An Bord Pleanála

Inspector's Report
ABP-313918-22

Development	Temporary electricity generating plant.
Location	North Wall Power Generating Station, Alexandra Road, Dublin 1
Planning Authority	Dublin City Council
Applicant(s)	Minister for the Environment, Climate & Communication
Type of Application	Approval under Section 181 (2A) (b) of the Planning & Development Act, 2000 (as amended).
Submissions:	IFI, HSA, EPA & TII
Date of Oral Hearing	None
Date of Site Inspection:	3rd August 2022
Inspector:	**Karla Mc Bride**

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1.0 INTRODUCTION

1.1 Context

This is an application for Approval under Section 181 (2A) (b) of the Planning & Development Act, 2000 (as amended) for the installation of temporary emergency electricity generating plant at the North Wall Generating Station. The Commission for Regulation of Utilities (CRU) identified a substantial risk to security of electricity supply which has arisen because of unexpected generator outages and delays in delivery of new gas fired generation capacity.

1.2 Pre-Application Consultation

The Minister for the Environment, Climate and Communication requested Pre-Application Consultations under Section 37B of the Planning and Development Act, 2000, as amended. Two pre-application meeting were held with representatives of this department on behalf of the Minister in relation to the requirement under Section 181(2A) (b) of S.I. No. 418/2019 to seek the Boards approval where EIA and AA are required for development proposed to be carried out by or on behalf of a Minister of the Government or the Commissioners. These meetings took place on the 5th May and 18th May 2022.

It should be noted at the outset that the prospective applicant is not seeking planning permission for the proposed development as this is provided for by way of the emergency provisions provided in Section 181(2)(a) of the Planning and Development Act 2000, as amended. For the Boards information, a draft order made by the Minister accompanies the application for approval under this section and following the approval of An Bord Pleanála, the Minister for Environment, Climate and Communication will issue a Ministerial Order.

S.I. No. 418/2019 European Union (Environmental Impact Assessment and Habitats)(Section 181 of the Planning and Development Act 2000) Regulations 2019 provides at Section 181(2A)(b) that "*where development is proposed to be carried out by or on behalf of a Minister concerned pursuant to an order under subsection (2)(a) and the Minister concerned is satisfied, having had regard to Part X and Part XAB, that an environmental impact assessment or an appropriate assessment, or both such assessments of the proposed development is or are required, the Minister concerned shall prepare or cause to be prepared an application for approval, which shall include the documents and information referred to in paragraph (c), in respect of the development and shall apply to the Board for such approval*".

The following report comprises an assessment of the EIAR and NIS submitted for consideration to the Board in accordance with the foregoing.

1.3 Project Background

The ESB is proposing to install a temporary emergency power plant within the existing North Wall Generating Station in response to the CRU's concerns relating to the security of electricity supply. The proposed power plant would comprise the installation of 6 x temporary modular turbines which will be operational for a period of five years. It will operate for up to 500 hours per year on natural gas only, and typically for 4 x hours per day, when called on to run. Natural gas will be provided by the existing gas compound within the site and each of the generating units will be connected to the existing on-site 220kV transformer via cables which are connected to the national grid via the existing on-site 220kV substation. The applicant states that the site operates and will continue to operate under the existing EPA Industrial Emissions Licence (Reg. No. P0579) and that a review of the existing Licence will be applied for.

1.4 Site Location and Description

The subject site is located in the North Wall in Dublin Port within a predominantly industrial area on the N side of the River Liffey. It is bound to the N by Alexandra Road and to the E, W and S by existing Port operations including warehousing,

container storage and other port related activities. Vehicular access is off Alexandra Road which functions under a one-way system.

The site accommodates existing buildings and structures related to the generation of electricity by the ESB. The site has been used for electricity generation since 1949, and a 270MW power plant was developed in the 1980's, with electricity fed into the national grid via an existing on-site substation.

The nearby Dublin Bay is covered by several sensitive European and National site designations including the South Dublin Bay and River Tolka Estuary SPA, and there are several features of historic and cultural heritage interest in the surrounding area related to maritime and port activities.

Maps and photographs in Appendix 1 describe the site in more detail.

1.5 Planning history

The site has been the subject of multiple planning applications made to Dublin City Council the most recent of which is as follows:

Ref. 2697/20 – permission granted to the ESB for alterations to the existing North Wall Power Generating station, which include:- the replacement of existing indoor gas turbines and one of the two existing exhaust chimney stacks; the installation of new gas compressors and fan coolers; storage facilities for fuel, oil and water; a new fire water tank; a new tanker unloading area; emergency diesel generator; a new administration and welfare building; minor modifications to existing surface water drainage, a new entrance opening on to Alexandra Road and revised internal road layout; and the removal of some existing structures. (It was stated during the pre-application meetings that the ESB do not propose to undertake these works).

***IE Licence* P0579**: emissions are governed by an EPA Industrial Emissions Licence.

2.0 PROPOSED DEVELOPMENT

2.1 Documentation

The application documentation includes the following:

- Environmental Impact Assessment Report (EIAR)
- Natura Impact Statement (NIS)
- Planning Drawings & Photomontages

The EIAR was supported by several Technical Appendices which included:

- Appendix 8: Air & Climate Report
- Appendix 11: Bat Survey Report
- Appendix 12: Archaeology & Cultural Heritage report
- Appendix 13: Landscape & Visual Impact Assessment Criteria

2.2 Development Description

The proposed development would comprise the installation of a temporary modular emergency generating plant within a c.3ha site over a c.15-month period.

- 6 x gas turbine generators, each with
  - 11m high stacks
  - Air intakes filters
  - Exhaust silencer & ancillaries
- 6 x control house modules & 3 x power control modules.
- 3 x natural gas compressors with fin-fan coolers.
- Revised internal road layout.
- A 1250m_3 water storage tank & pumphouse.
- 2 x air compressors, electrical reactors, pipes & cable racks.
- Modifications to existing surface water drainage system.
- Demolition of several existing structures.
- All associated & ancillary site works.

2.3 Environmental Impact Assessment Report (EIAR)

The EIAR was prepared using the standard “grouped format structure”. It described the site, surrounding area and the existing operational facility. It explained the background to the project, the benefits arising and the need for the development based on an analysis of existing and anticipated energy requirements. The applicant states that an amendment to the EPA Industrial Emissions Licence will be sought and that facility is not a Seveso site. It provided a detailed description of the existing and proposed facilities, identified constraints and described the alternatives considered.

The main body of the EIAR outlined the study methodologies and assessed the potential impacts on the receiving environment under the required range of headings, and it proposed mitigation measures. It identified residual and cumulative impacts and assessed interactions. It also included a summary of the qualifications and experience of the main contributors to the report, stated that no difficulties were encountered. It had regard to the risk of major accidents or natural disasters, and to Climate Change. The EIAR was informed by several technical appendices and a Non-Technical Summary was provided.

The EIAR stated that the proposed development would involve works at an existing operational facility. There would be additional emissions to air from construction vehicles and the operational generator stacks which could potentially have a significant temporary effect on air quality, climate and the increased vehicular movements during the construction phase could also potentially affect roads and traffic. The EIAR concluded that any adverse environmental impacts will be minimal and managed by mitigation measures and compliance with the EPA Industrial Emissions Licence requirements.

2.4 Natura Impact Statement (NIS)

A Stage 1 AA screening exercise was carried out for the proposed temporary emergency generating plant and a Stage 2 Natural Impact Statement was prepared.

Stage 1 AA Screening Report

The AA Screening exercise described the site, and the characteristics of the existing facility and proposed development. It summarised the legislative requirements and described the AA screening methodology. It identified the European sites within the Zone of Influence, described the likely sources of impact, and concluded that the project had the potential to affect the Conservation Objectives of 4 x European Sites.

Stage 2 Natura Impact Statement Report

The NIS assessed the likely significant effects on the Conservation Objectives for the following European sites which were screened in after the AA screening exercise.

South Dublin Bay & Tolka Estuary SPA	South Dublin Bay SAC
North Bull Island SPA	North Dublin Bay SAC

The NIS described the elements of the project with potential to give rise to effects on these European Sites (incl. their Conservation Objectives and QIs & SACs). It described any likely direct, indirect or secondary effects on the European Sites along with in-combination effects, and it assessed the significance of any effects. It identified the potential for direct and indirect effects on the European sites and their Conservation Objectives during the construction, operational and decommissioning phases. It concluded that the proposed development had the potential to adversely affect several QI and SCI habitats and species, and it outlined a range of mitigation measures (incl. water quality protection measures) and assessed the likelihood of residual effects following mitigation. It also assessed the potential for cumulative effects in-combination with other plans and projects in the area.

The NIS concluded that based on the assessment of the proposed development, alone or in-combination with other projects and plans, including the implementation of the mitigation measures, it can be concluded that no adverse effects on the integrity of any European sites will arise, in view of the site's conservation objectives. As such the Board is enabled to reach the same conclusion.

3.0 POLICY CONTEXT

3.1 European Policy

Large Combustion Plant Directive (2001/80/EC)

This Directive requires reductions in emissions of acidifying pollutants, particles and ozone precursors. The various emission limit values are based licence dates.

Renewable Energy Directive (2009/28/EC [REDI])

This Directive requires a commitment to produce energy from renewable sources and it set national binding targets on the share of renewable energy in energy consumption and in the transport sector to be met by 2020. It aimed to make renewable energy sources account for 20% of EU energy by 2020. Ireland had a national target of 16%. The government decided that 40% of electricity consumed in 2020 would be generated by renewables sources. Members States must submit National Renewable Energy Action Plans and Progress Plans to the EC.

Recast Renewable Energy Directive (Revision 2018/2001 [REDII])

This revision of REDI requires that the EU 2030 target for the share of renewable energy consumed in Member States should be at least 27%, and it established a binding target of at least 32% of renewable energy for the EU by 2030. Member states are required to establish their contribution to the achievement of that target as part of their integrated national energy and climate plans.

Energy Roadmap 2050

This 2011 Roadmap deals with the transition of the energy system in ways that would be compatible with the greenhouse gas reductions targets set out in REDI.

3.2 National Policy

Government White Paper – Ireland's Transition to a Low Carbon Energy Future 2015-2030

This document sets out a framework o guide lreland's energy policy development and actions up to 2030.

White Paper: Ireland's Transition to a Low Carbon Energy Future, 2015-2030

This document sets out a framework to guide policy and the actions intended to take in the energy sector up to 2030. It takes into account European and International climate change objectives and agreements, as well as Irish priorities.

Climate Action and Low Carbon Development Act, 2015 (as amended)

This document established a framework to develop the national transition towards a low carbon economy. It required the preparation of a national mitigation plan and a national adaptation framework along with compliance with existing obligations.

Climate Action Plan, 2021

This plan seeks to tackle climate breakdown and it commits Ireland to a legally binding target of net-zero greenhouse gas emissions by 2050, a emissions reduction of 51% and to meet up to 80% of electricity demand form renewables by 2030.

National Planning Framework, 2018-2040

This Plan sets out a high-level strategic plan for shaping future growth and development to 2040. It seeks to develop a region-focused strategy to manage growth and environmentally focused planning at a local level. It contains several National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs) related to transitioning to a low-carbon and climate resilient society (NSO8), promoting renewable energy use (NPO55), and improving air quality (NPO64).

National Development Plan, 2021-2030

This Plan underpins the National Planning Framework. It contains several priorities related to transitioning to a low-carbon and climate resilient society (NSO8) including investment in renewable energy infrastructure.

3.3 Regional Policy

Regional Spatial & Economic Strategy for the Eastern & Midlands 2019-31

The RSES supports the delivery of the programme for change set out in the National Planning Framework and the National Development Plan and it sets out a strategic vision and policy objectives for the Dublin Metropolitan Area (DMA). It seeks to promote quality infrastructure provision and capacity improvement in tandem with new development aligned with national projects and improvements in water and wastewater, sustainable energy, waste management and resource efficiency. It seeks to reduce emissions and support the transition to a low carbon region by 2050.

Metropolitan Area Strategic Plan

MASP provides a strategic plan and investment framework for Dublin metropolitan area which aligns with the outcomes of the RSES including its energy aims.

3.4 Local Policy

Dublin City Development Plan 2016 - 2022

Zoning objective:

Zone Z7: seeks to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation (site & environs).

Energy policies & objectives:

CC02: seeks to mitigate the impacts of climate change.

CC03: support the implementation of national renewable energy strategies & plans.

CC04: support the implementation of the Dublin City Sustainable Energy Action Plan.

CC09: seeks to encourage the production of energy from renewable sources including bioenergy, solar, wave/tidal, geothermal, wind, CHP and any other renewable sources, subject to normal planning considerations, including in particular, the potential impact on areas of environmental sensitivity including Natura 2000 sites

CCO14: support government targets for renewable energy.

Other policies & objectives:

SI24: monitor & improve air quality.

SI25: preserve & maintain air & noise quality in line with good practice & legislation.

SI28: have regard to the provisions of the Major Accidents Directive.

G122/3/4: deals with European sites & NHAs, and Protected flora, fauna & habitats.

Dublin City Council's Climate Change Action Plan 2019 - 2024

This Plan contains measures to improve energy efficiency & reduce emissions.

Dublin Port Masterplan 2040 (Reviewed 2018)

This non-statutory plan provides the framework for the sustainable development of the Port. It queries the continued use of the North Wall site by the ESB.

3.5 Other plans and policy documents

- Shaping out Electricity Future (EirGrid, 2021)
- Policy Statement on Security of Electricity Supply (DECC, 2021)
- Delivering a Secure, Sustainable Electricity System (EirGrid, DS3).
- ESB's Brighter Future Strategy.

3.6 Natural heritage designations

European sites	***Natural Heritage Areas***	***Other designations***
South Dublin Bay & River Tolka Estuary SPA North Bull Island SPA North Dublin Bay cSAC South Dublin Bay cSAC	North Dublin Bay pNHA South Dublin Bay pHNA North Bull Island pNHA Dolphins, Dublin Docks pNHA	Dublin Bay Biosphere Reserve N Bull Island Ramsar Site N Bull Island Nature Reserve N Bull Island Wildlife Sanctuary

4.0 PROJECT SUBMISSIONS

4.1 Prescribed Bodies

A total of 4 x submissions have been received from the following agencies:

- Inland Fisheries Ireland (IFI)
- Environmental Protection Agency (EPA)
- Health & Safety Authority (HSA)
- Transport Infrastructure Ireland (TII)

IFI:

- Project site is located within the catchments of the Rivers Liffey & Tolka which are both salmonoid systems & developments within the port area have significant potential to affect aquatic ecology.
- Several migratory fish species (incl. salmon, trout & lampreys) have to pass through these rivers to reach the sea and return to spawning grounds, as do large numbers of eels.
- All works will be completed in accordance with a C&DWM Plan.
- Ground & construction works have the potential to cause the release of sediments & pollutants into surrounding waters which could affect flora & fauna, sediment patterns on the shore & seabed with resultant adverse impact on habitats (incl. fish feeding, nursery & spawning).
- The potentially highly polluting nature of the historic oil plume within the site highlights the need for comprehensive management measures to protect ground & surface waterbodies.
- Use of concrete & cement should be strictly controlled & monitored.
- SUDS should not give rise to a deterioration of water quality or habitat.
- Comprehensive & integrated measures required to protect marine & fresh waters during construction/operation (attenuation ponds, petrol & oil interceptors, and hydro-brake controls) which should be maintained.
- Comply with IFI “Guidelines on protection of fisheries during construction works in and adjacent to waters.”

- Consult with IFI in relation to all matters concerning fisheries & surface water quality, including regular communications from the ECofW & receipt of ground & surface water monitoring data.
- Appropriate environmental protection measures are the responsibility of the developer & contractor, and all woks should comply with relevant legislation, and ongoing aquatic ecological monitoring is required.

EPA:

- The existing facility is licenced under an EI Licence (Reg. No. P0579-03) dated 26th October 2012 & amended on 18th December 2015.
- The activity requires a licence because it falls within para. 2.1 of the First Schedule of the EPA Act (as amended) for the "Combustion of fuels in installations with a total rated thermal input of 50MW or more."
- The IE Licence will require a review to accommodate the proposed changes, and no application has yet been received.
- An EIA & AA are required as the thermal output is greater than the 300MW threshold (EIA Directive, Annex 1 and Schedule 5 Part 1 of the P&D Regs), and the project site is proximate to European sites.
- Likely that the EIA & AA will have to be considered by the EPA as part of any review of the IE licence, along with associated consultations.
- All matters to do with emissions to the environment from the proposed activities will be assessed by the EPA.
- EIAR should adequately address the potential impacts of emissions to air and the potential for cumulative effects.
- NIS should adequately assess whether any parts will adversely affect the integrity of European sites & describe mitigation measures.

HSA: No concerns raised as the proposed development will not constitute a new COMAH establishment.

TII: No concerns raised.

All observations have been circulated to the applicant.

4.2 Public submissions:

No observations have been received from members of the public.

4.3 Applicants response to submissions

No response requested.

4.4 EPA IE Licence consultations

The EPA response did not raise any new issues over and above those previously raised in its original submission as a prescribed Body which is summarised in section 4.1 above, and it confirmed that it has not yet received an application for a review of the IE Licence.

5.0 ENVIRONMENTAL IMPACT ASSESSMENT

5.1 Introduction

This section of the report deals with the potential environmental impacts of the proposed development during the construction, operational and decommissioning phases. An EIA is required for the proposed development as the thermal output is greater than the 300MW threshold (EIA Directive, Annex 1 and Schedule 5 Part 1 of the P&D Regs).

This section should be read in conjunction with Section 6.0 (Appropriate Assessment).

5.2 Compliance legislative requirements

Directive 2011/92/EU was amended by Directive 2014/52/EU. The applicant has submitted an Environmental Impact Assessment Report (EIAR) which is presented in a 'grouped format' comprising the following:

- Non-Technical Summary
- Main Statement
- Technical Appendices

It is submitted by the applicant that the EIAR has also been prepared in accordance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 that came into effect on 1st September 2018, and which the Board will be aware, transposed Directive 2014/52/EU into Irish planning law. As is required under Article 3(1) of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU, the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets,

cultural heritage and the landscape and it equally considers the interaction between the factors referred to in points (a) to (d).

I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with the requirements of Directive 2011/92/EU as amended by Directive 2014/52/EU.

I am satisfied that the information contained in the EIAR complies with article 94 of the Planning and Development Regulations 2000, as amended, and the provisions of Article 5 of the EIA Directive 2014.

I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application. A summary of the results of the submissions made by the prescribed bodies along with the applicant's response to same has been set out in Section 4.0 of this report.

The EIAR describes the proposed development, including information on the site, the existing operational energy facility and the proposed temporary emergency generators. A description of the main alternatives studied by the applicant and alternative locations considered, is provided and the reasons for the preferred choice. The impact of the proposed development was assessed under all the relevant headings with respect to population and human health; noise, air and climate; biodiversity; landscape; land, geology and soils; hydrology and hydrogeology; roads and traffic; material assets and cultural heritage; interactions of impacts; and the suggested mitigation measures are set out at the end of most chapters.

The content and scope of the EIAR is in compliance with Planning Regulations. No likely significant adverse impacts were identified in the EIAR following mitigation.

5.3 Consideration of Reasonable Alternatives

The consideration of reasonable alternatives was considered in Section 2.3 of the EIAR. The proposed development would comprise the installation of 6 x temporary emergency electricity generators at an existing operational energy facility. The Alternatives considered related to Alternative Locations, Alternative Processes, and the Do-Nothing Alternative. It concluded that the proposed installation of the generators at the existing facility would be the most sustainable option compared with the alternatives, given the emergency situation and time constraints involved.

5.4 Likely Significant Effects

The EIA identifies and summarises the likely significant effects of the proposed development on the environment with respect to several key receptors in the receiving environment. It identifies the main mitigation measures and any residual impacts following the implementation of these measures together with any conditions recommended in section 6.0 of this report (Appropriate Assessment), and it reaches a conclusion with respect to each of the receptors. It assesses cumulative impacts, identifies interactions between the receptors, and considers the risks associated with major accidents and/or disasters. The EIA reaches a Reasoned Conclusion.

For ease of reference the EIA is presented in a tabular format with respect to:

- Population and Human Health
- Air and Climate
- Landscape
- Biodiversity
- Land soil and water
- Material assets
- Cultural heritage

5.5 Population and human health

5.5.1 Project description

The proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing c.3ha site which operates under an existing EPA Industrial Emissions Licence, which may be reviewed and/or amended. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas modular turbine generators with 11m high stacks and exhaust silencers, control house and power control modules, natural gas compressors, and a water storage tank, along with a revised internal road layout. Some of the existing structures would be demolished. The proposed works (incl. site preparation & construction) would take approximately 15-months to complete, and it is anticipated that the system would be up and running by mid to late 2023.

5.5.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a series of existing buildings, structures, substations and underground gas storage facilities related to the generation and supply of electricity to the national grid. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses. There are several long-established residential areas located to the far N, E and S of the site at Clontarf, East Wall and Poolbeg/Ringsend, and the main vehicular access to the area is via the Dublin Port Tunnel and along East Wall Road (R131).

5.5.3 Applicant's submission

EIAR sections 6, 7, 8, 13 and 14 and associated Technical Appendices dealt with: - population and human health; noise and vibration; air and climate; roads and traffic; and the landscape. The EIAR described the receiving environment and existing electricity generating facility. It identified potential impacts on human beings, human health, air quality, employment, local amenities and health and safety. The EIAR did not predict any significant adverse impacts on human beings, population or human

health during the construction and operational phases subject to the implementation of mitigation measures related to the management of construction works and the operational facility.

5.5.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains a plethora of polices for the protection of residential and visual amenity, human health and air quality, along with traffic management.

5.5.5 Assessment

The Prescribed Bodies did not raise any concerns in relation to population and human health in their written submissions. There is potential for the following impacts on human beings during the construction, operational and decommissioning phases of the proposed temporary development associated with an increase in airborne emissions from the construction works and the operation of the facility, along with construction related noise, dust and traffic movements, and possible visual intrusion.

Air quality:

There is potential for adverse impacts on air quality during all phases of the proposed development. These would be associated with an increase in airborne emissions from the construction works, the operation of the gas burning facility, and its subsequent decommissioning, on the surrounding residential areas to the far N, E and S of the site, and along the main construction vehicle delivery route.

Any potential negative ***construction phase*** emission impacts (incl. dust & particulate matter) would be mitigated by adherence to the measures contained in the CEMP, including the implementation of best construction practices. The combined site preparation and construction works are predicted to take approximately 15 months to complete so any adverse impacts would be temporary and of a short duration. Furthermore, the proposed development would be located

within an existing and extensive long established industrial complex which is at a far remove from any residential areas, and any construction phase dust would normally dissipate up to c.50m from source. The larger modular elements would be delivered by ship via Dublin Port. Any negative traffic emission impacts associated with the delivery of construction materials and removal of demolition and associated waste from the site would be mitigated by the distribution of traffic away from the more densely populated central area of the city and routing traffic via Dublin Port Tunnel, which would in turn improve safety and reduce NO_x and NO_2 emissions in built up areas.

Any potential negative ***operational phase*** emission impacts arising from the combustion of natural gas would be managed and monitored by the EPA Industrial Emissions Licence (as reviewed and/or amended) and mitigated by adherence to the measures contained in the EIAR/CEMP. It is noted that stack emissions from temporary gas turbines for temporary use that operate less than 500 hours per year are not covered by the emission limits set out in the Industrial Emissions Directive (IED), and that such plants are required to record the used operating hours. However, the EIAR states that emissions will nonetheless meet IED requirements for NO_x and NO_2. Refer to section 5.6 of this report for a detailed analysis of climate impacts (inc. GHG). The EIAR states that emissions will remain below the limits set in the EPA IE Licence after the proposed temporary generating facility with no exceedance of air quality standards or adverse impacts on local air quality anticipated. The existing energy generating facility operates within the IE Licence limit values for all metrics including the worst-case scenario (incl. NO_x, NO_2, CO & SF_6) as described the air quality assessments contained in Chapter 8 of the EIAR. The modelling exercises concluded that an exceedance of air quality objectives and standards as a result of the proposed development would not occur, either on its own or in-combination with other projects in the surrounding area (incl. the permitted Poolbeg & Ringsend Flexigen OCGTs & the Poolbeg Power Station auxiliary boiler).

Potential adverse emissions impacts during the ***decommissioning phase*** would be similar to or less than during the construction phase as would be no delivery of construction materials to the site.

***Noise & vibration*:**

There is limited potential for minor disturbance during the ***construction, operational and decommissioning phases***. However, having regard to the industrial location within an extensive port complex, and the separation distances with the nearest residential properties to the N, E and S (c.760m), I am satisfied that the proposed temporary emergency generators would not have any significant short terms effects during either phase. Noise emissions will not significantly exceed the prevailing ambient noise levels within the industrial area or at the nearest sensitive receptors, including the neighbouring office building to the N (Lagan Bitumen), and there would be no significant additional noise during the operational phase.

Traffic:

There would be potential for minor localised impacts on air quality, road safety and residential amenity during the ***construction phase*** and along the haul route related to disturbance from the additional construction vehicles that would deliver materials to and remove demolition and associated waste from the site during the estimated 15 x month construction phase. Refer to section 5.10 of this report for a detailed analysis of movement and traffic impacts. Given the industrial location of the proposed development within an extensive Tier 1 National Port complex which already accommodates high volumes of HGVs on a regular daily basis, it is unlikely that emissions from construction phase traffic would have a significant adverse effect on air quality. The national, regional and local road network has sufficient capacity to assimilate the additional traffic volumes associated with the increase in construction phase HGVs subject to compliance with the EIAR/CEMP mitigation measures related to traffic management. Any temporary short duration negative traffic impacts would be mitigated by the distribution of traffic away from the more densely populated central area and routing construction vehicles via Dublin Port Tunnel, which would in turn improve safety and reduce NO_x and NO_2 emissions in built up areas. There would be no discernible traffic related emission impacts during the ***operational phase.*** Potential adverse impacts during the ***decommissioning phase*** would be less than during the construction phase as would be no delivery of construction materials to the site.

Health & safety:

There is potential for adverse impacts on health and safety from on-site accidents during all phases of the development and from road traffic accidents. On-site accident concerns are and would continue to be addressed by way of compliance with all relevant health and safety legislation.

Residential amenity:

There are several residential areas located to N, E and S of the site (incl. Clontarf, East Wall & Poolbeg/Ringsend). Given that the proposed development would be located entirely within an existing and long-established industrial area within Dublin Port and having regard to the substantial separation distances to the nearest sensitive residential receptor (c.750m), there would be no adverse impacts on any residential areas in terms of overlooking, overshadowing, loss of privacy or visual intrusion during any phase of the project. Issues related to air quality, traffic safety and the landscape, along with any resultant impacts on residential amenity are addressed other sections of this report.

5.5.6 Conclusions

Residual Effects: There will be some increase in airborne emissions from the chimney stacks during the temporary operational phase, however predicted emission levels are within guidance limit values and will be subject to compliance with the EPA IE Licence (as reviewed and/or amended). Residual impacts are not predicted to be significant subject to the implementation of mitigation measures.

Cumulative Impacts: Minor impacts may occur in-combination with existing plans and projects within the industrial port location, but none are predicted to be significant.

Conclusion: No submissions were made in relation to population human health. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application, and that no significant adverse effect is likely to arise.

5.6 Air and climate

5.6.1 Project description

The proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing c.3ha site which operates under an existing EPA Industrial Emissions Licence, which may be reviewed and/or amended. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas modular turbine generators, each with 11m high stacks and exhaust silencers, and associated structures including natural gas compressors and a revised internal road layout. The proposed works would take approximately 15-month to complete. It is anticipated that the operational system would be up and running by mid to late 2023 for a stated period of 5 years as and when needed, but for no more than 500 hours per year. The proposed generators would be connected to the existing underground gas storage facility within the site. There would be an increase in vehicular traffic and associated emissions during the construction phase with no discernible increase during the operational phase.

5.6.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a series of existing buildings, structures, substation, and underground gas storage facilities related to the generation and supply of electricity to the national grid. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses. There are several long-established residential areas located to the far N, E and S of the site at Clontarf, East Wall and Poolbeg/Ringsend. The main vehicular access to the area is via the Dublin Port Tunnel and along East Wall Road (R131). Several of the Dublin Bay European and Nationally designated sites are located nearby.

5.6.3 Applicant's submission

EIAR sections 6, 8, 11 and 13 and associated Technical Appendices dealt with: - human health; air and climate; biodiversity; and traffic movements. The EIAR described the receiving environment, and the existing and proposed electricity generating facilities. It identified potential impacts on human beings, air quality, climate and biodiversity. The EIAR did not predict any significant adverse impacts on air quality during the construction and operational phases subject to the implementation of construction phase mitigation measures and compliance with the EPA IE Licence operational requirements. It noted that there would be a temporary increase in greenhouse gas emissions during the operational phase, which would result in a short term, significant, adverse impact on climate. However, given the temporary and emergency nature of the project, the EIAR concluded that the overall impacts would not be significant.

5.6.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains several policies related to the protection of air quality and reduction in greenhouse gas, and for the transition to sustainable forms of renewable energy generation. The Plan also contains a plethora of polices for the protection of residential and visual amenity, human health and air quality, along with traffic management. Policy SI24 seeks to monitor and improve air quality in accordance with national and EU policy directives on air quality and, where appropriate, promote compliance with established targets.

5.6.5 Assessment

The EPA raised some concerns about in relation to increased emissions which will fall with its licencing remit. The remaining Prescribed Bodies did not raise any concerns in relation to air and climate in their written submissions. There is potential for adverse impacts on air and climate during the construction, operational and decommissioning phases of the proposed development associated with an increase

in airborne emissions from the construction works and the operation of the facility, along with construction related traffic movements.

Air quality:

Refer to section 5.5 above and section 5.8 below for a more detailed assessment of the potential adverse impacts on air quality relative to human beings and biodiversity during the construction, operational and decommissioning phases (incl. dust, particulate matter, traffic & operational airborne emissions). Any potential negative ***construction*** and ***decommissioning phase*** emission impacts arising from the physical works (incl. demolition, excavation & construction), and related transport movements would be mitigated by adherence to the measures contained in the EIAR/CEMP. Any potential negative ***operational phase*** airborne emission impacts on air quality arising from the combustion of natural gas would be managed and monitored by the EPA Industrial Emissions Licence (as reviewed and/or amended), and the mitigation measures inherent in the design of the proposed facility.

Climate:

The proposed development has the potential to have a significant adverse impact on the achievement of EU and National climate change and carbon emission reduction targets, mainly during the ***operational phase***. The main source of operational greenhouse gas (GHG) emissions from the proposed energy facility would be from the combustion of natural gas and consequent release of Carbon dioxide (CO_2) into the atmosphere, followed to a lesser extent by potential leakages of Sulphur hexafluoride (SF_6) from the Gas Insulated Switchgear in the substation. Total CO_2 emissions have not been calculated for the proposed development as it comprises an emergency generation plant that would not operate for a consistent number of hours per year. It is nonetheless estimated that a maximum of 58,000tCO_2 would be emitted each year under the worst-case scenario of all 6 x turbines operating at peak for the maximum permitted 500 hours per year. However, it is intended that the facility would only be used during emergency situations in order to provide security of supply and avoid power outages, pending the future connection of several renewable energy generating facilities to the national grid, along with the reconnection of existing recommissioned facilities that have undergone repair and upgrade works.

I note that the Institute of Environmental Management and Assessment (IEAM) guidance on assessing GHG emissions advises that all GHG emissions should be considered significant, regardless of the scale of the emissions. Given that the operational facility will result in additional CO_2 emissions to the atmosphere, the impact of the proposed development on climate would be significant and adverse, with resultant knock-on effects for EU and National climate change and carbon emission reduction targets.

Notwithstanding this concern, and having regard to: -

- the EIAR assertion that "calculating the net impact of the proposed plant on system-wide GHG emissions is inherently complex, impossible to predict with any confidence and well beyond the scope of this assessment",
- the overall justification and need for the emergency facility which would provide backup electricity generation to the national grid in order to avoid power outages,
- combined with the temporary short term nature of the facility which would not operate for more than 500 hours per year over a stated 5-year period, as and when needed,

I am satisfied, on balance, that any adverse impacts on climate would be temporary, localised and short term, but not significant when considered as part of the evolving energy supply network which is transitioning towards a greater reliance on renewables, in line with EU, National and Regional policy.

SEVESO:

The site is no longer identified as SEVESO.

Conclusion

Having regard to the foregoing and based on my assessment of the site and surrounding area, I am satisfied that the proposed development would not have an adverse impact on air quality and climate, subject to the implementation of the EIAR mitigation measures and compliance with the terms and conditions of the EPA Industrial Emissions Licence (as reviewed and/or amended). The proposed development would not give rise to any significant adverse local or cumulative impacts in-combination with other developments in the surrounding and wider area.

5.6.6 Conclusions

Residual Effects: There will be some increase in airborne emissions from the chimney stacks during the temporary operational phase, however predicted emission levels from the stacks are expected to be within guidance limit values and will be subject to compliance with the EPA IE Licence (as reviewed and/or amended). Residual impacts are not predicted to be significant subject to the implementation of the EIAR mitigation measures and having regard to the temporary emergency nature of the proposed facility which would operate for no more than 500 hours per year, as and when required, over a stated 5-year period.

Cumulative Impacts: Minor impacts may occur in-combination with existing plans and projects in the industrial and port location, and with the future development of the adjacent Port estate, but none predicted to be significant.

Conclusion: I have considered all the written submissions made in relation to air and climate, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.7 Landscape and Visual Amenity

5.7.1 Project description

The proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing c.3ha site. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas modular turbine generators with 11m high stacks and exhaust silencers, control house and power control modules, natural gas compressors, and a water storage tank, along with a revised internal road layout. Some of the existing structures would be demolished. It is anticipated that the works would take c.15 months to complete, and that the system would be up and running by mid to late 2023. The project components would remain in-situ for a period of 5 years.

5.7.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a range of existing buildings and structures of various heights, along with 2 x c.11m chimney stacks. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses, including structures that are as high or higher than the existing and proposed chimney stacks. There are several long-established residential areas located to the far N, E and S of the site at Clontarf, East Wall and Ringsend/Poolbeg. Two scenic coastal routes extend NE and SE along Clontarf Road and Sandymount, the Bull Wall and Wooden Bridge are located to the E, Poolbeg Boat Club is located directly opposite the site to the S, and the East Link Bridge and Sir John Rogerson Quay are located to the W and SW respectively.

5.7.3 Applicant's submission

EIAR section 14, desktop studies and associated technical appendices which include a Landscape and Visual Impact Assessment (LVIA) and Photomontages assessed the potential impacts on the landscape and visual amenity. The EIAR described baseline conditions (incl. the existing operational energy facility &

industrial environs), noted the absence of any sensitive designations, and described the scale, height and extent of the proposed development. It assessed potential impacts on views from several locations in the wider area (incl. Clontarf Road, East Wall Road, Eastlink Bridge, Sir John Rogerson's Quay & Pidgeon House Road). It concluded that the facility would not be visible from all but one of these locations (Pidgeon House Road/Poolbeg Boat Club). It did not predict any significant adverse impacts on landscape or views, having regard to the location of the facility within an existing industrial area.

5.7.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains policies for the protection of the landscape, views and visual amenity. The site and environs are not covered by any sensitive landscape designations, and there are no Protected Views or Prospects towards or from the site.

5.7.5 Assessment

The Prescribed Bodies did not raise any concerns in relation to the landscape to visual amenity in their written submissions. There is no potential for visual impacts on the landscape during the ***construction and decommissioning*** phases. There is very limited potential for visual impacts during the temporary ***operational phase*** having regard to the scale and height of the proposed components (incl. the 6 x c11m high chimney stacks), and the location of the facility within an existing industrial area within the extensive Dublin Port complex, which is characterised by a range of existing structures of varying heights and designs. Although the proposed development would be visible from the public domain along Clontarf Road and the Bull Wall and Wooden Bridge to the N and E, and from along Pidgeon House Road, Dublin Port and Poolbeg Boat Club to the S, the visual impact on the industrial landscape and views towards Dublin Port would not be significant. No adverse impacts are anticipated, and any minor visual intrusions would be temporary and of a short-term duration given the stated 5 -year lifespan of the facility.

5.7.6 Conclusions

Residual Effects: None predicted.

Cumulative Impacts: None predicted.

Conclusion: No submissions were made in relation to landscape and visual amenity. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.8 Biodiversity

5.8.1 Project description

As previously stated, the proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing site within is located within a long-established industrial area. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas turbine generators and associated structures along with a revised internal road layout. The proposed works (incl. site preparation, excavation, demolition & construction) would take approximately 15-month to complete. It is anticipated that the system would be up and running by mid to late 2023 for a stated period of 5 years as and when needed, but for no more than 500 hours per year. The proposed facility would be connected to the existing surface drainage arrangements which discharge to the River Liffey and Tolka Estuary and are monitored by the existing EPA IE Licence.

5.8.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a range of existing buildings and structures. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses. There are several sensitive ecological sites in the surrounding area which include the Dublin Bay European and National sites that are designated for a range of estuarine and coastal habitats, and a wide variety of species (incl. resident, wintering & migratory water birds). The River Liffey and River Tolka are frequented by several species of migratory fish, and some of the existing buildings within the site may contain suitable resting and/or roosting habitat for bats.

5.8.3 Applicant's submission

EIAR sections 8, 9, 10 and 11, and associated Technical Appendices dealt with: - air, climate, land, soil, water and biodiversity. The EIAR described the receiving environment and the existing operational and proposed energy generating facilities. It referenced several desk top studies and field surveys that were undertaken (incl. air quality and dispersal modelling from the chimney stacks, water quality monitoring

at the outfalls, and a plethora of ecological & bird surveys). It noted the proximity of the site to several Dublin Bay European and National sites and the possible presence of protected species in the vicinity (incl. birds, bats & fish), and an AA Screening report and NIS were prepared. The EIAR did not predict any significant adverse impacts on biodiversity during any of the phases, subject to the implementation of construction phase mitigation measures (incl. adherence to the CEMP & CDWMP), and operational phase mitigation measures related to the ongoing management of the facility, monitoring of emissions to air and water, and compliance with EPA IE licence emissions limits (as reviewed and/or amended).

5.8.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains a plethora of policies for the preservation, protection and enhancement of natural heritage and biodiversity. The industrially located site and its immediate environs are not covered by any sensitive natural heritage designations. There are several important European and nationally designated sites in the surrounding area which the Plan seeks to protect, along with suitable habitat for several species of animal.

5.8.5 Assessment

Inland Fisheries Ireland raised concerns in relation to the biodiversity in their written submission with respect to water quality and potential impacts on aquatic ecology and fisheries. The remaining Prescribed Bodies did not raise any concerns in relation to biodiversity. There is potential for adverse impacts on biodiversity during the construction, operational and decommissioning phases as a result of the proposed demolition, excavation and construction works, amended surface water drainage arrangements, additional construction phase traffic movements, and additional airborne emissions. The existing facility is located on made-ground within an established industrial area, it is surrounded by industrial, commercial and port related uses. It is located to the N of the River Liffey and there are several Dublin Bay European sites in the wider area to the N, E and SE. The site and immediate environs do not contain any sensitive or protected habitats, however some of the

existing buildings may contain suitable habitat for resting and/or roosting bats, and the River Liffey and River Tolka are frequented by several species of migratory fish (incl. Salmon & Lampreys).

European and national sites:

Refer to Section 6.0 of this report (AA) which concluded that there would be no loss, disturbance or damage to any European sites and their constituent QI/SCI habitats or species. Refer to the following sections of this report for an assessment of potential impacts on p/NHA constituent habitats and species.

Habitats and flora:

No rare or protected plant species or habitats, or scheduled invasive species were identified within the site or environs. There is very limited potential during the ***construction phase*** for significant adverse impacts on estuarine, coastal or other habitats and flora in the surrounding area, having regard to the long-established industrial location, the nature and small scale of the proposed construction related works, and the separation distances. This would be subject to the implementation of EIAR/CEMP construction phase mitigation measures (incl. measures to prevent the release of sediments & historic contaminations into waterbodies, and measures manage dust and protect air quality). No significant adverse impacts on habitats and flora are anticipated during the ***operational phase***, having regard to the temporary and stated short-term 5-year duration of the facility, and compliance with EPA IE Licence emissions limits (as amended and/or reviewed) for water and air. There would be no significant adverse impacts during the ***decommissioning phase*** subject to the implementation of a similar range of construction phase mitigation measures for the safe removal of equipment.

Birds:

There is potential for minor localised temporary disturbance to several species of bird during the ***construction phase*** resulting from an increase in construction traffic movements, noise and dust emissions, and from increased airborne emissions during the ***operational phase*** as a result of the proposed increase in energy generation. Several species of bird frequent the surrounding area including the

nearby sections of the River Tolka Estuary and South Dublin Bay SPA to the N and E (incl. Light bellied brent goose & other species) and the manmade structures within the River Liffey to the N and S (Terns), and Dublin Bay provides an extensive range of habitats for a wide variety of water birds (wintering & resident). On-going surveys indicate that the existing operational energy generation facility (and other industrial and port related uses) have not adversely affected water bird populations in the area.

The existing energy facility operates well within its EPA IE emissions level limits, and the EIAR air quality assessments (incl. dispersion modelling) do not predict any exceedance of air quality standards during the operational phase. I also note the prevailing meteorological conditions, which are referenced in the EIAR, and in particular the coastal wind speeds and direction that prevail in the vicinity of the chimney stacks which would further assist in the dispersal of airborne emissions. There would be no significant adverse impacts during the ***decommissioning phase***.

Bats:

There is potential for minor localised temporary disturbance to bats during the ***construction phase***, resulting from the demolition of buildings and general construction disturbance (incl. noise, dust & lighting). According to the results of the field surveys which are contained in EIAR Appendix 11.1, no active bat roosts were identified within the buildings surveyed, and none of the structures were assessed as being suitable for bat roosts. Having regard to the highly industrialised character of the site and environs, which is also well lit by artificial lighting, it is unlikely that bats frequent the site. There would be no significant adverse impacts on bats during the ***construction, operational or decommissioning phases***.

Fisheries:

There is potential for minor localised temporary disturbance to several species of migratory fish (incl. Lampreys & Atlantic salmon) during the ***construction phase***, resulting from the unmitigated release of historic sediments and contaminants along with accidental spills or leakage of hydrocarbons into ground and surface waters. The increase in construction vehicle movements could also result in accidental fuel spills and leakages.

The proposed demolition and construction works would involve shallow excavations to a depth of c.800mm below existing ground level, however some of the foundations for the gas turbine generators will be adjacent to or above the historic oil plume. The excavation works would be subject to a series of site-specific risk assessments, method statements and environmental oversight in line with current guidance, and the subsequent removal of demolition and excavation waste would be managed by a Construction and Demolition Waste management Plan (CDWMP) in accordance with the Waste Management Act and associated Regulations. Potentially contaminating construction materials (incl. fuel, oil & concreate) would be stored in bunded areas and spill kits will be available in the event of an accident.

The existing and amended surface water management arrangements would adequately deal with any additional risks, there would be no significant change to the composition of water emissions as a result of the proposed development which would be of a temporary short-term duration, and recent tests at the water outfalls did not detect the significant presence of any toxic substances in the discharged water. I also note the high degree of tidal mixing that occurs in the vicinity of the outfalls which would further assist in the dispersal of the discharges. There would be no significant adverse impacts on water quality, aquatic ecology or fisheries subject to compliance with the relevant legislation and IFI guidance, the terms and conditions of the EPA IE Licence (as reviewed and/or amended), and the implementation of the EIAR/CEMP mitigation measures (incl. site-specific risk assessments for excavations in the vicinity of the historic oil plume).

There would be no significant adverse impacts during the ***operational phase,*** nor during the ***decommissioning phase*** subject to the implementation of a similar range of measures for the safe removal of equipment.

Marine mammals:

There is potential for minor localised temporary disturbance during the ***construction phase*** to several species of marine mammal that frequent Dublin Bay (incl. Harbour porpoise and Grey & Harbour seals), as result of construction noise and any deterioration in water quality with resultant impacts on prey species (fisheries). However, according to the results of the desktop surveys, no marine mammal activity

was identified within the surrounding area. Having regard to the absence of in-stream/marine works, the separation distances to the closest recorded sightings of marine mammals within the Bay area, and the nature of the works which would comprise relatively shallow piles, the proposed works would not have any significant adverse impacts on marine mammals. There would be no significant adverse impacts during the ***operational or decommissioning phases***.

Conclusion:

Having regard to the nature and scale of the proposed temporary emergency energy development, the operation of the existing facility within its EPA IE Licence limits, the existing measures to protect water quality at the two outfalls to the River Liffey and Tolka Estuary, I am satisfied that the proposed development would not have an adverse impact on ecology or biodiversity (incl. estuarine & coastal habitats and species, waterbirds, bats & fisheries), subject compliance with relevant legislation and guidance, implementation of the EIAR/CEMP/CDWMP mitigation measures, and adherence to the terms and conditions of the EPA IE Licence (as reviewed and/or amended). The proposed development would not give rise to any additional significant adverse local or cumulative impacts in-combination with other developments in the surrounding industrial port area on ecology and biodiversity.

5.8.6 Conclusions

Residual Effects: None predicted.

Cumulative Impacts: None predicted.

Conclusion: I have considered all the written submissions made in relation to biodiversity, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.9 Land, Soil & Water

5.9.1 Project description

As previously stated, the proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing site within is located within a long-established industrial area. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas turbine generators and associated structures along with a revised internal road layout. The proposed works (incl. site preparation, excavations & construction) would take approximately 15-month to complete. It is anticipated that the system would be up and running by mid to late 2023 for a stated period of 5 years as and when needed, but for no more than 500 hours per year. The proposed facility would be connected to the existing surface drainage arrangements which discharge to the Tolka Estuary and are monitored by the existing EPA IE Licence.

5.9.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a series of existing buildings and structures, and it is surrounded on all sides by a mix of industrial, commercial and port related uses. The underlying ***bedrock*** comprises Calp limestone, there are no Geological Heritage sites in the vicinity or identified Geohazards, and the site is located within a Low Radon Area. In relation to ***soils***, the existing energy facility is built on reclaimed permeable estuarine sands and gravels comprising excavated sediments from the estuary or seabed, and the total thickness of the overburden beneath the site is in excess of 20m. In relation to ***groundwater***, the underlying bedrock aquifer is classified as a locally important aquifer (bedrock which is moderately productive only in local zones), and there are no Source Protection Zones or groundwater abstraction wells within 1km. The shallow groundwater within the reworked estuarine deposits is brackish. Deeper groundwater associated with the limestone bedrock may be hydraulically connected to the estuary, influenced by tidal fluctuations and is likely to be brackish and/or saline. Given the long established industrial and port related uses in the area, it is possible that groundwater is contaminated. In relation to ***surface waters***, the site is

located within the Liffey and Dublin Bay catchment, the WFD River Sub-catchment Tolka, and the WFD River Sub Basin Tolka, and there are no natural surface water bodies within the industrial site. The site is drained by an existing surface water drainage network that discharges to the Tolka Estuary via two locations. Outfall SW3 drains N to the existing Dublin Port surface water drainage network on Alexandra Road and Outfall SW4 drains S to the River Liffey.

5.9.3 Applicant's submission

EIAR sections 9 and 10 and associated Technical Appendices dealt with: - land, soils and water (incl. surface water). The EIAR described the receiving environment and existing operational energy facility which is operating within the terms and conditions of its EPA IE Licence. It referenced several desk top studies including the 2014 Remedial Action Plan for the historic subsurface/shallow groundwater oil plume, along with the quarterly ground water monitoring reports and weekly water quality monitoring tests at the two outfalls (SW3 & SW4) to the River Liffey. The WFD status for the Dublin groundwater body is classified as Good and "Not At Risk" whist the River Liffey is deemed to be "At Risk" by the EPA further downstream of the outfalls. It described the proposed temporary emergency generating facility and identified potential impacts on land, soil and water. It did not predict any significant adverse impacts during the construction, operational or decommissioning phases subject to the implementation of EIAR/CEMP mitigation measures and compliance with the EPA IE Licence requirements for the facility (as reviewed and/or amended). It noted the need for site specific excavation works to avoid disturbance to the historic oil plume within the compound.

5.9.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains several policies and objectives for the protection of soils, geology and ground and surface waters.

5.9.5 Assessment

Inland Fisheries Ireland raised concerns in their written submission in relation to potential adverse impacts on water quality and aquatic ecology in the River Liffey and River Tolka. Refer to section 5.8 above for a more detailed assessment of biodiversity impacts. The remaining Prescribed Bodies did not raise any concerns in relation to land, soil or water. There is potential for adverse impacts on land, soil and water during the construction, operational and decommissioning phases as a result of the proposed demolition, excavation and construction works, and the operational phase discharges to nearby watercourses, and any potential disturbance to the historic subsurface oil plume. The existing facility is located on made-ground within an established industrial area and it is surrounded by industrial, commercial and port related uses, however there are several sensitive ecological sites in the wider area.

Land and soil:

The proposed demolition and construction works would involve shallow excavations to a depth of c.800mm below existing ground level, however some of the foundations for the gas turbine generators will be adjacent to or above the historic oil plume. During the ***construction phase***, there is potential for the release of historic sediments and contaminants along with accidental spills or leakage of hydrocarbons. The excavation works would be subject to a series of site-specific risk assessments, method statements and environmental oversight in line with current guidance, and the subsequent removal of demolition and excavation waste would be managed by a Construction and Demolition Waste management Plan (CDWMP) in accordance with the Waste Management Act and associated Regulations. Potentially contaminating construction materials (incl. fuel, oil & concreate) would be stored in bunded areas and spill kits will be available in the event of an accident. There would be no significant adverse impacts on land and soil subject to compliance with the relevant legislation and implementation of EIAR/CEMP/CDWMP mitigation measures, including the site-specific risk assessments for excavation in the vicinity of the historic oil plume. There would be no significant adverse impacts during the ***operational phase,*** nor during the ***decommissioning phase*** subject to the implementation of a similar range of mitigation measures for the safe removal of equipment.

Water quality:

As previously stated, the proposed demolition and construction works would involve shallow excavations to a depth of c.800mm below existing ground level, however some of the foundations for the gas turbine generators will be adjacent to or above the historic oil plume. During the ***construction phase***, there is potential for the release of historic sediments and contaminants along with accidental spills or leakage of hydrocarbons into ground and surface waters. The increase in construction phase vehicle movements could also result in accidental fuel spills and leakages. The existing surface water management arrangements would adequately deal with any additional risks, there would be no significant change to water emissions as a result of the proposed development which would be of a temporary short-term duration, and recent tests at the water outfalls did not detect the significant presence of any toxic substances in the discharged water. There would be no significant adverse impacts on water quality or WFD status subject to compliance with the relevant legislation, the terms and condition of the EPA IE Licence (as reviewed and/or amended), and the implementation of the EIAR/CEMP mitigation measures. There would be no significant adverse impacts during the ***operational phase,*** nor during the ***decommissioning phase***.

Drainage and flood risk

The proposed grounds works and minor alterations to the drainage arrangements would not have any significant adverse impacts on drainage or flood risk, having regard to the tidal location of the site within the existing industrialised Port Estate.

5.9.6 Conclusions

Residual Effects: None predicted.

Cumulative Impacts: None predicted.

Conclusion: I have considered all the written submissions made in relation to land, soil and water, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.10 Material Assets

5.10.1 Project description

As previously stated, the proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing c.3ha site. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas turbine generators which would be connected to the existing underground natural gas storage facility within the site, and a water storage tank (1250m_3), along with associated structures and a revised internal road layout. The proposed works (incl. site preparation & construction) would take approximately 15-month to complete. It is anticipated that the system would be up and running by mid to late 2023 for a stated period of 5 years as and when needed, but for no more than 500 hours per year. The construction phase would give rise to additional traffic movements, with no discernible change during the operational phase. The proposed facility would be connected to the existing water supply, and the amended surface drainage arrangements which discharge to the Tolka Estuary and are monitored by the existing EPA IE Licence.

5.10.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a series of existing buildings, structures and underground gas storage facilities related to the generation and supply of electricity to the national grid. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses. The main vehicular access to the area is via the Dublin Port Tunnel, along East Wall Road (R131) and then Alexandra Road. The site is connected to an existing public water supply and drained by an existing surface water drainage network.

5.10.3 Applicant's submission

EIAR sections 10, 13 and 15 associated Technical Appendices dealt with water supply and drainage, roads and traffic, and material assets (incl. vehicular access, telecommunications,). The EIAR described the receiving environment (incl. the road

network & environmental services) and the existing operational energy facility. It noted that the existing facility occupies zoned industrial lands, and several desktop studies and traffic surveys were undertaken. It described the proposed movement, access, and service arrangements. It did not predict any significant adverse impacts on material assets, including on the road network, services or public utilities during the construction, operational or decommissioning phases.

5.10.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains polices for the provision, utilisation and protection of public utilities and traffic management.

5.10.5 Assessment

The Prescribed Bodies did not raise any concerns in relation to material assets in their written submissions. There is potential for adverse impacts on material assets associated with construction and decommissioning related traffic movements, and amendments to the surface drainage network during the operational phase. The facility is situated within an area that is zoned industrial lands, the existing energy facility is connected to the local, regional and national road network, it is served by an existing water supply, foul sewer, surface water drainage, power supply and telecommunications networks, whilst also supplying power to the national grid.

Traffic:

There is potential minor localised impacts on the road network and traffic safety related to the movement of additional construction related vehicles during the ***construction and decommissioning phases***. The national, regional and local road network has sufficient capacity to assimilate the increase in traffic volumes associated with these phases of the development and the road network (incl. junctions & port entrances) would continue to operate safely within their capacities. I am satisfied that the additional traffic movement would not give rise to any significant congestion, delays, disruption or hazards along any national, regional, local, urban or port roads, or at any of the main junctions with the road network. The project would not give rise to a traffic hazard or endanger the safety of other road users during any

of these phases. The proposed development would not give rise to any significant adverse local or cumulative traffic impacts in-combination with other developments in the surrounding and wider area, with no adverse impacts on this asset anticipated. There would be no significant adverse or discernible impacts during the ***operational phase*** having regard to the nature of the operations and the stated temporary 5-year duration of the project.

Water supply:

Water supply to the site is via two existing IW water towns connections, and it is used for general and firefighting purposes. There would be some limited potential for additional water use during the ***construction phase*** which would be short term and temporary, with no significant adverse impacts anticipated subject to compliance with EIAR/CEMP mitigation measures. There will be no additional water consumed as part of the energy generating processes during the ***operational phase*** as the proposed gas turbines use DRY Low NO_x technology, with no potential for any significant adverse impacts on water supply. Firefighting water will be stored in a proposed c.1,250m3 tank. There would be no discernible change to water usage during the ***decommissioning phase***. There is little potential for any significant adverse impacts on water supply assets during any of the phases.

Drainage:

The surface drainage for the existing energy facility ultimately discharges to the Tolka Estuary via two locations. Outfall SW3 drains N to the existing Dublin Port surface water drainage network on Alexandra Road and Outfall SW4 drains S to the River Liffey. These discharges are subject to weekly monitoring in compliance with the existing EPA IE Licence (P0579). The existing arrangements within the site would be amended slightly to accommodate the project although there would be no discernible change to discharge arrangements. The proposed development would not have any significant long-term effects on the existing drainage network asset during ***any of the phases***, subject to compliance with relevant EIAR/CEMP mitigation measures, and the terms and conditions of the EPA IE Licence (as reviewed and/or amended).

Gas supply:

There will be an increase in the use of gas to fire the proposed power plant which is an non-renewable asset. The facility would operate in compliance with the terms and conditions of the existing EPA IE Licence (as reviewed and/or amended) and having regard to the temporary nature and stated 5-year duration of the project, the resulting impacts would not be significant or long term. Refer to section 5.6 above for a more detailed assessment potential adverse impacts on air and climate.

5.10.6 Conclusions

Residual Effects: None predicted.

Cumulative Impacts: None predicted.

Conclusion: No submissions were made in relation to material assets. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.11 Cultural Heritage

5.11.1 Project description

As previously stated, the proposed development would comprise the installation of a temporary emergency generating plant within the ESB's existing c.3ha site. The main elements of the project, which are summarised in 2.2 above, would include the installation of 6 x gas modular turbine generators, control house modules, power control modules, natural gas compressors, and a water storage tank, along with a revised internal road layout. Some of the existing structures would be demolished. The works would comprise excavations within the existing hard surfaced area.

5.11.2 Locational context

The proposed temporary emergency electricity generating plant would be located within the existing ESB North Wall generating plant which comprises a range of existing buildings and structures. The plant is located within the extensive North Wall area of Dublin Port and it is surrounded on all sides by a mix of industrial, commercial and port related uses. There are several features of medieval, industrial and maritime cultural heritage interest in the surrounding area, including the historic Graving Dock and North Wall Lighthouse to the W, and the Quay Walls to the S.

5.11.3 Applicant's submission

EIAR section 12 and associated Technical Appendices dealt with cultural heritage. The EIAR described the receiving maritime industrial environment which is located on reclaimed land from the River Liffey Estuary. It noted that there are no Recorded Monuments (RM) within a 500m radius of the site and that the nearest RM site comprises the Zone of Archaeological Potential for the Great South Wall c.700m to the SE. It identified several features of interest in the vicinity including an early 20th Century industrial red-brick building within the site that is recorded in the National Inventory of Architectural Heritage (NIAH), along with several other maritime and industrial heritage sites that are recorded in the Dublin City Industrial Heritage Record (DCIHR), within 500m of the site boundaries. The EIAR did not predict any adverse impacts on cultural heritage during the operational phase as a result of the

proposed development but noted that the construction works will be archeologically monitored and recorded.

5.11.4 Policy context

The relevant European, national, regional, and local policies and objectives are set out in section 3.0 above. The current Dublin City Development Plan contains a plethora of policies for the protection of archaeology and cultural heritage. The site and its immediate environs are not covered by any sensitive archaeological or built heritage designations, although the Plan acknowledges the possible presence of subsurface medieval and/or early industrial artefacts. The site does not contain any Protected Structures although it does contain a building listed in the NIAH and there are several features of maritime and industrial heritage in the wider port area which the Plan seeks to protect where possible.

5.11.5 Assessment

The Prescribed Bodies did not raise any concerns in relation to archaeology or cultural heritage in their written submissions. However, there is potential for impacts on archaeology during the ***construction*** phase related to the demolition and site excavation works. Although the site and environs are not covered by any sensitive heritage designations, it is possible that the site is underlaid by as yet undiscovered artefacts which could date back to medieval period or early industrial era. However, I am satisfied that the EIAR mitigation measures, which provide for the archaeological monitoring of the works and the preservation of any items of interest (either in-situ or by record), in consultation with the National Monuments Service and the Dublin City Archaeologist, would ensure that no significant adverse impacts occur.

The existing early 20th Century red brick industrial building located on the SE section of the site, which is listed in the NIAH, would not be directly affected by the proposed works. Although the installation of the electrical generating plant equipment could affect the character and setting of this building, the impact would not be significant, having regard to the temporary nature of the project and its short-term duration. The proposed development would not have an adverse impact on the character or setting or any other features of maritime /or industrial heritage value in the wide Port area.

There is very limited potential for impacts during the ***operational and decommissioning phases*** of the project which would have a stated 5-year lifespan.

5.11.6 Conclusions

Residual Effects: None predicted.

Cumulative Impacts: None predicted.

Conclusion: No submissions were made in relation to cultural heritage. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

5.12 Cumulative Impacts

Several projects are being progressed in the wider area (incl. energy, industrial, waste, utility, residential & commercial developments, along with smaller scale urban developments). Having regard to the nature and scale of these projects and the temporary nature of the proposed development which would operate for no more than 500 hours per year as needed, over a stated lifespan of 5 years, I am satisfied that the issue of significant cumulative effects does not arise. There is, therefore, nothing to prevent the granting of approval on the grounds of cumulative effects.

5.13 Interactions and Interrelationships

I have also considered the interrelationships between the key receptors and whether this might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. In particular, the potential arises for the following interactions and interrelationships.

Population and human health:

- Noise and dust
- Air quality and climate
- Roads and traffic (air quality, safety & disturbance)

Air & climate

- Noise and dust
- Roads and traffic (emissions)
- Population and Human Health

Landscape

- None noted.

Biodiversity:

- Hydrology (water quality & fisheries)
- Air quality (airborne emissions)

Land, Soil and Water:

- Biodiversity (terrestrial & aquatic)
- Population & Human Health

Material Assets and Cultural Heritage:

- Population & human health
- Roads and traffic (disturbance & safety)

In conclusion, I am satisfied that any such impacts can be avoided, managed, and mitigated by the measures which form part of the proposed development and the aforementioned conditions, as recommended in section 6.0 (AA) below.

5.14 Risks associated with major accidents and/or disasters

No outstanding risks associated with major accidents or disasters identified and the potential impacts associated with climate change have been factored into the consideration of the proposed temporary emergency electricity generator in the EIAR.

5.15 Reasoned Conclusion

Having regard to the examination of environmental information contained above, including the EIAR and the submissions from the prescribed bodies, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified in sections 5.0 of this report. It is considered that the main significant direct and indirect impacts of the proposal on the environment are as follows.

- The proposed development would give rise to an increase in greenhouse gas emissions from the chimney stacks with resulting ***climate impacts*** and on the achievement of EU and National climate change and carbon emission reduction targets during the operational phase, however the impact on the environment would not be significant in the long-term having regard to the temporary and emergency nature of the facility which would only operate intermittently, as and when needed, and for no more than 500 hours per year.

- The proposed development would give rise to an increase in airborne emissions from the chimney stacks with resulting ***air quality impacts*** during the operational phase, however the impact on the receiving environment would not be significant subject to adherence to the emission limit levels set by the EPA Industrial Emission Licence.
- The project could give rise to minor localised impacts on ***residential amenity*** and the surrounding ***road network*** during construction phase (general disturbance from increased traffic & airborne emissions). These impacts would be mitigated by the implementation of measures to manage construction activities.
- The project could give rise to minor impacts on ***biodiversity*** during the construction phase (incl. noise, dust, traffic, airborne emissions & water discharges). These impacts would be mitigated by the implementation of measures to manage construction activities. Disturbance during the operational phase is not likely to arise given the industrial location within Dublin Port, the prevailing meteorological conditions, the high degree of tidal mixing in the estuary, and the separation distances between the development and sensitive receptors, which include the nearby Dublin Bay European sites.
- The project could give rise to minor impacts on ***hydrology*** as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering watercourses. These impacts would be mitigated by the implementation of measures to manage surface water discharges from the site which will be directed through the existing storm and foul drainage systems prior to discharge.

In ***conclusion***, having regard to the above identified significant effects, I am satisfied that the proposed development would not have any unacceptable direct or indirect impacts on the environment, subject to the implementation of the mitigation measures and adherence to the terms and conditions of the EPA Industrial Emission Licence.

6.0 Appropriate Assessment

6.1 Introduction

The main issues related to ecology and any concerns raised by the Prescribed Bodies are summarised in section 4.0. Section 5.0 contains an environmental impact assessment, which should be read in conjunction with this appropriate assessment.

6.2 Natura Impact Statement

The AA Screening Report

The AA Screening exercise described the site and receiving environment, the characteristics of the existing facility and proposed development, and it referenced the EPA IE Licence and associated monitoring reports. It summarised the legislative requirements, described the AA screening methodology, identified the European sites within the Zone of Influence, described the likely sources of impact arising from the various project elements. It concluded that the project has the potential to affect the Conservation Objectives of 4 x European Sites and that the preparation of an NIS and progression to a Stage 2 AA was required.

Stage 2 Natura Impact Statement Report

The NIS assessed the likely significant effects on the Conservation Objectives for the following European sites which were retained after the AA screening exercise.

South Dublin Bay & Tolka Estuary SPA	South Dublin Bay SAC
North Bull Island SPA	North Dublin Bay SAC

The NIS described the elements of the project with potential to give rise to effects on these European Sites. It described any likely direct, indirect or secondary effects on the European Sites along with in-combination effects, and it assessed the significance of any effects. It identified the potential for direct and indirect effects on the European sites and their Conservation Objectives during the construction, operational and decommissioning phases. It concluded that the project has the potential to adversely affect several habitats and species, and it outlined a range of mitigation measures and assessed the likelihood of residual effects following mitigation. It also assessed the potential for cumulative effects in-combination with other plans and projects in the area. It concluded that there would be no adverse effects on the integrity of any European sites.

6.3 Stage 1 AA Screening Assessment

The proposed development would not be located within an area covered by a European site designation, and it is not relevant to the maintenance of any such European site. There are 4 x European sites located within the Zone of Influence and the Qualifying Interests and approximate separation distances are listed below.

European sites	QIs/ SCIs	Distance
South Dublin Bay & River Tolka Estuary SPA (004024)	Light-bellied Brent Goose & Oystercatcher, Knot & Sanderling Ringed Plover & Grey Plover Dunlin, Bar-tailed Godwit & Redshank Black-headed Gull Roseate, Common & Arctic Tern Wetland & Waterbirds	0.35km
South Dublin Bay SAC (000210)	Mudflats and sandflats not covered by seawater at low tide	c.1.35km
North Dublin Bay SAC (000206)	Mudflats & sandflats Annual vegetation of drift lines Salicornia & other annuals (mud & sand) Atlantic & Mediterranean salt meadows Embryonic shifting dunes Shifting (white) & Fixed grey dunes Humid dune slacks & Petalwort	c.2.15km
North Bull Island SPA (004006)	Light-bellied Brent Goose Shelduck, Teal, Pintail & Shoveler Oystercatcher, Golden Plover & Grey Plover Knot, Sanderling & Dunlin Black-tailed Godwit & Bar-tailed Godwit Curlew, Redshank & Turnstone Black-headed Gull, Wetland and Waterbirds	c. 2.15km

Conservation Objectives:

- To maintain or restore the favourable conservation condition of the Annex 1 habitat(s) and/or the Annex 11 species for which the SACs have been selected which are defined by a list of attributes and targets (South Dublin Bay & North Dublin Bay SACs).

- To maintain the favourable conservation condition of the species for which the SPAs have been selected which are defined by a list of attributes and targets (South Dublin Bay & River Tolka Estuary SPA and North Bull Island SPA).

The potential effects relate to:

- Release & transport of air borne pollutants to the European sites via chimney stacks and traffic related emissions.
- Release & transport of sediments, pollutants and historic contaminants flowing into the European sites via the surface water drainage system to the River Liffey and Tolka Estuary.
- Loss of or damage to habitat/resting/foraging places used by QI/SCI species as a result of the above.
- Noise and disturbance to QI/SCI species during construction & operation.

Based on my examination of the AA Screening report and supporting information (incl. the EIAR studies & surveys), NPWS website, aerial imagery, the scale of the proposed works and nature of the likely effects, the separation distance and functional relationship between the proposed works and the European sites and their conservation objectives, the site specific characteristics and requirements, taken in conjunction with my assessment of the subject site and surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for the following European sites.

SPAs	SACs
South Dublin Bay & Tolka Estuary	South Dublin Bay
North Bull Island	North Dublin Bay

AA Screening Conclusion

In conclusion, having regard to the nature and scale of the proposed development, to the separation of the project site from the European sites, to the nature of the qualifying/conservation interests and conservation objectives of the European sites and to the available information as presented in the EIAR and NIS regarding ground and surface water pathways and mobile connections between the site and the European sites, and other information available, it is my opinion that the proposed development has the potential to affect 4 of the European sites having regard to the conservation objectives of the relevant sites, and that progression to a Stage 2 Appropriate Assessment is required.

6.4 Stage 2 Appropriate Assessment

Details for the European sites within the Zone of Influence are summarised below.

Site name	QIs & SCIs	Conservation Objectives
South Dublin Bay & Tolka Estuary SPA (004024)	Light-bellied Brent Goose & Oystercatcher, Knot & Sanderling Ringed Plover & Grey Plover Dunlin, Bar-tailed Godwit & Redshank Black-headed Gull Roseate, Common & Arctic Tern Wetland & Waterbirds	To maintain the favourable conservation condition of the bird species in South Dublin Bay & Tolka Estuary SPA SPA, which is defined by a list of attributes and targets for each species.
North Bull Island SPA (004006)	Light-bellied Brent Goose Shelduck, Teal, Pintail & Shoveler Oystercatcher, Golden Plover & Grey Plover Knot, Sanderling & Dunlin Black-tailed Godwit & Bar-tailed Godwit Curlew, Redshank & Turnstone Black-headed Gull, Wetland and Waterbirds	To maintain the favourable conservation condition of the bird species in North Bull Island SPA, which is defined by a list of attributes and targets for each species.

South Dublin Bay SAC (000210)	Mudflats and sandflats not covered by seawater at low tide	To maintain the favourable conservation condition of this habitat, which is defined by a list of attributes and targets.
North Dublin Bay SAC (000206)	Mudflats & sandflats Annual vegetation of drift lines Salicornia & other annuals (mud & sand) Atlantic & Mediterranean salt meadows Embryonic shifting dunes Shifting (white) & Fixed grey dunes Humid dune slacks & Petalwort	To restore the favourable conservation condition of the habitats and species, which are defined by a list of attributes and targets for each habitat and species.

Favourable Conservation Status is achieved when:

1. Habitats

- The natural range (and area covered) is stable or increasing.
- The specific structure and functions which are necessary for its long-term maintenance exist now and for the foreseeable future.
- The conservation status of its typical species is favourable.

2. Species

- Population dynamics data indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats.
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future.
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

North Dublin Bay and South Dublin Bay SACs:

European site description:

These extensive European sites are located to the N, S and E of Dublin Port and they extend eastward into Dublin Bay, and the site boundary of the North Dublin Bay SAC is located to the E of the site. According to the NPWS Conservation Objectives document, the North Dublin Bay SAC is designated for a wide variety of estuarine and coastal habitats (incl. mudflats, saltmarshes & sand dunes), and one species (Petalwort), whilst the South Dublin Bay SAC is designated for its mudflat habitats (Mudflats & sandflats not covered by seawater at low tide).

Qualifying Interest habitats and species:

The QI habitats and species and their Attributes and Targets are summarised below:

Site name	QIs/SCIs	Attributes & Targets
South Dublin Bay SAC (000210)	***Mudflats & sandflats not covered by seawater at low tide.***	Habitat area (stable or increasing); Community extent (maintain Zostera-dominated community); Community structure: Zostera density (conserve the high quality); Community distribution (conserve fine sands).
North Dublin Bay SAC (000206)	***Mudflats & sandflats***	Habitat area (stable or increasing); Community extent (maintain Mytilus edulis-dominated community); Community structure: (conserve the high quality of the Mytilus edulis community); Community distribution (conserve fine & muddy sands).
	Annual vegetation of drift lines	Habitat area (increasing); Habitat distribution (no decline); Physical structure (maintain natural sediment circulation & supply); Vegetation structure (maintain range of habitats); Vegetation composition (maintain the presence of species-poor communities with typical species); Vegetation composition (Negative indicator species to represent less than 5% cover).
	Salicornia & other annuals (mud & sand)	Habitat area (stable or increasing); Habitat distribution (no decline); Physical structure (maintain sediment supply); Physical structure (maintain creek & pan structure); Physical structure (maintain natural tidal regime); Vegetation structure (maintain range of habitats); Vegetation structure (maintain structural height variation); Vegetation structure (maintain more c.90% of area outside creeks vegetated); Vegetation composition (maintain presence of species-poor communities); Vegetation structure (no significant expansion of negative indicator species - Spartina)

	Atlantic & Mediterranean salt meadows	Habitat area (stable or increasing); Habitat distribution (no decline); Physical structure (maintain sediment supply, creeks/pans & tidal flooding regime; Vegetation structure (maintain range of habitats, sward height & cover); and Vegetation Composition (maintain range of species & no increase in negative species indicators).
	Embryonic shifting dunes, White & Grey Dunes	Habitat area (stable or increasing); Habitat distribution (no decline); Physical structure (maintain sediment supply); Vegetation structure (maintain range of habitats); Vegetation composition (maintain plant health of foredune grasses); Vegetation structure (maintain range of habitats); Vegetation composition (maintain the presence of species-poor communities with typical species); Vegetation composition (no significant expansion of negative indicator species).
	Humid dune slacks	Habitat area (stable or increasing); Habitat distribution (no decline); Physical structure (maintain sediment supply); Physical structure (maintain hydrological regime); Vegetation structure (maintain range of habitats); Vegetation structure (bare ground should not exceed 5% of dune slack habitat); Vegetation structure (maintain structural variation within sward); Vegetation composition (maintain range of sub-communities with typical species); Vegetation composition (maintain less than 40% cover of creeping willow); Negative indicator species (less than 5% cover); Vegetation composition (no more than 5% scrub/trees cover).
	Petalwort	Distribution of populations (no decline); Population size (no decline); Area of suitable habitat (no decline); Hydrological conditions (maintain); Vegetation structure (maintain open, low vegetation with a high percentage of bryophytes & bare ground).

Potential direct effects: The proposed development would not be located within a European site, and it is not relevant to the maintenance of any European site. No potential for direct effects having regard to the location and scale of the project and to the separation distance between the works and the QI habitats and species.

Potential indirect effects: There is potential for indirect effects during the ***construction phase*** as a result of water pollution from the unmitigated release of fine sediments, pollutants and historic contaminants during construction works, and hydrocarbons by way of accidental spillages from machinery, which could give rise to water pollution, chemical contamination and changes to sediment patterns with

resultant impacts on the on the attributes and targets for the QI habitats and species in the absence of mitigation. The uncontrolled introduction of invasive species from works vehicles could also give rise to the colonisation of habitats by invasive species. There is no potential for any additional significant indirect adverse effects during the ***operational phase,*** nor during the ***decommissioning phase*** subject to the implementation of the construction phase mitigation measures.

Mitigation measures: The EIAR/NIS mitigation measures include: -

- Preparation of a CEMP & CDWMP.
- Compliance with EPA IE Licence (as reviewed and/or amended).
- Adherence to all relevant legislation & guidance.
- Appointment of Ecological Clerk of Works.
- Adherence to best construction practices.
- Surface water management measures to protect water quality
- Regular surface water and air quality monitoring.

Likely significant effects:

The ***construction phase*** works (incl. demolition, excavation & construction) and any potential release of sediments, pollutants or historic contaminants, or introduction of invasive species would be managed and controlled by adherence to best construction practices and the implementation of the EIAR/NIS mitigation measures. No adverse impacts on the attributes and targets for the QI habitats and species anticipated post mitigation are anticipated (incl. Habitat area & distribution, Physical structure & sediment supply, Vegetation structure & composition, or Population structure). Although the proposed construction works would give rise to vehicle traffic movements, the resultant emissions would not have a significant effect the nearby European sites, having regard to the short duration of the construction phase and the heavily industrialised location of the site. Refer to section 5.6 and 5.6 above for a more detailed assessment of air quality and traffic movements. There will be no significant change to surface water drainage emissions as a result of the proposed development and recent tests at the 2 x outfall locations to the River Liffey and Tolka Estuary did not detect the presence of any toxic substances in the discharged surface water, with no adverse impacts on the QI habitats and species anticipated.

In relation to the ***operational phase***, the existing facility is operating within the limits set by the EPA Industrial Emissions licence for airborne and water discharges and there would be no exceedance of standards for any potential pollutants as a result of the proposed development subject to the continued compliance with the IE Licence (as reviewed and/or amended) and any other IE requirements. Refer to sections 5.5, 5.6 and 5.8 above for a more detailed assessment of air and water quality. There is no evidence of adverse effects on any nearby European sites or their QI habitats and species as a result of the current operational airborne and water emissions, with no adverse impacts anticipated as a result of the proposed increase in generation capacity at the existing energy facility. The air quality assessments and dispersion maps confirm that no significant adverse impacts would arise, subject to compliance with the terms and conditions of the EPA IE Licence (as amended and/or reviewed).

Potential in-combination effects: Potential indirect in-combination effects relate to damage to QI habitats and species because of sediment and historic contaminant release, accidental spillages during the works, and the accidental introduction of invasive species by construction vehicles. This could give rise to sedimentation, pollution, contamination and/or colonisation with resultant impacts on water quality, aquatic wildlife and sediment patterns, having regard to the various plans or projects in wider area (incl. port related activities, domestic & industrial discharges and water-based recreation) in the absence of mitigation. However, having regard to the implementation of the mitigation measures, I am satisfied that there would be no adverse cumulative effects on the European sites or their QI habitats and species. Given the lack on any local impacts, it is unlikely that the project would contribute to cumulative impacts in the wider area in-combination with other projects.

Suggested conditions: Implement all EIAR and NIS mitigation measures

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of these European sites in light of their Conservation Objectives, subject to the implementation of mitigation measures outlined above.

South Dublin Bay & River Tolka Estuary, and North Bull Island SPAs:

European site description:

The extensive South Dublin Bay & River Tolka Estuary SPA and the North Bull Island SPA are designated for several species of wetland and water birds. A small section of the South Dublin Bay & River Tolka Estuary SPA, which comprises a colony of breeding Terns (SCI species), is located to the S of the area within which the site is located, on manmade structures within the River Liffey.

Special Conservation Interest species:

These SPAs are designated for their importance to a wide variety of waterbirds and their main Attributes and Targets are summarised below:

Site name	SCIs	Attributes & Targets
South Dublin Bay & Tolka Estuary SPA (004024)	***Light-bellied Brent Goose, Oystercatcher, Knot Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull & Ringed Plover***	Population trend (stable or increasing; Distribution (no significant decrease in the range, timing or intensity of use of areas). Grey Plover (Proposed for removal from the list).
	Roseate, Common & Arctic Terns	Passage/Breeding population, Productivity rate, Distribution: roosting areas & Prey availability (no significant decline); Barriers to connectivity (no significant increase); Disturbance at roosting site (human activities should occur at levels that do not adversely affect numbers).
	Wetland & Waterbirds	Habitat area (stable)
North Bull Island SPA (004006)	***Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden & Grey Plover, Knot, Sanderling, Dunlin, Black-tailed & Bar-tailed Godwit, Curlew, Redshank, Turnstone & Black-headed Gull.***	Population trend (stable or increasing); Distribution (no significant decrease in the range, timing or intensity of use of areas).
	Wetland and Waterbirds	Habitat area (stable)

Potential direct effects: As for the North Dublin Bay and South Dublin Bay SACs.

Potential indirect effects: There is potential for indirect effects on these European sites and several of their SCI species during the ***construction phase*** as a result of water pollution from the unmitigated release of fine sediments, pollutants and historic contaminants during construction works, and hydrocarbons by way of accidental spillages from machinery, which could give rise to water pollution, chemical contamination and clogging of fish gills, with resultant impacts on the availability of prey biomass for the SCI species. Further potential indirect effects relate to the potential changes to sediment patterns with resultant impacts on the associated supporting Dublin Bay SAC QI habitats. The uncontrolled introduction of invasive species from works vehicles could give rise to the colonisation of these support habitats by invasive species, with resultant impacts on the attributes and targets for the SCI species, in the absence of mitigation. There is potential for any additional significant indirect adverse effects during the ***operational phase*** as a result on an increase in airborne emissions when the works are complete, in the absence of mitigation. There is no potential for any additional significant indirect adverse effects nor during the ***decommissioning phase*** subject to the implementation of the construction phase mitigation measures.

Mitigation measures: As for the North Dublin Bay and South Dublin Bay SACs.

Likely significant effects: As for the North and South Dublin Bay SACs in relation to the ***construction phase*** with no adverse impacts on their SCI wetland and water bird species attributes and targets anticipated post mitigation (incl. Population, Distribution & Habitat Area). The ***operational phase*** airborne and water discharge emissions would be monitored and managed in accordance with the EPA IE Licence (as reviewed and/or amended) with no adverse impacts on SCI species attributes and targets anticipated post mitigation (incl. Population, Distribution & Habitat Area), or their prey species anticipated. The existing energy facility does not give rise to a significant level of disturbance from operational noise or vibrations, and there would be no significant change to this arrangement under the proposed temporary emergency development.

Potential in-combination effects: As for the North & South Dublin Bay SACs.

Suggested conditions: As for the North Dublin Bay and South Dublin Bay SACs.

Conclusion: I am satisfied that the proposed development individually or in combination with other plans or projects would not adversely affect the integrity of these European sites in light of their Conservation Objectives, subject to the implementation of mitigation measures outlined above.

Appropriate Assessment Conclusion:
I concur with the conclusions reached in the NIS that the proposed development will have no significant adverse effects (direct, indirect or in-combination) on the Conservation Objectives, Qualifying Interests or Special Conservation Interests for the South Dublin Bay SAC (000210), North Dublin Bay SAC (000206), South Dublin Bay & Tolka Estuary SPA (004024), North Bull Island SPA (004006) or for any other European Site.

6.5 Appropriate Assessment conclusion:

I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site Nos. 000210, 000206, 004024, 004006, or any other European site, in view of the site's Conservation Objectives.

7.0 RECOMMENDATION

I recommend that Approval is granted.

8.0 REASONS AND CONSIDERATIONS

Having regard to:

a. the National Planning Framework Plan 2018-2040,
b. the National Development Plan 2021-2030,
c. the Climate Action Plan 2021,
d. Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031,
e. the policies of the planning authority as set out in the Dublin City Development Plan, 2016-2022,
f. the distance to dwellings or other sensitive receptors,
g. the submissions made in connection with the application,
h. the likely consequences for the environment and the likely significant effects of the proposed development on European Sites,
i. the Appropriate Assessment and Environmental Impact Assessment reports and recommendations of the Inspector,

Likely Effects on the Environment / Environmental Impact Assessment:

The Board completed an environmental impact assessment of the proposed development taking account of:

(a) the temporary nature, scale, location and extent of the proposed development,

(b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application,

(c) the submissions received from the prescribed bodies, and

(d) the Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application.

The Board considered that the main ***significant direct and indirect effects*** of the proposed development on the environment are, and would be mitigated, as follows:

- Negative impacts on **climate** during the operational phase. The increase in greenhouse gas emissions from the chimney stacks would have a negative impact on climate and the achievement of EU and National climate change and carbon emission reduction targets. The impacts would be mitigated in the long-term as a result of the temporary and emergency nature of the facility which would operate intermittently for no more than 500 hours per annum.
- Negative impacts on **air and climate** during the operational phase. The increase in airborne emissions from the chimney stacks and resulting air quality impacts would be mitigated by adherence to the emission limit levels set by the EPA Industrial Emission Licence.
- Negative impacts on **human health and population, air and climate** and **biodiversity** arising from construction activities include noise, dust, traffic emissions and traffic disturbance. These impacts will be mitigated through adherence to best practice construction measures and the implementation of a Construction and Environmental Management Plan and a Construction and Demolition Waste Management Plan. Noise disturbance from the operation of the facility is not likely to arise given the established industrial location within Dublin Port, and the separation distances between the development and noise sensitive receptors which include surrounding residential areas and the nearby Dublin Bay European sites.

- Negative impacts on **hydrology** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering watercourses and mitigation measures are proposed to manage surface water from the site. Discharge of surface water will be directed through the existing storm and foul drainage systems prior to discharge. Impacts will be mitigated by measures outlined within the application and adherence to the terms and conditions of the EPA Industrial Emission Licence.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

Appropriate Assessment Screening

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code: 004024), North Dublin Bay Special Area of Conservation (Site Code: 000206), South Dublin Bay Special Area of Conservation (Site Code: 000210) and the North Bull Island Special Protection Area (Site Code: 004006) are the European sites for which there is a likelihood of significant effects.

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the South Dublin Bay and River Tolka Estuary SPA (004024), North Dublin Bay SAC (000206), South Dublin Bay SAC (000210) and the North Bull Island SPA (004006) are the European sites for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the South Dublin Bay and River Tolka Estuary SPA (004024), North Dublin Bay SAC (000206), South Dublin Bay SAC (000210), North Bull Island SPA (004006), in view of these sites Conservation Objectives.

In completing the assessment, the Board considered, in particular, the

(a) the likely direct and indirect impacts arising from the development of the proposed development, both individually, when taken together and in combination with other plans or projects,

(b) the mitigation measures, which are included as part of the current proposal, and

(c) (c) the conservation objectives for the European sites.

9.0 Conditions

1. (a) All mitigation, environmental commitments and monitoring measures identified in the Environmental Impact Assessment Report shall be implemented in full as part of the proposed development.

   (b) All mitigation and ecological commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.

   Reason: In the interest of development control, public information and clarity.

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Karla Mc Bride
Senior Planning Inspector
09th September 2022