the 'screening opinion' of the Local Planning Authority".

# 4 Community Engagement

#### 4.1 Introduction

4.1.1 NGET believes that early and meaningful community engagement in planning can improve the quality and relevance of new developments; give people a voice and build their confidence to influence decisions affecting their local area; and build understanding between developers, planning authorities and communities.

#### 4.2 Pre-application Engagement with the Council

4.2.1 The Applicant has undertaken pre-application engagement with Carmarthenshire County Council since the early stages of project development in 2024. Engagement included a formal pre-planning enquiry, e-mail correspondence and meetings on matters such as the scope of the application documents, highway matters and drainage.

#### 4.3 Pre-Application Engagement with Other Stakeholders

4.3.1 Throughout the development of the project, the Applicant has engaged with other stakeholders through face- to- face meetings, virtual meetings, letters and e-mails. Organisations and individuals consulted included Llandyfaelog Community Council, landowners and members of the public and Heneb.

#### 4.4 Statutory Pre-Application Consultation

- 4.4.1 In accordance with Section 61Z of The Town and Country Planning Act 1990 (as amended) (Ref L) and Part 1A of the Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016 (Ref. 1-29), all major developments are required to be subject to formal pre-application consultation prior to submitting a planning application. Consequently, and in accordance with the regulations, statutory pre-application consultation is being undertaken in respect of the Proposed Project.
- 4.4.2 Following consultation, further details on the statutory pre-application consultation process will be presented in the Pre-Application Consultation Report.

# 5 The Development Proposal

#### 5.1 The Development Proposal

- 5.1.1 Substations are an integral part of the UK electrical transmission system. They are a method of controlling power flows and voltages around the transmission and distribution systems and are used to connect sources of electricity generation to those systems.
- 5.1.2 Substations will generally comprise elements such as transformers and switchgear. A transformer within a substation will change (or "transform") the level of a voltage from one value to another value. Switchgear is used to provide operational safety and flexibility to the network to enable efficient power flows and ensure the network operates safely and reliably.

#### **Proposed Platform and Air Insulated Substation**

- 5.1.3 Measuring 260m by 640m the single platform is comprised of hardstanding with drainage and earthing for electrical equipment. It will be surfaced with grey stone chippings. The NGET 400kV AIS substation will be located on the western side of the platform in a fenced compound measuring 155m by 602m. The eastern side of the platform will be used for the customers substations (and these will be consented separately).
- 5.1.4 The substation equipment will consist of a variety of vertical structures supporting overhead busbars with ancillary equipment. The maximum height of the equipment will be approximately 15m. There will be up to eight Supergrid Transformers located within the substation. Each Transformer will be sited on a reinforced concrete base within the compound and surrounded by noise enclosures. There is also provision for two future reactive compensators.
- 5.1.5 A control building, amenities building, and storage units will be sited within the compound, measuring 23.3 metres by 26.3 metres, 14.7 metres by 17.6 metres, 6 metres and 2.5 metres respectively. The control and amenities buildings will be a traditional block and brickwork construction. The storage units are modified shipping containers. The control building will house computers and controls to operate the substation. The amenities building will contain office and welfare facilities.
- 5.1.6 Close to the main entrance but external to the substation there will be a small DNO substation required for a low voltage power supply to the Site. Within the Site adjacent to the buildings will be and a package diesel generator required to be used as back up if the low voltage power supply fails.
- 5.1.7 Car parking will be provided adjacent to the control and amenities buildings, providing 23 spaces (including EV charging facilities).
- 5.1.8 The compound will be enclosed by an electrified security fence (measuring 3.4m in height). Passive infra-red security lighting and closed-circuit television security cameras will surround the equipment and create a secure compound. The equipment will be lit for maintenance purposes, and any lighting solution will be prepared in accordance with the current Design Standards for Exterior Lighting.
- 5.1.9 The internal road and pedestrian area layout for the substation compound has been designed to allow the safe movement of vehicles and pedestrians and has had regard to relevant health and safety legislation and good industry practice. The Site access road is designed to allow delivery of the SGTs, operational and maintenance access around the substation.

#### Access

5.1.10 Access to the Site will be from the A484 via a bellmouth junction. The access will be used for construction traffic and operational access. A metalled internal access road of approximately 6 metres wide will run from the bellmouth junction to the platform for approximately 600 metres.

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- 5.1.11 The bellmouth and road will be of asphalt construction. A fence line, nominally 1.1m high, will be installed alongside the access road.
- 5.1.12 During construction a gate and security unit will be positioned at the Site entrance to manage access to the Site.
- 5.1.13 The proposed access to the Site bisects an existing gravel access track serving as a secondary access to a dwelling to the south of the site. Access to the track will be maintained from a new entrance at the bellmouth. During the construction period access to the track will be subject to management between the contractor and the resident.

#### **OHL Works**

- 5.1.14 The OHL works will comprise the construction of two new towers and replacement of one existing tower, the construction and subsequent removal of a temporary diversion necessary to construct the new towers and construction of line entry arrangements into new substation bays with termination of the OHL on gantry type structures.
- 5.1.15 The new towers will be constructed along a similar alignment to that of the existing towers. The first new tower will turn two overhead line circuits onto gantries within the substation, the second new tower will turn one overhead line circuit onto a gantry within the substation, with the third tower replacing an existing tower and turning the final overhead line circuit onto a gantry within the substation.

#### 5.1.16 Foul and Surface Water Drainage

- 5.1.17 Permanent surface and foul drainage systems will be installed for the development. Surface water drainage for the compound and access road will be utilising SuDS. Swales and ponds will facilitate surface water management and biodiversity benefit.
- 5.1.18 An oil interceptor will be installed below ground before discharging oily water from bunded transformer areas to the attenuation basin.

#### Landscaping and ecological enhancement

- 5.1.19 Hard and soft landscaping is proposed across the Site, to denote and supplement boundaries, to mitigate the visual impact of the project and to deliver net benefit for biodiversity.
- 5.1.20 Measures designed to deliver a Net Benefit for Biodiversity (NBB) in accordance with Planning Policy Wales and the DECCA Framework are set in the Green Infrastructure Statement. In summary these will:
  - enhance and create habitats and improve habitat connectivity;
  - support protected and notable species; and
  - provide for long-term management and monitoring to secure biodiversity gains.

#### Removal of existing 132kV OHLs

5.1.21 The existing 132kV OHLs crossing the proposed development Site are to be diverted by the DNO NGED. These works are to be consented separately by NGED and whilst specific details are not yet known, the replacement lines are assumed to be undergrounded.

#### 5.2 Construction and Commissioning Programme

5.2.1 The Project will be designed, constructed and operated in accordance with all relevant health and safety legislation. It will also comply with design safety standards including the National Electricity Transmission System Security and Quality Supply Standard (NETS SQSS), which



- defines the criteria and methodology for coordinating and operating the National Electricity Transmission System. The NETS SQSS informs a suite of National Grid policies and processes, which set out the design standards and thresholds that must be met when designing, constructing and operating assets such as the proposed substations.
- 5.2.2 The construction and commissioning of the Project is expected to take 48 months, commencing in 2026. Construction and commissioning will comprise of the following principal phases:
  - **Phase 1 Site preparation:** The construction phase will commence with site preparation, erection of the temporary construction worker facilities, creation of the new access road and provision of parking and laydown areas across the Project Site. Temporary perimeter fencing will be erected within the first phase of the construction programme to ensure that the construction compound is secure. The Temporary OHL diversion may be installed at the early phase of construction to enable access to develop the platform.
  - **Phase 2 Earthworks:** This phase will include the earthworks required to set the Site level for the proposed platform. At this stage, the ground will be levelled and the sloped earthworks completed.
  - **Phase 3 Civil works:** In this phase, the Contractor will excavate the Site, build the cable troughs and foundation formworks, pour concrete and install reinforcements. Once the concrete has set, steel structures will be erected and assembled to support the electrical equipment and Site buildings. All necessary Site buildings, lighting and the substation perimeter fencing will be constructed.
  - **Phase 4 Electrical equipment:** During this phase, electrical equipment (e.g. switch gear, SGTs, busbars etc.) will be installed on foundations and steel structures and connected to their respective locations, including buildings and other plant components.
  - **Phase 5 OHL Works:** This phase of work will involve the construction of the two new towers and the replacement of one existing tower.
  - **Phase 7 Clean-up:** This phase will include restoration of the ground where laydown areas and welfare have been constructed. Additional gravel may be laid down over the Site.
  - **Phase 8 Energisation:** After completing all the necessary inspections, the substations will be ready to be energised.

#### **Construction Working Hours**

5.2.3 The construction programme for the Project assumes a six-day working week. Proposed core working hours are 07:00 to 19:00 Monday to Friday and 08:00 to 16:00 on Saturdays with no work on Sundays or Public holidays without prior approval from CCC.

#### **Construction Site Security and Lighting**

- 5.2.4 The necessary infrastructure and personnel to provide a secure and safe construction Site will be provided and equipment to control unauthorised access to the Site will be installed. All systems will be regularly inspected and maintained.
- 5.2.5 The construction site will be adequately lit to ensure safe working conditions. All lighting will be positioned and adjusted so that it does not cause a nuisance to neighbouring properties. Night-time illumination, outside of working hours, will be reduced to a minimum commensurate with the need to maintain the site's security requirements and reduce the environmental impact and light pollution.

#### **Construction Management Plans**



- 5.2.6 In line with all development projects of this nature and scale that are undertaken by National Grid, an Outline Construction Management Plan (Outline CEMP) will be produced to draw together the statutory controls required during the construction phase of the Project. The Outline CEMP will also set out standard best practice measures to manage the construction phase of the development, although those measures not mandated by statute have not been taken into account in the assessment of likely significant effects contained in this report. A Construction Traffic Management Plan (CTMP) will additionally be prepared and implemented.
- 5.2.7 Waste will be managed in accordance with a Site Waste Management Plan. The works will require an on-site compound area, that will offer waste handling facilities.

#### **Landscape and Ecological Mitigation and Enhancement**

5.2.8 The planning application for the proposed development will be accompanied by a Green Infrastructure Statement. This will detail measures to mitigate landscape, visual and ecological impacts associated with the scheme and deliver benefits, including net benefit for biodiversity.

#### Operation

5.2.9 The proposed Substation will be unmanned during operation. Welfare and Office facilities are included for staff as there will be the requirement for routine site visits for inspection and maintenance.

#### Access

- 5.2.10 Permanent vehicular access is required to enable regular inspection and maintenance of the substation equipment. There may also be a need in the future to replace or upgrade the substation components. No staff will be based at the substation site.
- 5.2.11 A new access road will be created to connect the substation to the A484. The access road is required to provide access for both the operational phase and construction phase of the Proposed Development. During the construction phase the access road needs to facilitate delivery of the largest substation components to Site. The largest of which is the Supergrid Transformers. It is anticipated that the transformers will arrive at Pembroke Dock via ship and will travel to Site via the A4139, A477, A40 and A484. The access road has therefore been designed to facilitate this movement as well as general construction traffic.
- 5.2.12 A route optioneering exercise was undertaken to identify the preferred alignment for the new access road. A variety of factors were considered including land ownership, road construction consent, road safety, vehicle manoeuvring (swept path analysis), alignment, topography, ecology, drainage, heritage, air quality and noise. The new access road is located to the south of the existing C2074 with direct access on to the A484. It is approximately 600m in length and traverses eastwards across existing fields to reach the substation site.

# 6 Relevant Planning History and Planning Policy Context

#### 6.1 Introduction

6.1.1 This Section sets out the relevant planning history on the Site and surrounding area and sets out the National planning policy and the Development Plan policies for determining this application.

#### 6.2 Relevant Planning History

6.2.1 Following a review of the CCC planning online search facility, there is no relevant planning history on the Site or within 5km of the surrounding area.

#### 6.3 Developments of National Significance

- 6.3.1 Under The Planning (Wales) Act 2015, developments of national significance (DNSs) are planning applications considered to be of the greatest significance to Wales because of their potential benefit and impact.
- 6.3.2 There are two recent DNSs on the PEDW website which relate to the local area. However these are at 'researching stage' and awaiting information including start dates. The cases are;

DNS CAS-03094-T7D9GO – Green GEN Towy Teifi Grid Connection, for a 132kV overhead line connection from the proposed Lan Fawr Energy Park to a proposed new substation near Carmarthen. The case stage is 'Pre-Application' awaiting information.

DNS CAS-02379-G1Z1J0 - Green GEN Towy-Usk Project, for a 132kV overhead line connection from the proposed Nant Mithil Energy Park to a proposed new substation near Carmarthen. There is no case stage published.

Table 1: DNSs which have been approved within the local area.

DNS Reference and Location	Description of Development	Status
DNS/3213164: Llangennech Solar Farm, land at Blaenhiraeth Farm, Llangennech, Llanelli, SA14 8PX.  This DNS is Approximately 14.5km south east of the Site.	Installation, operation and subsequent decommissioning of a renewable energy scheme comprising ground mounted photovoltaic solar arrays together with substation compound, transformer stations, internal access track, landscaping, biodiversity measures, permissive footpath, securing fencing, security measures, access gate, access improvement and ancillary infrastructure.	Granted planning permission subject to conditions on 23 July 2021.
Land to the East of the A48 and Land to the South West of Tycroes  This DNS is Approximately	Proposed installation of a ground mounted Photo Voltaic (PV) solar farm development, including proposed cable route.	The application is currently at the examination stage.

16km south east of the Site.	

### **6.4 National Infrastructure Projects**

6.4.1 The relevant Nationally Significant Infrastructure Project (NSIPs) which have been granted close to the Site since 2015 are set out in table 2 below.

Table 2: NSIPs which have been approved within the local area.

Location	Description of the Development	Status
The electric lines NSIP run approximately parallel to the Site boundaries.	Installation of a 132kV electric line of 28.6km (approximately 25.3km above ground and 3.3km below ground), connecting the consented Brechfa Forest West Wind Farm to an existing overhead line near Llandyfaelog.	This project is at the post decision stage. This application was granted on 6 October 2016.
	j	The Brechfa Forest West Wind Farm, operational since 2018, consists of 28 turbines and has a generating capacity of approximately 57.4 MW.
The generating Station NSIP is Approximately 27km south east of the Site.	Gas-fired peaking plant and connection infrastructure with a capacity of up to 299 MW. Located north of Swansea (north of M4, Junction 46) in the City and County of Swansea, approximately 1 km south-east of Felindre, 750 m south-west of Llwyncelyn and 1.5 km north of Llangyfelach.	This project is at the post-decision stage. This application was granted on 19 September 2019.

#### 6.5 Pre-Application Advice

6.5.1 A request for pre-application advice for the proposed substation development (CCC ref: PRE/02162) was submitted to CCC in April 2024. A response was received on 13 June 2024, which covered five areas. A summary of the five areas is set out in turn below (criteria (a) to (e):

The planning history of the land on which the Proposed Development is to be carried out, so as far relevant to the proposed application.

- CCC confirmed that there was no relevant planning history on the Site.
- a) The provisions of the development plan, so far as material to the proposed application
  - CCC provided a list of relevant policies for the determination of the application, and these are set out and discussed in turn in Section 7 of this PS.
- 6.5.2 The list of relevant policies identified by CCC have been used to inform Section 7 (Planning Assessment) of this PS.
  - b) Any supplementary planning guidance, so far as material to the proposed application.
    - CCC identified the Nature Conservation and Biodiversity SPG as relevant planning guidance documents to the proposed submission.
- 6.5.3 The Nature Conservation and Biodiversity SPG have been used to inform the planning submission.
  - c) Any other considerations which are or could be material in the opinion of the authority.



- CCC identified that part of the Site falls within surface water flooding and small water courses Flood Zones 2 and 3 and that the Site is within a buffer Zone of the National Gas LNG Gas Transmission Pipeline.
- d) Flooding has been addressed within Section 7 of this PS. NGET are aware of the National Gas LNG Gas Transmission Pipeline. If permission if granted enabling works would be required to divert the pipeline away from the substation site by Wales and West Utilities, the relevant statutory undertaker. An initial assessment of the proposed development on the basis of the information provided under paragraphs (a) to (d).
- 6.5.4 CCC provided the following guidance (without prejudice to any formal determination):
  - Planning policy does not preclude development of this nature within areas of open countryside.
  - The Site is also located in close proximity to the existing overhead line (OHL) Network.
  - The LPA would agree that the 'Next Steps' set out on pages 20 and 21 reflect the issues that need to be covered within a planning application for this development.
  - There will be a need to demonstrate accordance with Planning Policy Wales, the steps which have been taken towards securing a net benefit for biodiversity, and the identification/mitigation for landscape/visual impacts.

#### 6.6 The Development Plan

- 6.6.1 Sections 38(6) of the Planning and Compulsory Purchase Act 2004 (Ref. 1-30) and paragraph 1.18 of Planning Policy Wales emphasises that planning decisions should be made in accordance with the development plan, unless material considerations indicate otherwise. The Development Plan for the proposed works site comprises:
  - Future Wales The National Plan 2040 (Ref. 1-31)
  - Carmarthenshire Local Development Plan 2006-2021 (adopted 2014)

#### **Future Wales: The National Plan 2040**

- 6.6.2 Future Wales: The National Plan 2040 ('Future Wales') (Ref. 1-31) was adopted by the Welsh Government in 2021 and is the National Development Framework for Wales. Future Wales sets out the spatial strategy for growth and development in Wales. This includes providing a framework for the location of nationally significant development.
- 6.6.3 Chapter 2 of Future Wales provides an overview of opportunities and constraints to future growth. This includes progressing a reduction in Greenhouse Gas Emissions, which includes supporting the low carbon economy and the development of renewable energy (particularly wind) and resultant need for the new strategic grid infrastructure to support the growth of renewable and low carbon electricity generation.
- 6.6.4 Policy 5: Supporting the rural economy, provides Welsh Government support for sustainable, appropriate and proportionate economic growth in rural areas. The supporting text also sets out strong support for the development of innovative and emerging technologies, including those that play a key role in helping to decarbonise Wales.
- 6.6.5 Policy 9: Resilient Ecological Networks and Green Infrastructure seeks to ensure the enhancement of biodiversity.
- 6.6.6 Policy 17: Renewable and Low Carbon Energy and Associated Infrastructure confirms support for the principle of the development of renewable and low carbon energy from all technologies and at a scale to meet future energy needs. The policy recognises the importance of the provision of new grid infrastructure in delivering the growth in renewable energy provided that



infrastructure is "designed to minimise visual impact on nearby communities". It goes on to state that the Welsh Government is committed to working with stakeholders including National Grid and reduce barriers to the implementation of new grid infrastructure.

- 6.6.7 Carmarthenshire Local Development Plan 2006-2021 (adopted 2014)
- 6.6.8 The Carmarthenshire Local Development Plan (LDP) was adopted by the County Council on the 10 December 2014. The LDP sets out the spatial vision for the future of Carmarthenshire (excluding that area within the Brecon Beacons national Park) and a framework for the distribution and delivery of growth and development. It sets out land-use planning policies and proposals which are used in the determination of planning applications and in guiding future opportunities for investment and growth.
- 6.6.9 Section 7 of this PS sets out the key LDP planning policies which are considered relevant to the determination of the application for the Proposed Development.

#### 6.7 Material Considerations

- 6.7.1 In accordance with Section 38(6) of the Planning and Compulsory Purchase Act, it is necessary for development proposals to be in accordance with the development plan as a whole. In the event that a development proposal is deemed to not be in accordance with the development plan, it is necessary to then consider if any material considerations exist to justify a departure from the development plan. It is considered that the Proposed Development is in accordance with the development plan as whole. However, in the event that the decision maker considers that there is a divergence from the development plan, there are a number of material considerations relevant to this application which weigh in the favour of the scheme.
- 6.7.2 In this instance the following documents are considered material in the consideration and determination of this application:
  - Planning Policy Wales (Edition 12) (2024)
  - National Policy Statement for Energy (EN-1) and Electricity Networks Infrastructure (EN-5)
  - The Horlock Rules (2009)
  - Wales Fourth Carbon Budget (2025)
  - Climate Adaptation Strategy for Wales (2024)
  - Technical Advice Notes (TAN):
    - TAN 5: Nature Conservation & Planning (2009)
    - TAN 11: Noise (1997)
    - TAN 12: Design (2016)
    - TAN 15: Flood Risk (2025)
    - TAN 18: Transport (2007)
    - TAN 23: Economic Development (2014)
    - TAN 24: The Historic Environment (2017)
  - South West Wales Energy Strategy (March 2022)
  - Emerging Revised Carmarthenshire LDP 2018-2033 (2018-on-going)



#### Planning Policy Wales (Edition 12) (2024)

- 6.7.3 Planning Policy Wales (February 2024) (PPW) (Ref. 1-32) sets out the land use policies for the Welsh Government with the primary objective of ensuring that "the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation".
- 6.7.4 PPW establishes five key planning principles for the planning system, aimed at achieving the right development, in the right place (paragraph 2.13), three of which are relevant to the proposed works:
  - Growing our economy in a sustainable manner Enabling development which contributes
    to long-term economic wellbeing, making the best use of existing infrastructure and
    planning for new supporting infrastructure and services.
  - Making best use of resources Making development resilient to climate change, decarbonising society and developing a circular economy for the benefit of both the built and natural environment.
  - Maximising environmental protection and limiting environmental impact Natural, historic
    and cultural assets must be protected, promoted, conserved and enhanced. Negative
    environmental impacts should be avoided in the wider public interest.
- 6.7.5 Chapter 3 Strategic and Spatial Choices expands on the benefits of effective strategic placemaking, including paragraph 3.61, which provides a "need for supporting infrastructure that is 'adequate and efficient', including electricity infrastructure which is recognised as being 'crucial for economic, social and environmental sustainability".
- 6.7.6 In Chapter 5 Productive and Enterprising Places, the economic components of placemaking are covered. Paragraph 5.7.2 recognises that for future demand to be met, significant investment will be needed in energy generation, transmission and distribution infrastructure. It is acknowledged in paragraph 5.7.7 that to achieve overall commitments to tackling climate change the planning system should "integrate development with the provision of additional electricity grid network infrastructure".
- 6.7.7 Paragraph 5.7.8 sets out that an integrated approach should be adopted towards planning for energy developments and additional electricity grid network infrastructure to fulfil the Welsh Government's renewable and low carbon ambitions. It is recognised that additional electricity grid network infrastructure will be needed to support new energy generating developments more generally.
- 6.7.8 The Welsh Government's position on new power lines is outlined in paragraph 5.7.9, which states that they should be laid underground. Paragraph 5.7.9 acknowledges that a balanced view should be taken in this regard, with consideration of the cost of underground lines that could render the otherwise acceptable projects unviable. Where undergrounding is not possible, proactive engagement with energy companies and the public to mitigate visual impacts of new lines should take place.
- 6.7.9 Paragraph 5.9.10 states that "Planning authorities should plan positively for grid infrastructure", with appropriate grid developments being supported, and development plans facilitating grid infrastructure required to support renewable and low carbon energy. Planning authorities should support appropriate grid developments, regardless of whether they are located in their authority.
- 6.7.10 Chapter 6 Distinctive and Natural Places covers the environmental and cultural components of placemaking and provides in-depth guidance relating to a wide range of environmental topics including but not limited to the historic environment, landscape, biodiversity and ecology, water environmental and air quality.



# National Policy Statement for Energy (EN-1) and Electricity Networks Infrastructure (EN-5)

National Policy Statement for Energy (EN-1)

- 6.7.11 The Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref. 1-36) published by the Department for Energy Security and Net Zero (DESNZ) came into effect in January 2024. NPS EN-1 sets out national policy for energy infrastructure, including "the electricity transmission and distribution system". It emphasises the need for new energy projects that will contribute towards a secure, diverse and affordable energy supply. Paragraph 1.4.2 sets out that, "... energy policy is generally a matter reserved to the UK Ministers and this NPS may therefore be a relevant consideration in planning decisions in Wales and Scotland."
- 6.7.12 In view of this, both NPS EN-1 and the National Policy Statement for Electricity Networks Infrastructure (EN-5) which also came into effect in January 2024, may be material considerations in respect of the proposed development.
- 6.7.13 Paragraph 3.2.6 to 3.2.8 of NPS EN-1 (Ref. 1-37) establishes the need for the types of infrastructure covered by EN-1. These paragraphs set out that the Secretary of State has determined that substantial weight should be given to this need when considering applications. Paragraph 3.3.65 adds that "there is an urgent need for new electricity network infrastructure to be brought forward at pace to meet our energy objectives". In addition, paragraph 3.3.68 acknowledges that "the volume of onshore reinforcement works needed to meet decarbonisation targets is substantial".
- 6.7.14 Paragraph 4.11.3 sets out the government's acceleration of the development of the grid network to facilitate the UK's net zero energy generation development and transmission. Good design is a key consideration in the development of renewable energy infrastructure, with paragraph 4.7.2 outlining that energy projects expected to produce infrastructure sensitive to place. Paragraph 4.7.2 also highlights that the government acknowledge the limitations that an Applicant may have on the physical appearance of energy infrastructure. This is furthered by Paragraph 4.7.6 which states "the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure".

National Policy Statement EN-5

- 6.7.15 Paragraph 1.1.1 of EN-5 (Ref. 1-37) explains that an increased capacity in the UK's electricity network is fundamental to ensure the security and reliability of the current and future energy supply, to provide the infrastructure necessary to facilitate the transition to net zero. Paragraph 1.1.2 goes on to explain that a large amount of this new electricity network infrastructure is required in the near term, to support the Government's ambition of deploying up to 50 GW of offshore wind capacity by 2030. Without a reliable and secure electricity network, EN-5 is clear that this ambition cannot be achieved.
- 6.7.16 Paragraph 1.1.5 of EN-5 confirms that "As identified in EN-1, government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. This includes for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations."

#### The Horlock Rules

- 6.7.17 The Horlock Rules guidelines for the design and siting of substations were established by National Grid in pursuance of its duties under Schedule 9 to the Electricity Act 1989. These principles should be embodied in applicants' proposals for the infrastructure associated with new overhead lines.
- 6.7.18 The 'Horlock Rules' comprise a series of criteria applicable to new substations, substation extensions and modifications which cover the following considerations:



#### 1. Overall System Options and Site Selection:

In the development of system options including new (or replacement) substations, consideration must be given to environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum.

#### 2), 3) Amenity, Cultural or Scientific Value of Sites

The siting of new (or replacement) National Grid substations, cable sealing end (CSE) compounds and line entries should as far as reasonably practicable seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections. Areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas should be protected as far as reasonably practicable.

#### 4), 5), 6) Local Context, Land Use and Site Planning

The siting of substations, extensions and associated proposals should take advantage of the screening provided by landform and existing features and the potential use of Site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum. The proposals should keep the visual, noise and other environmental effects to a reasonably practicable minimum. The land use effects of the proposal should be considered when planning the siting of substations or extensions.

#### 7) Design

In the design of new substations or line entries, early consideration should be given to the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum.

Space should be used effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation. The design of access roads, perimeter fencing, earth shaping, planting and ancillary development should form an integral part of the Site layout and design to fit in with the surroundings.

Application of the above assists the achievement of environmentally acceptable siting and design solutions for substation developments and has been adhered to throughout the preparation of this Siting Study.

#### **Wales Fourth Carbon Budget**

- 6.7.19 Wales Fourth Carbon Budget, which was published in May 2025. The Environment (Wales) Act 2016 ('the Act') sets the framework for the Welsh Government to address climate change. The Act has a target to reach Net Zero greenhouse gas emissions by 2050, with any residual emissions balanced by removing carbon dioxide from the atmosphere. There are also decadal targets in 2030 and 2040 and five-yearly caps on emissions in Wales, known as carbon budgets, that started in 2016. The Committee is required to advise the Welsh Government on the level of these targets.
- 6.7.20 The Wales Fourth Carbon Budget's recommended level for the budget is a 73% reduction in average annual emissions compared to the 1990 baseline, over the five-year period from 2031 to 2035, including Wales. The report sets out that the growth of renewables will provide the majority of the emissions reduction required between 2030 and 2040.



#### **Climate Adaptation Strategy for Wales 2024**

6.7.21 The Climate Adaptation Strategy for Wales 2024 outlines the actions and plans of the Welsh Government to address the impacts of climate change. It highlights the current and future initiatives aimed at adapting to changing climate conditions, including responses to wetter winters and warmer summers. Action no.225 states:

"Ensure resilience of the energy supply is considered within our ongoing strategic planning for a net zero energy system, in light of the projected increased demand in electricity in particular, and in meeting renewable energy targets as energy generation and energy demand moves away from oil and gas towards renewable and low-carbon energy supplies."

#### **Technical Advice Notes (TAN)**

6.7.22 PPW is supplemented by topic-based Technical Advice Notes (TANs), of which there are 21 in total. These TANs provide detailed planning advice and are material considerations in the determination of planning application in Wales. The following TANs are of particular relevance to the proposal.

#### TAN 5: Nature Conservation & Planning (2009)

6.7.23 TAN 5 sets out guidance on how development should contribute to protecting and enhancing biodiversity and geological conservation.

#### TAN 11: Noise (1997)

6.7.24 There is a requirement in TAN 11 for planning applications to minimise adverse impact of noise placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business.

#### TAN 12: Design (2016)

6.7.25 TAN 12 promotes sustainability through good design' and 'Planning for sustainable buildings'. To create sustainable development, design must go beyond aesthetics and include the social, environmental and economic aspects of the development, including its construction, operation and management, and its relationship to its surroundings.

#### TAN 15: Flood Risk (2025)

6.7.26 TAN 15 offers technical guidance that supplements the policy outlined in Planning Policy Wales regarding development and flooding. It provides advice on development and flood risk in relation to sustainability principles and establishes a framework for assessing risks from river and coastal flooding, as well as additional run-off from development in any location.

#### **TAN 18: Transport (2007)**

- 6.7.27 This TAN provides guidance on topics related to transport. Paragraph 3.11 of TAN 18 states that development "in rural locations should embody sustainability principles, balancing the need to support the rural economy, whilst maintaining and enhancing the environmental, social and cultural quality of rural areas."
- 6.7.28 Whilst Paragraph 3.11 of TAN 18 is not considered directly relevant to transport matters in the context of this application, the Transport Statement demonstrates alignment with the necessary planning requirements.

#### TAN 23: Economic Development (2014)

6.7.29 TAN 23 confirms that the "economic benefits associated with development may be geographically spread out far beyond the area where the development is located. As a



- consequence it is essential that the planning system recognises, and gives due weight to, the economic benefits associated with new development."
- 6.7.30 The Proposed Development will provide benefits across the south of Wales in terms of direct supply chain benefits, local jobs during construction, improved energy capacity for business and indirectly through enabling jobs within the renewable energy sector.

#### Technical Advice Note 24: The Historic Environment (2017)

6.7.31 The purpose of TAN 24 is to guide how the planning system considers the historic environment during development plan preparation and decision-making on planning and Listed Building (LBC) applications.

#### South West Wales Energy Strategy (2022)

6.7.32 The South West Wales Regional Energy Strategy Plan (Strategy Plan) aims to decarbonise the energy system and achieve net zero by 2050. The Strategy Plan focuses on harnessing the region's low carbon energy potential and enhancing the wellbeing of future generations and the region's ecosystems. It sets out a potential decarbonisation route and identifies key interventions to deliver on the region's ambitions.

#### **Emerging Revised Carmarthenshire LDP 2018-2033**

- 6.7.33 In 2018, Carmarthenshire County Council resolved to prepare a revised LDP for Carmarthenshire. The timetable for the preparation of the Revised LDP is set out within the Delivery Agreement (DA) which was agreed by the Welsh Government. Once adopted the Revised LDP will be used as the basis for determining planning applications.
- 6.7.34 However, the production of the Revised LDP has been delayed due to the publication of new targets by Natural Resources Wales (NRW) which seek to reduce river phosphate levels in Special Areas of Conservation (SAC) across Wales. In response to these new targets and the challenges they present the Council have been working to re-assess the implications of the new targets for the LDP and the development allocations within phosphate sensitive catchments. In addition to NRW's new targets, several other matters have arisen since their publication which will affect the LDP and need further consideration.
- 6.7.35 It was therefore agreed at a meeting of the Full Council in 2022 to allow amendments to the Revised Delivery Agreement timetable to prepare a second Deposit Revised LDP. This is to allow time to evaluate the implications and for essential evidence and data to be gathered and mitigation options to be developed to address the phosphate issue, amongst other considerations.
- 6.7.36 Until the Revised LDP is adopted, the 2006-2021 LDP will remain in place for all planning decisions, in line with advice issued by the Welsh Government.

# 7 Planning Assessment

#### 7.1 Introduction

- 7.1.1 This Section of the PS sets out that planning applications must be determined in accordance with the Development Plan, unless material considerations indicate otherwise. Based on the review of the Development Plan, national planning policy and other material considerations presented above or in Section 6 of this Planning Statement, and considering the nature of the scheme, a number of topics have been identified which represent the key planning considerations relevant to the determination of the application for the Proposed Development.
- 7.1.2 These topics are as follows:
  - · Principle of Development
  - Agricultural Land Classification
  - Landscape and Visual
  - Cultural Heritage
  - Ecology (including arboriculture)
  - · Land Quality and Use
  - Traffic and Transport
  - Water (including groundwater, surface water and flood risk)
  - Pollution
- 7.1.3 Each of these sections are discussed in turn below.

#### 7.2 Principle of Development

- 7.2.1 The primary objective of PPW is to ensure that that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales. PPW must reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of the land, ensuring the sustainable management of natural resources and protecting, promoting, conservating and enhancing the built and historic environment.
- 7.2.2 PPW also sets out objectives regarding electricity grid network and energy storage which hold particular relevance to the Proposed development. PPW states that an effective electricity grid network is essential to achieve the Welsh Government's renewable and low carbon goals.
- 7.2.3 Planning for energy developments and grid infrastructure should be integrated. Additional grid infrastructure may be necessary to support new energy projects. Paragraph 5.7.10 states that: "Planning authorities should plan positively for grid infrastructure. Development plans should facilitate the grid infrastructure required to support the renewable and low carbon energy potential for the area, particularly areas identified for such development. Planning authorities should support appropriate grid developments, whether or not the developments to be connected are located within their authority."
- 7.2.4 Paragraph 5.7.2 of PPW has outlined an expected growth in energy demand because of the growing electrification of transport and heat. To ensure future demand can be met, PPW has



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- highlighted that significant investment should be made into energy generation, transmission, and distribution infrastructure.
- 7.2.5 Paragraph 5.7.7 of PPW sets out the approach for the planning system in delivering renewable and low carbon energy, indicating it should integrate development with the provision of additional electricity grid network infrastructure and optimisation of new developments on a location basis to allow for efficient use of resources.
- 7.2.6 PPW stipulates in paragraph 5.7.11 that planning authorities and the energy industry (including National Grid) should engage with one another to ensure development plans take grid infrastructure issues into account. Furthermore, they should ensure investment plans for transmission and distribution align with the identified potential for renewable and low carbon energy as well as the future challenges of increasing electrification of transport and heat.
- 7.2.7 The Proposed Development offers many benefits which meet the nationally identified Welsh government targets. The proposed development will ensure resilience of the energy supply is considered within our ongoing strategic planning for a net zero energy system, in light of the projected increased demand in electricity in particular, and to facilitate meeting renewable energy targets as energy generation and energy demand moves away from oil and gas towards renewable and low-carbon energy supplies.
- 7.2.8 The Welsh Government has set a target to achieve net zero carbon emissions by 2050 with a system of interim emissions targets and carbon budgets.
- 7.2.9 Further, the Wales Fourth Carbon Budget, which was published on 14 May 2025, sets out that: "Networks and interconnection. The capacity of transmission and distribution networks will need to be increased at pace to ensure supply is able to be transported to sources of demand as electricity generation is increasingly decarbonised and demand grows. Connection of the electricity grid to neighbouring markets enables imports of electricity when it is cheaper to do so and provides a market for surplus generation. In our pathway, Wales remains a net exporter of electricity to the Republic of Ireland and the rest of the UK."
- 7.2.10 There is also a Welsh Government target for 100% of Welsh electricity needs to come from renewables. However, there is currently issues with connecting renewable energy to the grid. This proposed development would enable the connection of the renewable energy schemes in South Wales to the grid and in turn will contribute towards facilitating the 100% renewables target. This would include the reserved capacity of 1.5GW provided by the Celtic Sea NESO National Energy System Operator.
- 7.2.11 The proposal is for the erection of a new 400kV substation (including the substation platform, access road and associated infrastructure). There are no specific policies referencing substations within the adopted Carmarthenshire Local Development Plan (CLDP). That said as noted in the pre-application response from CCC Officers there is no policy to preclude the Proposed Development. As the proposal is for utilities infrastructure, the relevant points of Strategic Policy SP17: Infrastructure would be applicable, which highlights that:

"Proposals for ancillary developments to the utilities infrastructure will be permitted where:

- a. They have regard to their setting;
- b. Incorporate landscaping;
- c. Do not conflict with the areas built, historic, cultural and nature conservation and landscape qualities. (Policy SP13 and SP14) "
- 7.2.12 The supporting policy text in Strategic Policy SP17 Infrastructure of the Carmarthenshire Local Development Plan (CLDP) sets out that the existence of appropriate infrastructure services including electricity is "vital to ensure the delivery of the Plan's policies and proposals."

  Additionally, the text states that in "seeking to deliver sustainable growth, the Plan recognises infrastructure's contribution and has regard to future improvements."



7.2.13 Although the Proposed Development is not strictly "ancillary development to the utilities infrastructure", it is a necessary development which will allow NGET to meet the connection requests to the transmission network from its customers.

#### Compliance with Strategic Policy SP17: Infrastructure

7.2.14 How the proposed development accords with criteria a-c of Strategic Policy SP17 is set out in turn and discussed below.

# Criterion a: Proposals for ancillary developments to the utilities infrastructure will be permitted where they have regard to their setting

- 7.2.15 NGET undertook a comprehensive Siting Study to identify the proposed Site for the 400kV substation. The Siting Study Area consisted of an area of 2km from the existing 4YV 400kV overhead line between towers 4YV139 south of Llangynog and 4YV226 to the west of Llanedi (with a 10% buffer zone to account for any potential sites that may fall on the border of the Siting Study Area). Proximity to the OHL was a key consideration and determines the 2km Siting Study Area in order to minimise the length of additional infrastructure required, including new towers and OHL to connect back into the existing OHL. The Siting Study was prepared independently of any information of the potential customers infrastructure and connection requirements.
- 7.2.16 The Site was selected as the most practical and cost-effective location for the Proposed Development. This study assessed multiple sites based on technical feasibility, environmental constraints, and potential community impact, concluding that the chosen Site offered the best balance of these factors. The environmental constraints included landscape and visual, ecology, cultural heritage, transport, planning and socio-economic impacts.
- 7.2.17 In summary, consideration was given to environmental effects, including landscape and visual, ecology, cultural heritage, transport, planning and socio-economic impacts. Key benefits of the Site location are as follows:
  - the Site is situated immediately adjacent to the existing OHL representing minimal environmental, landscape and visual impact from connection to the substation.
  - the Site is well contained visually due to hedgerows along existing field boundaries and local highways.
  - the Site is elevated in the landscape but comprises relatively flat landform. Despite its elevated position, there are few visual receptors identified, and the substation would sit in context with the immediately adjacent OHL with available land to provide screening.
  - the Site is not subject to notable environmental constraints.
  - Whilst there are some neighbouring residential properties, the separation distances involved together with intervening topography and hedgerows/woodland suitably screen the Site from unacceptably impacting upon neighbouring residential amenity standards.
- 7.2.18 It is considered that the Proposed Development's siting has been carefully considered and embeds the Horlock Rules principles and therefore accords with criterion (a) of Policy SP17: Infrastructure of the CLDP.

# Criterion b. Proposals for ancillary developments to the utilities infrastructure will be permitted where they incorporate landscaping

7.2.19 The landscape and visual appraisal (LVA) found that for landscape receptors there would be minor or negligible direct effects during construction for landscape character at the national and LANDMAP scale, with moderate direct effects predicted within the Site for landscape character, the green infrastructure network, landform, trees, woodland and hedgerows, and



field pattern and boundaries. No change was predicted for the Carmarthenshire Bay and Estuaries Special Landscape Area (SLA) or the Carmarthenshire Limestone Ridge SLA. During operation effects on all landscape receptors are predicted to reduce over time as mitigation measures establish, aside from landform of the Site given the permanent change as a result of the Proposed Development, which would remain a consistent moderate adverse change.

- 7.2.20 Visual receptors are predicted to experience change as a result of the proposals, particularly for those at proximity to the Site, with receptors at VL1a, VL3a and VL4 experiencing major adverse effects. Moderate adverse effects were predicted for receptors at VL2 and VL7. Similar to landscape receptors however these effects would reduce over time as the mitigation proposals establish, with effects reducing to minor or negligible adverse for VL2, VL3, VL3a, and VL7 by Year 15 of operation. Effects would be moderate adverse at VL1a and VL4 given the change in view from highly sensitive receptors looking directly towards the Proposed Development. No change was predicted for receptors at VL1, VL5 and VL6.
- 7.2.21 Detailed assessment of landscape and visual receptors is set out in Appendix C: Landscape Effects and Appendix D: Visual Effects. It is considered that this proposal accords with accords with criterion (b) of Policy SP17: Infrastructure of the CLDP.
  - Criterion c. Proposals for ancillary developments to the utilities infrastructure will be permitted where they do not conflict with the areas built, historic, cultural and nature conservation and landscape qualities. (Policy SP13 and SP14)
- 7.2.22 As set out in Section 6, the Horlock Rules principles have been embodied in the identification of the proposal location and in the design itself. The Horlock Rules have facilitated in mitigating the environmental effects and meet overarching policy requirements and objectives.

The Proposed Development is in accordance with SP13: Protection and Enhancement of the Built and Historic Environment and SP14: Protection and Enhancement of the Natural Environment as set out in Section 7.7 of this PS.

Summary of compliance with Policy SP17: Infrastructure

7.2.23 Given the Proposed Development's strategic importance in supporting regional energy demands and industrial growth, the proposal is consistent with the overarching aim of delivering sustainable development and is therefore deemed appropriate in planning terms and should be considered acceptable in principle; in accordance with overarching aims of PPW and requirements of relevant Strategic Policy SP17.

#### 7.2.24 Agricultural Land Classification

- 7.2.25 Strategic Policy SP14: Protection and Enhancement of the Natural Environment, criterion (d) requires development to give due consideration to the countryside and landscapes and the best and most versatile agricultural land; (Grade 2 and 3a).
- 7.2.26 PPW12 paragraph 3.58 and 3.59 outlines national policy towards conserving Wales BMVL. PPW12 states that: "Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development" and "If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade."
- 7.2.27 The LVA provides an appraisal of the landscape condition and the changes which may occur as a result of the Proposed Development.
- 7.2.28 Following a review of the Predictive Agricultural Land Classification (ALC) Map 2 from Data Map Wales, the Site is predominately categorised as grade 3b land (grade 3b: moderate quality agricultural land) with a small area on the south east boundary of the Site being categorised as grade 3a land (good to moderate quality Grade 3a land class is considered to be 'Best and Most Versatile Agricultural Land (BMVAL)'.



- 7.2.29 The majority of the site is grade 3b apart from a small area of 3a land which steps along the southeastern boundary. The 3a land is part of a stepped tract which skirts woodland further east of the Site. The southern extent of the platform and some scrub planting will encroach into the stepped area of 3a land. However, some of the 3a land within the site boundary (to the east of the platform earthworks and scrub) will be returned to agricultural use on completion of the Proposed Development. Thus, limiting the loss of 3a land.
- 7.2.30 As set out in the principal section above, the benefits of the Proposed Development in terms of resilience of energy supply and renewable energy connections is considered to outweigh this small loss of 3a BMVL.
  - Locational requirements of the Site
- 7.2.31 As set out above, the Site was chosen following a comprehensive siting study, in addition to the siting principals set out in paragraph 7.2.15 and as such the Site was chosen due to its locational benefits.
- 7.2.32 The Proposed Development's location is limited by its operational requirements. For example, it needs to be situated close to existing OHL's. The topography of the Site also needs to be relatively flat, free from onsite structures and any important ecological features. These factors reduce the locations where the Proposed Development can be located. Additionally, the Site was chosen as the substation requires a large amount of land, which is generally not available within urban areas, whilst the priority within the urban areas is to provide housing and other community infrastructure. The Site has no heritage assets onsite or nationally or locally designated ecological assets.
- 7.2.33 As set out in preceding paragraphs of this section of the PS, the Proposed Development supports local and national objectives for a resilient electricity grid that enables renewable and low-carbon energy, meeting current and future energy demands while ensuring reliable supply for industrial operations. It is considered that, on balance, the potential loss of a small section of BMVL is outweighed by the national climate change reduction policies and the economic benefits of the Proposed Development and that due consideration has been given to the loss in accordance with Strategic Policy SP14 of the CLDP.
- 7.2.34 This proposed Development will provide new infrastructure to ensure the reliability and stability of the electricity supply for homes and businesses. This in turn would provide supply chain benefits as a result of the Proposed Development and in turn create a positive multiplier effect on the Welsh economy. Further, it will improve energy independence and resilience and facilitate a reduction in energy supply disruptions. It is therefore considered that this proposal accords with criterion (d) of Strategic Policy SP14: Protection and Enhancement of the Natural Environment.

#### 7.3 Landscape and Visual

- 7.3.1 The importance of protecting and enhancing landscapes across Carmarthenshire is a thread which runs throughout a number of strategic and generic CLDP policies. Strategic Policy SP1: Sustainable Places and Spaces, criterion (c) states that development should respect, reflect and, wherever possible, enhance local character and distinctiveness.
- 7.3.2 Criterion (b) of Policy GP1: Sustainability and High Quality Design of the CLDP sets out that development proposal will be supported where they incorporate existing landscape features, takes account of site contours and changes in levels and prominent skylines or ridges. Criterion (f) states that development should retain, and where appropriate incorporate important local features and ensures the use of good quality hard and soft landscaping and embraces opportunities to enhance biodiversity and ecological connectivity.

Compliance with criterion (c) of Strategic Policy 1: Sustainable Places and Spaces and Criterion (b) and (f) of Policy GP1: Sustainability and High Quality Design



- 7.3.3 The following mitigation measures have been proposed which aim to allow the Proposed Development to assimilate within its surrounding as far as possible while also looking to incorporate retained landscape and ecological elements into the design where practicable:
  - Enhancement / reinforcement of a number of existing hedgerows across the Site to retain field boundary patterns in perpetuity where possible, enhance visual screening opportunities, and enhance the existing green infrastructure network.
  - Proposed native hedgerow planting to introduce new habitat connections where hedgerows are lost to construction wherever possible and suitable.
  - Proposed native hedgerow planting along the northern and southern embankments of the proposed access track to compensate for the loss of field boundary hedgerows, provide additional visual screening, and provide amenity value.
  - Seeding areas with species rich grassland where land would no longer be viable for agricultural use to increase amenity and ecological value, with particular focus on purple moor grass and rush pasture.
  - Planting of woodland blocks southeast and directly west of the substation compound to provide visual screening from nearby properties and enhance key characteristics of the local landscape character.
  - Planting of individual trees to the east of the substation to break up views towards the substation from sensitive receptors at Bancycapel.
  - Creation of SuDS ponds south of the proposed access road to provide amenity value and potentially increase Net Benefit for Biodiversity (NBB).
  - Provision of a 3m landscape bund which effectively wraps around the south-eastern corner of the substation compound planted with scrub up to an additional 5m to provide screening in views from the property to the southeast and from the A484.
  - Scrub planting throughout the Proposed Development, including along and between the landscape bund, to aid visual screening, provide additional green network connections, and enhance net biodiversity benefit.
- 7.3.4 A LVA has been prepared which provides an appraisal of the landscape condition and the changes which may occur as a result of the Proposed Development. Published landscape character assessments in addition to appraisal of the landscape and its features within the Site provide due consideration to the character of the landscape within the area.
- 7.3.5 The landscape design aims to incorporate existing landscape features where possible; most notably field boundary hedgerows and has sought to provide appropriate and sympathetic proposals where possible, retaining or forming green infrastructure connectivity across the Site.
- 7.3.6 The LVA concludes that:

"The Llandyfaelog Substation Landscape and Visual Appraisal (LVA) has identified that the Proposed Development would result in a range of landscape and visual effects, primarily during the construction and early operational phases. These effects are largely associated with the introduction of large-scale electrical infrastructure into a predominantly rural, agricultural landscape.

Moderate adverse effects are predicted for the Site's landform, green infrastructure, and field pattern during construction and early operation, with these effects reducing to minor or negligible by Year 15 due to the implementation of embedded mitigation measures. The most



persistent landscape effect is associated with the permanent alteration of the Site's landform to accommodate the substation platform.

Visual effects are most pronounced for receptors in close proximity to the Site, particularly at VL1a, VL3a, and VL4, where major adverse effects are predicted during construction and Year 1. These effects are expected to reduce over time as mitigation planting matures, with moderate or minor adverse effects remaining by Year 15.

The appraisal concludes that, while permanent adverse effects are anticipated, these are not unexpected given the scale and nature of the Proposed Development. The Site has the capacity to accommodate the infrastructure, provided that the proposed green infrastructure strategy and landscape mitigation measures are fully implemented. This approach would help integrate the development into the existing landscape and reduce its visual prominence, particularly in conjunction with the existing overhead line infrastructure."

Summary of compliance with criterion (c) of Strategic Policy 1: Sustainable Places and Spaces and criterion (b) and (f) of Policy GP1

7.3.7 The Proposed Development has been designed to balance the need for critical electrical infrastructure with aesthetic and environmental considerations. The appearance of the Proposed Development is dictated to some degree by the inherent function and safety requirements which derive from its role as a substation. The Proposed Development only includes the equipment necessary for the effective, efficient and safe operation of the proposed substation. The Proposed Development has sought to further reduce landscape and visual impacts where possible by implementing vegetive screening solutions, including the new landscape bund planted with scrub, through retaining existing hedgerows and trees where possible, planting new woodland blocks in the southeast and west of the substation and through planting new hedgerows (or enhancing existing). Additionally, the proposed landscaping provides habitat creational and ecological benefits. It is considered that this Proposed Development accords with criterion (c) of Strategic Policy 1: Sustainable Places and Spaces and criterion (b) and (f) of Policy GP1 of the CDLP.

#### 7.4 Ecology

7.4.1 Policy EQ4: Biodiversity of the CLDP sets out that proposals for development which have an adverse impact on priority species, habitats and features of recognised principal importance to the conservation of biodiversity and nature conservation will not be supported unless the impacts can be satisfactorily mitigated, net enhancements are provided and there is a need for the project, which can demonstrate exceptional circumstances.

#### Compliance with Policy EQ4: Biodiversity

- 7.4.2 A sHRA has been prepared to understand if there are any likely significant effects on European sites. The sHRA concluded that "no likely significant effects on the integrity of the qualifying features of the identified European sites are anticipated during construction or operation of the Project, either alone or in combination with other plans or projects."
- 7.4.3 An Ecological Impact Assessment (EcIA) has been prepared which identifies the important ecological features within the Site and within the surrounding area and the potential impacts during the construction and once the proposed development is operational.
- 7.4.4 The EcIA sets out that there could be potential impacts during the construction phase on important ecological features and/or legally protected species.

Disturbance due to construction activities

During the construction phase, there is potential for protected species to be impacted because of noise, light or human interference. The measures within the Construction Environmental Management Plan (CEMP) which set out how the Proposed Development will protect



- important ecological features and species on the Site. These measures will ensure that the construction impacts are not significant. *Habitat loss*
- 7.4.5 The construction phase of the Proposed Development would result in both permanent and temporary habitat losses and gains and habitat degradation as a result of:
  - the clearance of 2.9 ha of purple moor-grass and rush pasture and 10.4ha of neutral grassland and 8.6ha's modified grassland
  - the loss of species-rich native hedgerows (2.1 km) and other native hedgerows (0.6 km), other (10.4 ha) and modified grassland (8.6 ha).
- 7.4.6 Habitat creation within the Proposed Development boundary would provide semi natural habitats to directly replace any permanent loss of suitable habitats including:
  - species-rich native scrub (3.3 ha)
  - mixed woodland (0.5 ha)
- 7.4.7 species rich-grassland (10.2 ha)
  - ponds/ SuDS basins (0.2 ha)
  - species-rich native hedgerow (1.6 km)
  - enhancement of existing hedgerows where possible (up to 3.6 km).
  - bat boxes will be installed on trees within the enhanced hedgerows in order to replace the small amount of suitable roosting features lost and to provide increased roosting opportunities for bats in the local area
  - the Proposed Development will also provide species specific measures including reptile
    hibernacula, bat boxes, dormouse boxes and bird boxes and is anticipated to include a
    sensitive lighting design avoiding light spill on habitats with suitability for bats and hazel
    dormice.
- 7.4.8 The creation of the proposed habitats will deliver an overall enhancement and will mitigate for the habitat loss and habitat degradation. These measures that will be confirmed in the Landscape and Ecology Management Plan (LEMP) and will provide details of the management and monitoring of the habitats within the Site for a minimum of 25 years.
  - Fragmentation of populations and/or habitats
- 7.4.9 The Proposed Development would result in the partial east to west habitat fragmentation due to the loss of hedgerows. However, the proposed band of scrub to the south of the substation would strengthen the east to west connectivity across the Site, reducing any habitat fragmentation impacts. In addition, the creation of hedgerows, scrub, woodland and swales across the Site will provide additional connectivity to the local landscape.
  - Species mortality or injury
- 7.4.10 There is potential for protected species mortality or injury during construction of the proposed development. The CEMP describes measures to minimise mortality of protected species, for example through the appointment of an Ecological Clerk of Works who will ensure compliance with the CEMP and working practices which are set outlined within the relevant protected species licences.

Net Benefit for Biodiversity



- 7.4.11 The measures are designed to deliver a measurable Net Benefit for Biodiversity (NBB) in accordance with Planning Policy Wales and the DECCA Framework. The proposals will:
  - enhance and create habitats and improve habitat connectivity;
  - · support protected and notable species; and
  - provide for long-term management and monitoring to secure biodiversity gains.

#### Arboriculture

- 7.4.12 An Arboricultural Impact Assessment (AIA) has been prepared to support this planning proposal. The construction of the Proposed Development will result in the loss of 2.1km of species-rich native hedgerows and 0.6km of other hedgerows. Additionally, the AIA confirms that one B grade tree, seven C grade trees and four C grade tree groups will require removal in full in order to facilitate the development proposals. The partial removal of four C grade tree groups, seven B grade hedgerows and three C grade hedgerows will also be required. One category C tree group will be directly impacted by the construction of the proposed hardstanding area. Subject to the implementation of specialist root protection measures and strict arboricultural supervision, the impact can potentially be mitigated and any disturbance to tree roots and the tree rooting environment reduced. Temporary fencing will be required to protect all retained trees on Site. This fencing should be fit for the purpose for excluding construction activity and provide adequate protection to the trees.
- 7.4.13 The AIA concludes that in light of these considerations and taking account of the numbers, sizes and locations of trees to be retained including those that are off site, the medium impacts identified will represent a moderate alteration to the main arboricultural features of the Site and surrounding area.
- 7.4.14 As a result of the above, moderate adverse impacts to landscape character, green infrastructure network, landform, trees, woodland and hedgerows, field pattern and field boundaries have been identified. By year 15 of operation these effects are predicted to reduce for all receptors, aside from landform of the Site, given the irreversible change brought about by the proposals and surrounding area.
- 7.4.15 Landscape Mitigation Strategy Figure L7 Landscape Mitigation Strategy (Stantec 2025) sets out details of the soft landscape interventions and proposals including specimen tree planting and native mixed hedgerow and woodland planting to mitigate against the removal of moderate to low value category B and category C features.

#### Summary of compliance with Policy EQ4: Biodiversity

7.4.16 The EcIA concludes that the Proposed Development will result in the permanent loss of high priority species, hedgerows and trees. However, the proposed compensation and enhancement measures including the creation of native species-rich habitats, new woodland, grassland, new wetland ponds and SuDS basins, new hedgerows and hedgerow enhancement and species-specific features such as bat boxes, dormouse nest tubes, reptile hibernacula, and bird boxes would deliver measurable net benefits for biodiversity in line with Planning Policy Wales and the Environment (Wales) Act 2016. It is therefore not anticipated that construction and operation of the Proposed Development will result in significant impacts to Ecology. It is considered that the Proposed Development accords with Policy EQ4: Biodiversity of the CLDP.

#### 7.5 Green Infrastructure

7.5.1 Policy EQ5: Corridors, Networks and Features of Distinctiveness of the CLDP requires proposals to contribute to the local distinctiveness/qualities of the County, and to the management and/or development of ecological networks (wildlife corridor networks), accessible green corridors support their continuity in the future.



#### Compliance with Policy EQ5: Corridors, Networks and Features of Distinctiveness

- 7.5.2 A Green Infrastructure Statement (GIS) has been prepared by Stantec which outlines the approach to site development and accords with Chapter 6 of Planning Policy Wales (PPW) which requires all planning applications to be accompanied by a GIS.
- 7.5.3 The GIS includes details of ecological enhancements and mitigation, including the enhancement of the existing field boundaries and new hedgerows across the Site. The new and enhanced hedgerow planting will strengthen existing ecological connectivity across the Site and will provide valuable sheltering and foraging habitat for protected and notable species including but not limited to hazel dormouse, bats, birds, reptiles, amphibians and badgers.
- 7.5.4 The addition of the earthworks planted with scrub to the southwest of the Proposed Development will provide multiple benefits including visual screening and additional ecological connectivity from the west to east of the Site. The provision of a strong mixed woodland block transitioning into scrub and species-rich grassland to the west of the Proposed Development will aid screening of views from nearby properties and a net benefit for biodiversity.
- 7.5.5 The new planting in the east of the Site will break up views from the east and the inclusion of the improved drainage system across the Site will provide valuable wetland habitats for protected and notable species including amphibians and invertebrates.
- 7.5.6 The GIS confirms that the management and monitoring of these habitats and features will be outlined within a LEMP and secured for a minimum of 25 years.

# Summary of compliance with Policy EQ5: Corridors, Networks and Features of Distinctiveness

7.5.7 The GIS provides details of how the ecological mitigation and enhancement measures for the Proposed Development have taken into account the distinctiveness of local natural features and habitats across the Site. As set out above the green infrastructure proposals will have wider ecosystem benefits and will contribute to the development of wildlife corridor networks in the area. It is considered that this accords with Policy EQ5: Corridors, Networks and Features of Distinctiveness.

#### 7.6 Cultural Heritage

- 7.6.1 Strategic Policy SP13: Protection and Enhancement of the Built and Historic Environment sets out that "development proposals should preserve or enhance the built and historic environment of the County, its cultural, townscape and landscape assets and, where appropriate, their setting. Proposals relating to the following will be considered in accordance with national guidance and legislation.
  - a. Sites and features of recognised Historical and Cultural Importance;
  - b. Listed buildings and their setting;
  - c. Conservation Areas and their setting;
  - d. Scheduled Ancient Monuments and other sites of recognised archaeological importance.
- 7.6.2 Proposals will be expected to promote high quality design that reinforces local character and respects and enhances the local setting and the cultural and historic qualities of the plan area."



# Compliance with Strategic Policy SP13: Protection and Enhancement of the Built and Historic Environment

- 7.6.3 The Proposed Development has been sited to avoid heritage impacts. The initial Historic Environment Desk-Based Assessment (HEDBA) prepared by Stantec in 2023 established baseline conditions setting out the archaeological potential on the Site, and described historic assets, and their setting, that might be susceptible to indirect impacts from the Proposed Development.
- 7.6.4 The HEDBA identified a potential for archaeology with Romano-British remains associated with the Via Julia Maritima Roman road, together with medieval and post-medieval remains on the Site. Subsequently as geophysical survey and trial trenching have been carried out which have confirmed that the Site has relatively low archaeological potential and is unlikely to contain significant archaeological remains. The HEDBA concluded that no designated historic assets (scheduled monuments, listed buildings, conservation areas etc.) would be directly or indirectly affected by the Proposed Development.
- 7.6.5 The HEDBA concluded that the Proposed Development would impact upon the significance of four non-designated assets, comprising post medieval farmsteads. However, there would be no impact to their key and immediate setting but there would be changes to the wider setting resulting in a less than 'major' impact.
- 7.6.6 Accordingly, it is considered that the Proposed Development accords with Strategic Policy SP13: Protection and Enhancement of the Built and Historic Environment of the CDLP.
- 7.6.7 Criteria (i) of Policy GP1: Sustainability and High Quality Design of the CLDP sets out that development should protect and enhance the landscape, townscape, historic and cultural heritage of the County with no adverse effects on the setting or integrity of the historic environment.

#### Compliance with Criteria (i) of Policy GP1: Sustainability and High Quality Design

- 7.6.8 As set out above, the Proposed Development has been specifically designed to avoid heritage impacts and, where possible, protect the historic environment.
- 7.6.9 The HEDBA concluded that no designated historic assets (scheduled monuments, listed buildings, conservation areas etc) would be directly or indirectly affected by the Proposed Development.
- 7.6.10 The HEDBA concluded that the Proposed Development would impact upon the significance of four non-designated assets, comprising post medieval farmsteads. There would be no impact to their key and immediate setting but there would be changes to the wider setting which result in a less than 'major' impact.
- 7.6.11 With regards to archaeological assets, pre-determination archaeological investigations have demonstrated that the Site has low archaeological potential and is unlikely to contain significant archaeological remains. No remains have been identified that are significant enough to warrant preservation in-situ. This is on accordance with Criteria (i) of Policy GP1: Sustainability and High Quality Design of the CDLP.

#### 7.7 Highways and Parking

#### Strategic Policy SP9: Transportation

7.7.1 Strategic Policy SP9: Transportation sets out that Provision is made to contribute to the delivery of an efficient, effective, safe and sustainable integrated transport system.

Additionally, transport routes, improvements and associated infrastructural facilities which deliver the objectives and priorities of the Regional Transport Plan for South West Wales will be supported. Development proposals which do not prejudice the efficient implementation of any identified improvement or scheme will be permitted.



#### Compliance with Strategic Policy SP9: Transportation

7.7.2 The Outline Construction Traffic Management Plan (oCTMP) supports Policy SP9 as construction activities will be planned to minimise disruption to existing road networks and ensure safe access for road users where applicable. with consideration given to sustainability where feasible. Chapter 7 of the oCTMP outlines a framework Construction Worker Travel Plan, which encourages alternatives to private car use where practicable and sets out measures to support safe and coordinated access to the Site. While the Site's location presents some existing limitations in terms of accessibility by non-car modes, which is demonstrated in Chapter 3 of the TS, the plan demonstrates a commitment to reducing travel demand and promoting efficient use of the transport network. The oCTMP also reflects locational and design considerations that align with the strategic aims of the Regional Transport Plan for South West Wales, ensuring the development does not prejudice the implementation of any identified transport improvements and supports broader transport objectives. It is considered that this aligns to Strategic Policy SP9 of the CLDP.

#### Policy TR3: Highways in Developments-Design Considerations

7.7.3 Policy TR3: Highways in Developments-sets out that developments should provide appropriate parking and where applicable. Access should be delivered to the standards reflective of the relevant class of road and speed restrictions including visibility splays and design features and calming measures necessary to ensure highway safety and the ease of movement is maintained, and where required enhanced, and provide Sustainable Drainage Systems (SUDS) to allow for the disposal of surface water run-off from the highway.

#### Access road drainage

7.7.4 The final receptor for the access road drainage will be a gully pot on the A484. The SuDS train will convey, filter and attenuate surface water from the access road via a filter strip, swale and attenuation basin before being discharged to the A484 at controlled flow of 4.7 l/s. Detailed modelling in ICM has been carried out, which demonstrates that surface water from the access road will not enter the A484 system until after the storm event has passed. Therefore, capacity in the A484's surface water sewer will not be exceeded during a storm event.

#### Compliance with Policy TR3: Highways in Developments-Design Considerations

- 7.7.5 The Proposed Development includes the provision of 23 parking spaces which will meet operational access requirements. Parking and servicing for the development have been designed to uphold the principles of safe and inclusive access.
- 7.7.6 Chapter 6 of the Transport Statement outlines the access strategy, showing that the proposed access design reflects appropriate standards for the relevant road classification and speed restrictions, with visibility splays provided to demonstrate highway safety is maintained.
- 7.7.7 The Outline Construction Traffic Management Plan (CTMP) provides details of the traffic management measures to be implemented during the construction period. This is achieved through measures such as defined vehicle routing to avoid sensitive areas. Temporary signage and traffic management will also be implemented to maintain safe pedestrian and vehicular movement throughout the works. These provisions ensure that construction activities are managed in a way that minimises disruption and safeguards highway safety.
- 7.7.8 The Transport Statement outlines how the proposed access arrangements fully comply with design standards for the road classification and speed environment, ensuring that Policy TR3 is upheld. Visibility splays have been provided in accordance with guidance to maintain highway safety. Although on-site parking and servicing are not required for this proposal, the design ensures safe and efficient movement for all users without adverse impact on the surrounding network, in line with the principles of Policy TR3. As such, the proposals accord with Policy TR3: Highways in Developments-Design Considerations of the CLDP.



#### 7.8 Flood Risk and Sustainable Drainage

Policy EP1: Water Quality and Resources of the CLDP supports development which does not lead to a deterioration of either the water environment and/or the quality of controlled waters.

#### Compliance with Policy EP1: Water Quality and Resources

- 7.8.1 The sustainable drainage strategy for the Proposed Development makes use of features including gravel storage and swales with check dams, and filter strips which provide filtering and settlement of runoff. The simple index approach has been used to test water quality impacts and have been proven to be sufficient for the intended land use and therefore will not lead to the deterioration of the water environment or quality of controlled waters. The Site is to be built on existing greenfield land, so an improvement to water quality is not an appropriate expectation for this development.
- 7.8.2 The SuDS Strategy employs the use of National Grid standard substation design, SuDS basins, wetlands and swales to manage runoff generated by the new build access road and to intercept water likely to enter the Site. The strategy provides sufficient volume of attenuation and long-term storage to accommodate all the runoff generated by the new impermeable areas during the design rainfall event (whilst taking climate change into account). This means that for most events, discharges are likely to remain at or close to zero and will limit discharges to the 1 in 100 year greenfield runoff rate. This SuDS Strategy also incorporates elements that will help to clean surface water runoff and prevent pollution incidents which will also provide benefits to biodiversity. This accords with Policy EP1: Water Quality and Resources of the CLDP.

#### Policy EP3: Sustainable Drainage

7.8.3 Policy EP3: Sustainable Drainage of the CLDP, states development will be required to demonstrate that the impact of surface water drainage, including the effectiveness of incorporating SUDS, has been fully investigated.

#### Compliance with Policy EP3: Sustainable Drainage

- 7.8.4 A key aspect of the Projects design evolution was the opportunity for NGET to implement a comprehensive drainage strategy for the single platform, aimed at minimising the impact on local surface water drainage and reducing flood risk. This planning submission is accompanied by a SuDS Strategy that has been given approval in principle by CCC Sustainable Drainage Approval Body (SAB) during pre-application discussions.
- 7.8.5 The SuDS Strategy employs the use of National Grid standard substation design, SuDS basins, wetlands, filter strips and swales to manage runoff generated by the new build and to intercept water likely to enter the Site. This strategy provides a sufficient volume of attenuation and long-term storage to accommodate all of the runoff generated by the new impermeable areas during the design rainfall event (whilst taking climate change into account). This means that for most events, discharges are likely to remain at or close to zero and will limit discharges to the 1 in 100 year greenfield runoff rate. This SuDS Strategy also incorporates elements that will help to clean surface water runoff and prevent pollution incidents which will also provide biodiversity and amenity benefits.

#### 7.9 Pollution

7.9.1 Policy EP2: Pollution of the CLDP seeks to minimise the potential impacts of pollution, including on air quality, water quality, light and noise and contamination. Each of the elements of the policy are set out and discussed in turn below.



#### Compliance with Policy EP2: Pollution- Air Quality

- 7.9.2 An Air Quality Assessment has been prepared by Stantec which describes existing air quality within the study area and assesses the impact of the construction and operation of the Proposed Development on air quality in the study area.
- 7.9.3 CCC has investigated air quality within its administrative boundary as part of its responsibilities under the Local Air Quality Management (LAQM) regime. Three Air Quality Management Areas (AQMAs) have been declared due to exceedances of the annual mean nitrogen dioxide (NO2) objective. The Site is located approximately 6 km from the nearest AQMA, which encompasses an area within the centre of Carmarthen.
  - Air Quality Construction Impacts
- 7.9.4 During demolition and construction, dust from on-site activities and off-site trackout by construction vehicles has the potential to impact on sensitive human receptors within the study area. The main potential impacts are loss of amenity (as a result of dust soiling) and deterioration of human health (as a result of concentrations of PM10). During the construction phase, the increase in heavy duty vehicles (HDVs) movements on the road network will be below the threshold of 100 movements per day outside an AQMA for a detailed assessment to be necessary according to EPUK and IAQM guidance (EPUK / IAQM, 2017). Predicted baseline concentrations in the area are also well below the NAQOs and therefore this level of additional HDV movements will not have a significant effect on local air quality.
- 7.9.5 Although road traffic emission impacts on local air quality during the construction phase have been assessed as being 'not significant' and no further mitigation is required, a Construction Traffic Management Plan will be developed for the construction of the substation. It will identify measures to mitigate the impact of construction vehicle movements on the highway network and sensitive receptors, including residential properties.
  - Air Quality Operational Impacts
- 7.9.6 During operation, the Proposed Development is not anticipated to generate significant traffic as access will only be required for inspection and maintenance. As such, traffic generated by the Proposed Development falls below the EPUK / IAQM screening criteria and, therefore, the impacts of operational traffic generated by the Proposed Development on existing sensitive receptors within the study area can be screened and considered to be 'not significant' and no additional mitigation is therefore required.

#### Compliance with Policy EP2: Pollution -Water Quality

- 7.9.7 As set out in the 'Flood Risk and Sustainable Drainage' section, the SuDS Strategy incorporates elements that will help to clean surface water runoff and prevent pollution incidents which will also provide benefits to biodiversity and amenity.
- 7.9.8 The substation platform has been designed so that its footprint is as small as possible. The platform will incorporate measures such as the inclusion of reinforced grass/crushed stone surfacing to minimise the requirement for hard/impermeable surfacing and welded mesh security fencing to minimise visual impact. The proposed swales and SuDS basin will provide visual amenity using natural construction materials and geomorphological heterogeneity incorporated into the form of these features will provide habitat for local flora and fauna, both aquatic and terrestrial.

#### Compliance with Policy EP2: Pollution- Light

Lighting during construction:

7.9.9 The construction Site will be adequately lit to ensure safe working conditions. All lighting will be positioned and adjusted so that it does not cause a nuisance to neighbouring properties. Night-time illumination, outside of working hours, will be reduced to a minimum



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commensurate with the need to maintain the Site's security requirements and reduce the environmental impact and light pollution.

Lighting during operation:

7.9.10 The compound will be enclosed by an electrified security fence (measuring 3.4 metres in height). Passive infra-red security lighting and closed-circuit television security cameras will surround the equipment and create a secure compound. The equipment will be lit for maintenance purposes, and any lighting solution will be prepared in accordance with the current Design Standards for Exterior Lighting.

#### Compliance with Policy EP2: Pollution - Noise

Construction Impacts

- 7.9.11 A Construction Noise Assessment has been prepared by Stantec which covers noise from the construction phase of the development only. An environmental sound survey has been undertaken, to establish the existing environmental sound levels representative of nearby noise sensitive receptors. The results of the environmental sound survey have been used to inform the assessment. The Environmental Health Department (EHD) at CCC was consulted to agree the location and extent of the baseline sound survey. The results of the environmental sound survey have been used to inform the assessment. Noise sensitive buildings have been identified close to the works, and calculations of likely noise levels arising from construction works have been carried out. The Assessment concluded that the results of the calculations indicate that noise levels are likely to be below the threshold level for all receptors.
- 7.9.12 The following construction noise mitigation proposed is as follows:
  - Ensuring the use of quiet working methods, the most suitable plant and reasonable hours of working for noisy operations, where reasonably practicable;
  - Locating noisy plant and equipment as far away from dwellings as reasonably possible, and where practical, carry out loading and unloading in these areas;
  - Screening plant to reduce noise which cannot be reduced by increasing the distance between the source and the receiver (i.e. by installing noisy plant and equipment behind large site buildings);
  - Shutting down any machines that work intermittently or throttling them back to a minimum;
  - Orientating plant that is known to emit noise strongly in one direction so that the noise is directed away from houses, where possible;
  - Closing acoustic covers to engines when they are in use or idling;
  - Lowering materials slowly, whenever practicable, and not dropping them;
  - Use of temporary acoustic barriers, where appropriate, and other noise containment measures, such as screens, sheeting and acoustic hoardings at the construction site boundary to minimise noise breakout and reduce noise levels at the potentially affected receptors.
- 7.9.13 Therefore, based on the results of the assessments undertaken, the Site is considered suitable for the proposed development with respect to construction noise.



#### Operational Impacts

7.9.14 An assessment of likely operational noise effects associated with the Proposed Development has been undertaken and this is reported in the Noise Impact Assessment submitted with this planning application. The Operation Noise Impact Assessment sets out that there are no predicted adverse impacts at any noise-sensitive receptors.

#### Compliance with Policy EP2: Pollution -Contamination

- 7.9.15 The Site and the surrounding land predominantly comprise agricultural land and as such the Site is considered to have a very low potential for significant contamination. The Tier 1 Preliminary Risk Assessment using the Stantec methodology concludes that the worst-case estimated risk in relation to potential contaminant linkages is classified as 'Very Low'.
- 7.9.16 The published geology indicates the Site is underlain by the Milford Haven Group across the majority of the Site with the Senni Formation Sandstone outcropping at the south of the Site.

  An absence of superficial deposits is indicated across the majority of the Site, however a small outcrop of the Devensian Till is indicated to be present on the far western edge of the Site.
- 7.9.17 The geotechnical constraints to the development of the Site associated with the ground conditions, potential geological hazards and the historical and present land uses is generally considered to be' Low' to 'Very Low'

#### Summary of compliance with Policy EP2: Pollution

7.9.18 The proposed Development will minimise the potential impacts of pollution, on air quality, water quality, light and noise and contamination during the construction and operational stage with mitigation where necessary. It is considered that the Proposed Development accords with Policy EP2: Pollution of the CLDP.

#### 7.10 Other Relevant Matters

Fire Safety

7.10.1 A Fire Safety Report will be prepared at the detailed design stage and could be secured by use of a suitably worded condition. The Fire Safety Report will demonstrate that the proposed development will satisfy all functional requirements of Part B (Fire Safety) of Schedule 1 to the Building Regulations 2010 (as amended).

Security

- 7.10.2 The compound will be enclosed by an electrified security fence (measuring 3.4 metres in height). Passive infra-red security lighting and closed-circuit television security cameras will surround the equipment and create a secure compound.
- 7.10.3 National Grid conducts comprehensive risk assessments and collaborates with various government agencies to ensure each substation is individually secured and protected. All facilities meet Government and industry standards, with teams regularly testing and strengthening system resilience to ensure the safe and efficient transmission of electricity.

Electric and Magnetic Fields

7.10.4 Electric and Magnetic Fields (EMFs) are produced by a current flowing through a conductor. The strength of the magnetic field from a substation can increase or decrease depending on the electricity demand in that area. Substations do not produce a significant external electric field however they do provide a magnetic field. As set out on the National Grid website<sup>2</sup> "Magnetic field levels at the boundary of a substation are typically at a level of 1 or 2 µT, but

<sup>&</sup>lt;sup>2</sup> https://www.nationalgrid.com/stories/energy-explained/is-living-next-to-substation-safe [accessed on 12 October 2025).



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- this decreases very quickly as you move away." At approximately 1-2 metres from the substation, the magnetic field is usually lower than the field found in the average home.
- 7.10.5 The International Commission on Non-Ionizing Radiation Protection (ICNIRP) has set the UK guidelines for magnetic fields and these guides have been formally adopted by the Government. The ICNIRP 'reference level' for public exposure is 100 µT for power frequency (50 Hz) magnetic fields.
- 7.10.6 The Proposed Development has been designed to comply with the ICNIRP guidelines. This planning submission is accompanied by a detailed EMF Report.

# 8 Summary and Conclusion

#### 8.1 Summary

- 8.1.1 This application is submitted to the Council for a 400kV substation (including the substation platform, access road and associated infrastructure). The Project is comprised of the following principal elements:
  - Construction of a single platform (260 metres by 640 metres) on which an Air Insulated Substation (AIS) will be sited.
  - Access to the A484, with operational access road to connect the platform to the A484.
- 8.1.2 Modification works to the existing 400kV Overhead Line (OHL) to connect the substation to the existing OHL involving the installation of two new towers and one replacement tower circa 18m and 62m.
- 8.1.3 Associated drainage and hard and soft landscaping.

#### 8.2 Conclusion

- 8.2.1 The development supports local and national objectives for a resilient electricity grid that enables renewable and low-carbon energy, meeting current and future energy demands while ensuring reliable supply for industrial operations.
- 8.2.2 The proposed substation will play a critical role in the electricity network by regulating voltage, enabling safe power distribution, and isolating faults or maintenance areas to protect the grid. The new substation is essential to meet growing regional energy needs, enhance network resilience, and support future residential and commercial growth.
- 8.2.3 The proposal strongly aligns with both national and local planning policies, including Planning Policy Wales (PPW), Future Wales, and relevant policies of the Council's Local Plan. The Proposed Development comprises of sustainable development; its purpose involves the strengthening and enabling much-needed upgrades to energy infrastructure, whilst balancing environmental considerations. This PS demonstrates that the development is acceptable in principle. Furthermore CCC confirmed there was no policy to preclude the Proposed Development in pre-application advice received.
- 8.2.4 The supporting documents provide the background to site selection and an assessment of the detailed impacts of the Proposed Development. The PS has appraised this detail under the relevant planning polices and material considerations. It concludes that the Proposed Development complies with the detailed policies relating to land use, historic environment, landscape, ecology, traffic and transport and the environment.
- 8.2.5 The proposal will also provide green infrastructure enhancements and a net benefit for biodiversity in line with PPW.
- 8.2.6 This statement has assessed and confirmed compliance with the adopted Development Plan as a whole, as required by S38(6) of the Planning and Compulsory Purchase Act 2004.
- 8.2.7 On this basis, it is considered and respectfully requested that this application should be approved without delay.