

Ein cyf/Our ref: CAS-241394-J8J9

Eich cyf/Your ref: 23/0949

Newport City Council
Civic Centre
Newport
NP20 4UR

Dyddiad/Date: 07 December 2023

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: BATTERY ENERGY STORAGE SYSTEM WITH ASSOCIATED INFRASTRUCTURE AND WORKS

LLEOLIAD/LOCATION: LAND AT USKMOUTH POWER STATION WEST NASH ROAD NASH NEWPORT SOUTH WALES

Thank you for consulting Cyfoeth Naturiol Cymru (CNC) / Natural Resources Wales (NRW) about the above, which we received on 26 October 2023.

We advise that based on the information submitted to date, conditions regarding European Protected Species (EPS), Protected Sites and Protection of Controlled Waters should be attached to any planning permission granted and the documents identified below should be included in the approved plans and documents condition on the decision notice. Without the inclusion of these conditions and documents we would object to this planning application.

Condition: Lighting Plan

Condition: Construction Environment Management Plan (CEMP)

Conditions: Land Contamination

Condition: Piling

Condition: Surface Water Drainage

Documents:

- Drwg No. UH-01-P01 Rev. 03 "Site Location Plan" by Enso Energy, dated 26/07/2023
- Drwg No. UH-01-P17 "Context Site Location Plan" by Enso Energy, dated 26/07/2023
- Drwg. No. UK-01-P02 Rev. 01 "Proposed Site Plan" by Enso Energy, dated 20/04/2023

- Drwg. P22-3216_EN_03 Rev. B “Detailed Landscape Proposals” by Pegasus Group, dated 13/07/2023
- Ref. P36-ECIA “Ecological Impact Assessment” by Enso Energy, dated July 2023
- Ref. ECO02937 “Shadow Habitat Regulation Assessment – Enso Energy BESS, Uskmouth” Version 1 by RPS, dated July 2023
- Ref. P36-AIA “Arboricultural Impact Assessment” by Enso Energy, dated July 2023
- Ref. P36-PS “Planning Statement” by Enso Energy, dated July 2023.
- *CONFIDENTIAL* Otter Report – Afon Wysg Battery Energy Storage System by Enso Energy (Ref: P36-OR, dated November 2023)
- Bat Survey Report – Afon Wysg Battery Energy Storage System by Enso Energy (ref: P36-BSR, dated November 2023)
- Flood Consequence Assessment (FCA) by RPS (ref: P36-FCA) dated July 2023

European Protected Species (EPS)

We have reviewed the documents identified above with regards to European Protected Species (EPS) and provide the following advice.

Otters

The site is directly adjacent to the River Usk Special Area of Conservation (SAC), of which otters are a feature. Our statutory pre-app advice for *“Batter Energy Storage System with Associated Infrastructure and Works”* (our reference CAS-218714-J3Y9, dated 22/06/2023) advised that appropriate surveys of surrounding habitat must be undertaken to inform mitigation to protect otters.

Based on the information submitted in the Shadow Habitat Regulation Assessment (“SHRA”) (July 2023) and plans submitted, we do not consider that the proposed development is likely to be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

The boundary of the development in relation to the known otter breeding site, and the network of habitat linkages to suitable foraging, commuting and resting habitat, provide sufficient buffer from disturbance whilst allowing otters to continue to function in their local range. We also welcome the recommendations for daytime working hours made within Section 4.2.3 of the Ecological Impact Assessment, which will ensure that nocturnal foraging and commuting activity can continue undisturbed.

Furthermore, we welcome the operational mitigation recommendations made within Section 5.5 of the submitted SHRA, which will ensure incidental entrapment of otters within excavations will be avoided. To ensure these recommendations are undertaken, we advise that they are included within a Construction Environment Management Plan (CEMP) condition which should be attached to any planning consent. Details of the recommended CEMP condition are provided later in this response, under the ‘Protected Sites’ heading.

We note that mitigation of the impacts of artificial lighting during the construction and operational phases is to be controlled using siting, timing and technical specification of lighting.

We advise that the details of the lighting design should be agreed by way of a lighting condition attached to any grant of planning consent.

Condition

Prior to its installation, full details of lighting shall be submitted to and agreed in writing by the Local Planning Authority. The Lighting Plan should include:

- Details of the siting and type of external lighting to be used during both construction and operational phases
- Drawings setting out how light spillage will not extend beyond the site boundaries. If light spillage is to fall beyond the site boundary, details are required, together with mitigation to minimise the effects on protected species
- Details of lighting to be used both during construction and operation
- Measures to monitor light spillage during the construction phase, and once development is operational, and details of responsible personnel for monitoring and instigating remedial measures where appropriate

The lighting shall be installed and retained as approved during construction and operation.

Justification: A lighting plan should be submitted to ensure lighting details are agreed prior to installation and to reduce the impacts of lighting in the interest of protected species, namely otters and bats, their places of shelter and breeding, and their foraging and commuting corridors.

Wider Observations

We note the potential for an otter over-land travel route to exist between the River Usk and the freshwater features to the east, south and west of the current power station site. The record of the live otter sighting would suggest that, should future development proposals which may result in increased site traffic be submitted, sufficient monitoring would be required to inform any impact assessment and mitigation proposals for otters.

Bats

Based on the information submitted, we do not consider that the development is likely to be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range. However, should further information come to light, the applicant is advised to contact us for advice on licensing requirements – further advice is provided below.

European Protected Species Licence

A European protected species (EPS) Licence might be required for this development. This planning permission does not provide consent to undertake works that require an EPS licence. It is an offence to deliberately capture, kill or disturb EPS or to recklessly damage or destroy their breeding sites or resting places. If found guilty of any offences, you could be sent to prison for up to 6 months and/or receive an unlimited fine.

To undertake the works within the law, you can obtain further information on the need for a licence from Natural Resources Wales on 0300 065 3000 or at:

<https://naturalresources.wales/conservationbiodiversity-and-wildlife/european-protected-species/?lang=en>

Please note that any changes to plans between planning consent and the licence application may affect the outcome of a licence application. We advise recipients of planning consent who are unsure about the need for a licence to submit a licence application to us.

Dormice

We are satisfied that the 40m stand-off will be sufficient protection for dormice, should any individuals move into the scrub habitat just outside the site boundary, and are satisfied that the development is unlikely to be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range. We have no further comments to make on this species.

Protected Sites – Habitat Regulations Assessment

Severn Estuary Special Area of Conservation (SAC), Special Protected Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI)

The proposed development site is within 100 metres from the Severn Estuary SAC, SPA, Ramsar site and SSSI. The Severn Estuary is designated as a SAC as it contains the following qualifying habitats: sandbanks which are slightly covered by sea water all the time, salt meadows, mudflats, estuaries, reefs, and Atlantic salt meadows. In addition, it supports the following qualifying species: Sea Lamprey, River Lamprey, and Twaite Shad. The Severn Estuary SPA is of national and international importance for the breeding, feeding, wintering and migration of rare and vulnerable species of birds. The qualifying species are Bewick's Swan, Greater White-fronted Goose, Dunlin, Common Redshank, Common Shelduck, and Gadwall. The Severn Estuary is one of the most important estuaries in the UK for overwintering wildfowl and waders, and the waterbird assemblage is a qualifying feature of the site.

We have reviewed the Shadow Habitat Regulation Assessment (HRA) – Enso Energy BESS, Uskmouth, produced by RPS, reference ECO02937, dated July 2023. We agree with the conclusions for the Severn Estuary SAC, SPA, and Ramsar site, provided the proposed mitigation measures are implemented.

We advise Your Authority undertake their own HRA which we would be happy to provide advice on when consulted.

River Usk SAC and SSSI

The proposed development site is within 100 metres from the River Usk SAC and SSSI. The River Usk is designated as a SAC as it supports the species of Allis Shad, Twaite Shad, Bullhead, River Lamprey, Brook Lamprey, Sea Lamprey, Atlantic Salmon and Otter. The River Usk is considered to be one of the best examples of a near natural river system in England and Wales. The range of plants and animals reflects a transition from nutrient poor to naturally rich. It was notified to protect a wide range of habitats and features. It also

acts as an important wildlife corridor, an essential migration route and a key breeding area for nationally and internationally important species, including otter.

We have reviewed the Shadow HRA and we agree with the conclusions for the River Usk SAC.

Newport Wetlands SSSI and National Nature Reserve (NNR)

The proposed development is 300 metres north of Newport Wetlands SSSI and NNR. Newport Wetlands SSSI is designated for its nationally important breeding and over-wintering birds, invertebrates and aquatic and marginal flora. Shrill carder bee (*Bombus sylvarum*) is found throughout the site. The reens and ditches of the drainage system are dependent on the water quality, water quantity, the existence of the drainage system and its continued management. Any development which has an adverse impact on any of these factors will have an adverse impact on the wildlife for which the area was notified.

We note that there are multiple ditches within 50 metres of the proposed development site with connectivity to the wider drainage system. To protect the SSSI, there should be maintained a buffer zone of a minimum 7m from works to the top of the ditch bank. There should be no storage of materials including soil piles or fuel storage in this buffer and where possible no trafficking of vehicles.

Shrill carder bee

We encourage additional enhancement measures to support Shrill carder bee (*Bombus sylvarum*) populations. Shrill carder bee is a feature of the Gwent Levels SSSIs, the area is of national importance and a strong hold for the species. Management recommendations for Shrill carder bee focus on ensuring plentiful flower-rich habitat with suitable forage is available from April to late September/October, in addition to providing undisturbed nesting habitat. It is good practice that foraging and nesting habitat areas are included as biodiversity enhancement measures.

We have reviewed the Ecological Impact Assessment (EcIA), produced by RPS, reference P36-ECIA, dated July 2023. We welcome that the EcIA identifies management of open structured grassland and tussocky grassland to provide foraging and nesting habitats for Shrill carder bee, including the use of locally sourced green hay in grassland creation. If flora that provides a good nectar source for bees is not flourishing on site, seeding could be undertaken from a local seed mix to build resilience for Shrill carder bee populations in the local area. Our preference would be to investigate sourcing seed harvested from Great Traston (Solutia) the Gwent Wildlife Trust reserve.

We advise that areas of foraging habitat are mown once per year in late September to mid October to leave flowers in place for Shrill carder bees to forage. All cuttings should be collected and removed. Shrill carder bee nesting requirements are rough field margins and areas of tussocky grassland. Field buffers could be encouraged by cutting and collecting on rotation. We recommend that these measures be included within any submitted Landscape and Ecological Management Plan.

Tree Planting

We note tree planting is proposed within 400m of the Newport Wetlands SSSI. We advise the species should be selected from our Gwent Levels native tree list (attached). Our preference is that any planting is species from the first section (natives) of the Gwent Levels tree list, which can be found here: [Gwent Levels Native Tree List.doc](#)

Plants should be of UK native provenance (grown in British nurseries) to remove the risks of importing diseases that our plants have no resistance to and pests that have no natural predators in the UK. Those species of plant not native to UK or the Gwent Levels should be removed from the planting list. British grown plants are far more likely to do well in our conditions than those that have been imported.

Construction Environmental Management Plan

We advise that a Construction Environmental Management Plan (CEMP) should be provided to manage the potential adverse environmental impacts from construction of this development on Protected Sites and European Protected Species.

Condition

No development shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP should include:

- Construction methods: details of materials, how waste generated will be managed;
- General Site Management: details of the construction programme including timetable, details of site clearance; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain.
- Biodiversity Management: details of tree and hedgerow protection; invasive species management; species and habitats protection, avoidance and mitigation measures.
- CEMP Masterplan: details of the extent and phasing of development; location of landscape and environmental resources; design proposals and objectives for integration and mitigation measures.
- Control of Nuisances: details of restrictions to be applied during construction including timing, duration and frequency of works; details of measures to minimise noise and vibration from piling activities, for example acoustic barriers; details of dust control measures; measures to control light spill.
- Resource Management: details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption, wastewater and energy use
- Traffic Management: details of site deliveries, plant on site, wheel wash facilities
- Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.
- Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details

- Landscape/ecological clerk of works to ensure construction compliance with approved plans and environmental regulations.
- On-site measure to prevent otter entrapment in any open excavations.

The CEMP shall be implemented as approved during the site preparation and construction phases of the development.

Justification: A CEMP should be submitted to ensure necessary management measures are agreed and implemented for the protection of the environment during construction.

Flood Risk

The planning application proposes highly vulnerable development. Our Flood Risk Map confirms the site to be within Zone C1 of the Development Advice Map (DAM) contained in Technical Advice Note (TAN) 15: Development and Flood Risk (2004). The Flood Map for Planning identifies the application site to be at risk of flooding and falls into Flood Zone 2 and 3 (Sea).

Section 6 of TAN15 requires the Local Planning Authority to determine whether the development at this location is justified. We refer you to the tests set out in section 6.2 of TAN15. If the Local Planning Authority considers the proposal meets the tests set out in criteria (i) to (iii), then the final test (iv) is for the applicant to demonstrate through the submission of a Flood Consequences Assessment (FCA) that the potential consequences of flooding can be managed to an acceptable level.

We have reviewed the supporting FCA undertaken by RPS, referenced P36-FCA, dated July 2023, which is informed by the NRW Caldicot and Wentlooge (2016) model. We note that the northern boundary of the battery compound area is elevated around 8.5m AOD and the centre of the battery compound area has an undulating topography with levels between 8.49m AOD and 9.04m AOD.

We note that it is acknowledged that the sea defences in the area are identified as in 'Poor' condition, and therefore flood levels for the undefended scenario have been used to inform development design and mitigation measures. The following flood levels are provided for the site:

In the 0.5% (1 in 200 year) with Climate Change Allowance (2100) undefended scenario:

- Northern part of the BESS Compound: Flood level = 9.75 m AOD producing a flood depth of 1.23m.
- Western part of the BESS Compound: Flood level = 9.74 m AOD producing a flood depth of 1.51m.
- Southern part of the BESS Compound: Flood level = 9.75 m AOD producing a flood depth of 1.2m.
- Eastern part of the BESS Compound: Flood level = 9.76 m AOD producing a flood depth of 1.15m.

- Central part of the BESS Compound: Flood level = 9.74 m AOD producing a flood depth of 1.0m.

In the 0.1% (1 in 1000 year) with Climate Change Allowance (2100) undefended scenario:

- Northern part of the site: Flood level = 10.41 m AOD producing a flood depth of 1.89 m.
- Western part of the site: Flood level = 10.42 m AOD producing a flood depth of 2.19 m.
- Southern part of the site: Flood level = 10.43 m AOD producing a flood depth of 1.88 m.
- Eastern part of the site: Flood level = 10.43 m AOD producing a flood depth of 1.81 m.
- Central part of the site: Flood level = 10.43 m AOD producing a flood depth of 1.69 m.

We note that the FCA states that the ground will be raised to a minimum level of 9.75m AOD which would ensure the development site is above the 200 year with Climate Change Allowance (2100) flood level, and therefore meets the requirements of TAN 15. It is further stated that depending on the final development level achieved, to be established at detailed design stage, 'at risk' assets will be elevated on a suitably engineered platforms, which may include but not limited to, concrete/masonry blocks and steel stanchions.

However, using the above figures, it should be noted that the Eastern part of the BESS Compound, will experience a flood depth of 100mm in the 1 in 200 year (2100) flood event. Therefore, the whole area within the red line boundary is not flood free, though, we do recognise that this area will be used as grassland.

We note that the built components of the development will be elevated and that the proposed 9.75m AOD is the lowest the ground level will be set too. This figure is based on a 1 in 200 year plus climate change event (77 years rather than 75 years) and uses the 95% confidence level. The FCA has therefore taken a precautionary approach.

During the 1 in 200 year plus climate change flood event, the majority of the site is expected to experience flood velocities that are between 0.3 to 1.0 m/s. There are isolated areas where velocities are below 0.3 m/s and between 1.0 and 1.5 m/s. During the 1 in 1000 year plus climate change flood event, the majority of the site is expected to experience flood velocities that are between 0.3 to 1.0 m/s with isolated areas where velocities are between 1.0 and 1.5 m/s.

We note that flood resilience measures will be incorporated in the design to reduce the risk of tidal flooding and it is intended to raise the ground level above predicted flood levels to around 9.75m AOD. We would suggest conditioning the ground level to a minimum of 9.75m AOD.

We note that it is recommended that a Flood Management Plan is produced for site management and operational staff. We also note that it is recommended that the proposed development is registered with the NRW's flood warning service and that a Flood Warning and Evacuation Plan (FWEP) is prepared to set out the procedures that site management and site staff should follow in the event a flood warning is issued.

The FCA shows that the risks and consequences could be managed to an acceptable level, provided the Flood Consequence Assessment (FCA) undertaken by RPS, referenced P36-FCA, dated July 2023 is included as part of the submitted plans and documents attached to any permission granted.

As it is for your Authority to determine whether the risks and consequences of flooding can be managed in accordance with TAN15, we recommend you consider consulting other professional advisors on matters such as emergency plans, procedures and measures to address structural damage that may result from flooding. Please note, we do not normally comment on or grant the adequacy of flood emergency response plans and procedures accompanying development proposals, as we do not carry out these roles during a flood. Our involvement during a flood emergency would be limited to delivering flood warnings to occupants/users.

Protection of Controlled Waters

We note that the Design and Access Statement refers to underground cables. We advise confirmation is provided that the cables are not fluid filled and are not to be placed below the water table.

We will normally object to pipelines or fluid filled cables that transport pollutants, particularly hazardous substances that:

- pass through SPZ1 or SPZ2 where this is avoidable
- are below the water table in principal or secondary aquifers (for the purposes of this position statement, the term 'water table' is taken to mean any laterally continuous groundwater including perched groundwater. Operators should consider the lifetime of the pipeline or cable in their assessment of the depth to groundwater)

We have reviewed the Preliminary Risk Assessment (PRA) Afon Wysg Battery Energy Storage System, prepared by RPS for Enso Energy, dated July 2023.

The PRA provided is generally comprehensive, however, we would advise that with future submissions, the following should be considered:

- Evidence of the use or storage of firefighting foams on site in case there are sources of PFAS associated with the site
- River Usk is considered a controlled waters receptor.
- Premature at this PRA stage to consider there to be no S-P-R linkages. The presence of shallow groundwater and connectivity with the River Usk is and other nearby surface waters is possible and as such ought to be investigated before making this assumption.

Given the historic land use associated with the site as a power station, use of storage tanks and railway and given the proximity to the River Usk, we advise that the following conditions be imposed upon any permission granted for the protection of controlled waters:

Condition - Land affected by contamination

No development, shall commence until the following components of a scheme to deal with the risks associated with contamination at the site, has been submitted to and approved in writing by the Local Planning Authority.

1. A preliminary risk assessment which has identified:
 - all previous uses
 - potential contaminants associated with those uses
 - a conceptual model of the site indicating sources, pathways and receptors
 - potentially unacceptable risks arising from contamination at the site
2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The remediation strategy and its relevant components shall be carried out in accordance with the approved details.

Justification: To ensure the risks associated with contamination at the site have been fully considered prior to commencement of development as controlled waters are of high environmental sensitivity; and where necessary remediation measures and long-term monitoring are implemented to prevent unacceptable risks from contamination.

Condition – Verification Report

Prior to the operation of the development a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include a long-term monitoring and maintenance plan for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be carried out in accordance with the approved details.

Justification: To ensure the methods identified in the verification plan have been implemented and completed and the risk associated with the contamination at the site has

been remediated prior to occupation or operation, to prevent both future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

Condition - Unsuspected contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this unsuspected contamination shall be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be carried out as approved.

Justification: To ensure the risks associated with previously unsuspected contamination at the site are dealt with through a remediation strategy, to minimise the risk to both future users of the land and neighbouring land, and to ensure that the development can be carried out safely without unacceptable risks.

Condition - Piling

No development shall commence until details of piling or any other foundation designs using penetrative methods sufficient to demonstrate that there is no unacceptable risk to groundwater have been submitted to and approved in writing by the Local Planning Authority. The piling shall be implemented in accordance with the approved details.

Justification: Piling should be submitted to ensure there is no unacceptable risk to groundwater during construction and methods/design are agreed prior to the commencement of development or phase of development.

Condition - Surface water drainage

No infiltration of surface water drainage into the ground is permitted other than with the express written consent of the local planning authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approval details.

Justification: To prevent both new and existing development from contributing to or being put at unacceptable risk from or being adversely affected by unacceptable levels of water pollution.

Informative/advice to applicant

Natural Resources Wales recommends that developers should:

1. Follow the risk management framework provided in [Land contamination risk management \(LCRM\)](#)
2. Refer to '[Land Contamination: a guide for developers \(WLGA, 2017\)](#)' for the type of information that we require in order to assess risks to controlled waters from the

site. The Local Authority can advise on risk to other receptors, such as human health.

3. Refer to the [Environment Agency's \(2017\) 'Approach to Groundwater Protection'](#)

Existing Permits

The proposed development area is within the permitted boundary of Uskmouth Power Station (permit no. LP3131SW). The current permit holder (SIMEC Uskmouth Power Limited) will be required to fully or partially surrender the existing permit prior to commencement of works. We would welcome pre-application discussions with the current permit holder to understand the approach.

Furthermore, a large volume of waste pulverised fuel ash (PFA) residue remains onsite from when the installation was operational as a coal fired station. We understand that the applicant may wish to use this material as part of land profiling works. We also understand that discussions with the applicant (or nominated consultant) have taken place to discuss these proposals, as a deposit for recovery permit may be required.

It is unlikely the proposal will impact existing permitted activities at Severn Power Station

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully,

Ryan Rees

Cynllunio Datblygu Cynghorydd / Development Planning Advisor
Cyfoeth Naturiol Cymru / Natural Resources Wales

E-bost/E-mail: southeastplanning@cyfoethnaturiolcymru.gov.uk

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.