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Habitats Regulations Assessment

Harts Way Farm, Havant

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24th January 2024

Project No: P6080

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Harts Farm Way, Havant – HRA

Issue No	Author	Reviewer	Issue Date	Additions/alterations	Notes
Original	KP	EB	24/01/2024	N/A	

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Executive Summary

1. The Ecology Co-op was commissioned by Forsa Energy Gas Holdings Ltd. to prepare a Habitats Regulations Assessment (HRA) in relation to a proposed gas fuelled capacity mechanism embedded generation plant (x5 4.5MW generators) to support the National Grid at Harts Farm Way, Havant, Portsmouth PO1 1HU. This assessment has been completed due to the proximity of the site to National Site Network sites: Solent Maritime Special Area of Conservation (SAC), and Chichester & Langstone Harbours Special Protection Area (SPA) and Ramsar.
2. The Ecology Co-op undertook a Preliminary Ecological Appraisal (PEA) of the site in December 2023. In addition, a shadow HRA was produced in 2022 by Biora Limited, associated with a previous planning application for the installation of up to ten generators.
3. The existing site measures 0.45ha in area and comprises a disused parcel of brownfield land within a small industrial estate. The site is dominated by hardstanding and ruderal vegetation.
4. Chichester and Langstone Harbour Ramsar and SPA are important for breeding and wintering bird species and assemblages of international importance. Solent Maritime SAC is designated for a number of important habitat types in addition to the Desmoulin's whorl snail.
5. The Stage 1 screening assessment did not identify the potential for significant effects to arise in relation to the proposed development and the conservation objectives of the designated sites, alone or in combination with other plans or projects. Stage 2 appropriate assessment is therefore not considered to be required.



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1 INTRODUCTION

1.1 Purpose of the Report

The Ecology Co-operation Ltd (hereafter The Ecology Co-op) was commissioned by Forsa Energy Gas Holdings Ltd to prepare a Habitats Regulations Assessment (HRA) in relation to a proposed gas fuelled capacity mechanism embedded generation plant (x5 4.5MW generators) to support the National Grid at Harts Farm Way, Havant, Portsmouth PO1 1HU. This report has been completed due to the proximity of the site to the Solent Maritime Special Area of Conservation (SAC), and Chichester & Langstone Harbours Special Protection Area (SPA) and Ramsar.

This document represents the results of a “Stage 1: formal screening assessment for any ‘likely significant effects (either alone or in combination with other plans or projects)’”.

1.2 The Application Site

The site is located at Harts Farm Way, Havant, Portsmouth PO1 1HU. The central grid reference for the site is SU 70601 05830.

The existing site measures 0.45ha in area and comprises a disused parcel of brownfield land within an industrial estate. The site is dominated by hardstanding which has not been maintained recently, leading to ruderal plants beginning to establish and areas of fallen deadwood and leaf litter forming. Mosses are abundant between cracks in the hardstanding. Patches of buddleia *Buddleia* sp. and bramble *Rubus fruticosus* agg. scrub are present, particularly along the site boundaries and close to the existing entrance.



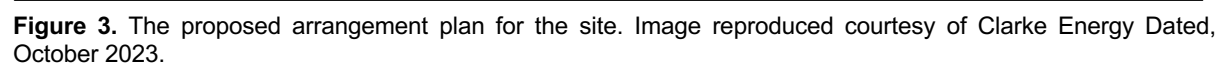
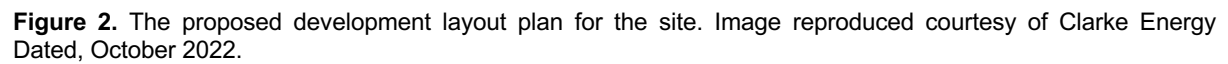


Figure 1 shows the approximate boundary of the site and local context.

The proposed development comprises the installation of five 4.5MW gas fuelled capacity mechanism embedded generators. The proposed plans for the site are indicated in Figure 2 and Figure 3 below.



Figure 1. An aerial image showing the location of the site. The approximate site boundary is outlined in red. Image produced courtesy of Google maps (map data ©2024 Google).





1.3 Background to the Site

The site has been subject to previous associated planning permissions: APP/21/00809 – related to a proposed gas fueled capacity mechanism embedded generation plant to support the National Grid; the application comprised a resubmission of previously approved applications (APP/17/00511 as amended by APP/18/01281) in order to secure a further three years to commence development following transfer of ownership of the site (granted planning consent, 19 January 2023).

To support the above application, which proposed the installation of up to ten generators, each rated at 2,535kw, a shadow HRA was completed by Biora Limited¹.

As part of the 2022 HRA assessment, in addition to the European designated sites, a number of candidate sites for the Solent Waders and Brent Goose Strategy (SWBGS) were also considered within the scope of the HRA, in line with comments received from Hampshire's County Ecologist. A detailed assessment of potential air quality impacts by Wood Group UK Ltd (2022) underpinned the shadow HRA (Biora, 2022).

The Environment Agency's risk assessment guidance (Environment Agency, 2016²) criteria were used in Wood's Air Quality Assessment (AQA) to define when the impacts of emissions on ecological receptors could be screened out of the assessment. For European sites, the guidance advises that to screen out the need for further assessment, the Process Contribution (PC) for any substance emitted from an industrial source must meet both the following criteria at the assessment location:

- short-term PC is less than 10% of the short-term environmental standard; and
- long-term PC is less than 1% of the long-term environmental standard.

Wood's AQA conclusions determined that only a small area of the designated sites would exceed the 1% assessment criterion. In relation to nitrogen oxides, Biora noted that, "Some habitat types are more susceptible to nitrogen oxides than others:

- Intertidal mudflat habitats tend to be resilient to nitrogen oxides as they are subject to frequent tidal inundation. This regular flushing of nitrogen oxides from tidal incursion tends to reduce the role of nitrogen from the atmosphere in controlling botanical composition. This means that slightly raised levels of nitrogen oxide are unlikely to negatively impact the high biomass of invertebrates in such sediments, which provide important food sources for waders including Brent geese.
- Saltmarsh habitats tend to be less resilient to nitrogen oxides as they do not benefit from the regular flushing effects of frequent tidal inundation".

Further assessment was undertaken by Biora to determine the extent of both intertidal mudflat and saltmarsh habitat types present within the areas of the designated sites that were located within the 'exceedance envelope' for nitrogen oxides. This research found that approximately 85% represented mudflat habitat and that sensitive saltmarsh habitat was absent from within the exceedance envelope for nitrogen oxides. In view of this habitat composition, predicted impacts of air pollution from nitrogen

¹ Biora (2022). (Shadow) Habitats Regulations Assessment (HRA) Report – Land off Harts Farm Way, Havant, Portsmouth (ref: SE1000-01_G01_JO). Biora Limited, 18 October 2022.

² Environment Agency (EA), 2016. Air emissions risk assessment for your environmental permit



oxides were screened out within the Biora HRA. The candidate sites for the SWBGS were also screened out in relation to nitrogen oxides.

In addition to nitrogen oxides, the predicted impacts of acid deposition and nitrogen deposition were screened out for all assessed sites, concluding no likely significant effects.

1.4 Legal Basis

Habitats Regulations Assessment (HRA) refers to the requirement for plans and projects to be assessed in relation to European sites under the Conservation of Habitats and Species Regulations 2017³. As of the 1st January 2021, the Regulations have been amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019⁴ under exercise of the powers conferred to the European Withdrawal Act 2018 (1)⁵.

Under Regulation 63:

“1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.”

As such, within England and UK inshore and offshore marine areas, the Habitats Regulations 2017⁶ now amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019⁴, requires that any plan or project that may have a ‘likely significant effect’ on a site within the National Site Network (Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) (in addition to Ramsar sites)) either individually or in combination with other plans or projects), must be made subject to an ‘appropriate assessment’ of its implications for the site in view of the Network Objectives for the site, and can only proceed if it can be shown that they will not adversely affect the integrity of the site.

1.5 Habitat Regulations Assessment

There are three stages in a full HRA⁷:

³ UK Gov (2017). The Conservation of Habitats and Species Regulations 2017. Available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

⁴ UK Gov (2019). The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111179512>.

⁵ UK Gov (2018) European Union (Withdrawal) Act 2018. Available at: <https://www.legislation.gov.uk/ukpga/2018/16/contents/enacted>.

⁶ UK Gov (2017). The Conservation of Habitats and Species Regulations 2017. Available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

⁷ <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>



Stage 1 – Screening: Initially, the proposal is screened to see whether it is directly connected with (or necessary) to the conservation management of a European designated site. The potential impact pathways (direct and indirect) of a project are identified. These are then assessed for their potential to result in 'likely significant effects' upon the integrity of sites within the National Site Network and the conservation objectives of their qualifying features, both alone and in-combination with other plans and projects. Mitigation measures are not considered at this stage⁸. Where no likely significant effects are identified, it is not necessary to take the project any further through HRA.

Stage 2 – Appropriate Assessment: Where it is not possible to conclude that there are no likely significant effects, an appropriate assessment is undertaken. This stage assesses in detail the likely significant effects of a proposal on the site integrity and conservation objectives (alone and in combination). Mitigation can be considered at this stage to avoid or reduce any significant adverse effects. Where significant adverse effects on the integrity of the designated site cannot be ruled out the third stage is triggered.

Stage 3 – Derogations: Where the 'integrity test' has failed, a proposal may qualify for a derogation to allow a proposal to go ahead. In order for a derogation to be granted, three legal tests must be passed:

- **Assessment of Alternative Solutions:** This process looks at feasible alternative solutions that would be less damaging or avoid damage to the site and its qualifying features (conservation objectives and site integrity).
- **Imperative Reasons of Overriding public interest (IROPI):** Where no alternative solutions exist and where adverse impacts remain despite mitigation, the plan or project may still be permitted if there are imperative reasons of overriding public interest. For this to happen, the project must satisfy a set of strict tests.
- **Compensatory Measures will be taken and secured:** Where no alternative solutions exist and there are IROPI, compensatory measures must be secured. The measures must fully offset the remaining significant adverse effects to the designated site's integrity and qualifying features.

2 METHODOLOGY

2.1 Screening Assessment Approach

Stage 1 (screening) determines whether the proposed development is likely to have any significant effects upon the conservation objectives of the nearby National Site Network site alone or in combination with other proposals (in the absence of mitigation).

The process is as follows:

1. Identify and characterise sites which fall within the National Site Network within the zone of impact⁹;
2. Review and screen the proposed development plan to identify potential impacts and likely effects on these sites;

⁸ Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta ('People over Wind')

⁹ The zone of impact used here is a 5km buffer zone.



3. Consider any other plans and projects (and combined project impacts) that may result in 'in-combination' effects to these sites; and
4. Produce a Screening Assessment recording the analysis and supporting information.

The following information sources have been reviewed as part of the Screening Assessment:

- www.magic.gov.uk and its links to SAC and SPA citations
- JNCC website
- objectives for SAC and SPA sites, available on the Natural England website
- the UK Air Pollution Information System (www.apis.ac.uk)

In order to determine that there will be no significant effects upon the National Site Network sites, the following criteria must be met:

- there must not be any reduction in the area of the Annex I habitats (or composite features);
- there must not be any changes to the composition of the habitats for which the site was designated (such as the abundance and diversity that compromises the habitat over time);
- there must not be any direct effect upon the species for which this site was designated or classified beyond any existing baselines;
- there must not be any indirect effects upon the population of species for which the site was designated or classified due to loss or degradation of their habitat (qualify and/or quantity), and:
- there must not be any interruption or degradation of the physical, chemical or biological processes that support habitats and species for which the site was designated or classified.

2.2 Appropriate Assessment Approach

Where Stage 1 (screening) has identified likely significant effects on the nearby National Site Network sites, Stage 2 (Appropriate Assessment) is undertaken. Stage 2 assesses further whether effects are likely to be adverse to the integrity of the European site or designated interest feature(s), looking in detail at recorded sensitivities and/or vulnerabilities and the conservation objectives of the designated site. Mitigation measures are considered at this stage in addition to in-combination effects (intra and inter).

2.3 Approach to Scoping in Potential Impact Pathways

Potential impact pathways associated with the proposed development have been determined using professional judgement in accordance with the following factors:

- whether the potential impact pathway could directly affect the designated site or qualifying features
- whether the potential impact pathway could indirectly affect the designated site or qualifying features by virtue of being within the zone of influence (e.g. changes to hydrology)
- whether the proposed development site is functionally linked to the European site and, therefore, whether potential impacts could affect 'mobile' qualifying features of the designated site (e.g. birds).



The conservation objectives of the European site and cited threats/pressures and vulnerabilities have been taken into account.

2.4 Precautionary Approach

At each stage of the HRA process, a precautionary approach has been followed, i.e. stage 2 appropriate assessment is triggered where the risk of a proposal resulting in likely significant effects on the conservation objectives of a designated site cannot be ruled out at the screening stage (stage 1); and, where ‘all reasonable scientific doubt’ of an adverse effect on the integrity of a designated site cannot be ruled out, stage 3 derogation is triggered.

2.5 Relevant Legislation and Guidance

The following legislation and guidance documents have been consulted in the preparation of this HRA:

- ECLI:EU:C:2018:244, Judgment of the Court (Seventh Chamber), 12 April 2018, Reference for a preliminary ruling — Environment — Directive 92/43/EEC — Conservation of natural habitats — Special areas of conservation — Article 6(3), available online at: <http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN>
- High Court judgment of Wyatt, R. (On the Application of) v Fareham Borough Council [2021] EWHC 1434 (Admin) (28 May 2021) relating to Habitats Regulations Assessments (“HRAs”)
- European Commission (2000), Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC;
- European Commission (2001), Assessment of plans and projects significantly affecting Natura 2000 sites;
- European Commission (2007), Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC;
- The Design Manual for Roads and Bridges (DMRB). Sustainability & Environment Appraisal: LA 115 Habitats Regulations Assessment. January 2020.
- The Design Manual for Roads and Bridges (DMRB). Sustainability & Environment Appraisal: LA 105 Air quality. November 2019.
- Holman et al (2020). A guide to the assessment of air quality impacts on designated nature conservation sites. v1.1. Institute of Air Quality Management, London.
- CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.
- Chapman, C. & Kite, B. (2021). Guidance on Decision-Making Thresholds for Air Pollution. JNCC Report No.696 (Main Report), JNCC, Peterborough, ISSN 0963-8091.

3 NATIONAL SITE NETWORK SITES UNDER CONSIDERATION

3.1 Proximity of the Application Site to National Site Network Sites

A Habitats Regulations Screening Assessment has been undertaken as development within the zone of influence of sites within the National Site Network in the UK have the potential to result in likely significant effects on the integrity of the designated sites and their qualifying features.



The application site lies approximately 450m north-east of the boundary of the designated sites at the closest point. Langstone Harbour Site of Special Scientific Interest (SSSI) and Chichester Harbour SSSI are component sites of the designated sites. Figure 4 shows the location of the development in relation to the designated sites.

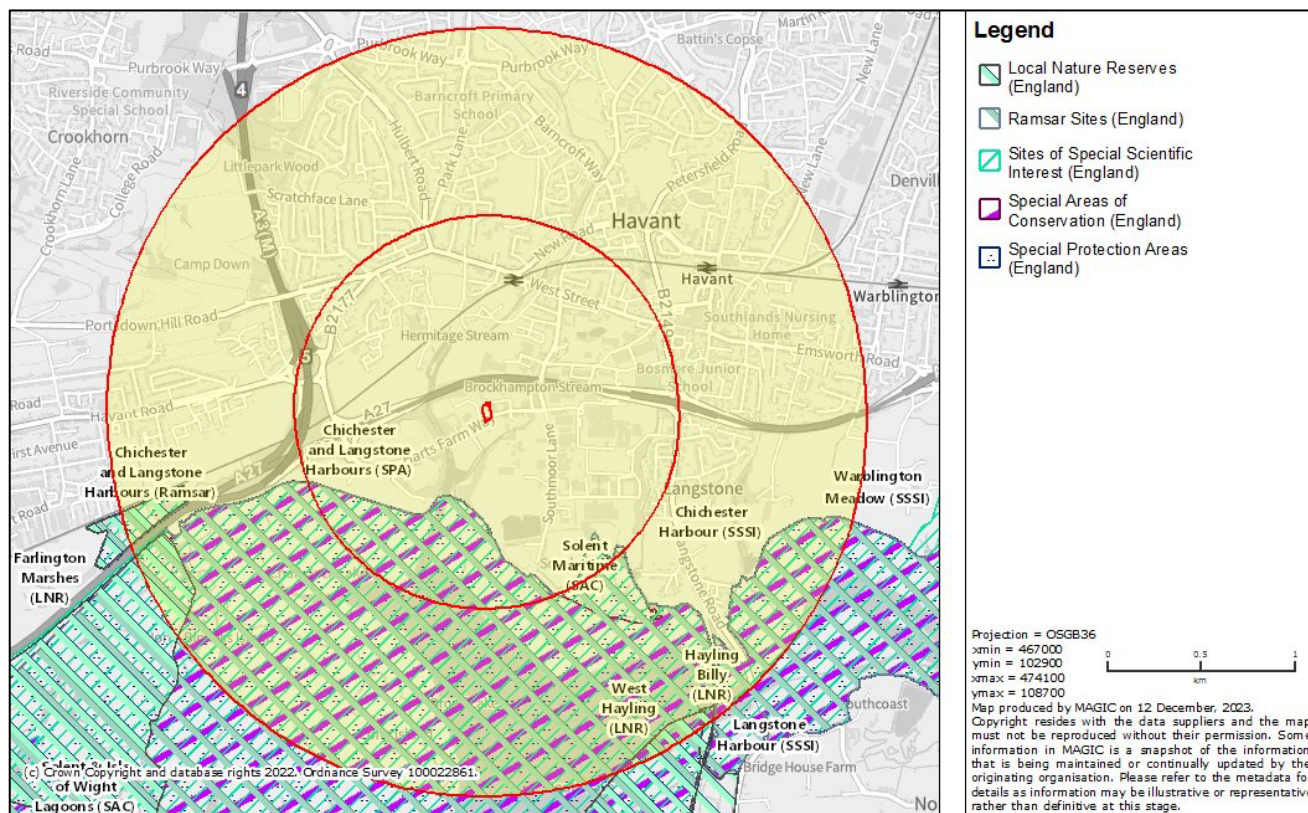


Figure 4. Location of the application site (red dot) in relation to the designated sites. Image produced courtesy of Magic maps (<http://www.magic.gov.uk/>, contains public sector information licensed under the Open Government Licence v3.0).

3.2 Qualifying Features and Network Objectives

3.2.1 Chichester and Langstone Harbours SPA

Qualifying Features

Total area = 5810.95ha; marine area = 87.8%.

General site character:

- Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins): 63.0%
- Heath, Scrub, Maquis and Garrigue, Phygrana: 0.1%
- Humid grassland, Mesophile grassland: 1.7%
- Bogs, Marshes, Water fringed vegetation, Fens: 0.5%
- Salt marshes, Salt pastures, Salt steppes: 21.5%
- Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites): 0.2%
- Inland water bodies (Standing water, Running water): 0.4%
- Broad-leaved deciduous woodland: 0.8%
- Coastal sand dunes, Sand beaches, Machair: 0.3%



- Improved grassland: 11.7%

This site qualifies under Article 6.1 of the Directive (79/409/EEC) by supporting habitats/populations of the species listed below on Annex II of the Directive¹⁰. Note that the European directives have been transposed into The Conservation of Habitats and Species Regulations 2017, now amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019⁴.

- northern pintail *Anas acuta* (wintering); 330 individuals representing 1.2% of the GB population
- shoveler *Anas clypeata* (wintering); 100 individuals representing 1% of the GB population
- teal *Anas crecca* (wintering); 1,824 individuals representing 0.5% of the GB population
- wigeon *Anas penelope* (wintering); 2,055 individuals representing 0.7% of the GB population
- turnstone *Arenaria interpres* (wintering); 430 individuals representing 0.7% of the GB population
- brent goose *Branta bernicla* (wintering); 17,119 individuals representing 5.7% of the GB population
- sanderling *Calidris alba* (wintering); 236 individuals representing 0.2% of the GB population
- dunlin *Calidris alpina* (wintering); 44,294 individuals representing 3.2% of the GB population
- ringed plover *Charadrius hiaticula* (wintering); 846 individuals representing 3% of the GB population
- bar-tailed godwit *Limosa lapponica* (wintering); 1,692 individuals representing 3.2% of the GB population
- red-breasted merganser *Mergus serrator* (wintering); 297 individuals representing 3% of the GB population
- curlew *Numenius arquata* (wintering); 1,861 individuals representing 1.6% of the GB population
- grey plover *Pluvialis squatarola* (wintering); 3,825 individuals representing 2.3% of the GB population
- little tern *Sterna albifrons* (breeding); 100 pairs representing 4.2% of the GB breeding population
- common tern *Sterna hirundo* (breeding); 33 pairs representing 0.3% of the GB breeding population
- sandwich tern *Sterna sandvicensis* (breeding); 31 pairs representing 0.2% of the GB breeding population
- shelduck *Tadorna tadorna* (wintering); 2,410 individuals representing 3.3% of the GB population
- redshank *Tringa tetanus* (wintering); 1,788 individuals representing 1% of the GB population

The overall waterbird assemblage is 93,230 individuals.

Network/Conservation Objectives

¹⁰JNCC (2001). The UK SPA Network: its scope and content (Volumes 1-3). Available at: <http://jncc.defra.gov.uk/page-2049-theme=default>.



The Network Objectives for the Chichester and Langstone Harbours SPA set out by Natural England¹¹ are as follows:

“Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- *The extent and distribution of the habitats of the qualifying features*
- *The structure and function of the habitats of the qualifying features*
- *The supporting processes on which the habitats of the qualifying features rely*
- *The population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site.”*

Threats and Pressures

The following negative impacts have been highlighted on the data form in relation to the SPA:

- changes in biotic conditions
- pollution to groundwater (point sources and diffuse sources)
- changes in abiotic conditions
- fishing and harvesting aquatic resources
- outdoor sports and leisure activities, recreational activities.

3.2.2 Chichester and Langstone Harbours Ramsar

Qualifying Features

Total area: 5810.03 ha

General site character¹²:

Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is of particular significance for over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats supporting important plant and animal communities.

Habitat composition comprises:

- tidal flats 46%
- salt marshes 21.4%
- other 14.3%
- estuarine waters 14.1%
- marine beds (e.g. sea grass beds) 1.7%
- freshwater marshes / pools: seasonal / intermittent 0.9%

¹¹ Natural England (2019) European Site Conservation Objectives for Chichester and Langstone Harbours Special Protection Area Site Code: UK9011011.

¹² <https://jncc.gov.uk/jncc-assets/RIS/UK11013.pdf>



- sand / shingle shores (including dune systems) 0.8%
- freshwater marshes / pools: permanent 0.4%
- saline / brackish marshes: permanent 0.3%
- shrub-dominated wetlands 0.07%
- rivers / streams / creeks: permanent 0.02%
- Coastal brackish / saline lagoons 0.01%

Ramsar criterion 1: Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.

Ramsar criterion 5: Assemblages of international importance. Species with peak counts in winter: 76,480 waterfowl (5-year peak mean 1998/99-2002/2003).

Ramsar criterion 6: Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

- ringed plover, Europe/Northwest Africa: 853 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3)
- black-tailed godwit *Limosa limosa islandica*, Iceland/W Europe: 906 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)
- common redshank *Tringa totanus tetanus*: 2,577 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

- dark-bellied brent goose: 12,987 individuals, representing an average of 6% of the population (5 year peak mean 1998/9-2002/3)
- common shelduck *Tadorna tadorna*, NW Europe: 1,468 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
- grey plover, E Atlantic/W Africa – wintering: 3,043 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)
- dunlin, W Siberia/W Europe: 33,436 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species regularly supported during the breeding season: little tern, W Europe; 130 apparently occupied nests, representing an average of 1.1% of the breeding population (Seabird 2000 Census).

Threats and Pressures

Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

- erosion
- eutrophication



- domestic sewage

3.2.3 Solent Maritime SAC

Qualifying Features

Total area = 11,243.12ha

General site character¹³:

- marine areas, sea inlets (14%)
- tidal rivers, estuaries, mud flats, sand flats, lagoons (including saltwork basins) (59%)
- salt marshes, salt pastures, salt steppes (23%)
- coastal sand dunes, sand beaches, machair (0.5%)
- shingle, sea cliffs, islets (3%)
- broad-leaved deciduous woodland (0.5%)

Annex I habitats that are a primary reason for selection of this site:

- estuaries
- Spartina swards *Spartinion maritimae*
- Atlantic salt meadows *Glauco-Puccinellietalia maritimae*

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- sandbanks which are slightly covered by sea water all the time
- mudflats and sandflats not covered by seawater at low tide
- coastal lagoons (Priority feature)
- annual vegetation of drift lines
- perennial vegetation of stony banks
- Salicornia and other annuals colonizing mud and sand
- shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")

Annex II species present as a qualifying feature, but not a primary reason for site selection:
Desmoulin's whorl snail *Vertigo moulinsiana*.

Network/Conservation Objectives

The Network Objectives for the Solent Maritime SAC set out by Natural England¹⁴ are as follows:

"Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*

¹³ <https://sac.jncc.gov.uk/site/UK0030059>

¹⁴ file:///Users/2012interactive/Downloads/UK0030059%20SolentMaritime%20SACV2018.pdf



- *The structure and function (including typical species) of qualifying natural habitats*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site.”*

Threats and Pressures

The following negative impacts have been highlighted on the data form in relation to the SAC¹⁵:

- pollution to groundwater (point sources and diffuse sources)
- outdoor sports and leisure activities, recreational activities
- changes in biotic conditions
- fishing and harvesting aquatic resources
- changes in abiotic conditions.

3.2.4 Vulnerability of the SPA/Ramsar/SAC

Natural England's Site Improvement Plan (SIP) for the Chichester and Langstone Harbours SPA and Ramsar, and Solent Maritime SAC site¹⁶, lists the following as current threats or pressures on the qualifying features (bird species, assemblage and habitats) supported by the sites:

- public access/disturbance (threat)
- coastal squeeze (threat)
- fisheries (commercial marine and estuarine) (threat)
- water pollution (threat)
- changes in species distributions (threat)
- climate change (threat)
- change to site conditions (threat)
- invasive species (threat)
- direct land take from development (threat)
- biological resource use (threat)
- change in land management (threat)
- inappropriate pest control (threat)
- air pollution (atmospheric nitrogen deposition) (pressure)
- hydrological changes (threat)
- direct impact from 3rd party (threat)
- extraction (non-living resources) (threat)

¹⁵ <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030059.pdf>

¹⁶ Natural England (2014) Site Improvement plan (SIP): Solent; Improvement Programme for England's Natura 2000 Sites (IPENS), Available online at: <file:///Users/2012interactive/Downloads/SIP141007FINALv1.0%20Solent.pdf>



4 SCREENING ASSESSMENT

The development proposals are not directly connected with or necessary to the management of the internationally designated sites.

4.1 Assessment of Likely Significant Effects

Only those potential impact pathways associated with the proposed development and with potential relevance to the European sites and their qualifying features have been scoped into the assessment.

Accordingly, the following threats/pressures on the qualifying features identified in the SIP, in addition to those relevant to the proposed development, have been scoped in:

- air pollution: impact of atmospheric nitrogen deposition (pressure) – operational phase of the proposed development
 - changes in species distributions (threat) – operational phase
 - change to site conditions (threat) – operational phase.

A number of the key threats/pressures listed within the SIP relate to site management issues and are not related to potential impact pathways from the proposed development.

The following potential impact pathways associated with the proposed development have been scoped out:

- dust emissions (construction)
- water pollution – wastewater and drainage (construction and operation)
- disturbance – lighting, noise, vibration, site personnel (construction and operation)
- habitat loss – functionally linked land (construction and operation).

The rationale for scoping out the above impacts includes distance (the designated site is outside of the zone of influence relating to the impact), absence of recorded threat to the designated site and absence of connectivity to the designated site.

The potential impact mechanisms that have been scoped in and the assessment of likely significant effects are presented in Table 1 below. It is established case law that an effect is only 'significant' in this context if it undermines the conservation objectives.

Table 1. Assessment of likely significant effects: screening.

Impact pathway	Assessment of likely significant effects	Significance of effects (alone and/or in combination)



Air pollution	The main atmospheric pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂). Air pollution can result in significant effects for those habitats and species that serve as qualifying features for the SAC, SPA/Ramsar and has the potential to undermine the sites' conservation objectives by affecting the integrity of the sites and the favourable conservation status of their qualifying features. Indeed, nitrogen deposition is listed in the SIP as a pressure affecting habitats within the designated sites. The proposed installation of five 4.5MW generators represents a slight decrease in capacity compared to the previous granted application (total of 22.5MW compared to 25.35MW). In view of this, it is considered that there will be no increased significant impact risk and that the findings of the AQA undertaken by Wood in 2022 and the subsequent shadow HRA produced by Biora remain valid for the current application. In view of the scale of the proposed impact and the habitat composition within the areas that have potential to be affected comprising of mud flats of low sensitivity to air pollution, no significant effects on the conservation objectives, site integrity or favourable conservation status of the qualifying features associated with the designated sites have been identified alone or in combination with other plans and projects. (This is also relevant to the candidate sites for the Solent Waders and Brent Goose Strategy.)	No likely significant effects alone or in combination
Is the project likely to have a significant effect alone?		
No – based on the scale of the proposed development and habitats within the zone of influence, the discussed impact pathway is not considered likely to be significant.		
Is the project likely to have a significant effect 'in combination'?		
No – based on the evidence, the proposed development is considered highly unlikely to contribute to any in combination effects of air quality pressures on the conservation objectives, site integrity or qualifying features of the designated sites.		
Conclusion of the test of Likely Significant Effects		
Outcome of screening stage	No likely significant effects identified.	
Is an Appropriate Assessment required	No – Stage 2 Appropriate Assessment is not required.	
Are the appropriate statutory environmental bodies in agreement with this conclusion?	To be consulted.	

Should you need any further advice on the information provided above, please do not hesitate to contact The Ecology Co-op.