

Our Ref: 331201429

9<sup>th</sup> April 2024

Neuadd y Sir / County Hall
Caerfyrddin
Carmarthen
SA31 1JP1
F.A.O. Hugh Towns
planningregistrations@carmarthenshire.gov.uk

Dear Hugh,

RE: FULL PLANNING APPLICATION FOR THE ERECTION OF A NEW NATIONAL GRID 400KV SUBSTATION AT THE SITE CENTRED ON E:241868 N:213542, C.6KM SOUTH OF CARMARTHEN.

Request for an Environmental Impact Assessment (EIA) Screening Opinion under Regulations 5 and 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

#### 1. Introduction

Stantec UK Limited is instructed by National Grid Electricity Transmission ('National Grid') as 'the Applicant' to submit a request for an Environmental Impact Assessment (EIA) screening opinion from Carmarthenshire County Council (CCC) for the erection of a new National Grid 400kV substation at the Site, centred on E:241868 N:213542, c.6km south of Carmarthen (hereafter referred to as 'the Site').

A full planning application will be submitted to CCC for the erection of the new substation (hereafter referred to as 'the Proposed Development'). The Site, which is the subject of this screening request, is based on worst case parameters for the Proposed Development and includes a footprint for the proposed National Grid substation, an area for modifications to the existing adjacent overhead line which could include up to two new towers, and land potentially required for construction and operational access from the A484.

In its current iteration, the Site is formed of two parcels, one measuring 13.6ha (for the substation) and the second measuring 0.24ha (for the tower connection to the overhead line). The Site Location Plan is shown on **Appendix 1.** The Proposed Development is illustrated on the Indicative Layout Plan provided in **Appendix 2.** 

Please note that, within the Site boundary, there are areas of land that will accommodate the footprints of two new 132kV substations required by National Grid customers. This is due to National Grid receiving connection requests from Green GEN Cymru and National Grid Electricity Distribution (NGED), a separate National Grid company to NGET, both of which would seek to connect to the new National Grid 400kV substation. Planning permission for the Green GEN Cymru and NGED 132kV substations will be sought separately by the relevant National Grid customers.

The Site falls within the jurisdiction of CCC, and any planning application for the Proposed Development would be subject to CCC planning policies. A revised Local Development Plan (LDP) is being prepared by CCC. Until its adoption, planning applications will be subject to policies contained within the 2006-2021 LDP and relevant Supplementary Planning Guidance and national planning policy contained within Planning Policy Wales (Edition 11, 2021) and Technical Advice Notes.



As required by the EIA Regulations 2017 (as amended), hereafter referred to as the 'EIA Regulations' this letter provides the following:

- A plan sufficient to identify the land;
- A description of the development, including in particular:
  - A description of the physical characteristics of the development, and where relevant, of demolition works:
  - A description of the location of the development, with particular regard to the environmental sensitivity of the geographical areas likely to be affected;
- A description of the aspects of the environment likely to be significantly affected by the development;
- To the extent the information is available, a description of any likely significant effects of the Proposed Development on the environment resulting from:
  - o The expected residues and emissions and the production of waste, where relevant; and
  - The use of natural resources, in particular soils, land, water and biodiversity; and
  - Such other information or representations as the person making the request may wish to provide or make, including any features of the Proposed Development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.

This report supports National Grid's requests to Carmarthenshire County Council for the proposed new substation and to the Secretary of State for Energy Security and Net Zero for the associated overhead line modifications, as necessary, for screening opinions to confirm whether Environmental Impact Assessment (EIA) is required in respect of the proposed works.

The EIA screening opinion request sets out where there is the potential for significant environmental effects to occur as a result of the Proposed Development and, where necessary, how these effects will be addressed as part of the planning application.

The request is being made to Carmarthenshire County Council under Regulation 5 of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the TCPA EIA Regulations 2017). The request to the Secretary of State for Energy Security and Net Zero is being made pursuant to Schedule 2 of The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017 (the EWA EIA Regulations).

This screening opinion request has given due regard to the Environmental Impact Assessment (EIA) (Agriculture) (Wales) Regulations 2017 – *Screening Decision Application Form* advisory checklist of information required to support EIA Screening (available at <a href="mailto:environmental-impact-assessment-screening-application.pdf">environmental-impact-assessment-screening-application.pdf</a> (gov.wales)).

# 2. Consenting Regime

National Grid will submit a planning application under the Town and Country Planning Act (1990) to Carmarthenshire County Council for the development of the proposed substation. Planning permission will not be sought from the Council for the overhead line works required to connect the proposed substation to the existing 400kV overhead line as a different consenting route applies for such works.

Section 37 of the Electricity Act 1989 establishes the statutory consenting process to install, and keep installed, overhead electric lines. Depending on the final design of the overhead line modification works, they will either require Section 37 consent from the Secretary of State or confirmation that they are exempt from the need for Section 37 consent. In the event that a Section 37 exemption is being



sought then an updated request for a screening opinion is also likely to need to be sought from Carmarthenshire County Council, prior to confirmation being sought from the Secretary of State.

Whilst the proposed substation and the overhead line works fall under different consenting regimes, they are interrelated. All elements are therefore considered in this EIA Screening Report to ensure that robust consideration is given to the potential for the proposal as a whole to result in likely significant environmental effects.

#### 3. Site and Surrounding Area

The Site, centred on E:241868 N213542, lies c.6km south of Carmarthen. The Site is made up of 12 agricultural fields and shares a border with a further 15. The Site is accessible from a narrow country road roughly 600 meters long that branches off the A484.

The elevation profile of the Site is fairly flat with slight changes in elevation occurring the further south you travel. To the east of the Site there is an existing wooded area providing screening to the Site.

The Site is screened by a range of natural landscaping including trees and large hedges. There are two existing National Grid Over Head Lines (OHL) that run parallel to one another. The furthest west of these OHL runs directly through the red line boundary of the proposal Site.

The Site Location Plan is shown on Appendix 1.

The Site is not located within a sensitive area as defined by the EIA Regulations.

## 4. Proposed Development

National Grid is reviewing infrastructure options to meet an increase in electrical demand resulting from multiple customer connections required to come into the national electricity transmission network. A new substation is required in the area to accommodate both generation and demand connections due to there being limited capacity at existing substations in South Wales.

The approximate area of the AIS Substation compound (255m x 530m) is shown in **Figure 1** below. The actual layout of the substation may be amended during detailed design but should be within these parameters.



Figure 1: AIS Substation Compound



The Proposed Development is illustrated on the Indicative Layout Plan provided in **Appendix 2**, which shows the equipment the substation compound is likely to include and the likely modifications to the existing OHL.

Short sections of new 400kV OHL and associated equipment, together with possible underground cabling, will be required to connect the new substations to the existing OHL network. Existing 132kV OHLs crossing the site will be re-routed.

The Proposed Development is likely to include:

- Up to two new additional and one replacement 400kV towers circa 45 55m tall to connect into the
  existing OHL to allow the diversion of existing lines into the new substation and / or adaptations to
  existing towers, as well as any temporary OHL works as required;
- Control buildings;
- Substation access from public highway, main gate and pedestrian gate;
- An electrified security fence (typically 3.4m in height), passive infra-red security lighting and closed-circuit television security cameras would surround the equipment and create a secure compound which would be surfaced with grey stone chippings. The equipment would be lit for maintenance purposes and any lighting solution will be prepared in accordance with the current Design Standards for Exterior Lighting.
- A metalled internal access road of approximately 5.5m wide with adjacent hard standing within which the substation equipment would be sited; and
- Diesel generators for backup power supply.

The equipment within the substation will consist of a variety of vertical structures supporting overhead busbars with ancillary equipment. The maximum height of the equipment would be approximately 15m.

The substation would not be manned during operation (i.e. no additional traffic/employee numbers expected at this stage), although small welfare/office facilities will be included for maintenance workers.

In addition to the substation infrastructure itself, the following is also likely to be required:

- Areas to the north, south and east of the site for landscaping and biodiversity enhancement mitigation measures; and
- Installation of new fresh water, sewage, drainage, telecommunications equipment, and low voltage power supplies to the site.

### **Access**

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.

Construction access will need to facilitate delivery of the largest substation components to site, including 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 to the junction with an unnamed road in Upland Arms. Permanent and construction access to the substation site would be taken from the A484 which lies some 600m to the west. To reach the Site from the A484, Stantec are exploring access options that are subject to further investigation to identify the space envelope that is required to allow for the movement to and from the Site.

The unnamed road (including the junction with the A484) could be widened and strengthened to facilitate the required vehicle movements. Alternatively, a new access route could be created utilising land to the north or south of the unnamed road or the unnamed road could be used in part and a new route created from a suitable point along its length utilising land to the north or south subject to further route alignment work. It is anticipated that the access road would need to be up to 6m wide.



Depending on the preferred access route it could be used solely for construction purposes or it could be retained for operational/maintenance purposes. Route optioneering is being undertaken considering a variety of factors including land ownership, road construction consent, road safety, road buildability and cost, vehicle manoeuvring (swept path analysis), alignment, topography, ecology, drainage, heritage, air quality and noise.

The exact route for the access road to the Proposed Development will be decided upon in collaboration with CCC to seek to ensure that environmental effects are minimised as far as practicably possible. This will be conducted via both informal discussions and the submission of a formal pre application enquiry (which accompanies this screening request).

### Landscape Mitigation

The Site occupies an elevated plateau within is an area of relatively flat landform, which affords some far-reaching views across the surrounding generally open largely unspoilt agricultural landscape which has a high degree of scenic quality. When considering the landscape baseline, the area is described as one of a rolling and undulating nature with medium to large scale fields bounded by well-defined and intact hedgerows (with limited trees). Woodland presence is generally limited but these features are present and contribute to the landscape visually. Settlement pattern is mainly one of many dispersed farmsteads.

Given the nature of the Proposed Development, a range of landscape mitigation measures will be required to integrate it into the landscape, minimise its visual intrusion and reduce harm as much as is reasonably practicable.

It is considered the placement of well-considered vegetation blocks which respond to the field pattern and connect with existing woodland and vegetation groups would be an appropriate solution. These would provide a degree of visual mitigation which would respond positively to the prevailing landscape character and support conservation and enhancement of the surrounding semi natural habitats.

In addition to the introduction of woodland features, the introduction of new hedgerows to the perimeter of the development would provide habitat connectivity around the development and mitigate for any loss of existing features. The introduction of hedgerow trees to existing field boundaries would also support visual screening of the proposed development.

A more detailed mitigation strategy for landscaping will be determined following consultation with CCC and stakeholders.

# 5. Consideration of the EIA Regulations

## Town and Country Planning Act (TCPA) EIA Regulations

The Town and Country Planning Act (TCPA) EIA Regulations establish that certain developments should be screened to determine whether an EIA should be carried out. Schedule 1 developments are mandatory EIA developments, whilst Schedule 2 developments require a screening process to be undertaken to determine whether EIA is necessary. This process involves obtaining the opinion of the Local Planning Authority. The Proposed Development does not fall within Schedule 1.

Substation development is also not listed within any of the categories of development contained in Schedule 2 of the EIA Regulations. In particular, it does not fall within the description of any of the projects listed in paragraph 3 of Schedule 2, which are specific to the energy industry. In respect of energy developments, it is noted that in terms of electricity undertakings overhead lines have been included (transmission of electrical energy by overhead cables) but substations are not referenced.

The Proposed Development also does not fall naturally within any of descriptions of the projects listed in the categories of "Other projects" or "Infrastructure projects" in paragraphs 11 and 10, respectively, of Schedule 2. The substation proposal is considered to be of a different character, in that post



construction very little ongoing operational activity is required. Such ongoing operational activity and overall impact will be of a significantly lesser scale to the types of development set out in Part 10 and 11.

However, that a development proposal is not specifically listed or identified in Schedule 2 is not, in itself, a clear determinant that it cannot be considered to fall within Schedule 2 and there is case law that indicates that in interpreting such matters a Planning Authority is able to use its judgement.

Whilst the Proposed Development is not directly identified within Schedule 2 of the EIA Regulations, due to it being over 0.5 hectares (ha) in area and because of the nature of the development, it could be considered as development of a nature which could fall within Schedule 2 of the Regulations. It is considered therefore that the Proposed Development needs to be screened to determine whether it is likely to have significant environmental effects and therefore needs to be the subject of an EIA.

The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017 (the EWA EIA Regulations).

Like the TCPA EIA Regulations, the EWA EIA Regulations define projects as either Schedule 1 development, where EIA is mandatory, or Schedule 2 development, where the need for EIA must be determined on a case-by-case basis. Where a development falls within the description of the developments listed within Schedule 2 of the EWA EIA Regulations, it must be considered against Schedule 3 to determine whether it is likely to have significant environmental effects.

Exceptionally, for developments which fall outside the criteria defined in Schedules 1 and 2, the need for EIA may have to be determined if the Secretary of State considers that specific, local circumstances need to be taken into account (such as where an OHL passes through heavily populated areas).

The selection criteria set out in Schedule 3 of the EWA EIA Regulations is consistent with that contained in Schedule 3 of the TCPA EIA Regulations and includes the characteristics of development, the location of development and the characteristics of any potential impact.

The proposals have been considered against the criteria and thresholds set out in Schedules 1 and 2 of the EWA EIA Regulations, along with the selection criteria within Schedule 3, to determine whether likely significant effects are anticipated and as such, whether the scheme is EIA development.

The EWA EIA Regulations define Schedule 1 developments as:

- A nuclear generating station;
- A thermal generating station with a heat output of 300mw or more;
- An electric line installed above ground with a voltage of 220kv or more and a length of more than 15km.

Electricity substations are not included within Schedule 1 of the EWA EIA Regulations and whilst the OHL works would involve the installation of an electric line above ground with a voltage over 220kV, the length of the new line would not exceed 15km. In consequence, the proposal does not constitute development falling within Schedule 1 of the EWA EIA Regulations.

The proposal would be considered Schedule 2 development if it comprises of:

- Development to provide a generating station (other than a generating station of a description set out in paragraph 1 of Schedule 1 of the EWA EIA Regulations) (paragraph 1); or
- Development to provide either of the following electric lines (other than an electric line of a description set out in paragraph 1 of Schedule 1) -
  - An electric line installed above ground with a voltage of 132kv or more (paragraph 2(a));
  - An electric line installed above ground in a sensitive area (paragraph 2(b)).



The proposal does not involve the development of a generating station nor would the OHL works be installed above ground in a sensitive area (as defined in Schedule 2 of the EWA EIA Regulations as including: SSSIs; National Parks; the Broads; AONBs; World Heritage Sites; scheduled monuments; and European designated nature conservation sites). The OHL works do, however, involve the installation/modification of above ground lines with a voltage above 132kV.

The OHL works therefore fall within Schedule 2 (paragraph 2(a)) of the EWA EIA Regulations. In consequence, it is necessary to consider whether this development is likely to give rise to significant adverse environmental effects by virtue of factors such as the development's nature, size or location.

The following sections of this letter aim to fulfil the remaining requirements of Schedule 3 (TCPA EIA Regulations) and Schedule 2 (EWA EIA Regulations) and assist CCC in reaching a decision on whether the planning application for the Proposed Development should be accompanied by an EIA.

For all development that falls under Schedule 2 of the TCPA EIA Regulations, the need for an EIA is determined on the bases of the set criteria as follows:

- The development falls within one of the classes of development stated in Schedule 2; AND
- EITHER it exceeds the size threshold for that class of development in Schedule 2;
- · OR it is in a sensitive area; AND
- It is likely to have significant effects on the environment.

**Table 1** (enclosed with this letter) provides an appraisal of the Proposed Development in the context of the existing Site and surrounding area. Schedule 3 of the TCPA EIA Regulations lists the selection criteria for the screening of a Schedule 2 development, based on the characteristics and location of the development and the types and characteristics of the potential impacts that could occur. The appraisal considers the characteristics of the Proposed Development, the environmental sensitivity of areas likely to be affected and the potential for significant effects.

The key determinant for whether EIA is required is whether the development is likely to result in <u>significant</u> effects on the environment. **Table 1** sets out the environmental effects that are anticipated to occur during Site preparation, construction and operation of the Proposed Development, how these are being assessed and managed through the design stage, and the technical reports that are proposed to be submitted with the planning application.

# Assessment of Significant Cumulative Effects

The assessment documented in **Table 1** is mindful of the likelihood of significant cumulative effects from the Proposed Development with other existing and approved local developments. However, no cumulative developments have been identified and therefore no likely significant cumulative effects have been identified.

Within the Site, there are areas of land that will accommodate the footprints of the 132kV substations required by the National Grid customers connecting to the new National Grid 400kV substation. Planning permission for the 132kV substations will be sought separately by the relevant National Grid customers. While this Screening Letter applies to the 400kV substation only, it is acknowledged that the two other 132kV substations could potentially contribute to cumulative environmental effects.

We have provisionally included these potential 132kV substation developments in the plan at **Appendix 2** – their approximate (indicative) location is represented by blue dashed lines. This is to demonstrate that they will integrate into our infrastructure, should they go ahead and receive approval.

In the event these projects proceed, we anticipate that they will conduct their own Environmental Impact Assessment Screening in order to address the cumulative impacts of their developments and this development as a whole. Cumulative impacts of the 132kV substations have therefore not been considered within **Table 1**.



# 6. EIA Screening Appraisal

The Schedule 3 criteria relates to:

- The characteristics of the development;
- The environmental sensitivity of the location; and
- The characteristics of the potential impact.

As set out in **Section 3** of this letter, the Site is not an environmentally sensitive location as defined by the EIA Regulations.

The following paragraphs summarise the potential effects of the Proposed Development during construction and operation and set out the proposed measures to mitigate any potential effects. As mentioned above, **Table 1** provides further detail of the consideration of effects and potential mitigation during the construction and operational phases of the Proposed Development.

### Construction Phase

During construction the Proposed Development will not give rise to any significant impacts relating to noise and vibration, air quality and flood risk and drainage. A Construction Environment Management Plan (CEMP) will be submitted with the planning application which will outline any mitigation to limit impacts on any sensitive receptors.

It is anticipated that construction vehicles will utilise the existing primary road network and avoid unsuitable small roads where possible. A Construction Traffic Management Plan (CTMP) will be developed for the construction of the substation, if required following discussions with CCC highways department. This will be submitted with the planning application and will outline the effects of the Proposed Development on the local highway network during construction. It will also identify measures to mitigate the impact of construction vehicle movements on the highway network and sensitive receptors, including residential properties. Given this proposed mitigation, it is therefore expected that effects to transport as a result of the Proposed Development during construction would be not significant.

During construction, any potential temporary visual impacts will be mitigated through best practice and, if considered necessary, details of such things as Site hoardings can be the subject of a planning condition on the planning permission. There is expected to be local landscape and visual effects from the Proposed Development, however these are not expected to be significant.

There are no heritage assets within the Site, or directly adjacent to the Site. Any potential impact to archaeological remains can be mitigated through their recovery and preservation by record and through the development of a Written Scheme of Investigation (WSI). A Phase 1 Ground Conditions Assessment will also be undertaken. It is considered that heritage, archaeology, ground conditions and agricultural land effects would be not significant.

There are no internationally, nationally, or locally designated nature conservation sites within the Site. Indirect impacts to Ancient Woodland and Priority Habitat will be mitigated through construction due to the implementation of a CEMP and standard best practice construction processes.

Potential risks to human health during the construction phase, as well as any employment benefits, would be temporary.

Construction of the Proposed Development has the potential to result in the production of waste - all waste generated during the demolition and construction phase will be managed in accordance with the processes set out by The Waste (England and Wales) (Amendment) Regulations 2014.

Further information regarding consideration of impacts and the proposed approach for these topics can be found in **Table 1.** 



### Operation Phase

As the Site is located in a rural location, the completed Proposed Development has the potential to adversely impact the landscape and visual amenity of the surrounding area. However, given the context of the Site adjacent to the existing OHL, the screening currently provided by existing vegetation and the proposed landscape mitigation, it is considered that landscape and visual amenity effects would not be significant. The Design and Access Statement (DAS) and Landscape and Visual Appraisal (LVA) proposed to be submitted with the planning application will identify how the design and layout of the Proposed Development responds to its context and will set out in detail the proposed landscape mitigation.

During the operational phase there is unlikely to be potential for transport, air quality and noise and vibration impacts as a result of vehicle movements because operational traffic will be infrequent, as access will only usually be required for inspection and maintenance. Based on the assumption that no regular HGV or notable load traffic will be required during operation, it is anticipated that the existing road network can accommodate any increase in operational traffic generated by the Proposed Development. Similarly, the limited amount of operational traffic movements are not considered sufficient to result in significant air quality or noise impacts to local receptors.

A Drainage Strategy will be submitted as part of the planning application which will detail the approach to drainage for the Proposed Development during operation.

The substation would not be manned during operation (i.e. no additional employee numbers expected). However, the substation plays a role in energy supply reinforcement by ensuring a stable and reliable power supply, contributing socio-economic benefits. It is anticipated that this would be beneficial, although not a significant economic effect.

As with the construction stage, it is anticipated that there would be no adverse heritage/archaeology, land and ground conditions, biodiversity, human health, climate, waste, agricultural land or risk of major accidents and disasters impacts during the operation phase.

Further information regarding the consideration of impacts and the proposed approach for these topics can be found in **Table 1**.

### Planning Application Supporting Documents

The planning application will be supported by a range of supporting documents, of which the exact name, scope and mitigation are yet to be confirmed with the council. Expected supporting documents are set out in **Table 1** and listed below:

- Planning Statement
- Design and Access Statement
- Ecological Impact Assessment (EcIA)
- Preliminary Ecological Appraisal (PEA) / Desktop Study including the study of Trees.
- Biodiversity Net Gain (BNG) Assessment
- Flood Consequences Assessment
- Drainage Strategy
- Noise Impact Assessment
- Air Quality Assessment
- Landscape & Visual Appraisal (LVA)
- Heritage Environmental Desk-Based Assessment (HEDBA)
- Phase 1 Ground Condition Assessment
- Transport Statement
- Outline Construction Traffic Management Plan (CTMP)
- Outline Construction Environmental Management Plan (CEMP)



Pre-application Consultation (PAC) Report

These supporting documents will demonstrate that the Proposed Development will not give rise to any significant environmental effects after mitigation, the implementation of which would be secured by conditions to the planning permission.

#### 7. Conclusion

The Proposed Development is not directly identified within Schedule 2 of the relevant EIA Regulations; however, due to the Proposed Development being over 0.5 hectares (ha) in area and the nature of the development, it could be considered as development of a nature which could fall within Schedule 2 of the Regulations. The Proposed Development has therefore been screened to determine whether there is likely to be significant environmental effects and the needs for an EIA.

Overall, considering the characteristics and location of the Site and the type and characteristics of the potential impacts of the Proposed Development after mitigation, it is considered that **the Proposed Development should not be considered to be EIA development** in accordance with the EIA Regulations and does not require an ES to be prepared.

We would be grateful if CCC could provide a formal screening opinion within three weeks to the date of receiving this request in accordance with regulation 5 (5) and (6) of the EIA Regulations.

Yours sincerely,

**Janet Burns** 

**Senior Associate Environmental Consultant** 

on behalf of Stantec UK Ltd

Janet Bos

Encls:

 Table 1: Screening of potential effects and proposed approach

**Appendix 1**: Proposed Site Location Plan **Appendix 2**: Indicative Layout Plan



Table 1: Screening of potential effects and proposed approach

Topic	Potential Effects	Proposed Approach
Landscape and	The Site is located 1.3km south west of Idole. The Site is not within	A robust Landscape and Visual Appraisal (LVA) will be
Visual	a designated landscape; however, the Tywi Valley Special Landscape Area (SLA) is located approximately 1.8km to the west.	undertaken to support the detailed application. The approach and methodology will be based on the Guidelines for Landscape and Visual Assessment, Third Edition (GLVIA3) (Landscape Institute
	The Site comprises medium sized fields of an irregular pattern which are bounded by hedgerows of varying heights and densities. A number of hedgerows will require removal as a result of the Proposed Development, and the land use will be permanently changed.	and Institute of Environmental Management & Assessment) combined with professional experience for similar types of development. This will detail the potential effects and any mitigation as part of the Proposed Development. This will include the results of a winter site visit which will be undertaken between Dec 2023 – Feb 2024.
	The Site is elevated when in context of the wider landscape, occupying an elevated plateau which is an area of relatively flat landform.	Potential reversible and temporary visual impacts during construction will be mitigated through the implementation of best practice and standard construction processes and measures
	The Sites elevated position affords some far-reaching views with views across a generally open largely unspoilt agricultural landscape which has a high degree of scenic quality. The Site is however	contained within a Construction Environment Management Plan (CEMP).
	considered to be well contained visually due to hedgerows along existing field boundaries and local highways.	During operation, mitigation will be embedded into the Proposed Development. There is an opportunity to reinforce existing field boundary features with tree planting, and introduction of well-
	The Site is located immediately adjacent to the existing OHL which is a dominating visual feature in the landscape.	considered vegetation blocks which respond to the field pattern and connect with existing woodland and vegetation groups to screen the development from local properties. Planting should be
	At the national scale, the Site is located within the National	relatively wide and include a mix of plants to afford screening all
	Landscape Character Areas (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.	year round. The introduction of new hedgerows to the perimeter of the development would provide habitat connectivity around the development and mitigate for the loss of existing features.
	No local landscape character studies cover the Site.	A Design and Access Statement will be submitted with the application to demonstrate how the Proposed Development has
	The Site is located within the following LANDMAP aspect layers:  Visual and Sensory: Areas (CRMRTVS960) Middleton Hills with an	been designed to respond to its surrounding context.
	overall evaluation of Moderate, & (CRMRTVS936) LLansaint Coastal	There may be visual effects from the isolated local properties and
	Hills with an overall evaluation of High;	the PRoW located to the east. However, LIDAR data suggests
	<u>Landscape Habitats</u> : Area (CRMRTLH042) Llansaint North with an overall evaluation of High;	isolated residential properties to the south are screened from views via the intervening elevated landform at 125AOD, whilst



Topic	Potential Effects	Proposed Approach
	Historic Landscape: Area (CRMRTHL39492) Llandyfaelog,	residential properties located east and west of the Site have
	Llangyndeyrn with an overall evaluation of Outstanding;	limited visibility due to existing intervening vegetation.
	Cultural Landscape Services: Areas (CRMRTCLS235) Middleton	Despite its sleveted position, there are few viewal recenters
	Hills with an evaluation of over 75% High or Outstanding, & (CRMRTCLS231) LLansaint Coastal Hills with an evaluation of over	Despite its elevated position, there are few visual receptors identified and the substation would sit in context with the
	75% High or Outstanding;	immediately adjacent OHL with available land to provide
	Geological Landscape: Area (CRMRTGL201) Llansaint North with an	screening.
	overall evaluation of Moderate.	oorooming.
		There is expected to be local landscape and visual effects from
	The landscape character of the wider area is described as being of a	the Proposed Development, however these are expected to be
	rolling and undulating nature with medium to large scale fields	Not Significant.
	bounded by well-defined and intact hedgerows (with limited trees).	
	Woodland presence is generally limited but these features are	The Design and Access Statement and the LVA will identify how
	present and contribute to the landscape visually. Settlement pattern	the design and layout of the Proposed Development responds to
	is mainly one of many dispersed farmsteads.	its context and mitigation approaches to height, scale and design
	Vigual recentors for the Cita include users of the legal read adjacent	quality of the Proposed Development within the landscape.
	Visual receptors for the Site include users of the local road adjacent and users of the PRoW to the east. Residential receptors include	
	nearby farmsteads and isolated properties. Desk study review	
	indicates 6no residential properties located within 500m of the Site.	
	The second of th	
	The Wales Coastal Path (and NCN Route 4) are located	
	approximately 1.4km to the west, however views from this receptor	
	are limited. Views from the Coastal Path are focused toward the Tywi	
	estuary to the west.	
	There is a DDaW leasted approximately 200 as to the exact. We have	
	There is a PRoW located approximately 300m to the east with open	
	views towards the Site and isolated residential receptors in proximity of the Site, the closest being circa 150m to the east.	
	of the one, the closest being chea fount to the east.	
	Development heights across the heights will vary typically being up	
	to ~15m tall, with one new pylon tower circa 45 – 55m tall to connect	
	into the OHL. Views from receptors immediately surrounding and	
	facing towards the Site may be impacted.	
	The Cite has after from a high damage of the standard contribution of	
	The Site benefits from a high degree of visual containment in most	
	directions as a result of vegetation, and landform, with views limited	



Topic	Potential Effects	Proposed Approach
	predominantly to local and medium distance receptors including residences and footpaths, and occasional glimpses from roads.	
	The Proposed Development has the potential to affect local landscape and visual receptors during demolition, construction and	
	operational phases.	
Heritage and Archaeology	There are no heritage assets within the Site, or directly adjacent to the Site.  A Scheduled Monument (Castell y Domen, Gwempa) comprising the remains of a motte and ditch is located approximately 1.6km southeast. Desk-study review indicates views to this asset will be limited. The monument is of national importance for its potential to	A Heritage Environmental Desk-Based Assessment (HEDBA) will be submitted as part of the planning application which will detail any potential impacts of the Proposed Development. The anticipated study area is to comprise 1km for non-designated and 3km for designated heritage assets.  A Site Walkover Survey will also be conducted, which is non-
	enhance knowledge of medieval defensive practices, the significance of which will not be affected by the siting of the substation in this location.  Grade II and II* listed buildings and Local Heritage Assets are	intrusive, to look for any archaeological potential (earthworks / buildings and structures) as well as visiting heritage assets with a potential for sensitivity in relation to their setting (e.g., checking intervisibility with the Site, considering noise potential).
	located within 1 km of the Site but there is limited potential for adverse effects to their character and setting due to the poor intervisibility with the Proposed Development.	Any potential impact to archaeological remains can be mitigated through their recovery and preservation by record. This may include a programme of metal detecting both before and potentially during intrusive ground works. Any anticipated direct
	The Site is not considered to be within crucial proximity of designated heritage assets and no evidence of archaeological significance has been identified.	archaeological impacts would be mitigated through advance excavation and recording ('preservation by record') and through the development of a Written Scheme of Investigation ('WSI').
	There is not anticipated to be any archaeological value within the Site.	It is considered that heritage and archaeology effects would be <b>Not Significant</b> .
Transport	The Site is accessible from a narrow unnamed single lane road roughly 650 meters long that connects to the A484 via a priority junction in Upland Arms. This unnamed road is currently an access road from A484 to Bwlch Y Gwynt Farm, Fforest Isaf Farm and	There are potential effects caused by traffic disturbance to local residences during the construction period as a result of routing construction traffic.
	Bancycapel village.  At this stage, it is envisaged that permanent and construction access	An Outline Construction Traffic Management Plan (CTMP) will be developed for the construction of the substation. This will be submitted with the planning application and will outline the effects
	to the substation Site would be taken from the A484 which lies some	of the Proposed Development on the local highway network



Topic	Potential Effects	Proposed Approach
ТОРІС	600m to the west of the Site. From the A484, there are number of options to reach the substation Site. It is anticipated that the access road would need to be between 4.5 – 6m width with passing bays.	during construction. It will also identify measures to mitigate the impact of construction vehicle movements on the highway network and sensitive receptors including residents.
	The unnamed road (including the junction with the A484) could be widened and strengthened. It is anticipated that upgrade works would be needed along much of the road (some 630m in length) resulting in the potential loss of hedgerows, trees, fences and infilling of drainage ditches. An alternative option would be to create a dedicated haul route for construction access through the fields adjacent (to the south) of the unnamed road. There are three areas (field boundaries) of hedges and trees that would be impacted by this	It is anticipated that construction vehicles will utilise the existing primary road network and avoid unsuitable small roads where possible. The presence of slow-moving abnormal loads on the road network may cause some short-term congestion. However, this would be temporary, short-term and not likely to be significant. Potential temporary impacts can be mitigated through the implementation of measures set out in a CEMP.
	route. The haul route could subsequently be made into a permanent access for the substation Site once construction is complete. A further option would be to use a combination of the existing unnamed road for part of the access and then create a dedicated haul route from the unnamed road at a suitable point along the unnamed road.	The construction of the Proposed Development will aim to minimise peak periods of traffic on the network and minimise impacts. This approach will also enable utilisation of construction storage and parking on the Site, avoiding the need for additional parking external to the Site.
	The options outlined above are subject to ongoing surveys to determine the extent of the relative impact of each option on hedges, trees, wildlife etc. The exact route for the access road to the Proposed Development will be decided upon in collaboration with CCC to seek to ensure that environmental effects are minimised as far as practicably possible. This will be conducted via both informal discussions and the submission of a formal pre application enquiry	A Transport Statement will be submitted as part of the planning application which will consider the potential transport and highways impact of the Proposed Development on the surrounding transport network and will describe how on-site and off-site access and movements can be achieved for a range of travel modes.
	(which accompanies this screening request).  The Proposed Development therefore has the potential to affect the local transport network during the construction and operation phases as a result of additional vehicle trips generated.	During operation, there will be a minor increase in vehicle movements. Due to the nature of the project, operational traffic will be infrequent as access will only be required for inspection and maintenance. Based on the assumption that no regular HGV or notable load traffic will be required during operation, it is anticipated that the existing road network can accommodate any increase in operational traffic generated by the Proposed Development and cumulatively with other committed developments in the local area.
		The design of the Proposed Development entrance and access road will comply with relevant highway design standards for the road network and will be agreed in consultation with the Local



Topic	Potential Effects	Proposed Approach
		Authority. A swept path analysis will be undertaken as part of the Transport Statement to support the planning application.
		It is considered that effects to transport as a result of the Proposed Development would be <b>Not Significant</b> .
Noise and Vibration	The nearest noise receptors include a number of residential and agricultural buildings, all located within 300m of the Site. The closest of which is an isolated residential property located 150m to the east.	Standard construction control measures or Best Practical Means would be adhered to within a CEMP which would reduce construction noise effects.
	The substation equipment associated with the Proposed Development has the potential to affect noise and vibration levels at existing dwellings.  During construction, increased noise and vibration levels at dwellings could occur from construction of the Proposed Development and increased vehicle movements during the construction phase.  Operational effects to dwellings could result from increased vehicle traffic from the Proposed Development, although transport movement is expected to be minimal as there are no permanent staff located at the substation, with operational traffic limited to inspection and maintenance visits.	A sound level survey will be conducted to identify the existing ambient sound environment around the Site. This will inform a Noise Impact Assessment which will be submitted with the planning application to identify impacts of the Proposed Development on surrounding residential receptors and mitigation measures that may need to be incorporated into the design.  Construction of the development will be phased to minimise the potential for significant impacts. Standard and best practice construction techniques for noise and vibration will be employed during the construction stage to mitigate any potential impact. Therefore, no significant effects are anticipated.  During construction, the Proposed Development will temporarily introduce construction vehicles into the area. Potential temporary noise and vibration impacts of these vehicles will be mitigated through the CEMP conditioned to the planning permission, and cumulative impacts will be limited through consultation with nearby developments.  During operation, the development will have limited traffic, with
		movements limited to servicing of the Proposed Development.
		Operational noise impacts will be assessed by National Grid and will be identified in a Noise Impact Assessment. Noise from the operation of the substation will adhere to requirements specified



Topic	Potential	Effects					Proposed Approach
							by the CCC (the Local Authority) in order to minimise noise break out from the facility.
							It is considered that effects to noise and vibration as a result of the Proposed Development would be <b>Not Significant</b> .
Air Quality	within its at the Local Managem exceedan The deve nearest A Camarthe Estimated obtained in DEFRA.	anshire Counadministrative Air Quality Manent Areas (Adaces of the anilopment Site in QMA, which een.  It background from the lates The background NAQOs, as sh	boundary anagemei QMAs) ha nual mear s located encompas concentra t 2018-ba nd concer	y as part of nt (LAQM) rave been de a nitrogen da approximates an area ations for the sed nations area area area ations area area area area area area area are	its respons regime. Threclared due lioxide (NO rely 6 km from within the le Site have all maps pro	An Air Quality Assessment will be submitted with the planning application.  The generation of dust or other pollution which could generate adverse air quality effects will be mitigated through the implementation of best practice and standard construction process, and measures included within a CEMP.  During operation, the Proposed Development is not anticipated to generate additional traffic movements sufficient to result in significant air quality impacts to local receptors. There would be no routine air emissions from the development. There would be a backup diesel generator for emergency use, and this would be	
					31	1	used only for short term and infrequent use.
	Year	Location	NO <sub>2</sub>	Mean (µg/r	PM <sub>2.5</sub>	-	It is considered that effects to air quality as a result of the
	2023	241_213	3.4	10.2	6.2	1	Proposed Development would be <b>Not Significant</b> .
	NAQOs		40	40	20		
	by construction human reare loss of human he sensitive.  There is a emissions associate	enstruction, du uction vehicle ceptors within of amenity (be ealth (because ecological rec also the poten is of NO <sub>2</sub> , PM <sub>1</sub> d with the Pro tial to occur a	s has the at the study cause of conce eptors.  tial for imposed Descriptions of the study of the	potential to y area; the r dust soiling) entrations of pacts on air 2.5 from consevelopment.	impact on main poten and deteri PM <sub>10</sub> ) and quality bed struction tra These im	tial impacts oration of harm to cause of affic pacts have	



Topic	Potential Effects	Proposed Approach
	residences) that are close to roads along which the construction traffic will travel.	
	During operation, the potential effects to existing residential receptors may arise from servicing of the Site and continued operation of the development.	
Flood Risk, Drainage and Water Quality	According to the Flood Risk from Rivers Map provided by Natural Resources Wales (NRW), the Site is located entirely within DAM Zone A, meaning that there is little or no risk of fluvial or tidal/coastal	Pollution control mitigation would be adopted through a Construction Environmental Management Plan (CEMP).
	flooding.	Realignment of field drainage ditches where present may be required.
	The proposed substation Site is located at the top of the catchment. Any groundwater present beneath the Site is likely to be deep and the effect of flooding from groundwater can be insignificant in comparison to the effect of surface water at the Site.	A Flood Consequence Assessment (FCA) will be required and will be submitted as part of the planning application and will be prepared in consultation with the relevant flood risk authorities.
	The Site comprises medium sized fields of an irregular pattern which are bounded by hedgerows of varying heights and densities. Surface water runoff would therefore predominantly infiltrate the ground. The Proposed Development has the potential to increase the	A Drainage Strategy will also be submitted as part of the planning application which will detail the approach to drainage for the Proposed Development during operation.
	permeability of the Site and therefore adversely affect drainage.	Potential impacts to surface water and groundwater during construction will be mitigated through the implementation of a
	During the construction phase, there is potential for contaminants (such as pollution, chemicals, or sediment) to enter the existing drainage features at the Site.	Construction Environment Management Plan (CEMP) and standard best practice construction processes.
	Under the TAN15 guidance, utilities infrastructure is usually classed as "Less Vulnerable" development. However, as the Proposed Development is for a National Grid substation, it is prudent to	In terms of consumption of natural resources (water), the Proposed Development is not anticipated to involve any exceptional or unusual demands in this respect.
	consider the development as "Especially vulnerable industrial development (e.g., power stations, chemical plants, incinerators)" which falls within the "Highly Vulnerable" category.	There is not expected to be any likely significant effects on flood risk, drainage and water quality, and therefore there are no cumulative impacts with nearby developments.
		It is considered that effects to flood risk, drainage and water quality as a result of the Proposed Development would be <b>Not Significant</b> .



Topic	Potential Effects	Proposed Approach
Land and Ground Conditions	The Site comprises relatively flat landform. Based on LIDAR information available the Site ranges from 120AOD to 130AOD.  The Site and the surrounding land predominantly comprises agricultural fields and small farms, and as such the Site is considered to have a very low potential for significant contamination.	A Phase 1 Ground Conditions Assessment will be submitted as part of the planning application which will detail the potential impacts of the Proposed Development. Site investigations and measures for recording, remediation and verification of ground contamination, if required, will be conditioned to the planning permission.
	During the construction phase, where construction activities occur on site there is the possibility for the mobilisation of any existing contaminants in the ground or the introduction of contaminants through spillages or leakages of fuels or chemicals on site.	The risk to human receptors during construction is considered to be low. Any potential impacts as a result of contaminated land will be mitigated through the implementation of best practice and standard construction process, and measures included within a CEMP.
	The potential for generating contamination as a result of the land use of the Proposed Development is considered to be low as a result of anticipated construction and operational activities.  Therefore, the risk of contamination to construction workers and future users of the Proposed Development is considered to be low.	During the operation phase it is also considered that risk to human receptors is low. Most of the Proposed Development will comprise hardstanding that will break potential pollution linkage between any potential contaminated land and future users of the Site.
	During operation, there is the potential for introduction of contaminants through spillages or leakages of fuels or chemicals on site.	It is considered that effects to land and ground conditions as a result of the Proposed Development would be <b>Not Significant</b> .
	The risk of contamination to other receptors including groundwater, buildings, ecological systems, animals and crops is expected to be very low.	
Biodiversity	There are no internationally, nationally, or locally designated nature conservation sites within the Site. There are two internationally designated areas within a 5km radius and four nationally designated areas within a 5km radius.	An Ecological Impact Assessment (EcIA) and Preliminary Ecological Appraisal (PEA) / Desktop study will be submitted as part of the planning application and will identify any local level mitigation required during construction and operation of the Proposed Development, including consideration of Trees.
	The Site comprises primarily of neutral grassland fields separated by native hedgerows. Semi-natural broadleaved woodland is located just outside the Site boundary.	A Biodiversity Net Gain (BNG) Assessment will be submitted as part of the planning application. Biodiversity enhancements in the form of boundary planting would be required to achieve National
	The hedgerow has low potential to support badger setts, however no evidence of badger presence was observed during a survey except	Grid policy of biodiversity net gain.



Topic	Potential Effects	Proposed Approach
Торіс	for a single mammal path which did not have sufficient features to be attributable to any single UK mammal species.  Ancient Woodland is located approximately 425m east of the Site within and enclosed by other, undesignated woodland.  Priority Habitat 'Purple Moor Grass and Rush Pastures' is located outside of the Site boundary approximately 250m to the east.  It is anticipated that there would be no impacts on these nature conservation sites given the distance from the Proposed Development and the scale and nature of the Proposed Development.	Semi-natural broadleaved woodland and native hedgerows are priority habitats. The CEMP, implemented during any construction activities, will prevent adverse impacts on notable habitats present on Site. This CEMP will include best practice measures to control noise, dust, and pollution.  Indirect impacts to Ancient Woodland and Priority Habitat will be mitigated through construction due to the implementation of a CEMP and standard best practice construction processes.  A pre-works badger check will be conducted prior to works commencing.  The Site is of low ecological value and it is considered that that impacts from the Proposed Development would not give rise to significant adverse effects when combined with other cumulative developments in the surrounding area.  It is not anticipated that the Site will result in significant impacts and impacts to adjacent priority habitats can be mitigated. Therefore, it is considered that effects to biodiversity as a result of the Proposed Development would be <b>Not Significant</b> .
Population (Socio- Economics)	The substation would not be manned during operation (i.e. no additional traffic/employee numbers expected at this stage), although small welfare/office facilities will be included for maintenance workers.  The Proposed Development will enhance the existing operations of energy infrastructure, distribution and transmission in the area.	The substation plays a role in energy supply reinforcement by ensuring a stable and reliable power supply, contributing socioeconomic benefits. It is anticipated that this would be beneficial, although not a significant economic effect.  It is therefore considered that socio-economic effects as a result of the Proposed Development would be <b>Not Significant</b> .



Topic	Potential Effects	Proposed Approach
Human Health	New development has the potential to introduce impacts upon human health, for example through the introduction of pollutant pathways.  Potential risks to human health could occur during the construction phase, however any potential effects would be temporary.  Residential receptors include nearby farmsteads and isolated properties. Desk study review indicates 6no residential properties located within 500m of the Site. It is anticipated there would be risks as a result of potential dust and vehicle pollution and noise and vibration during construction or operation.	Potential risks to human health during the construction phase would be temporary. Given the distance of the closest residential receptors to the Site, as well as the implementation best practice and standard construction process within a CEMP, it is anticipated that there would not be any significant effects.  The land uses that form part of the Proposed Development do not introduce new residents, so it will not lead to additional pressure on local social infrastructure, such as schools and GPs.  It is not considered that there are any risks to human health from the operational development as the development will be designed to the required standards in relation to building design.  It is therefore considered that effects to human health resulting from the Proposed Development would be <b>Not Significant</b> .
Climate	New development has the potential to impact the climate through an increase in greenhouse gas emissions embodied in its construction and the use of energy during its operation.  Climate change also has the potential to affect the operation of the Proposed Development if resilience measures are not incorporated into the design in relation to flood risk.  The Proposed Development is not considered to represent a significant source of greenhouse gas emissions and will contribute to Net Zero by enabling distribution and transmission of renewable energy.	The Site is not susceptible to a high risk of flooding, and measures identified by the drainage strategy will ensure resilience for the increased risk of flooding induced by climate change.  The quantum of vehicle and plant use on the Proposed Development is not considered to be a significant effect in relation to climate change, for annual regional or national greenhouse gas emissions terms.  The Proposed Development will have a back-up diesel generator for emergency use. The use of this will be intermittent and temporary and is not considered to present a significant effect in relation to climate change.  It is therefore considered that effects both to and from the climate as a result of the Proposed Development would be <b>Not Significant</b> .
Waste	Construction of the Proposed Development has the potential to result in the production of waste.	All waste generated during the demolition and construction phase will be managed in accordance with the processes set out by The Waste (England and Wales) (Amendment) Regulations 2014.



Topic	Potential Effects	Proposed Approach
	However, there are no existing structures at the Site, and therefore waste generated during the demolition and construction phase would be limited.	During operation, it is not anticipated that the Proposed Development will generate significant amounts of waste.
		It is therefore considered that effects to waste as a result of the Proposed Development would be <b>Not Significant</b> .
Soil	The Site is evaluated as 'Moderate' quality of Geological Landscape within LANDMAP.	To mitigate the potential for loss of best and most versatile agricultural land (soil), any topsoil removed would be carefully managed and reused within the landscape proposals. Soil will be
	A desktop survey of the Provisional Agricultural Land Classification Map <sup>1</sup> indicates that the soil on the Site is not located within agricultural land of grades 1, 2 and 3a of the Agricultural Land	stored in heaps no higher than 1 m to avoid harm to the soil through compaction.
	Classification (ALC) system so is not BMV land.	It is therefore considered that effects to soil as a result of the Proposed Development would be <b>Not Significant</b> .
Risk of major accidents and disasters	New development has the potential to be affected (and therefore has the potential to impact the environment) by the risk of major accidents or disasters. Accidents are considered to be an occurrence resulting from uncontrolled developments in the course of site preparation/construction and operation of a development. 'Disasters' are considered to be naturally occurring extreme weather events or ground related hazard events.  For such events to pose a risk to the environment, there must be a source (the event), a pathway (a process by which a receptor could be affected by the event), and a receptor.  In reviewing the characteristics of the development, the location of development and environmental baseline, it is considered, in relation to the EIA, that there are no specific risks to environmental receptors or environmental aspects identified within this request for a Screening Opinion, in relation to major accidents and disasters relevant to the development concerned.	Appropriate legislative procedures will be in place during design, construction and operation such as The Construction (Design and Management) Regulations 2015 ('the 2015 CDM Regulations'), The Health and Safety at Work Act 1974, and wayleave and easement agreements for identified utilities.  The construction activities will be controlled by National Grid's Transmission's health and safety frameworks and policies, which are consistently deployed on their construction sites.  Flood risk in relation to the construction of the Proposed Development will be effectively considered and managed.  Additionally, mitigation measures as discussed elsewhere in this screening assessment will be implemented such as standard construction management measures to mitigate the risk of potential spillage of chemicals or pollutants during construction (to be included within a CEMP which is anticipated to be secured by way of planning condition) and incorporation of the flow path features into the design of the Proposed Development.

<sup>&</sup>lt;sup>1</sup> Provisional Agricultural Land Classification (ALC) (England) | Provisional Agricultural Land Classification (ALC) (England) | Natural England Open Data Geoportal (arcgis.com)



		<b>Stantec</b>
Topic	Potential Effects	Proposed Approach
-		Therefore, effects by virtue of the vulnerability of the Proposed Development to major accidents and disasters would be <b>Not Significant.</b>



