

Planning Statement

Installation of Battery Energy Storage System (BESS) on Land at Uskmouth Power Station, Newport

On Behalf of AW2 Energy Storage Limited

May 2025



CONTENTS

1.0 INTRODUCTION..... 2

2.0 SITE CONTEXT 4

3.0 PROPOSED DEVELOPMENT 8

4.0 PLANNING POLICY CONTEXT 12

5.0 POLICY ANALYSIS & DEVELOPMENT APPRAISAL 19

6.0 SUMMARY AND CONCLUSIONS..... 26

Prepared by:	Clodagh Macken		
Checked by:	Kate Gapper		
Issue Date:	May 2025	Revision	2 – Final



1.0 INTRODUCTION

Preamble

- 1.1 This Planning Statement has been prepared by CarneySweeney on behalf of the applicant, AW2 Energy Storage Limited, in support of a full planning application for the following proposed development:

“Removal of stored pulverised fuel ash (PFA) and the installation of a new battery energy storage system (BESS) with all associated drainage, infrastructure, engineering works and associated utilities connections”.

- 1.2 The proposal relates to land at Uskmouth Power Station, Newport, located within the administrative boundary of Newport City Council (NCC).
- 1.3 The rationale for the proposed development is to deliver a new battery energy storage facility, which will improve the stability of the National Grid electricity network and facilitate greater use of and reliance upon renewable energy sources. The wider Uskmouth Power Station site benefits from existing electrical infrastructure, making it a prime location for the delivery of further energy storage development.

Need for Environmental Impact Assessment

- 1.4 On the 22 January 2025, the Applicant submitted to NCC a request for a formal Screening Opinion in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 to ascertain whether an Environmental Impact Assessment (EIA) is required for the proposed development.
- 1.5 On 20 March 2025, NCC issued a ‘Screening Opinion’ under reference 24/0961 confirming that having regard to the scale and nature of the development, the size and location of the development area and the existing use of the site the proposal is unlikely to result in significant adverse effect on the environment. It was therefore confirmed that an Environmental Statement would not be required.

Purpose of Planning Statement

- 1.6 This Planning Statement has been prepared to support the planning application and focuses on the general planning policy issues associated with the application proposals. It is intended to assist NCC in its determination of the application and has been prepared in accordance with the requirements set out in Future Wales: The National Plan 2040 and Planning Policy Wales (Edition 12).



1.7 This Planning Statement is not a standalone document and should be read in conjunction with all other elements of the application which include:

- Pre-Application Consultation Report
- Design & Access Statement
- Preliminary Ecological Appraisal
- GCN Survey Report
- Reptile Survey Report
- Transport Assessment
- Air Quality Assessment
- Green Infrastructure Statement
- Landscape and Visual Appraisal
- Landscape and Ecology Management Plan
- Flood Consequence Assessment
- Drainage Strategy Report
- Geo-Environmental and Geotechnical Desk Top Study
- Outline Battery Safety Management Plan

Structure of the Report

1.8 The remainder of this Planning Statement is set out as follows:

- Section 2 describes the application site, surrounding context and planning history;
- Section 3 details the development proposals;
- Section 4 sets out the local and national legislative and planning policy context;
- Section 5 assesses the material planning considerations relevant to the proposed development;
- Section 6 presents our overall conclusions.



2.0 SITE CONTEXT

Application Site and Surroundings

- 2.1 The Uskmouth Power Station site is located at the mouth of the River Usk in the south-east of Newport, approximately 4km south of Newport city centre (see Figure 1 below).



Figure 1: Site Location (shown circled in red)

- 2.2 Uskmouth Power Station was historically made up of two power plants: Uskmouth A Power Station built in the 1940s and demolished in 2002; and Uskmouth B Power Station constructed in the late 1950s. The proposed battery energy storage system (BESS) facility will be installed on land associated with the former Uskmouth A Power Station, referred to as 'AW2'. The extent of the site is shown on the submitted Site Location Plan (Drawing No. Q-AW2-101) and in Figure 2 overleaf.
- 2.3 To the immediate north is the Severn Power combined cycle gas turbine (CCGT) Power Station, which was constructed in 2007 on the site of the former Uskmouth A power station and west of this is the Uskmouth National Grid Substation.



- 2.4 To the south east is the former coal stockpile area, where a new BESS development is currently under construction (under planning permission ref: 23/0835). Beyond this lies the RSPB Wetlands National Nature Reserve.



Figure 2: Aerial Image of Proposed BESS Site

- 2.5 The wider setting of the Uskmouth Power Station site is industrialised with existing industry close by and across the River Usk. To the north east is the Liberty Steel plant and industrial estates stretching from the power station site to the A48 'Southern Distributor Road'. To the east is the Welsh Water Treatment Works.
- 2.6 The application site itself extends to approximately 4 ha of land currently used for the storage of pulverised fuel ash (PFA). The PFA storage area comprises a concrete slab beneath the PFA stockpiles bound by 2.4m high reinforced concrete walls. The application site boundary also includes part of the internal access road through the Uskmouth site, rough grassland, disused railway tracks, and a balancing pond to the west. See Figure 3 overleaf.
- 2.7 The site is currently accessed via existing roads from the Power Station entrance from West Nash Road, leading to Nash Road and Meadows Road towards Newport with the M4 corridor beyond.





Figure 3: Aerial Image of PFA Storage Area

- 2.8 There are no public rights of way within the Power Station site. The Wales Coastal Path, running through the Newport Wetlands National Nature Reserve, is located approximately 170 m to the south of the Site.
- 2.9 The Site is situated within the designated Urban Boundary and is not covered by any statutory or non-statutory designations or assets that relate to biodiversity, landscape or cultural heritage. However, the site is near to four European designated sites, as follows: River Usk/Afon Wysg SAC and the Severn Estuary/Môr Hafren SAC, SPA and Ramsar site. The site also falls within 'The Levels' Archaeologically Sensitive Area.
- 2.10 Caldicot levels Special Landscape Area (SLA) is located c. 130m to the south of the site at its closest point, whilst the River Usk SLA is c.340m west of the site.
- 2.11 The Site is located within National Landscape Character Area 34 'The Gwent Levels' (NLCA). The landscape to the east of the Site is designated as the Gwent Levels registered Historic Landscape of Outstanding Interest. The Uskmouth Power Station site is not located within this landscape area.
- 2.12 According to NRW's Flood Map for Planning, the majority of the site is located within Flood Zone 3 for sea flooding whilst some areas are in Flood Zone 2. The southern part of the site falls within a Defended Zone, benefitting from coastal flood defences.
- 2.13 Levels on site are relatively flat with the exception of the PFA storage area in the centre of the site and pond to the west. Levels surrounding the PFA storage area generally sit between 8.14 AOD and 9m AOD with slightly higher levels in the east. Raised levels in the centre of the PFA storage site sit between 12m AOD and 15m AOD.



Planning History

- 2.14 The wider Uskmouth site has significant land and infrastructure that makes it a prime location for the delivery of large-scale, commercially attractive, BESS facilities. As such there are a number of applications relating to BESS projects presently under development within the wider site as illustrated in Figure 2.

UES Site

- 2.15 Land at the former coal stockyard at the Uskmouth site (to the south east of the application site) is currently under construction to deliver a BESS facility. The following planning history is relevant to this part of the site:
- Application Ref: 22/0263 – EIA Screening opinion for the construction of a 230MW battery energy storage system (BESS), which confirmed the proposed development did not constitute EIA development.
 - Application Ref: 22/0823 – Full planning application for the installation of a 230MW BESS at the former coal stockyard area to the south east of the application site, approved in December 2022.
 - This permission was subsequently amended by a s73 application (Ref: 23/0835) which made a number of changes to the site layout. There has also been a number of Non-Material Amendments (NMA), including an amendment to the description of the approved development, omitting the reference to '230MW' (Ref: 23/1120).

AW1 Site

- 2.16 A second BESS scheme is being developed on land in the northern part of the Uskmouth site, that was previously occupied by cooling towers, which have now been demolished. Application Ref: 23/0949 – full planning application for BESS with associated infrastructure and works, approved January 2024.

AW3 Site

- 2.17 An EIA screening opinion request for a proposed BESS was submitted in August 2024 (ref: 24/0679). It was determined that the proposal was not EIA development.
- 2.18 In terms of the application site itself full planning permission for provision of pulverised fuel ash storage facility, surface water drainage system and attenuation pond, and infrastructure improvements was granted on 13/12/2006 (Ref: 06/1304) .



3.0 PROPOSED DEVELOPMENT

Rationale for the Proposed BESS

- 3.1 This application seeks full planning permission for the removal of stored pulverised fuel ash (PFA) from the site and the installation of a battery energy storage system (BESS). It includes the raising of land levels to create an elevated engineered platform designed to support the new infrastructure and mitigate flood risk.
- 3.2 Battery energy storage systems are facilities that store energy generated from renewable sources, such as solar and wind, during periods of low demand. This stored energy can then be released back into the grid when it is most needed, such as during times of peak demand.
- 3.3 Battery energy storage systems facilitate grid stability as energy storage can allow significant increase in intermittent renewable generation from wind and solar onto the electricity system by enhancing the balance of supply and demand. This location has the advantage of being in close proximity to the electrical grid and features an existing substation on-site.
- 3.4 The proposed development would comprise the following elements:
- Site clearance including the removal of circa 140,000 tonnes of PFA currently stored on site.
 - Raising the ground level for the electrical infrastructure above predicted flood levels.
 - Laying out of containerised battery storage units along with associated inverters mounted on concrete slabs/piers. Each containerised battery unit will measure approximately 6.1m by 2.44m and 2.9m high.
 - Installation of:
 - A HV substation with associated electrical infrastructure. The substation compound will measure approximately 45m by 102m with a maximum height of 12m.
 - 2.5m high palisade fence around the BESS facility with access gates to the compound entrance from the internal road network.
 - 2 x O & M buildings each measuring approximately 19.4m by 8.9m and 4.4m high. One of the buildings will contain the control room and the other will contain the switchgear.
 - PCS & MV skid container measuring approximately 12.2m by 2.4m and 2.9m high.



- Underground cabling to connect the battery storage facility to the proposed on-site substation which comprises the plant and equipment necessary to export the electricity stored on-site to the electricity network;
- Laying out of a hard surfaced site access into the BESS substation and battery compound from the internal road network along with car parking bays.
- Layout out of uncompacted gravel as a surface cover between the containerised units and equipment.
- Temporary construction laydown area.
- A short underground cable route to connect the BESS to the existing National Grid 275kV substation located circa 900m to the north west via an existing access track.
- Landscape planting, biodiversity enhancements and surface water attenuation measures;

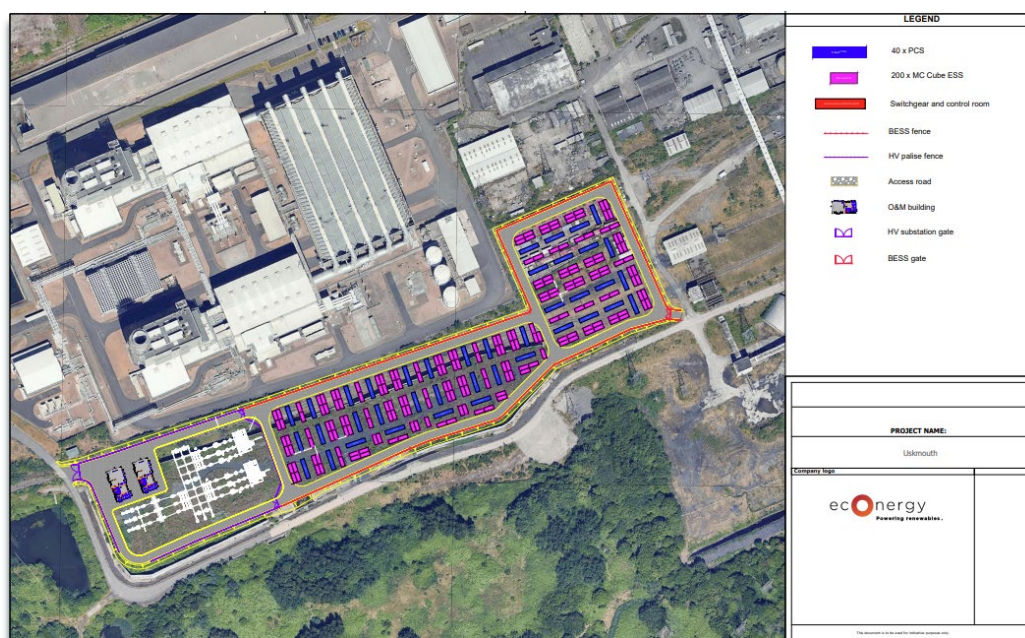


Figure 4: Proposed Site Plan

3.5 This planning application uses the 'Rochdale Envelope' principle which is a widely accepted approach to energy and infrastructure proposals under the Town and Country Planning Act 1990. Best practice suggests that where the nature of the proposed development means that some details of the project have not been confirmed (for instance the siting or precise dimensions of structures) when the application is submitted, the 'Rochdale Envelope' approach should be used to ensure that the effects of a proposed development have been properly assessed. As such, it has been necessary to establish relevant parameters for the purposes of this application and the accompanying assessments. The parameters (maximum height, width and depth of structures) used are set out in paragraph 3.4 above.



PFA Removal

- 3.6 The PFA is proposed to be removed from the site via the road network over a 15-month period. This will be undertaken during normal working hours (indicatively, 07:00 to 19:00 Monday to Friday; and 07:00 to 13:00 on Saturdays and at no time on Sundays or bank holidays). This process will result in approximately 30 HGVs movements i.e. 15 arriving and 15 departing the site per day. The site will then be cleared to make way for the BESS facility.

Construction

- 3.7 The construction period is anticipated to take approximately 24 months and will be undertaken during the normal working hours as the PFA removal above. The BESS infrastructure is proposed to be delivered to the site via the road network, which will be detailed within a construction programme.

Site Layout

- 3.8 The proposed site layout comprises two main elements: the battery compound in the central and eastern part of the site; and the substation and operational buildings in the western part of the site.
- 3.9 It is proposed that circa 2.1ha of the site will be occupied by the BESS compound and associate electrical infrastructure, whilst the remaining area will be utilised for landscaping, access, drainage and the underground cable route.
- 3.10 The ground levels on site are proposed to be raised and levelled to achieve a ground level of 9.75m AOD. This will ensure all site and electrical infrastructure is raised above the relevant flood level, as detailed further in Section 5 of this report and the supporting Flood Consequence Assessment.
- 3.11 The existing balancing pond in the western part of the site will be retained and incorporated into the sustainable drainage scheme for the site, whilst also providing opportunities for landscaping and ecological enhancements.
- 3.12 Landscaping proposals include enhanced planting, grassland verges along the site boundary and a grassed swale to the southern site boundary. There are a number of existing trees on site, which will be retained.

Parking and access

- 3.13 Two access points into the site are proposed, one at the eastern boundary and one at the western boundary, with an internal access track to be created within the site. The access points are served from the existing access road within the Uskmouth site, which travels



to the south and west of the application site. This route will serve vehicular access to and from the new development via West Nash Road to the east.

- 3.14 No car parking spaces are proposed, as these will not be required. Visitors to the site only occurs occasionally for inspection and maintenance purposes.

Operational Lifetime of Development

- 3.15 The proposed development will be operational for a period of 40 years, after which time the BESS facility will be decommissioned and associated apparatus fully removed from the site.



4.0 PLANNING POLICY CONTEXT

Introduction

- 4.1 The following section provides an overview of the relevant policy framework relating to the application proposals. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance with the statutory development plan unless material considerations indicate otherwise. The statutory development plan applicable to the site comprises Future Wales: The National Plan 2040 and Newport City Council Local Development Plan (adopted January 2015).
- 4.2 In addition to the above, other key 'relevant material considerations' include, in particular, Government policy guidance contained within Planning Policy Wales (PPW) (Edition 12), and associated Technical Advice Notes (TANs).

Future Wales: The National Plan 2040 (Adopted February 2021)

- 4.3 Future Wales is the national development framework for Wales with development plan status. The document sets the direction for development in Wales up to 2040. The Plan acknowledges the impacts of a climate emergency and an ecological emergency and identifies key priorities, risks and opportunities to achieve the sustainable management of natural resources, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of communities.
- 4.4 It is noted that it is vital that we reduce our emissions to protect our own well-being and to demonstrate our global responsibility. Future Wales together with PPW will ensure the planning system focuses on delivering a decarbonised and resilient Wales through the places we create, the energy we generate, the natural resources and materials we use and how we live and travel.
- 4.5 Regarding energy generation, Future Wales identifies that Wales can become a world leader in renewable energy technologies. Wales' wind and tidal resources, potential for solar generation, its support for both large and community scaled projects and commitment to ensuring the planning system provides a strong lead for renewable energy development means it is well placed to support the renewable sector, attract new investment, and reduce carbon emissions.
- 4.6 Future Wales sets the following ambitious targets for the generation of renewable energy:
- For 70% of electricity consumption to be generated from renewable energy by 2030.
 - For one gigawatt of renewable energy capacity to be locally owned by 2030.
 - For new renewable energy projects to have at least an element of local ownership from 2020.



- 4.7 **Policy 17 - Renewable and Low Carbon Energy and Associated Infrastructure** is of specific relevance to this application. The policy states the WG's strong support for the principle of developing renewable and low carbon energy from all technologies and at all scales to meet future energy needs. It states that in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight (our emphasis) to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.

Newport Local Development Plan (LDP)

- 4.8 The adopted LDP Proposals and Constraints Maps show that the site is not allocated for any specific land use. However, it is affected by the following designations:

- Archaeologically Sensitive Area (Policy CE6);
- Developed Coastal Zone (Policy CE9);
- Urban Boundary (Policy SP5);
- Flood Risk Zone B; and
- Flood Risk Zone C1.

- 4.9 The site also adjoins the following designations:

- Countryside (Policy SP5);
- Special Landscape Area (Policy SP8);
- Site of Special Scientific Interest (River Usk and Newport Wetlands);
- Ramsar and Special Protection Area (Severn Estuary);
- Special Area of Conservation (Severn Estuary and River Usk); and
- National Nature Reserve.

- 4.10 The adopted LDP policies considered relevant to the proposed development are as follows.

- 4.11 **SP1 Sustainability** – Requires proposals to make a positive contribution to sustainable development by concentrating development in sustainable locations on brownfield land within the settlement boundary. Proposals will be assessed as to their potential contribution to *inter alia*:

- i) The efficient use of land
- ii) The reuse of previously developed land in preference to greenfield sites
- iii) Reducing energy consumption, increasing energy efficiency and use of low and zero carbon energy sources
- iv) Minimisation, re-use and recycling of waste
- v) Minimising the risk of and from flood risk, sea level rise and the impact of climate change



- 4.12 **SP3 Flood Risk** – Newport’s coastal and riverside location necessitates that development be directed away from areas where flood risk is identified as a constraint and ensure that the risk of flooding is not increased elsewhere. Development will only be permitted in flood risk areas in accordance with national guidance. Where appropriate a detailed risk assessment will be required. Sustainable solutions to manage flood risk should be prioritised.
- 4.13 **SP9 Conservation of the Natural, Historic and Built Environment** – the conservation, enhancement and management of recognised sites within the natural, historic and built environment will be sought in all proposals.
- 4.14 **SP18 Urban Regeneration** – Proposals will be favoured which assist the regeneration of the area, particularly where they contribute to *inter alia* reuse of vacant, underused or derelict land.
- 4.15 **GP1 General Development Principles – Climate Change** – development proposals should, *inter alia*:
- i) Be designed to withstand predicted changes in local climate and to reduce the risk of flooding on site and elsewhere by demonstrating where appropriate that the risks and consequences of flooding can be acceptably managed, including avoiding the use of non-permeable hard surfaces;
 - ii) Be designed to minimise energy requirements and incorporate appropriate renewable, low or zero carbon energy sources, including on site energy.
 - iii) Be designed to reuse or recycle existing construction materials present on the site.
- 4.16 **GP2 General Development Principles – General Amenity** – Development will be permitted where, as applicable *inter alia*:
- i) There will not be a significant adverse effect on local amenity, including in terms of noise, disturbance, privacy, overbearing, light, odours and air quality;
 - ii) The proposed use and form of development will not be detrimental to the visual amenities of nearby occupiers or the character or appearance of the surrounding area;
 - iii) The proposal seeks to design out the opportunity for crime and anti-social behaviour;
 - iv) The proposal promotes inclusive design both for the built development and access within and around the development
- 4.17 **GP3 General Development Principles – Service Infrastructure** – Development will be permitted where, as applicable *inter alia*:
- i) Necessary and appropriate service infrastructure either exists or can be provided;
 - ii) In areas served by the public foul sewer, there is capacity for the development within the system or, if not, satisfactory improvements are provided by the developer.



4.18 **GP4 General Development Principles – Highways and Accessibility** – development proposals should *inter alia*:

- i) Provide appropriate access for pedestrians, cyclists and public transport in accordance with national guidance;
- ii) Be accessible by a choice of means of transport;
- iii) Be designed to avoid or reduce transport severance, noise and air pollution;
- iv) Make adequate provision for car parking and cycle storage;
- v) Provide suitable and safe access arrangements;
- vi) Design and build new roads within private development in accordance with the highway authority's design guide and relevant national guidance;
- vii) Ensure that development would not be detrimental to highway or pedestrian safety or result in traffic generation exceeding the capacity of the highway network.

4.19 **GP5 General Development Principles – Natural Environment** – Development will be permitted where, as applicable, *inter alia*:

- i) The proposals are designed and managed to protect and encourage biodiversity and ecological connectivity, including through the incorporation of new features on or off site to further the UK, Welsh and/or Newport biodiversity action plans;
- ii) The proposals demonstrate how they avoid, or mitigate and compensate negative impacts to biodiversity, ensuring that there are no significant adverse effects on areas of nature conservation interest, and protecting features of importance for ecology;
- iii) The proposal will not result in unacceptable impact on water quality;
- iv) There would be no unacceptable impact on landscape quality;
- v) The proposal includes an appropriate landscape scheme, which enhances the site and wider context including green infrastructure and biodiversity networks.

4.20 **GP6 General Development Principles – Quality of Design** – good quality design will be sought in all forms of development. The aim is to create a safe, accessible, attractive and convenient environment. The following fundamental design principles should be addressed, *inter alia*:

- i) Context of the site: all development should be sensitive to the unique qualities of the site and respond positively to the character of the area;
- ii) Access, permeability and layout: all development should maintain a high level of pedestrian access, connectivity and minimise noise pollution;
- iii) Preservation and enhancement: where possible development should reflect local character but avoid inappropriate replication of neighbouring architectural styles.
- iv) Scale and form: new development should appropriately reflect the scale of adjacent townscape.
- v) Materials and detailing: high quality, durable and preferably renewable materials should be used to complement the site context.



- vi) Sustainability: new development should be inherently robust, energy and water efficient, flood resilient and adaptable, thereby facilitating the flexible re-use of the building.
- 4.21 **GP7 General Development Principles – Environmental Protection and Public Health** – development will not be permitted which would cause or result in unacceptable harm to health because of land contamination, dust, instability or subsidence, air, heat, noise or light pollution, flooding, water pollution, or any other identified risk to environment, local amenity, or public health and safety.
- 4.22 **CE6 Archaeology** – development proposals will normally be required to undertake an archaeological impact assessment before the proposal is determined:
- i) Where groundworks and/or the installation of services are proposed within the archaeologically sensitive areas of *inter alia* The Levels, or;
 - ii) Within other areas of recognised archaeological interest.
- 4.23 **CE8 Locally Designated Nature Conservation and Geological Sites** – proposals affecting locally designated sites will only be permitted where:
- i) There would be no overall loss of the nature conservation resource for which the site has been designated;
 - ii) There would be no significant adverse effect on the geological interest of the site;
 - iii) Appropriate mitigation or compensatory measures can be achieved.
- 4.24 **CE9 Coastal Zone** – development will not be permitted in the coastal area of adjoining the tidal river unless:
- i) In the undeveloped coastal areas such development is required to be on the coast to meet an exceptional need which cannot reasonably be accommodated elsewhere;
 - ii) The area is not itself at risk nor will the proposed development exacerbate risks from erosion, flooding or land instability.
- 4.25 **CE10 Renewable Energy** – renewable energy schemes will be considered favourably, subject to there being no over-riding environmental and amenity considerations. The cumulative impacts of renewable energy schemes will be an important consideration.
- 4.26 **T2 Heavy Commercial Vehicle Movements** – developments which generate heavy commercial vehicle movements will be favoured in those locations which allow access to a railway line, wharf or dock. Where it can be demonstrated this is not appropriate, locations readily accessible to strategic and principal routes will be favoured.
- 4.27 **T4 Parking** – Development will be required to provide appropriate levels of parking, within defined parking zones, in accordance with adopted parking standards.



Planning Policy Wales (PPW) 12th Edition February 2024

- 4.28 Planning Policy Wales (PPW), which was revised in February 2024, sets out the land use planning policies of the WG. The primary objective of PPW is to ensure 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.
- 4.29 Figure 5 of PPW identifies five key planning principles and national sustainable placemaking outcomes as follows:
- Growing our economy in a sustainable manner;
 - Making better use of resources;
 - Facilitating accessible and healthy environments;
 - Creating and sustaining communities; and
 - Maximising environmental protection and limiting environmental impact.
- 4.30 Paragraph 2.14 advises that these principles will enable the goals, and five ways of working set out in the Well-being of Future Generations Act to be realised through land use planning. They provide the context and will act as a catalyst for the positive delivery of the planning system across Wales.
- 4.31 PPW is clear that a Globally Responsible Wales is promoted by reducing our carbon footprint through, *inter alia*, the promotion of renewable energy over carbon-emitting sources.
- 4.32 The benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance (pp. 5.7.7). The policy notes that the planning system should optimise energy storage and maximise renewable and low carbon energy generation (pp. 5.7.7).
- 4.33 Paragraph 5.7.12 recognises that *“Energy storage has an important part to play in managing the transition to a low carbon economy. The growth in energy generation from renewable sources requires the management of the resultant intermittency in supply, and energy storage can help balance supply and demand. Proposals for new storage facilities should be supported wherever possible.”* (our emphasis added).
- 4.34 Paragraph 5.9.7 states *“The local balance of the energy network will be a crucial consideration...and planning authorities should consider the best places for local renewable energy generation to help improve the resilience of the grid in the future.”*



- 4.35 Chapter 6 of PPW explains that Green Infrastructure plays a fundamental role in shaping places and our sense of well-being, and is intrinsic to the quality of the spaces we live, work and play in. Paragraph 6.2.4 advises that the planning system must maximise its contribution to the protection and provision of green infrastructure assets and networks as part of meeting society's wider social and economic objectives and the needs of local communities. PPW further advises that a green infrastructure statement should be submitted with all planning applications and that this will be proportionate to the scale and nature of the development proposed describing how green infrastructure has been incorporated into the proposal. The green infrastructure statement will be an effective way of demonstrating positive multi-functional outcomes which are appropriate to the site in question.
- 4.36 Section 6.4 describes biodiversity and ecological networks and provides a summary of the Step-Wise Approach and how it should be used to "maintain and enhance biodiversity, build resilient ecological networks and deliver net benefits for biodiversity by ensuring that any adverse environmental effects are firstly avoided, then for."1 minimised, mitigated, and as a last resort compensated Paragraph 6.4.12 states "providing evidence in the Green Infrastructure Statement that the step-wise approach has been followed, a scheme of enhancements must be provided to ensure a net benefit for biodiversity."

Technical Advice Notes

- 4.37 Technical advice notes provide detailed planning advice. Local planning authorities take them into account when they are preparing development plans. The following Technical Advice Notes (TAN) are considered relevant to the proposal:
- TAN 5: Nature Conservation and Planning;
 - TAN 11: Noise;
 - TAN 12: Design;
 - TAN 15: Development and Flood Risk;
 - TAN 18: Transport; and
 - TAN 23: Economic Development



5.0 POLICY ANALYSIS & DEVELOPMENT APPRAISAL

Introduction

- 5.1 We turn now to assess the proposed development drawing on the supporting technical information provided by others where relevant.

Principle of Development

- 5.2 The purpose of the proposed development is to deliver a battery energy storage system (BESS) facility within an existing industrial location at the former Uskmouth power station site.
- 5.3 The site is located within the urban boundary and comprises previously developed brownfield land, meaning that the proposal meets the requirements of **LDP Policy SP1** regarding the efficient use of land and the preference for reusing previously developed land. The proposal also complies with **LDP Policy SP18** which favours proposals to regenerate areas, particularly where they contribute to the reuse of vacant, underused or derelict land. The location of the proposed development is an existing industrial site which already benefits from electrical infrastructure, making it an ideal location to support the energy storage development. The proposed development will also secure significant, long-term investment in this underused urban industrial site.
- 5.4 There is significant national and local policy support for proposals that make a positive contribution to sustainable development and energy supply resilience. In this regard, the proposal is considered to contribute to the uptake of low and zero carbon energy sources (as per **LDP Policy SP1**).
- 5.5 The proposed BESS development will support renewable energy generation, reduce energy wastage and support the transition to a low carbon economy. BESS developments can improve energy security by ensuring a more balanced and reliable supply of electricity. BESS development therefore has an important role to play in the energy network and will supplement the electricity grid during periods when the supply of energy may have fallen below optimum levels for any reason. All these factors are in accordance with **LDP Policies SP1 and GP1** and **Future Wales Policy 17**.
- 5.6 The principle of the proposed development is therefore established by virtue of the local and national planning policy objectives, and support for renewable energy schemes. All the environmental, sustainability and economic benefits are of significant merit and must be afforded substantial weight in favour of the scheme.



Traffic and Transport

- 5.7 This application is supported by a Transport Assessment, prepared by RPS, which considers the transport implications of the proposed development.
- 5.8 The TA advises that the proposed access route to the site, via West Nash Road, is deemed suitable for the proposed traffic movements and has previously been used for operational traffic associated with the former Power Station, as well as for other consented BESS developments on the wider Uskmouth site.
- 5.9 The TA explains that the construction phase will incorporate the removal of the PFA from the site and the construction of the BESS compound and associated development. The PFA removal and site clearance is anticipated to take 15 months, whilst the construction period will be circa 2 years. Traffic movements associated with the PFA removal will be 30 HGV movements (15 in and 15 out) per day (with half of these movements on Saturdays owing to the shorter working day). During the construction phase, there are anticipated to be 18 HGV movements (9 in and 9 out) per day (with half of these movements on Saturdays).
- 5.10 By comparison to the site's previous use as an operational power station, the proposed development generates 90 fewer movements. To ensure a robust assessment, a cumulative assessment has also been undertaken to assess HGV movements associated with the approved Afon Wysg BESS facility (planning application ref: 23/0949). The cumulative assessment found that even if the construction period for the Afon Wysg BESS site overlapped with the proposed PFA removal for the AW2 BESS site, there would be circa 72 fewer HGV movements compared to the operation of the power station.
- 5.11 The TA advises that transport impacts of the operational phase of development will be minimal, because the BESS facility is not permanently manned and therefore there are no regular vehicle movements generated. Occasional maintenance and inspection visits will be required and associated traffic demand is negligible.
- 5.12 The Transport Assessment confirms there is ample capacity on the existing road network to accommodate the additional traffic generated by the proposal. It is important to note that by comparison to the site's previous use as an operational power station, the proposed development generates significantly fewer HGV movements, including for the worst-case cumulative assessment scenario.
- 5.13 In summary the TA finds the proposed development to be acceptable with regards to parking, access and traffic impact and therefore is in accordance with **LDP Policies GP4, T2 and T4**.



Landscape and Visual

- 5.14 This application is supported by a Landscape and Visual Appraisal (LVA), prepared by Tir Collective which provides an assessment of the effects of the proposed development, on the landscape of the site and its context. The LVA has been informed by a combination of desk-based studies and field surveys.
- 5.15 The LVA explains that the site itself is not within any statutory or non-statutory landscape designations and that the existing landscape context is industrial in nature. Whilst the site context of the study area has some rural qualities and features to the south, the movement and sounds associated with the existing industrial/energy use of the site and existing infrastructure, pylons and overhead cables are detracting features, and the proposed development would be viewed in context and subservient to these features.
- 5.16 The LVA considers effects during the construction, operation after 10 years, and decommissioning phases of development. The assessment takes account of mitigation measures embedded into the proposed design, such as locating the new development within an existing plot boundary to retain the existing plot pattern; new planting proposals which will provide screening and ecological benefits; careful location of new perimeter fencing to avoid damage or disturbance to existing vegetation on site; and perimeter fencing which will be painted a colour that is sensitive to the existing landscape environment.
- 5.17 In terms of the visual assessment the LVA advises that visual effects of the development are primarily contained within close proximity to the site. Importantly, the existing backdrop of the Uskmouth Power Station and associated pylons, industrial buildings and Newport docks mean that key views are already dominated by the existing industrial context and would not be notably altered by the proposed development.
- 5.18 The proposed soft landscape scheme will develop over time and screen views of the development, particularly from the Wales Coastal Path, Caldicot Levels SLA, Nature Reserve and Wetlands to the south of the site. Weather conditions are also considered, and during days/periods of rainfall or frost visibility of the site from key viewpoints would be further limited.
- 5.19 A cumulative landscape and visual assessment has been undertaken to consider cumulative effects with other operational, consented, and proposed BESS proposals within the wider Uskmouth site. Cumulative landscape effects are assessed as minor adverse, noting that the proposal will not result in BESS development becoming a defining feature of the landscape, owing to the wider existing industrial development on site, and proposed mitigation measures. The BESS developments will ultimately be decommissioned and removed, meaning the cumulative landscape impacts are reversible. Cumulative visual effects are assessed as minor adverse due to the limited potential visibility of the proposed BESS and other BESS sites and the separation between them.



- 5.20 The LVA concludes that the proposed battery storage development would be seen in context to Uskmouth Power Station, industrial units, Newport Docks, pylons and overhead cables. Visual effects would be limited by the existing surrounding vegetation and local landforms, that screen parts of the site from view from some locations. The wider landscape also contains trees and vegetation, which also often screen and filter views towards the site. Any views of the proposals would be viewed in context to nearby existing energy infrastructure. Proposals for the site include the planting of native scrub, which would help to integrate the proposed development into the landscape over time, whilst reflecting the existing landscape character and providing some enhancement of key features. As the proposed planting establishes, views of the proposed development would also become more limited.
- 5.21 As is evidenced within the LVA, the proposal is not anticipated to result in any unacceptable adverse landscape and visual impacts and therefore accords with **LDP Policy GP5 and GP6**.

Flood Risk and Drainage

- 5.22 The application is supported by a Flood Consequence Assessment (FCA) prepared by RPS and a Drainage Strategy Report prepared by Burroughs. The FCA explains that its aim is to outline the potential for the site to be impacted by flooding, the impacts of the proposed development on flooding in the vicinity of the site, and the proposed measures which could be incorporated into the development to mitigate the identified risk.
- 5.23 According to NRW's Flood Map for Planning, the majority of the site is located within Flood Zone 3 for sea flooding whilst some areas are in Flood Zone 2.
- 5.24 The proposed development is classified as 'highly vulnerable' to flood risk, so as per the requirements of TAN 15, the FCA includes a justification test. The proposal is considered to meet criteria b (i.e. necessary to contribute to key employment objectives supported by the local authority, and other key partners, to sustain an existing settlement or region) by virtue of the local economic benefits of the development, including employment opportunities and purchasing of local services by construction works. The proposal is considered to accord with criteria c (i.e. concurs with the aim of PPW and meets the definition of previously developed land) because the proposal utilises vacant industrial land on an existing industrial site located within the urban area. As for requirement d, the potential consequences of a flooding event for the proposed development have been considered within the supporting FCA and mitigation measures are proposed. As a result, the proposal is considered to meet the justification test, specifically criteria b, c and d.
- 5.25 The FCA confirms that the proposed area for the BESS and associated infrastructure is free from flooding during the present day undefended and defended 1 in 200 year event. The majority of the site is at risk during the 200-year Climate Change horizon year 2100 Upper End 95th percentile confidence level undefended scenario.



- 5.26 The site is proposed to be regraded, levelled and raised such that a resilience design level of 9.75 metres AOD is achieved, to ensure the development will be above the flood level associated with a 200-year Climate Change horizon year 2100 Upper End 95th percentile confidence level undefended scenario, thereby suitably mitigating the flood risk on site.
- 5.27 The surface water drainage strategy for the site is proposed to comprise porous paving through the areas housing the batteries and electrical infrastructure, and a retrofitted dry swale within the existing perimeter concrete conduit channel. Surface water will then be discharged into an existing channel opposite the access road and directed to an existing detention basin before reaching the final existing retained outfall location. The swale will provide opportunity for landscape, amenity and biodiversity benefits in addition to its drainage function.
- 5.28 Overall, it has been demonstrated that the development would be safe, without increasing flood risk elsewhere, and that a positive reduction in flood risk would be achieved through the proposed drainage system. The proposal is considered to accord with **LDP Policies SP3, GP3 and GP7** as well as the policies within **PPW12** and **TAN 15**.

Ecology and Biodiversity

- 5.29 A Phase 1 Preliminary Ecological Appraisal (PEA) has been submitted in support of this application, prepared by TetraTech. The findings of the PEA confirm the site has potential to support bats, breeding birds, great crested newt (GCN) and reptiles. Further Phase 2 survey work was therefore recommended for GCN and reptiles and these surveys have since been undertaken.
- 5.30 In respect of reptiles, the Reptile Survey Report confirms that no reptiles were recorded during the surveys and as such no further survey work or mitigation is required.
- 5.31 The GCN Report advises that four presence /absence GCN surveys (bottle-trapping, torching, and egg-search) were carried out on three waterbodies which found no evidence of GCN on site. Further GCN eDNA surveys of eight waterbodies within the vicinity of the site returned negative results. This indicates that GCN are highly likely absent from the site and no further surveys or mitigation specific to GCN are required.
- 5.32 The proposed mitigation measures include the preparation of a Shadow Habitats Regulations Assessment (HRA), owing to the site's proximity to the Severn Estuary SPA/SAC/Ramsar site (c. 0.27km away).
- 5.33 Other recommendations include nesting bird checks to take place prior to vegetation clearance and groundwork; retaining the balancing pond on site; ensuring staff report any findings of invasive species; devising a sensitive lighting scheme and preparation of a construction environment management plan (CEMP).



- 5.34 Opportunities for biodiversity enhancement are provision of bird boxes, hibernacula for common amphibians and reptiles; log piles and/or bug hotels for invertebrates; and removal on the non-native buddleja and sea buckthorn identified on site.
- 5.35 The PEA concludes that subject to adoption of the recommended measures, the proposal can comply with local and national biodiversity planning policies.
- 5.36 In summary, the proposed development is considered to comply with relevant criteria of **LDP Policies GP5, CE8 and PPW12**.

Green Infrastructure and Landscape Strategy

- 5.37 A Green Infrastructure Statement and Landscape Ecological Management Plan (LEMP) is enclosed with this submission, prepared by Tir Collective.
- 5.38 This existing green infrastructure (GI) on site comprises:
- Trees - 2 individual trees and 4 tree groups, at the periphery of the site. All are Category C trees with low retention value.
 - Ecology and habitat – predominantly cultivated land in the eastern part of the site; standing water are scrub land in the western part; and a wet ditch travelling along the southern boundary. Species present on site is discussed above and within the PEA.
 - Watercourses and drainage – there are no main rivers nor ordinary watercourses on site. There are existing concrete conduit channels in the southern part of the site.
- 5.39 The proposed landscape strategy for the site seeks to retain and enhance the existing green infrastructure on site. As such, retention, enhancement and protection of existing vegetation at the site boundaries and existing pond is proposed. Native shrub planting is proposed at the site boundaries to provide dual visual screening and biodiversity benefits.
- 5.40 Ecologically sensitive working practices will be implemented to protect any species present on site and buffer zones around root protection areas of the existing trees will be retained.
- 5.41 The supporting LEMP details measures to ensure the existing and proposed habitats and GI features on site will be retained for the duration of the construction and operational lifespan of the development. Following decommissioning of the BESS facility, the habitats remaining will be retained.
- 5.42 The GI Statement sets out the measures proposed which demonstrate how the stepwise approach has been adhered to. In summary, the proposed development is considered to comply with **LDP Policies GP5, CE8 and PPW12**.



Ground Conditions

- 5.43 This submission is supported by a Geo-Environmental and Geotechnical Desk Top Study prepared by TetraTech.
- 5.44 Following a site walkover, no evidence of asbestos, fuel leakages, or visual evidence of contamination was identified. However, previous investigations on the wider Uskmouth site have identified contaminants in soil and groundwater. There is also anecdotal evidence that a fire training area was located near to the current PFA storage compound, indicating potential for PFAS contamination.
- 5.46 As a result, the Desk Top Study provides a number of measures to address contamination risk on site, including a ground investigation to ascertain the presence or absence of contaminants.

Air Quality

- 5.47 The application is supported by an Air Quality Assessment prepared by Arthian. The assessment assesses potential air quality impacts both for the construction phase and operational phase of the development.
- 5.48 The construction phase may involve dust generating activities on site, which has been assessed based on the relevant guidance whereby the worst-case unmitigated risk is 'low' for demolition, earthworks, construction and trackout activities. Best practice mitigation measures are therefore proposed and are suitable to ensure no unacceptable impacts arise.
- 5.49 During operation phase, the BESS will generate very few traffic movements, limited primarily to maintenance visits. As such, associated air quality impacts from the proposed development are not significant.
- 5.50 The proposed development will not give rise to any unacceptable adverse air quality impacts and accords with the air quality criteria of **LDP Policy GP2**.

Fire Safety

- 5.51 An Outline Battery Safety Management Plan is provided in support of this application. The aim of the management plan is to identify at an early stage the reasonably foreseeable risks that may be associated with battery energy storage system technology; and describe the key measures that will be implemented in the design and operation of the proposed development to reduce identified risks, informed by best practice BESS system design and safety guidance.



6.0 SUMMARY AND CONCLUSIONS

- 6.1 This Planning Statement is prepared in support of a full planning application for the removal of pulverised fuel ash and the installation of a battery energy storage system, with associated works.
- 6.2 The proposal seeks to bring vacant, underutilised land within Uskmouth power station site back into beneficial use for the storage of energy, supporting national objectives to make effective use of land and support renewable energy projects. This should be afforded significant weight in decision making.
- 6.3 The application is supported by a suite of technical reports and plans which demonstrate the application has been assessed against all material considerations and planning policies and ultimately found to be acceptable.
- 6.4 This application has also considered cumulative effects with surrounding BESS developments at various stages throughout the Uskmouth site and found these to be acceptable.
- 6.5 Overall, the proposal will bring significant sustainability, environmental and economic benefits, whilst resulting in no adverse impacts on highways, landscape and visual effects, ecology, biodiversity, flood risk, ground contamination, air quality and fire safety. The overall balance of considerations therefore weighs firmly in favour of approving the proposed redevelopment.

