MOTT MACDONALD

Huntstown Temporary Emergency Power Plant

Environmental Impact Assessment Screening

August 2022

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Mott MacDonald
South Block
Rockfield
Dundrum
Dublin 16
D16 R6V0
Ireland

T +353 (0)1 2916 700
mottmac.com

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Issue and Revision Record

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1 Introduction

1.1 Overview

This Environmental Impact Assessment (EIA) screening assessment seeks to identify the legal need or otherwise for an EIA for a proposed 50MW (electrical output) temporary emergency power generation facility within the existing Huntstown Power Station site, which is located in Finglas, Dublin 11. The screening process includes an appraisal of the details of the proposal with reference to the relevant EIA legislation, including the Planning and Development Regulations, 2001 (as amended), and against the relevant Irish legislation which has transposed Annex I and Annex II of Directive (2011/92/EU) as amended by Directive 2014/52/EU (together, the "EIA Directive").

This report provides the background to, and a description of the proposed development, key plant processes and operating procedures, as well as construction phase activities and programme. A review of EIA legislation in the context of the screening assessment is also presented, followed by the sub-threshold EIA Screening Assessment. This report is supported by assessments of environmental factors which are stated under Article 3 of the EIA Directive (Appendix A) in addition to the following documentation:

- Construction Environmental Management Plan (CEMP) including a Construction Resource and Waste Management Plan (CRWMP) (contained in Appendix B)
- Traffic Management Plan (TMP) (contained in Appendix C)
- COMAH Land Use Planning Assessment (contained in Appendix D)
- Photomontages (contained in Appendix F)
- Proposed Landscape Plan (contained in Appendix G)

The EIA Screening Report has been prepared having regard to the Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022), which is the standard approach for environmental assessment in Ireland, and wherein it is stated that *"the screening procedure should ensure that an environmental impact assessment is only required for projects likely to have significant effects on the environment.".*

1.2 Background

The proposed development aims to temporarily reinforce the transmission network and facilitate the provision of temporary emergency power generation to support infrastructure and capacity. It is a critical temporary emergency power generation and transmission asset, required as a direct response to addressing and mitigating national risk to power disruption, supply and demand. It forms part of a programme of actions being progressed by the Commission for Regulation of Utilities (CRU), together with the energy industry and other stakeholders to provide additional stability and resilience to the Irish energy industry in response to the national security of energy supply emergency.

EirGrid is responsible, under Regulation 28(3) and 28(4) of the European Communities (Internal Market in Electricity) Regulations 2005 (S.I. No. 60 of 2005) (the "2005 Regulations"), to report on the monitoring of security of supply matters and identify where it is of the view that security of supply is threatened or is likely to be threatened.

In accordance with their statutory obligations, EirGrid has thus advised the Commission for the Regulation of Utilities (the "CRU"), of security of supply concerns and identified a number of recommendations as measures necessary to cover peak demand and to deal with shortfalls. In

determining the proposed recommendations, EirGrid considered the adequacy of generation capacity, the availability of the transmission network and whether there is sufficient ancillary or system services to meet demand for electricity. On that basis, the CRU published a programme of actions to address security of supply matters in Information Paper CRU 21/115.2.

Furthermore, on 7 June 2022, the CRU, with the consent of the Minister for the Environment, Climate and Communications (the "Minister"), directed EirGrid under Regulation 28(10) of the 2005 Regulations, in its capacity as the Transmission System Operator ("TSO"), to seek to procure, using the most expeditious means available, approximately 450 MW of additional generation capacity from the winter of 2023-24 up to the winter of 2025-26, for the purposes of the provision of system services in response to the national security of energy supply emergency.

It is expected that the temporary emergency generation will be called upon to generate when the system is in Alert or an Emergency state as defined in the Grid Code (https://www.eirgridgroup.com/site-files/library/EirGrid/GridCodeVersion9.pdf)

The temporary emergency generation facility will include 38No. 1.43MWe nominal capacity gas generator sets based on the reciprocating internal combustion technology (Janbacher J420 units) to provide a nominal electrical output of 50MW (electrical output). The units are containerised and will be delivered to site, predominantly pre-assembled, ensuring speedy implementation and installation of the proposed development. It is intended that the development will operate on natural gas from an existing Gas Networks Ireland (GNI) Above Ground Installation (AGI), located to the north-west of the proposed temporary emergency power generation facility. Power generated by the temporary emergency generating facility will be exported to the national grid via an underground cable connection to the existing Finglas 220kV substation (consented under Planning reference: FW21A/0144), located c.800m to the south-east of the site.

As required under the EirGrid/ CRU procurement process, the proposed development is a stand-alone, temporary electricity transmission generation plant/ installation. It will not function as, nor is proposed as, an extension to an existing power plant facility and there is no functional dependency between Huntstown 1 and 2 and the proposed temporary emergency generation facility.

- Any power generated, will not be 'fed into' or conducted/ transmitted via the existing Huntstown power station/plant or its associated substation – i.e. Huntstown substation.
- The power generated will go to a proposed new 110kV Air-Insulated Switchgear (AIS) System (which will not be connected to any part of the existing power station/ plant), and then to an existing transmission line (Corduff – Platin 110kV line to Finglas substation), which will be newly undergrounded as part of a prior grant of planning permission, to Finglas substation.
- The proposed temporary emergency power generation facility will be independently monitored/ managed and controlled (switched on/ off), and will have a separate control facility, to the existing power plant (Huntstown 1 and 2).

Whilst there is an immediately adjacent operational power plant which has a (combined) 744MW rating, the proposed temporary power generating plant (with 50MW electrical output), is separate to this and stand-alone in its own right. It does not integrate into the existing plant in any respect, aside from using the same gas supply pipeline, earth grid and limited services infrastructure - this would be the situation with any development, of any nature, which links into existing service/ utility infrastructure.

The temporary emergency generating plant will be installed and operational as such, for up to five years, from summer 2023 to late 2027.

1.3 Statement of Competency

Mott MacDonald Ireland Limited (MMI) is a multidisciplinary consultancy with over 30 years' experience of undertaking complex and challenging EIARs in accordance with the requirements of the EIA Directive and of writing EIARs for a wide range of projects. These include some of Ireland's largest infrastructure, engineering and development projects. MMI has prepared this EIA Screening with specialist input from IAC Archaeology and MacroWorks. The professional competencies of all who have assisted in the preparation of the EIA Screening are listed in the '*Supporting Information to the EIA Screening'* contained in Appendix A.

1.4 Guidance

In addition to the various requirements of planning legislation, the following guidance was also considered in the preparation of this EIA Screening Report:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, EPA, May 2022
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Housing, Planning and Local Government, August 2018
- Guidance on EIA Screening (Directive 2011/92/EU as amended by 2014/52/EU), European Commission, 2017
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009
- EIA, Guidance for Consent Authorities regarding Sub-Threshold Development, Department of the Environment, Heritage and Local Government, 2003

2 Project Description

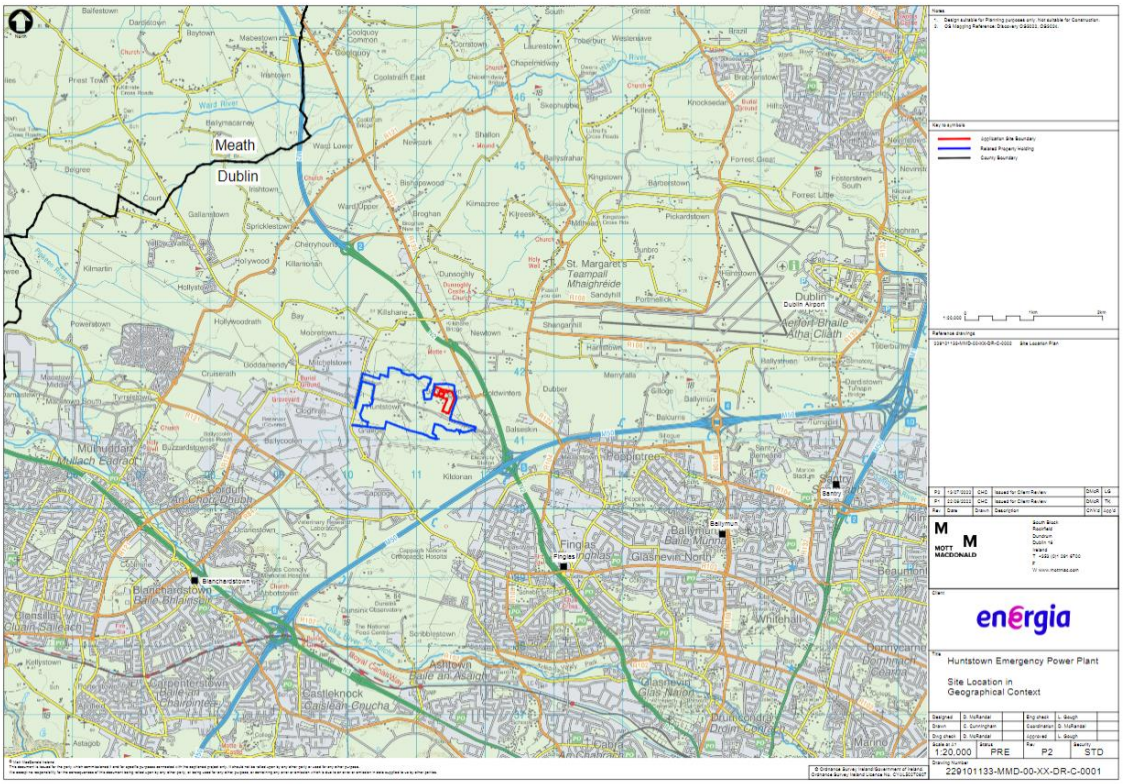
2.1 Location of Proposed Development

Huntstown Power Station Limited propose to develop a temporary emergency power generation facility on a c. 4.2ha site within the existing Huntstown Power Station, in the townlands of Huntstown and Johnstown, Finglas, Dublin 11, refer to Figure 2.1.

The surrounding area is generally and chiefly characterised by industrial and commercial uses, including heavy industry (power generation and transmission), commercial warehousing (including a Home and Garden Centre) and logistics, quarrying, agricultural and limited residential uses.

The proposed development is located within the existing Huntstown Power Station complex which has been operational since circa 2000. This land use is well-established and continues to be deemed appropriate for classes of development such as the proposed development by Fingal County Council through its “Heavy Industry” land use zoning (Fingal Development Plan 2017-2023, as varied).

Figure 2.1: Location of Proposed Development



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The Peter McVerry Trust sheltered housing facility and the Dogs Trust (Dog Rescue and Rehoming Charity), are located to the north and north-northeast of the site respectively. The site is also bounded to the south by a vehicular entrance leading to the Huntstown Quarry and an Anaerobic Digestion Plant (currently under construction); lands to the immediate east are currently subject of a live planning application (FW21A/0151) for a Data Centre. Two residential

properties fronting the R135 are situated within the proposed Data Centre site (demolition of both is included in the data centre application). The existing Huntstown Power Station is located to the immediate west of the subject site.

A number of large logistics warehouse parks are located to the north-east of the site including Dublin Airport Logistics Park and Vantage Business Park, Coldwinters, granted under Ref. F17A/0769 and further amended under Refs. FW19A/0053 and FW20A/0044. Several small scale commercial and service uses are scattered along the frontages of the R135 including: a garden centre; veterinary clinic and car repair facility.

A drainage ditch and hedgerow located on the eastern site boundary, separates the proposed temporary emergency generating plant from the proposed Data Centre site adjoining Huntstown Power Plant. A set of 110kV overhead lines traverse the site in a north - south direction towards to the Finglas 220kV substation complex to the south-east of the site. These lines have been subject of a permitted planning application for undergrounding (Planning Ref. FW21A/0144).

2.1.1 Description of the Development

The proposed temporary emergency power generation development consists of the following principal elements:

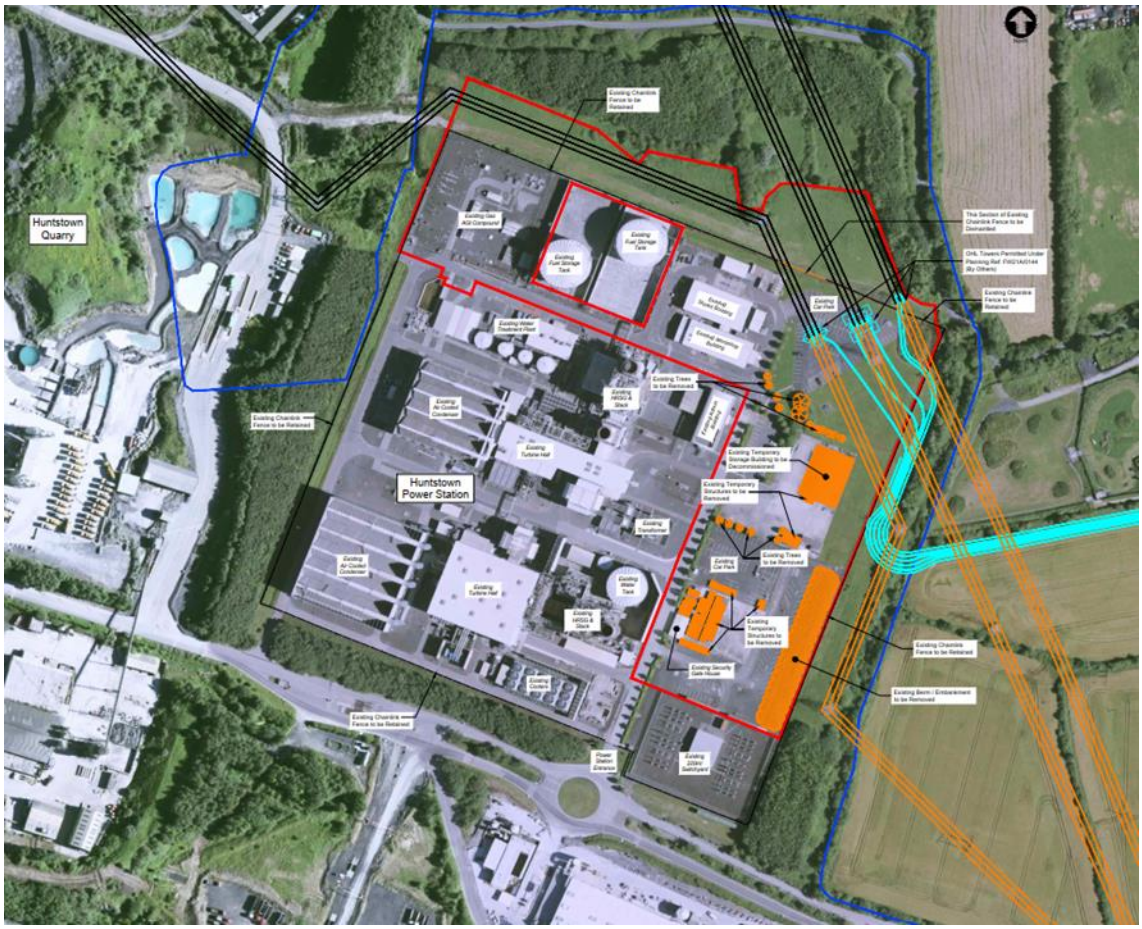
1. 38No transportable, pre-assembled containerised Janbacher J420 1.43MWe generator units. Each generator unit is typically housed in 2No stacked ISO shipping containers and in this case a top attenuation unit is added, with each generator set comprising/ incorporating the following:
    a. an engine container (approx. 6.05m L x 2.4m W x 2.6m H);
    b. an engine cooling module container (approx. 6.05m L x 2.4m W x 2.6m H), stacked on top of each engine container;
    c. an attenuation unit with an exhaust silencer (approx. 6.05m L x 2.4m W x 2.6m H) that sits on top of the cooling module container; and
    d. one exhaust gas flue exit point with a diameter of approx. 0.4m (at approx. 8m height after the attenuator unit).
2. 2No to 4No exhaust flues each approx. 0.4m in diameter will be extended and grouped/bundled together and supported by a total of 12No 25m (above ground level) high chimney structures.
3. A 1250kVA mobile diesel generator for limited occasional black-starting the temporary emergency generation plant (approx. 6.05m L x 2.4m W x 2.6m H).
4. 10No 6.3MVA Transformers, (each approx. 6.05m L x 2.4m W x 2.6m H).
5. A ZS1 Switchgear (approx. 6.05m L x 2.4m W x 2.6m H).
6. A 70MVA Transformer 11/110kV (approx. 7.3m L x 3.1m W x 3.9m H).
7. A 110kV Air-Insulated Switchgear (AIS) System (approx. 31.6m L x 6.6m W x 7m H).
8. 2No Series Reactors (each approx. 6.5m L x 5m W x 5.6m H).
9. A Neutral Earthing Transformer (approx. 2.3m L x 1.9m W x 2m H).
10. High Pressure Gas Pressure Reduction Station (approx. 10m L x 6m W x 2.5m H).
11. 10No Medium Pressure Gas Trains (each approx. 4m L x 1m W x 1.4m H).
12. New High Pressure Gas Lines (28 and 42 barg) to the existing Huntstown Power Station Gas Networks Ireland (GNI) site, extension to the existing AGI boiler house (approx.4.0m L x 3.8m W x 3.5m H), and an increase in the capacity of the existing 28 barg gas supply system.
13. Above-ground pipe and cable-bridge(s) between the gas pressure reduction stations and the generator units and 110kV transformer.

14. 20ft Control room container to house the Supervisory Control and Data Acquisition (SCADA) panel.
15. Control containers for the Air-Insulated Switchgear equipment.
16. Acoustic wall (approx. 102m L x 0.4m W x 7m H) to the immediate north and east of the 38No proposed generator units and 5m containers wall on part of the eastern side (approx. 55m L x 2.4m W x 5.2m H).
17. 2.6m high chainmail security fencing topped with barbed wire around the perimeter of the site.
18. 2No new lightning masts, approx.16m H.
19. Replacement/ relocated tarmacadam laydown area for existing displaced equipment and car/ vehicle parking and replacement storage buildings/ offices/ workshops.
20. New staff welfare facilities comprising a kitchen/diner container, a toilet block container and an offices container (each approx. 6.05m L x 2.4m W x 2.6m H).
21. New foul drainage to service the welfare facilities.
22. Extension to existing site stormwater drainage, including attenuation and hydrocarbon interceptor serving the proposed hardstanding areas.
23. 3No workshop/stock containers (each approx. 6.05m L x 2.4m W x 2.6m H).
24. Bunded chemical and oil storage areas.
25. Lighting to facilitate the proposed development.
26. Demolition/dismantling of existing stores building (approx.34m L x 23m W x 8.0m H).
27. New permanent stores building (29.5m L x 21.5m W x 10.3m H).
28. Site development works and landscaping.

The majority of the proposed development site is already levelled and compacted. As illustrated in Figure 2.2 (below and refer to Drawing No. 229101133-MMD-00-XX-DR-C-0010), the majority of the development footprint pertaining to the proposed temporary emergency power generation plant is located on areas of existing hard surface. This existing surface is currently used for storage, set-down and car parking, and has been in-situ since around the same time as the commissioning of the existing power plant (since the year 2000), in excess of 20 years.

An adjacent grassed area with some hedgerow to the east and north will be developed as an area of hardstanding as a replacement parking, storage and laydown area. The proposed temporary emergency generation disapplication boundary extends to the west to include a small extension to an existing boiler house within the Gas Networks Ireland (GNI) Above Ground Installation (AGI) compound.

Figure 2.2: Proposed Site Extent (Red line boundary) and structures/plant identified for removal (orange)



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The generator units (38 No.) are containerised and will be delivered to site predominately already pre-assembled. On arrival to site, they will be placed in position on plastic feet on the ground. Where the load bearing capacity of the ground is insufficient, the engines will be rested on sleepers in order to spread the load, and no excavation work is anticipated. Staff welfare facilities and the control room will be housed within 20ft containers to be placed on existing hardstanding.

The magnitude of earthworks required for the development proposed is relatively small, as foundations required are limited to those identified in section 2.3.3 (Civil Works). It is anticipated that foundations will be raft type ground bearing foundations and will be constructed above the water table.

The generators will operate on gas only using the existing gas connection supplied to Huntstown Power Station by Gas Networks Ireland. A single gas pressure reduction station containing two gas pressure reduction modules is included in the proposals.

Power generated by the temporary emergency generating facility will be exported to the national grid via an underground cable connection to the existing Finglas 220kV substation (consented under Planning reference: FW21A/0144), located c.800m to the south-east of the site.

Due to the requirement for the proposed temporary emergency power generation development to be delivered expediently to secure emergency generation and due to its impermanence, the

design has been developed to ensure that it can be constructed and commissioned speedily. The proposed design is also cognisant of the requirements during its operation, as it will be required to operate under the conditions of an Industrial Emissions Licence (Huntstown Power Station operates under Industrial Emission (IE) Licence Number P0483-04 and P0777-02 regulated by the Environmental Protection Agency (EPA)) and the applicable emission limit values.

The design has therefore ensured embedded mitigation is present and the construction methods are as non-intrusive as possible. The proposed development has utilised existing hardstanding- as outlined earlier; the majority of the site is existing levelled and compacted ground which would require limited interventions to ready the site for construction, as a result ground works will be minimal. Excavations for foundations are limited to those structures and plant listed in Table 2.3, namely, generator exhaust stacks (total of 12No.), 110kV transformer and associated blast walls, AIS substation equipment, reactor, replacement storage shed, lightning masts, acoustic wall and fencing. Where existing structures are present these will be demolished/dismantled (please refer to section 2.3.3, Table 2.3, and Drawing No. 229101133-MMD-00-XX-DR-C-0010 for more details on structures to be dismantled/ demolished), prior to the commencement of construction.

The proposed design has included embedded mitigation in relation to the generator sets comprising an attenuation unit and an exhaust silencer on each generator set. Noise attenuation barriers will be provided along the northern and eastern boundaries of the site to ensure no exceedances at closest residential receptors of daytime and night-time noise limits for Industrial Emissions Licenced sites as prescribed in the EPA, Guidance Note for Noise, (2016) (NG4)[1].

Additionally, the proposed development will tie into the existing potable and stormwater networks within Huntstown Power Station site. The storm drainage strategy for the application site is to provide on-site attenuation for a minimum 1 in 30 storm event. It is proposed to collect runoff from hardstanding via a series of new filter drains to be provided around the extents of the proposed site. The proposed filter drains will convey flows to the existing outfall on the northwest boundary of the site. Before discharging, flows will be attenuated to 5.48l/s (refer to Drawing No. 229101133-MMD-00-XX-DR-D-0001 and 229101133-MMD-00-XX-DR-D-0002). Attenuation will be provided via a new below ground geo-cellular tank (refer to Drawing No. 229101133-MMD-00-XX-DR-D-0011) located to the immediate northeast of the existing AGI Gas compound.

Rainfall/ surface water runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the new filter trenches. The non-permeable laydown areas will be drained via traditional gullies or channels which will discharge into the proposed filter drains.

The proposed development will collect discharges from the new welfare facilities within an existing septic tank to be emptied by a vacuum tanker.

There will be no process wastewaters generated by the proposal.

All chemicals and oils (lube oil) will be stored in suitably bunded areas.

Firefighting on site will predominately be carried out by manual fire suppression using the existing fire hydrant network, which will be extended. Foam hydrants and hose cabinets will be provided in accordance with the National Fire Protection Association Guidelines. In general, fire

[1] EPA & OEE 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in relation to Scheduled Activities' (NG4), 2016

water discharges will be collected in the existing extended surface drainage system and will be discharged from the site after passing through the proposed drainage interceptor.

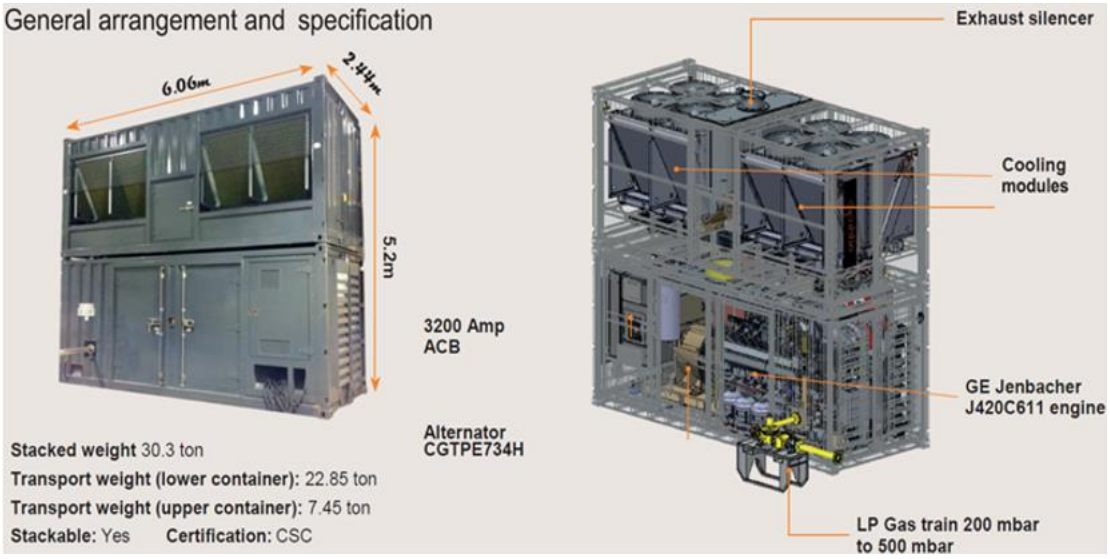
2.2 Key Plant Processes and Operating Procedures

2.2.1 Gas Generator Unit Technology

As indicated above, the Janbacher gas generators are housed in standard 20ft ISO shipping containers. Each generator is made up of two containers, one stacked on top of the other. The lower container houses the reciprocating gas engine and alternator, as well as a local control panel and Low Voltage circuit breaker for connection of out-going power cables. The upper container houses the radiators and cooling circuits, plus exhaust silencer. In this design a third attenuation unit is added which sits on top of the cooling module container.

An image of a typical Janbacher J420 generating unit is provided in Figure 2.3 below.

Figure 2.3: Janbacher J420 Generating Unit



Source: Aggreko

2.2.2 Control House Module

A twenty-foot container set up will be used as a control room for the temporary emergency generation power package, housing the Supervisory Control and Data Acquisition (SCADA) panel. The Emergency Shutdown and Intertripping panel will also be housed in the Control container. Within the 110kV AIS Switchyard separate control containers for the EHV equipment will contain the protection control and communication relays and panels associated with the 110kV equipment.

2.2.3 Above Ground Gas Installation

The Huntstown Power Station site is currently connected the natural gas network supplied to the site by Gas Networks Ireland (GNI).

The existing GNI above ground gas installation (AGI), located in the northwest of the site, will supply gas to the emergency generation units. Gas pipes from the AGI to the gas pressure reduction stations will run partly above ground and partly in underground gas pipes. After the gas pressure reduction station and up to the individual emergency generation units the gas piping will be run on above ground pipe works.

Initially gas will be provided to the temporary emergency generation plant by temporary AGI connections to the Huntstown Power Station internal gas network. As part of this emergency generation project, GNI will increase the capacity of the existing AGI and a single dedicated gas supply will be provided for the emergency generation plant. Once complete, the gas supply to the emergency generation units will switch from the temporary AGI connections to this dedicated gas connection. The work required will include the construction of an extension to the existing GNI AGI boiler house utility infrastructure, as shown on the accompanying drawings.

The proposed development will not impact the operation of the two existing Combined Cycle Gas Turbine (CCGT) power stations at Huntstown.

2.2.4 Gas Reduction Station

Huntstown Power Station has an existing transmission gas connection supplied by GNI at 70barg. The gas supply to the site currently serves the gas requirements of the two CCGT power stations at the facility. The existing AGI configuration on site has two offtakes to the existing generators which each have a rated capacity output of 72,500 standard cubic metres per hour (scmh) (Huntstown 1) and 85,800 scmh (Huntstown 2).

The 28barg and 40barg supplies from the gas AGI will be piped to a pressure reduction and metering compound to reduce the gas pressure. A medium pressure pipe network feeds out to the generation area. Groups of four generators will then connect to the medium pressure network and the pressure reduced to the low pressure needed to supply the individual generators. A new single gas pressure reduction station containing two gas pressure reduction modules will be located at the northern end of the proposed temporary emergency generation site. The gas pressure reduction station will contain the equipment to reduce the incoming gas pressure down from High Pressure (42barg and 28barg) to Intermediate Pressure (4.5-5.5barg) for distribution around the temporary emergency generation plant area. The pressure reduction equipment contains control valves, gas filters, pressure regulators and a gas heating unit. Also included in the gas reduction packages are Remote Operating Valves (ROV) to shut-down the site gas supply in case of an emergency.

2.2.5 Electricity Transmission Connection

The thirty-eight Janbacher J420 units will be connected to a proposed 110kV Transformer which will export power to the national grid via the underground cable connection (consented under Planning reference: FW21A/0144) to the existing Finglas 220 kV Substation which is located approximately 800m southeast of the proposed development site.

The transformer will be of the oil-filled type, provided with safety blast walls and a foundation sump to prevent the escape of oil in case of a transformer leak.

The gas generators will connect to the consented underground cable connection by means of cabling running on above-ground cable racks. Where the cables cross circulation routes, steel plated ramps will be used for access over the top of the above-ground cable racks.

2.2.6 Replacement Laydown Area for Huntstown Power Station

A replacement laydown area for the existing Huntstown Power Station site will be provided to the north of the existing power station site. This area will be accessed from the existing northern boundary of the site, c.100m from the eastern boundary. The area to the north and east of the newly created access will have a tarmacadam finish and will be used as a laydown area for equipment and parts, with additional load-bearing requirements. The area to the west will have hardcore and chippings finish and will serve as both a parking area and a laydown area for smaller pieces of equipment. The entire area will have an external chainmail fence (topped with barbed wire) and perimeter lighting.

2.2.7 Emissions Monitoring System

The exhaust gases from each gas generator will be discharged to atmosphere through a 25m high stack. There are 12no. exhaust stacks proposed, as shown on Drawing No. 229101133-MMD-00-XX-DR-C-0025 with two, three of four generator sets connecting to a single 25m high exhaust stack. The stacks will incorporate emissions monitoring sampling points in accordance with EPA Guidance Note on Site Safety Requirements for Air Emissions Monitoring (AG1). Air emissions monitoring will be carried out in accordance with the reviewed IE Licence.

Periodical sampling of exhaust gases will be undertaken following commissioning at a frequency to be agreed with the EPA.

2.2.8 Water Demand

Water will be supplied to site via the existing Irish Water connections and there is sufficient existing water supply on site to meet the demand. Water will be used by the following consumers:

- Water for topping up of engine cooling systems.
- Potable water used for general purposes (drinking water, toilets etc.).
- The site is already served by the existing power station buried fire main and hydrant system. Some minor modifications to this system may be required to accommodate the new emergency generation units. Water storage for this system will continue to be provided from the existing power station firewater tank.

Foam hydrants and hose cabinets will be provided in accordance with the National Fire Protection Association Guidelines.

2.2.9 Wastewater Drainage

2.2.9.1 Surface Water Drainage

The proposed development will use and extend the existing site surface water drainage system – it will thus tie into the existing potable and stormwater networks within Huntstown Power Station site. The surface water drainage will be provided via two separate systems, one serving the southern part of the site and the other serving the northern part of the site.

The southern section of drainage will discharge to the existing drainage network which currently serves an existing building and carpark which are to be demolished/ relocated as part of the works. Rainfall/ runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the filter trenches.

For the northern section of the site, the storm drainage strategy is to provide on-site attenuation for a minimum 1 in 30 storm event, the drainage strategy has been designed to ensure that no flooding of adjacent properties occurs as a result of a 1 in 100 storm event from the proposed development, based on CIRIA guidance.

It is proposed to collect runoff from hardstanding via a series of filter drains provided around the extents of the proposed site. The filter drains will convey flows to the existing outfall on the northwest boundary. Before discharging into the existing storm network, flows will be attenuated to 5.48l/s which is calculated as the greenfield runoff rate for the application boundary. Attenuation will be provided via a below ground geo-cellular tanks.

Rainfall/ runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the filter trenches. The non-permeable laydown areas will be drained via traditional gullies or channels which will discharge into the filter drains.

Refer to drawings 229101133-MMD-00-XX-DR-D-0001 and 229101133-MMD-00-XX-DR-D-0002 for the proposed drainage layouts.

Water Quality

The CIRIA SuDS Manual states that the following interception storage measures for run off from rainfall events measuring <5m can be utilised by the proposed development:

- Filter Trenches,
- Porous / Granular open grading surface.
- These measures ensure that the appropriate treatment of run-off in relation to the contamination risk for each surface type has been considered.

2.2.9.2 Foul Wastewater Drainage

A new foul drainage network comprising a limited extent of underground pipework, will be provided around the extents of the proposed new welfare facilities to allow for collection of all discharges from the welfare facilities (as illustrated in Drawing No.229101133-MMD-00-XX-DR-D-0002). Foul wastewater will discharge to an existing septic tank within the Huntstown Power Plant complex which will be emptied, as is current procedure, by a licenced contractor to an approved licenced facility.

2.2.9.3 Process Wastewaters

There are no process wastewaters generated by the proposals.

2.2.10 Gas and Fire Safety Systems

2.2.10.1 Standards

Equipment inside the Generator Containers is designed in accordance with the safety requirements of the Institution of Gas Engineers & Managers (IGEM) Standard IGEM UP/3 “Gas-fuelled spark ignition and dual fuel engines”. The engine enclosure is classified as Hazardous Zone 2NE in accordance with European Standard EN 60079-10, with ventilation used to remove the hazardous atmospheres.

External gas pipework will be in accordance with the EU Pressure Equipment Directive and with European Standard EN 15001-1 “Gas installation pipework with an operating pressure greater than 0,5barg for industrial installations and greater than 5barg for industrial and non-industrial installations”. Gas pressure reduction stations shall comply with IGEM Standard TD/13 “Pressure regulating installations for natural gas, Liquefied Petroleum Gas (LPG) and LPG/air”.

2.2.10.2 Gas safety in engine containers

Risk analyses have shown that with a high rate of ventilation an explosive atmosphere inside the engine containers is unlikely to occur during normal operation. Ventilation of the engine container to prevent a build-up of flammable gas is therefore the primary gas safety control method.

Maintenance of a high rate of ventilation is essential, and interlocks are installed to check and monitor the air flow rates. The risk of gas leakage into the engine enclosure when the engine is shut down has been addressed by fitting an automatic gas shut off valve outside the enclosure. Any gas volume remaining in the enclosure supply piping will be very small and will be diluted safely by natural ventilation.

Duplicate gas detectors provide an alarm signal if the gas concentration reaches 20% of the lower explosive limit (LEL). If the concentration reaches 40% of the LEL, a signal is sent to two

automatic shut-off valves at the gas inlet to the generator and the fuel supply is completely shut off.

In addition to this:

- The generator circuit breaker, which is located in a non-hazardous zone, opens if the gas pressure falls to 10% of its normal value
- The generator fail safe control system is activated
- The engine room air circulation fans keep running at maximum speed.
- Error messages “GAS PRE ALARM” and "GAS ALARM" appear on the main control system panel

Gas detection is not regarded as a substitute for good ventilation but is used for safety back up for the various risk scenarios.

2.2.10.3 Gas safety in external areas

Gas shut-off valves shall be provided at the gas connection points, and hazardous area identified.

Hazardous area calculations and layouts shall be used to ensure that electrical and sparking equipment are positioned out of the gas risk areas. These studies are site-specific and are completed in accordance with ISO standards.

Automatic emergency shut-down of the gas supply shall be provided by push button operation from the control room.

2.2.10.4 Fire safety

Fire hydrants shall be located around site in accordance with NFPA 1 and NFPA 24 to provide local fire-fighting capability to assets.

Firefighting on site will predominately be carried out by manual fire suppression using the existing fire hydrant network, extended as required. Foam hydrants and hose cabinets will be provided in accordance with the NFPA guidelines.

In general, fire water discharges will be collected in the surface drainage system and will be discharged from the site after passing through the drainage interceptors.

Portable fire extinguishers will be placed for use at the generator unit containers.

Smoke and heat detectors will be provided in each engine container, and if smoke or heat are detected the engine will be shut down and isolated.

In the event of fire being detected, an alarm announcement shall warn all operators to evacuate the site area.

Access and egress studies and drawings will be completed at design stage to ensure at least two points of egress are provided and that no confined spaces exist on site.

2.2.11 Chemical Storage

All chemicals and oils will be stored in suitably bunded areas, Table 2.1 provides quantities for each substance.

Table 2.1: Chemical Storage (Existing and Proposed)

Material/ Substance	Nature	Amount Stored	Storage Location	Location of Use
Shell Rimula R4 X 15W-40	Generator Lube Oil	2-4 Nos	Lube Oil stored in drums and placed in 20-ft spare Containers	NGG 420 Genset
ZEREX™ Nitrite Free Extended Life 50-50 Antifreeze Coolant	Coolant	2-4 Nos	Stored in drums / IBC Tanks and placed in 20-ft spare Containers	NGG 420 Genset
SINOPEC Oil	Transformer Oil	28000kgs	Filled in Transformer Tank/ Spare not stored on site (order when needed)	70MVA Transformer
Shell Diesoline (B2)	Diesel	2-4 Nos	Stored in drums / IBC Tanks and placed in 20-ft spare Containers	Auxiliary Diesel Genset KTA50 G3+
Sealed Lead Acid Battery	Battery	10 Nos	Spare 20-ft Container	NGG 420 Genset / 6.3MVA Transformer
Si70 Silicon Coupling Block Spares Package	Sealant	7-10 kgs	Stored in workshop container (special vented cabinet)	General
Klüberquiet BQ 72-72	Grease	30 Nos (0.4kg)	Stored in workshop container (special vented cabinet)	General

2.2.12 Lighting

A new lighting arrangement will be provided to ensure a safe work environment for staff on site. This will consist of directional/ cowled LED flood lights where necessary and will replicate existing site security/ perimeter lighting.

2.2.13 Security

The Huntstown Power Station site is secured by high walls with security gates. Gates are remotely operated by security. Notices at the gates inform visitors to site on contact methods for security to gain access. The gates will operate in line with the current arrangements for the existing gates. During times of high traffic volumes to and from the site the gate will be manned. New chainmail perimeter fencing is proposed along the northern and eastern boundaries of the proposed development.

2.3 Construction Phase Programme and Activities

2.3.1 Construction Phase Description and Duration

Construction activities will gradually phase from pre-construction site preparation, enabling and dismantling works, to civil works which will include the construction of all equipment foundations and drainage works, to installation of the plant, connection to the gas and electricity infrastructure, followed by commissioning and testing of the proposed plant and equipment.

The construction phase of the project is expected to commence in Q3 2022 and can be broken into the following activities and durations listed in Table 2.2, some activities will run in parallel to enable completion of the project within 10 months.

Table 2.2: Construction Schedule

Phase	Timeline (estimated months)
Consent/Procurement/Enabling/ Dismantling/Demolition/ Decommissioning of existing services/Works	6 months
Civil Works	2 months
Plant Installation and Connection Works	3 months
Total	10 months

The total number of construction staff on-site will vary during the construction phase of the works but is expected to peak at approximately 35 persons.

Normal working hours for external site activities during the construction period are expected to be Monday to Friday 07:00 to 19:00 hours and 08.00 to 13.00 on Saturday. During certain stages of the construction phase, it is expected that some work will have to be carried out outside of normal working hours however this will be kept to a minimum. Works outside of the normal working hours will be arranged in advance by consultation with the local authority.

2.3.2 Enabling Works/Dismantling & Demolition Works

The pre-construction phase of development includes preparatory works and consultation with statutory bodies [Health and Safety Authority (HSA), EPA] as required. Following this process, site clearance activities will commence. Typical activities will include removal/relocating temporary structures (such as offices and portacabins), lighting and electrical panels, installation of welfare facilities, provision of new area for parking, demolition/dismantling of the existing storage building and temporary storage facilities and the grading of surfaces which will involve the removal of topsoil from the grassland area to the north of the existing power station site. This topsoil will be re-used on the site wherever possible.

Services to existing structures will be isolated and physically disconnected as required. Any remaining chemicals will be removed, and vessels will be decontaminated as required to reduce the residual risk to as low as reasonably practicable. Any hazardous materials will be identified and removed by specialist contactors in advance of site clearance and dismantling works.

There are a number of shipping containers which will be required to be removed in advance, in addition to a section of existing internal security fencing.

The existing stores building covers an area of approx. 780m^2 and is used to store plant and equipment for the operation of the power station. It will be required to be demolished/dismantled to facilitate the proposed development. The general methodology for removal of the storage facility will be by mechanical dismantling that will bring all structures and equipment to ground level/grade in a progressive manner using a top-down approach and the removal of foundations to a depth of approximately 3000mm. All open spaces/ voids created as part of the removal process will be backfilled with suitable materials to the surrounding grade levels.

The majority of the proposed development site (as an existing brownfield site/area of land) is already levelled and compacted. The area on the eastern side of the site situated in the earth berm will be levelled and compacted as required.

2.3.3 Civil Works

Where required, areas for the installation of new equipment will be levelled and new equipment foundations will be constructed. Where any works are required below ground, and there exists a conflict with rising substructures or existing foundations, the affected areas will be cleared as required. Existing below ground services (surface water drains) will be rerouted around areas where foundations are to be constructed. Existing below ground services in conflict with new

foundations will be relocated as required. A description of the foundations required, and an estimate of their approximate area and depth is provided in Table 2.3 below.

Table 2.3: Foundations

Structure/Equipment	Approximate Area (m2)	Estimated depth below ground level (mm)
Generator Exhaust stacks (12 in no,)	20.25	1000
110 kV Transformer	28.0	600
110kV AIS Substation Equipment	1.0	1000
Series Reactor	45.6	450
Lightning Conductor masts (2 in no.)	2.25	1800
New palisade fencing foundations	0.36	1100
Blast walls adjacent to 110 kV transformer	26.52	2000
Acoustic Wall	21.0	1450
Replacement storage shed	45.0	750

It is anticipated that the foundations (other than the foundations for the replacement storage shed) will be raft type ground bearing foundations. Recent ground investigations note that the water table adjacent to the site is situated at approximately 4mbgl. The proposed works are anticipated to be limited to approximately 2.0mbgl (refer to Chapter 3, Appendix A – *Supporting Information to the EIA Screening*, for more detail).

Existing ground water monitoring/treatment wells that may be affected by the works will be identified and amendments to the monitoring well network will be agreed with the EPA prior to commencement of works. All currently decommissioned boreholes will be capped to prevent any ingress of surface water.

All waste arisings resulting from excavation works will be managed in accordance with the Waste Management Act, 1996 and associated regulations. Excavated material will be tested on site prior to disposal off site or reused on site. Excavated material will be re-used on site where possible in accordance with the Construction Resource and Waste Management Plan (Appendix A to the CEMP, Appendix B). The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective.

Excavations will be supervised by the Environmental Clerk of Works (EnCoW) throughout the period of such works.

The Contractor will be responsible for the management of excavated material and the safe disposal of this material to a suitably licenced waste disposal facility where it cannot be reused as a by-product in accordance with the Article 27 notification procedure. In-situ concrete casting will be fully controlled to ensure that cement bound materials do not present any pollution risk.

In the area where the gas generating units are to be installed, the existing surface water network will need to be modified and rerouted. Surface water drains will also be re-routed and/or sealed in advance of any concrete being cast.

2.3.4 Environmental Clerk of Works

The Contractor's Environmental Clerk of Works (EnCoW) will have suitable environmental qualifications and the necessary experience and knowledge appropriate to the role. The EnCoW will be delegated sufficient powers under the construction contract to instruct the Contractor to stop works and to direct the carrying out of emergency mitigation / clean-up operations. The EnCoW will also manage consultation with key stakeholders as appropriate. The EnCoW will be

responsible for carrying out regular monitoring of the Contractors CEMP and will report monitoring findings in writing to the HPCL on a regular basis (at least weekly, but immediately in the case of incidents or accidents.

2.3.5 Plant Installation and Connection Works

The generator sets will be installed resting on plastic feet on the ground. Where the load bearing capacity of the ground is insufficient, the engines will be rested on sleepers in order to spread the load. No excavation work is anticipated for the generator sets.

Most of the new equipment will be skid mounted or containerised elements fabricated off site and delivered finished or for final assembly on site.

2.3.6 Construction Compounds / Laydown Areas

Given the modular nature of the development, no designated construction compound / laydown area is proposed.

Equipment will be delivered to site in a phased manner and located in its final position on arrival. Small items of plant and materials such as pipework, cables, tools and installation equipment will be stored in the proposed spares containers once delivered to site. The area to the north of the access road north of the temporary storage facility and 110 kV AIS will be used for construction parking/storage of plant if required.

2.4 Operational Phase

2.4.1 Operational Hours

The temporary emergency generating plant must be capable of operating up to 1460 hours per annum (based on a daily average of 4 hours per pay) on natural gas only. The actual running profile will be determined by the TSO and it is expected the emergency generation will be called to generate when the system is in Alert or Emergency state (as defined in the Grid Code).

2.4.2 Operation and Maintenance

The operational phase will a maximum of five years from summer 2023 to late 2027.

The operation of the plant will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and must therefore ensure that compliance with the licenced air, stormwater and noise emissions limit values when operational.

During the operational phase the generation plant will be operated by a site staff of up to 21No. personnel (within a 24-hour period) on a 3 x 8-hour shift basis.

Scheduled maintenance will be carried out by site personnel in compliance with the schedule provided by the plant manufacturer. A contract will be agreed with the engine OEM under which the warranty is maintained in conjunction with a comprehensive preventative maintenance program. For all major equipment maintenance will be managed by a Maintenance Management System (MMS), a web-based tool produced by Aggreko to simplify asset maintenance scheduling and ensure minimal asset downtime. Utilizing MMS ensures that asset reliability is maintained, and condition and equipment availability is maximised.

Apart from the digital MMS mentioned above, there are Service Tracker, Standard Work Instructions and Inspection Forms which will be followed during plant operations. Each Maintenance Schedule has an accompanying Maintenance Parts List detailing the Materials required to perform the task. Critical spare parts will be stored on site to carry out repairs and maintenance as and when required.

Plant will be equipped with certified operators, electrical / mechanical personnel, and qualified technicians to perform unplanned and extraordinary maintenance, comprehensive inspection, repairs, and operation activities. Standard Site Operation Procedures and Operation & Maintenance (O&M) manuals will be followed throughout the Project Life Cycle.

The majority of the servicing and maintenance will be conducted on the generators by the on-site personnel with parts, material and equipment stored on-site. The below table shows the scheduled maintenance program for each generator.

Table 2.4: J420 Generator Scheduled Maintenance Programme

Maintenance Type	Frequency (no. of operating hours)	Personnel Required	Location of Maintenance Activities
Oil drain	1,850	Mechanical Engineer/Technician	On-site
Engine induction air filter, NOx, valve clearance, re-gap plugs, replace gas train filters	2,000	Mechanical Engineer/Technician	On-site
Grease alternator bearings	4,000	Electrical Engineer/Technician	On-site
Circuit breaker maintenance	5,000	Electrical Engineer/Technician	On-site
Turbo clean, oil mist separator filter, mechanical seal HT pump, decoke head/piston change elasomers, clean mixture heat exchanger	10,000	Mechanical Engineer/Technician	On-site
Replace coolant, replace gaskets/seals/bearings on coolant pumps	16,000	Mechanical Engineer/Technician	On-site
Turbo overhaul using swing turbo	20,000	Mechanical Engineer/Technician	On-site
Engine overhaul & package maintenance	30,000	Mechanical / Electrical Engineers	On-site or off site at Aggreko Maintenance Facility

Two of the generators will be used as back-up generators in the event of any generator breakdown. These two generators will also be subject to scheduled maintenance on a rotational basis throughout the year. The maintenance schedule will ensure the high availability of the plant to meet the 95% operation availability.

2.5 Decommissioning Phase

Following the cessation of the emergency generation plant the generator units will be disconnected and removed from site. This equipment is likely to be shipped from Ireland, via Dublin Port for use at another location.

Remaining equipment such as, pipework and cabling, will be made safe and retained on site for potential future uses at Huntstown Power Station. Equipment will be stored under appropriate conditions and the site will be secured.

Waste materials generated during the decommissioning of the plant will be removed from site in accordance with the Waste Management Act, 1996 and associated regulations.

The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project.

2.6 Health and Safety Considerations

2.6.1 Alternative Fuel

The proposed generating units will operate on natural gas only and therefore there will be no bulk storage of distillate fuel oil on site. A quantity of natural gas will be maintained in the gas system and a small quantity of diesel will be stored on site for use by the diesel fire pump.

2.6.2 COMAH Regulations

Huntstown Power Station is notified to the HSA as a Lower Tier COMAH site and is subject to the provisions of the Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2015 (COMAH) Regulations 2015. The Health and Safety Authority is the central competent authority for the purpose of the COMAH Regulations, and the details of the application and how it relates to the existing hazardous material at the establishment have been assessed. The updated report will be issued to the HSA and is a standard reporting mechanism for COMAH sites. AWN Consulting Ltd. completed a COMAH Land Use Planning Assessment for the proposed development. The Land Use Planning assessment was completed in accordance with guidance published by the HSA (HSA, 2021). This report is provided in Appendix D.

3 EIA Legislative Review

3.1 Requirements under the EIA Directive

The primary objective of the EIA Directive (Directive 2011/92/EU), as amended by Directive 2014/52/EU (together, the "EIA Directive"), is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for environmental impact assessment (EIA), prior to development consent being awarded, of public and private developments that are likely to have significant effects on the environment.

The EIA Directive provides in Recital (27) that the screening procedure should ensure that an environmental impact assessment is only required for projects likely to have significant effects on the environment.

The EIA Directive provides a definition of environmental impact assessment as being a process consisting of:

- The preparation of an environmental impact assessment report (EIAR);
- The carrying out of consultations required to inform the EIAR;
- The examination by the competent authority of the information presented in the EIAR and any supplementary information provided, where necessary, by the developer and relevant information received through consultations with the public, prescribed bodies and any affected Member States;
- The reasoned conclusion by the competent authority on the significant effects of the project on the environment; and
- The integration of the competent authority's reasoned conclusion into any development consent decision.

In determining the requirement for EIA, the EIA Directive differentiates between the projects that automatically require EIA and those for which an EIA may be required. These projects are listed in Annex I and Annex II of the EIA Directive respectively.

3.2 Requirements under the Planning and Development Regulations 2001, as amended

The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transposed the requirements of the 2014 EIA Directive (Directive 2014/52/EU) into existing Irish planning consent procedures, i.e. the *Planning and Development Regulations 2001, as amended.*

In determining the requirement for EIA, the Directive differentiates between projects that always require EIA and those for which an EIA may be required. These projects are listed in Schedule 5 Part 1 and Part 2 of the *Planning and Development Regulations 2001, as amended* (hereafter the P&D Regulations).

- Part 1 projects are projects which are considered as having significant effects on the environment and require a mandatory EIA; and
- Part 2 projects are those not included in Part 1 but may require EIA where the proposed development is of a class specified in Part 2 and equals or exceeds the relevant thresholds; or, where the proposed development would be of a class specified in Part 2, but does not equal or exceed prescribed threshold in Part 2 yet it is concluded, determined or decided, that the proposed development is likely to have a significant effect on the environment.

3.2.1 Schedule 5, Part 1 Projects

Within Part 1 of Schedule 5 of the P&D Regulations the following classes of development may be considered applicable to the proposed temporary emergency generation plant.

Class 2(a):

"2(a) A thermal power station or other combustion installation with a heat output of 300 megawatts or more."

The proposed development is characterised as a type of *'other combustion installation'* as it utilises reciprocating gas engines which do not utilise steam to power the engines. The proposed development utilises a waterless process; a mixture of natural gas and air is ignited to produce hot air and the resulting thrust is used to power the generator units. The thermal output (which is an ancillary output which has no use or function) via the exhaust stacks, from the proposed development, totals 80 MWth, and is therefore below the 300 MW threshold in Paragraph 2(a). The proposed development is thus below the prescribed threshold and mandatory EIA is therefore not required.

Class 22:

"22. Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex."

The proposed development is located on existing brownfield hardstanding within the existing Huntstown Power Plant complex (comprising Huntstown 1 and Huntstown 2 power generation plants). Both Huntstown 1 and 2 (H1 and H2) can also be considered a class of development which falls under Part 1, Class 2(a), as each of these can be categorised as *'other combustion installations'*. However:

- The proposed temporary emergency generation plant is a stand-alone, temporary electricity transmission generation plant/ installation. Any power generated, is not being 'fed into' or conducted/ transmitted via the existing H1 or H2 power station/ plant or their associated substation – i.e. Huntstown substation (which has its own AIS).
- The power generated will go to a proposed new AIS (which is not connected to any aspect of the existing H1 and 2 power station/ plant) and then, via new (separately and independently permitted undergrounded infrastructure (comprising part of the existing Corduff – Platin 110kV line (to Finglas substation)), connecting to Finglas substation.
- The proposed temporary emergency generation facility can be independently operated and switched on/ off and has its own, separate control room.

Therefore, notwithstanding the proposed development's location within the existing Huntstown Power Plant complex, the proposed development is a stand-alone project and is entirely independent of the operations and functions of either Huntstown 1 and/or 2. Whilst there are shared utility connections (such as GNI AGI, storm water outfall), there is nonetheless, no functional interdependency, and both H1, H2 and the proposed development can be separately and independently operated. As a stand-alone project, the proposed development cannot be considered to be a change or extension of any existing or consented development class under Part 1. Class 22 is therefore not applicable to the proposed development.

3.2.2 Schedule 5, Part 2 Projects

Within Part 2, five types of development classes are identified which *may* be applicable to the proposed development:

Class 3 - Energy Industry

"3(a) Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more."

The proposed facility's primary output is electrical energy and not thermal energy. The hot air flow which exits each generator stack has no purpose, use or function and is the only associated 'thermal output' from the proposed development. This hot air ('thermal output') totals 80 MWth, which is below the 300 MW threshold in Class 3(a).

Class 10 - Infrastructure Projects

"10(b)(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere."

The proposed development may be considered to be a type of 'urban development' as it represents a development type which is predominately focused on urban centres and although it provides electricity to the national grid, development of this nature predominately serves areas of high electricity demand such as urban areas. Irrespective of the limited size of the development and its location within an area zoned by Fingal County Council for the development of heavy industry on the urban periphery, the very nature of the proposed development is 'urban' as an industrial undertaking - an electricity generating facility. The operation of the proposed development is an industrial activity which is required to be regulated by the Environmental Protection Agency under a revised Industrial Emissions Licence (P0483-04).

Whilst the proposed development is considered to be a type of 'urban development' under Class 10(b)(iv), the proposed development is not located in a 'business district' (the P&D Regs states that "*In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use"*), as it is within an area zoned for 'Heavy Industry', as per the Fingal Development Plan 2017-2023, where surrounding land uses are all predominantly heavy and light industry. In addition, whilst it is considered to be located within a 'built-up area' as per the definition in Article 3[2] of the P&D Regulations, it does not meet the 10 hectare threshold for a built-up area, as the overall development site covers an area of approximately 4.2 hectares.

Class 13 - Changes, extensions, development and testing

"13(a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:-

"(i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and

(ii) result in an increase in size greater than –

- 25 per cent, or

- an amount equal to 50 per cent of the appropriate threshold,

whichever is the greater."

"13(c) Any change or extension of development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, which would result in the demolition of structures, the demolition

[2] "built-up area" means a city or town (where "city" and "town" have the meanings assigned to them by the Local Government Act, 2001) or an adjoining developed area.

of which had not previously been authorised, and where such demolition would be likely to have significant effects on the environment, having regard to the criteria set out under Schedule 7."

As previously outlined within section 1.8.3 (in relation to Part 1, Class 22), the proposed development is a stand-alone project with no functional links or interdependencies with the authorised developments of Huntstown 1 or 2; therefore, no change or extension of these existing already permitted and implemented developments results arising from the proposed the temporary emergency generation plant.

Class 14 - Works of Demolition

"Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7."

The proposed development can therefore be considered to require enabling works which includes 'demolition' works, by virtue of the fact that it requires the dismantling of the existing storage building, which in and of itself was originally proposed as a temporary structure. As a lightweight prefabricated structure of corrugated galvanised steel, having a semi cylindrical cross-section, its dismantling will not result in significant effects on the environment based on the scale, nature and duration of the dismantling works required.

The proposed development is therefore identified as a type of development under Class 3(a) and 10(b)(iv) but does not meet the respective thresholds. It is therefore considered to be a 'sub-threshold development'. Class 13 is not applicable to the proposed development, while there are no significant effects resulting from the proposed development under Class 14.

Class 15

"Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7."

To confirm the potential for significant effects on the environment in relation to Class 15, an assessment of the proposed development against the criteria in Schedule 7 and 7A, which transpose Annex III and Annex IIA, respectively of the EIA Directive, has been prepared. This is presented in Section 4 *Sub-threshold EIA Screening* of this report. The conclusion on the significance of the effects is provided in Section 6 *Conclusion*.

4 Sub-threshold EIA Screening

4.1 Characteristics of Project

Criterion	Discussion
Will the size and design of the whole project be considered significant?	The proposed development covers a small spatial area, totalling approx. 4.2 hectares and is predominately located within the existing Huntstown Power Plant complex which operates two combined cycled gas turbine generating plants (Industrial Emissions Licence references: P0777-02 and P0483-04). The proposed development will be licenced under the latter. The overall size of the proposed development is not considered to be significant as the spatial extent is limited to only 4.2 ha; to assist comparison the adjacent landholding for Huntstown Quarry totals approx. 200ha (operational and non-operational lands). The proposed development is not considered significant in size in relation to the existing and surrounding heavy industry land uses which have been operational for the last 20 years (minimum) within the townlands of Huntstown and Johnstown. The proposed development will comprise of technology which is extensively used for electricity generation. The proposed development was specifically designed to meet the requirements for temporary emergency electricity generation, both electrical output and response times. The proposed development, although a common type of development within Ireland; is fundamentally different in its design, which is predominately modular in nature, to accommodate the urgent and critical need to secure electricity supply. The modularised design of the proposed development will facilitate the civil works and plant construction, installation and commissioning of the generation units within a four - month period upon the completion of the enabling works. The proposed development has been designed with a temporary and limited lifespan of five years at this location (period 2023-2027). The proposed development will run only when required, typically equating to four hours per day; 1460 hours per year. The actual running profile will be determined by the Transmission System Operator, and it is expected the emergency generation will be called to generate when the system is in 'Alert or Emergency state'. The design of the proposed development, in providing a speedy response to the critical need for the secure of electricity supply, comprises 38No. generator units within 20ft shipping containers, which will require limited ground works to facilitate their placement on site. The site benefits from extensive existing hardstanding which can be used without intervention. Limited groundworks will be required, as foundations will be required for the following elements only: generator exhaust stacks (total of 12No.), 110kV transformer and blast walls, 110 kV AIS substation equipment, series reactor, a new storage building, acoustic barrier, and lightening conductor masts and palisade fencing. The proposed development is also able to utilise the existing stormwater and water network within Huntstown Power Plant complex. The existing stormwater drainage system will be extended and modified to accommodate the proposed emergency plant. Foul drainage from the new welfare facilities will drain to an existing septic tank to be emptied via a vacuum tanker. The design of the proposed development is not considered to be significant as it utilises where possible existing features of the site and pre-assembled equipment where feasible. Many elements of the proposed development, such as drainage or noise attenuation mitigation are standard applications. None of the elements for the proposed development are complex in their design and are typically applied to the same or similar project types.
Will the project have a significant impact when considered in cumulation with other existing and/or approved projects?	The proposed development is located within the Huntstown Power Plant complex which includes two existing combined cycled gas turbine generating plants (Huntstown 1 and 2) and the adjoining Huntstown 220kV substation and Gas Above Ground Installation (AGI). Adjacent to the entrance of the Huntstown Power Plant, and directly opposite the entrance to the proposed development, is the BioEnergy AD Renewable plant and associated wastewater treatment plant, to the west Huntstown Quarry, and Finglas 220 kV Substation to the south (located adjacent to Junction 5 of the M50). There are several approved projects which have not been constructed including a gas peaking plant (Planning ref: FW20A/0219), to be located approximately 620m to the north of the proposed development, the Regional Biosolids storage facility permitted as part of the Ringsend Upgrade SID proposal (ABP Ref: PA29S.301798), electrical infrastructure between Finglas 220 kV Substation and Huntstown Power station (Planning Ref: FW21A/0144); data centre facility (Planning ref. FW21A/0151 / current

Criterion	Discussion
	appeal ABP Ref: PL06F.313583) and Mooretown 220kV GIS substation (ABP Ref: VA06F.311528). A complete list of approved and granted developments are listed in table 5.1 of this report. The proposed development has the potential for cumulative impacts to occur when considered in combination with the existing and approved developments listed above and within Chapter 5. The methodology employed for each environmental thematic (covered in Chapter 2 to11 of Supporting Information to the EIA Screening – Appendix A) differs based upon the relevance of the emissions from other planned or approved developments, therefore each thematic will included different planned or approved development within the respective cumulative assessments. The commencement of the construction phase of many of the approved and yet to be constructed developments is not known; however, it is likely that the proposed electrical infrastructure project FW21A/0144 will be commenced simultaneously with the construction of the proposed development. If other remaining granted or planned developments are constructed simultaneously there is potential for cumulative impacts and these have been assessed in Chapter 5 of this EIA Screening report under the following thematic headings: • Material Assets (Section 5.4.2) • Soils, Geology and Hydrogeology (Section 5.4.3) • Surface Water including Flood Risk (Section 5.4.4) • Biodiversity (Section 5.4.5) • Noise (Section 5.4.6) • Air Quality and Climate (Section 5.4.7) • Archaeology, Architecture and Cultural Heritage (Section 5.4.8) • Landscape and Visual (Section 5.4.9) • Traffic and Transportation (Section 5.4.10) The cumulative effects assessment under each thematic heading concluded there are no significant cumulative impacts.
The nature of any associated demolition works	Demolition/dismantling works required as part of the site enabling works are limited in scale and nature. An existing stores building, which covers an area of approx. 780m^2, is the only structure which will be required to be dismantled/demolished. Shipping containers used for storage purposes will also be removed from site (for reuse elsewhere or resale) while a section of the fence along the northern boundary of the Huntstown Power Station site will be removed. The general methodology of removal of the storage facility will be by mechanical dismantling in a progressive manner using a top-down approach and the removal of foundations to a depth of approximately 300mm. All open spaces/voids created as part of the removal process for utility diversions will be backfilled with suitable materials to the surrounding grade levels. Waste arising from demolition/dismantling will be managed in accordance with the Construction Resource and Waste Management Plan prepared for the proposed development (contained within the CEMP provided in Appendix B of this report). The scale and nature of the demolition/dismantling works is limited and therefore is not considered to result in any significant impacts.
Will the project involve the use of natural resources, in particular land, soil, water and biodiversity? Is the use of these natural resources considered significant?	There will be limited use of natural resources by the proposed development. There will be no use of natural resources during the demolition/dismantling phase as dismantled materials will be collected for disposal at a licenced waste facility. There is limited use of natural resources during the construction, operational and decommissioning phases. **Land** In relation to land, the land take for the proposed temporary emergency generation power facility is already largely encompassed within the footprint of an existing and operational power plant complex. All equipment relating to the operation of the proposed temporary emergency power plant will be located within the licenced boundary for Huntstown Power Plant complex, under existing IED Licence P0483-04, as such, there is no significant use of land as a natural resource. The associated proposed replacement parking (tarmac – 3,827m^2) and laydown area (hardcore – 5,646m^2) are located outside of the operational areas of the existing Huntstown power plant complex and within an area of amenity grassland. This replacement parking and laydown area will be reinstated to grassland on decommissioning of the temporary emergency power generation plant.

Criterion	Discussion
	Soil The majority of the proposed development will be undertaken on areas of existing hardstanding which are already levelled and compacted, thus reducing the need for significant ground clearance or levelling. The development requires the removal of topsoil in the northeast of the site over an area of approximately 5,000m^2. a. Excavations for foundations are limited to the following structures and plant: b. generator exhaust stacks (total of 12No.) c. 110kV transformer and associated blast walls d. AIS substation equipment e. reactor f. replacement storage shed g. lightning masts h. acoustic wall i. fencing There will also be minor excavation works required to relocate underground services and provide stormwater attenuation and foul water drainage. There are no operational uses of soils; as such, there are no impacts during this phase. During the decommissioning phase, it is anticipated that similar earthwork activities to those carried out during the construction phase, will be required. It is anticipated that all activities will be limited to shallow depths (<2.0m) and those excavations will be backfilled once the site is decommissioned - likely with aggregate materials. The use of soil has been assessed as not significant (refer to Chapter 3 of Appendix A) as there will be no soil importation; the soil removal volumes are not significant. **Water** During the construction phase the impact to water as a natural resource is limited. The proposed works are anticipated to be limited to shallow depths (<2.0m). Earthworks are proposed to take place above the water table (approx. 4.0mbgl). The impact to groundwater is categorised as slight during the construction phase. It is acknowledged that risks such as run-off associated with the works may contain hydrocarbons associated with fuel spills, and plant leaks during the construction phase. However, the CEMP (contained in Appendix B), has been prepared in accordance with best practice guidelines, including mitigation measures contained within CIRIA C741 Environmental good practice on site guide (fourth edition). These measures will be implemented during the construction phase at all times to protect water resources (surface water and groundwater). The existing drainage network includes existing oil interceptors which will prevent hydrocarbon emissions to the closest waterbody, the Ward River, and the wider environment. The operation of the proposed development does not require process water; as such, the use of public water resources is limited to welfare facilities and topping up of engine cooling systems. The operation of the plant will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will ensure compliance with the licenced air, water and noise emissions limit values when operational, including but not limited to, any requirements for groundwater sampling and monitoring. If any groundwater contamination is identified following the cessation of the development, then the site will be required to remediate in accordance with the IE licence conditions. There is no significant impact on water as a natural resource as a result of the proposed development. **Biodiversity** An area of low diversity amenity grassland will be replaced with hardstanding (replacement parking tarmac – 3,827m^2 and laydown area hardcore – 5,646m^2). This loss will not be significant, as the ecological value of this habitat is categorised as local importance (low value) due to its characterisation as actively managed grassland. In relation to biodiversity as a natural resource, the change from an area of low biodiversity grassland to hardstanding, is not considered significant, as both uses are of low biodiversity value. In the absence of mitigation there will be a permanent loss of a 5m section of hedgerow and potential temporary impacts to adjacent habitats of local importance (higher value); scrub, hedgerow and less modified calcareous and neutral grassland. Prior to mitigation the impacts of the proposed development are considered not to be significant.

Criterion	Discussion
	Notwithstanding, mitigation measures detailed within Chapter 5 of Appendix A, and also within CEMP in Appendix B, will implemented by the Environmental Clerk of Works. These biodiversity mitigation measures are also included in the CEMP and will result in imperceptible impacts. The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective **Natural Gas** The proposed development will operate on an existing natural gas supply. It has been confirmed by HPCL that there is the requisite volume of natural gas supply capacity to operate the proposed temporary energy generation plant. The requisite 50MW emergency electricity generation can be achieved through the utilisation of available headroom capacity above the registered capacity from the 28barg and 42barg systems of the existing AGI. An assessment of the headroom capacity available (as advised by Gas Networks Ireland), over the registered supply capacity and during peak consumption, was therefore undertaken. The assessment concluded that there is sufficient headroom available from the existing 28barg and 4 barg gas supplies, which supply Huntstown Unit 1 and 2, to supply the required gas to the proposed temporary emergency generation plant. In conclusion, the use of natural resources is not considered significant due to the limited volumes required for the proposed development.
Will the project produce a significant volume of waste?	The proposed development will result in limited volumes of waste during the construction phases, due to the limited earthworks and limited demolition/dismantling works required, as previously stated. The demolition/dismantling phase will not generate significant volumes of waste, as the majority of the structures to be removed comprise of shipping containers and storage buildings. In addition to those temporary structures, dismantling of an existing storage facility will be undertaken, as well as the removal of the fence on the northern boundary of the existing power station site. Any excavated materials and demolition/dismantling waste will be managed in accordance with the Construction Resource and Waste Management Plan which has been prepared in accordance with "Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects" (EPA, 2021), refer to Appendix B. The operational phase will not generate significant volumes of waste, as the proposed development will operate on piped natural gas. The main source of waste during the operational phase will be from empty containers for lubrication and general oils required for the operation and maintenance of equipment; these waste volumes will be insignificant. Future decommissioning will similarly result in limited waste, as the generator sets will be removed from site and reused/ utilised on future projects elsewhere/ where required. Containerised units used for noise mitigation can also be re-utilised elsewhere or re-used upon resale. Remaining equipment such as gas compressors, pipework and cabling, will be made safe and retained on site for potential future uses at Huntstown Power Station.
Will the project result in significant pollution or nuisance?	The proposed development, as a type of energy generation development, will result in some emissions which may be considered to be a pollution or nuisance risk, if unmitigated. The proposed development has limited emissions - namely, noise, stormwater and air. These constitute the emissions controlled and monitored by the existing IE Licence controls and monitors. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced air, stormwater and noise emissions limit values when operational. The construction phase and similarly the decommissioning phase, will also give rise to the same emissions. The risk of these emissions causing pollution or nuisance is outlined further hereunder. **Noise** The design of the proposed development has incorporated embedded mitigation to reduce any noise impacts on sensitive noise receptors. These comprise an attenuation unit with an exhaust silencer fitted to each generator set. As further detailed in Chapter 6 of Appendix A to this report, noise modelling was undertaken for the proposed development. The assessment of noise impacts arising from the construction phase, is based on the '5 dB(A) change' methodology of BS5228-1 2009+A1:2014 Code of Practice for noise and

Criterion	Discussion
	vibration control on construction and open sites for the main phases of work. Noise levels from construction are predicted to be below 65 dB LAeqT for daytime periods. It is therefore assessed that noise impacts due to construction activities will be negligible and not significant at surrounding Noise Sensitive Locations. During the operational phase, the noise modelling concluded that the proposed development would result in an exceedance of the noise levels for daytime and night-time prescribed within the EPA document "Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities" (2016), if no mitigation is applied. The proposed noise mitigation comprises a third attenuation unit which sits on top of the cooling module container, in addition to a 7m high acoustic wall along the northern boundary in the locality of the generator sets and a 5m high acoustic barrier comprising of containers, along the eastern boundary. The assessment of cumulative noise impacts accounting for the proposed development site and other nearby development projects, shows an increase of less than 0.5 dB to the existing ambient noise level LAeq T for all time periods. The cumulative noise impacts are not therefore considered to be significant (refer to section 5.4.6 of this report). The decommissioning phase will include similar activities to those laid out for the construction phase and hence will also result in negligible noise impacts. Therefore, it is concluded that significant adverse impacts, due to noise generated from decommissioning activities, are not likely. **Air** Air dispersion modelling has been prepared for the proposed development and is detailed in Chapter 7 of Appendix A. The assessment of air quality has been carried out in accordance with national requirements including EPA Air Dispersion Modelling from Industrial Installations: Guidance Note (EPA AG4) and addresses the construction, operational and decommissioning impacts resulting from emissions to air. The air dispersion modelling assessed the impact on both human and ecological receptors. The construction phase is predicted to have a 'Negligible Risk' to 'Low Risk' in terms of dust soiling and PM_{10} effects with no mitigation in place. Best practice mitigation measures adapted from the IAQM guidance have been incorporated into the proposed development's CEMP included in Appendix B. The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective For the operational phase, the scenarios applied are highly conservative. When the cumulative effects are assessed, it is concluded that cumulative effects are not significantly greater than the proposed development, in isolation, which meets the Maximum Allowable Process Contributions (MAPC) criteria set out in EPA AG4; significant effects are therefore not likely. No mitigation measures in addition to those already inherent to the design of the proposed development are required during the operational phase. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced air emissions limit values when operational. Decommissioning phase mitigation measures are commensurate with construction phase mitigation measures. **Stormwater** Stormwater is the only water emission which results from the proposed temporary emergency transmission generation development. Foul wastewater drains to an existing septic tank for off-site disposal and there is no process wastewater. Any stormwater collected from hardstanding or impermeable surfaces, will drain to the existing extended and modified stormwater system, which is fitted with oil interceptors, and conveys flows to the existing outfall on the northwest boundary of the site. The assessment of the impacts on surface water is detailed in Chapter 4 of Appendix A. It is concluded that the operational impacts in terms of stormwater discharges will be imperceptible. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced stormwater emissions limit values when operational. The construction and decommissioning phase impacts on surface water are considered in Chapter 4, Section 4.4 of Appendix A. Pollution of surface water may occur via the existing stormwater network; however, no impacts are considered to be significant prior

Criterion	Discussion
	to mitigation, with the magnitude assessed no greater than minor. Notwithstanding the limited impacts during construction, mitigation measures will nonetheless be implemented and are included in the CEMP provided in Appendix B. A full-time on-site Environmental Clerk of Works (EnCoW) will be appointed prior to commencement of works. The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The proposed development will not result in any significant pollution or nuisance.
Will the project result in a risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge?	The proposed development is located within the extent of the existing Huntstown Power Plant site. Huntstown Power Plant is listed as a Lower Tier Establishment (extant list dated 18th November 2021, HSA) under the Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (COMAH Regulations). AWN Consulting were appointed to produce the necessary COMAH Land Use Planning Assessment. The COMAH Land Use Planning Assessment assessed the following major accident scenarios 1. Vapour Cloud Explosion (VCE) within a generator container. 2. Jet fire following a leak or rupture of the natural gas pipeline at the proposed development. 3. Flash fire following a leak or rupture of the natural gas pipeline at the proposed development. The assessment concluded that the risks associated with the proposed development in combination with the existing Huntstown Power Station are acceptable. Refer to Appendix D for the COMAH Land Use Planning Assessment Report. The risk of major accidents and/or disasters is not significant as the proposed development has been designed in accordance with Best Available Techniques to reduce risks to human health or the environment.
Will the project result in any risks to human health (i.e. due to water contamination or air pollution)?	According to the Geological Survey Ireland (GSI), there are no Groundwater (Drinking Water) Protection Areas within the general vicinity of the proposed development. The proposed development will utilise the public mains supply for the topping up engine cooling systems and for welfare facilities. The potential for water and air pollution have been discussed above and are detailed in full within Chapters 4 and 7 of Appendix A (Supporting Information to the EIA Screening Assessment) of this report. It is concluded that there is no significant risk to human health as a result of the proposed development, based upon the assessment of effects within the respective sections of this report. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and is required to ensure that the temporary emergency generation plant will operate under all relevant EU Best Available Techniques reference documents (BREFs) or Commission Implementing Decisions (BAT Conclusions). Best available techniques (BAT) are defined as the techniques that are most effective, or 'best', at eliminating or, where not practical, minimising / controlling industrial emissions and environmental impacts. The design of the proposed development is cognisant of the requirements of BAT and a reviewed IE Licence under which it will be required to operate. As such, there are no emissions from the proposed development which are considered significant.

4.2 Location of proposed development

Criterion	Discussion
What is the existing and approved land use?	The proposed development is located within an area zoned for 'Heavy Industry' (HI) within the Fingal Development Plan 2017-2023 (as varied). This zoning objective seeks to 'provide for heavy industry', and the zoning vision seeks to, "*facilitate opportunities for industrial uses, activities and processes which may give rise to land use conflict if located within other zonings. Such uses, activities and processes would be likely to produce adverse impacts, for example by way of noise, dust or visual impacts. HI areas provide suitable and accessible locations specifically for heavy industry and shall be reserved solely for such uses*." The precedent for this land use is well established, given the existence of Huntstown Power Plant since circa 2000. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04).
Has the project the potential to impact on the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground?	The impact of the proposed development on natural resources has been assessed in Chapters 3, 4 and 5 of Appendix A (Supporting Information to the EIA Screening Assessment) of this report. The assessments concluded that prior to mitigation, the proposed development does not result in any significant impacts on natural resources, namely, soil, land, water or biodiversity. Notwithstanding the limited impacts, mitigation measures will be provided to safeguard natural resources from any impact on the relative abundance, availability, quality and regenerative capacity. Mitigation measures within this report have been transposed to the CEMP (included as Appendix B) and will be implemented by the appointed Contractor(s). The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. A full-time on-site Environmental Clerk of Works (EnCoW) will be appointed, prior to commencement of works, who will ensure that measures are designed, installed, and maintained in accordance with the CEMP. Impacts to natural resources are therefore not anticipated to be significant.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to wetlands, riparian areas, river mouths	The proposed development is not located in proximity to any wetlands or river mouths. The closest watercourse to the proposed development is the Ward_030 (European Code: IE_EA_08W010300), located approximately 500m to the north of the proposed development. Due to the distance to this watercourse and lack of any works to this watercourse and its riparian corridor, there is no impact to this riparian area and its habitats. There is therefore no significant impact as a result of the proposed development to wetlands, riparian areas, river mouths, as there is an absence of wetland habitat or river mouths within or adjacent to the proposed development. The proposed development does not require any direct works to any riparian area or waterbody. Notwithstanding the absence of these habitats in proximity to the proposed development, pollution control measures to mitigate surface water run-off, as listed in Section 4.5.1 and 4.5.2 of Appendix A, are included in the CEMP (contained in Appendix B) and will be implemented by the appointed Contractor(s). The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The design of the development will ensure that the operational phase does not result in pollution of riparian areas or rivers through the application of Best Available Techniques, including bunding of hazardous substances and the use of oil inceptors, on the existing drainage systems. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced stormwater emissions limit values when operational under Schedule B of the IE Licence. These water emissions will continue to discharge as per the existing IE Licence to Roadstone Wood Limited Quarry Dewatering Network, which discharges to the Ballystrahan Stream, a tributary of the Ward River. The existing IE Licence under which the proposed development will operate, implements an Environmental Management System to manage the requirements of the IE Licence and details of preventative and corrective measures to ensure compliance with the IE Licence. The decommissioning phase will not result in significant impacts. Similar to the construction phase, the same mitigation measures will be implemented for surface water run-off.

Criterion	Discussion
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to coastal zones and the marine environment	The proposed development will not result in a significant impact on the coastal or marine environment due to the tenuous hydrological connectivity and separation distances to such environments. The surface water on site discharges to the Ward River (EPA code IE_EA_08W010300) to the north of the site. The Ward River flows into the Malahide Estuary (Malahide River Estuary SAC 000205), approximately 9.8 km downstream. The hydrological connectivity is described as tenuous, as it is limited to the existing drainage network which discharges to a tributary of the Ward River, which then flows to the Malahide Estuary. The existing drainage network includes oil interceptors which will trap hydrocarbons that enter the drainage system. The drainage system will also allow for the settlement of cement fines and sediment in any discharge which may enter into the network due to surface water run-off. In the event that there is insufficient settlement to prevent the fines from entering into the Ward River, it is of note that the hydrological route to Malahide Estuary is significant in length (9.8km). The combination of surface-water inputs for a distance of 9.8km before entering Malahide Estuary will provide sufficient dilution and assimilative capacity of any potential pollution events. As stated in the above section [wetlands, riparian areas, river mouths], pollution control measures will be implemented during the construction phase to ensure the protection of the local surface water network. The operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced stormwater emissions limit values when operational under Schedule B of the IE Licence. These emissions will continue to be monitored and reported in accordance with EPA requirements. For the reasons aforementioned, the proposed development will not result in any significant impact to coastal zones or the marine environment.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to mountain and forest areas	The proposed development has no potential to impact on these features of the natural environment, having regard to its location and the nature of the proposed development works.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC	A Screening for Appropriate Assessment Report (AA Screening) has been prepared for the proposed development. It assessed the potential for significant effects on a number of European Sites, specifically: Malahide Estuary SAC [000205] North Dublin Bay SAC [000206] South Dublin Bay SAC [000210] Baldoyle Bay SAC [000199] South Dublin Bay and River Tolka Estuary SPA [004024] Malahide Estuary SPA [004025] North Bull Island SPA [004006] Baldoyle Bay SPA [004016] Viable source pathway receptor links were identified for Malahide Estuary SAC (000205) and Malahide Estuary SPA (004025) only, due to potential hydrological links, as the Zone of Influence (ZoI) for surface water emissions is catchment wide and therefore impacts must be considered further by the AA Screening. There is potential for SCI species to occur outside of European site boundaries. The ZoI differs for each potential source of impact and for species. The ZoI for noise and vibration is 55m for wetland birds, 150m for otters, ZoI dust emission is taken as 50m from the works and 500m along existing roadways from the site entrance. The proposed development has been cumulatively assessed in relation to air quality; as such, there is no significant impact to any qualifying interests (QI) occurring within or outside the European site boundary. Similarly, the impacts of noise and vibration on QI within or outside the European site boundary will not be significant. The proposed development is located within an existing operational site which will not result in any significant impact during any phase of the proposed development.

Criterion	Discussion
	The impacts on both Malahide Estuary SAC (000205), and Malahide Estuary SPA (004025) were assessed against a number of possible sources of impact, namely; • Size, scale, area, land-take • Physical Changes • Resource Requirement • Transportation Requirements • Emissions and Waste The AA Screening concluded there is no potential for significant effects on any European sites from the proposed development, either alone or in-combination with other plans and/or projects, in view of the best scientific information and the sites conservation objectives, and that no measures are required to avoid or reduce harmful effects on European sites.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure	The closest watercourse to the proposed development is the Ward_030 (European Code: IE_EA_08W010300), which has been assigned Moderate status in the latest monitoring cycle for the Water Framework Directive (2013-2018). The proposed development is located approximately 500m southeast of this watercourse. The construction phase of the proposed development will include pollution protection measures to mitigate risk of pollution to this watercourse. All pollution control measures will be designed, installed, and maintained in accordance with CIRIA guidance for 'Environmental Good Practice on Site' (C741) and 'Control of water pollution from linear construction projects. The full list of pollution control measures is provided in the CEMP (contained in Appendix B). The design of the drainage system for the proposed development includes embedded mitigation to ensure that the proposed development has no impact on the ability of the Ward River to achieve Good Status. The proposed development, as described in Chapter 2 - Project Description, details that the proposed drainage system will collect runoff from hardstanding via a series of filter drains provided around the extents of the proposed site. The filter drains will convey flows to the existing outfall on the northwest boundary of the site. Before discharging into the existing storm network, flows will be attenuated to 5.48l/s as stated previously. Attenuation will be provided via a below-ground geo-cellular tank. Rainfall / runoff on the permeable gravel surfaces will percolate through the build-up. The formation below will be graded towards the filter trenches. The non-permeable laydown areas will be drained via traditional gullies or channels which will discharge into the filter drains. There is no process water resulting from the proposed development and all foul wastewater from the new welfare facilities will drain to an existing septic tank, the contents of which will be removed by vacuum tanker from site. All chemicals and oils required for the operation and maintenance of the proposed development will be stored in suitably bunded areas. Under the required Industrial Emissions licence for the proposed development, an Environmental Management Systems will be operated to protect surface waters from pollution. The proposed development will not impact upon the ability of the Ward River to achieve Good Status due to the application of the above measures. The proposed development therefore has no significant impact on the absorption capacity of the natural environment, for areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to densely populated areas	The proposed development is located to the north of the M50 (Junction 5), within an established area of industrial development, located on the periphery of Dublin city. There are a small number of sporadic residential dwellings in the area, the closest of which (Ravenswood Estate) is approximately 400m northeast of the proposed development. The largest residential area (Northway Estate) is located along the R135 approximately 1.4km to the southeast. The surrounding area is not considered to be a densely populated area as it represents a peripheral area on the outer extents of Dublin city. There is no significant impact on the absorption capacity of the natural environment in relation to densely populated areas as a result of the proposed development.
Has the project the potential to impact on the absorption capacity of the natural environment, paying particular attention to	Within Sheet No.14 Green Infrastructure 1 of Fingal Development Plan 2017-2023 (as varied), the proposed temporary emergency generation development is not identified as being located within a 'highly sensitive landscape' or 'historic landscape characterisation area'. It will be located within a 'Low Lying Character Type', which is assigned as having low sensitivity to development.

Criterion	Discussion
landscapes and sites of historical, cultural or archaeological significance	The proposed development is characteristic of existing energy generation development immediately adjacent, which has been an established land use within the area for a period of 20 years. There is no significant impact on the immediate and surrounding landscape towards absorbing the proposed development, as the proposed development is of a smaller scale than adjoining. It is considered that the magnitude of landscape impact within the immediate context is Low-negligible and of a Neutral quality. The Low landscape sensitivity judgement attributed to the study area, coupled with a Low-negligible magnitude of operational stage landscape impact is considered to result in an overall significance of no greater than slight-imperceptible / neutral. Chapter 10 (within Appendix A Supporting Information to the EIA Screening) includes an assessment of visual impacts at surrounding visual receptors within the study area. Visual impacts were assessed at five viewpoint locations, which represent a variety of viewing distances, angles, and receptor types. This is a peri-urban landscape that is heavily influenced by a broad range of highly anthropogenic land uses, the most notable of which include the existing Huntstown Power Plant and its neighbouring Roadstone Huntstown Quarry facility. In terms of landscape character and sensitivity, this peri-urban landscape context is not considered to be highly sensitive or distinctive in any sense. This is further reinforced by the 'HI-Heavy Industry' zoning classification that contains the site and wider study area, within which the principal zoning objective is "*Provide for heavy industry*". Four of the five visual receptors were classified with a Low receptor sensitivity, which further highlights the robust character of the surrounding landscape context influenced by numerous industrial and commercial developments, electrical infrastructure developments, and major linear transport routes. The closest archaeological monument is located approximately 0.4km to the north-northeast (Ring-ditch, DU014-015). This monument has been built upon and is now the site of Vantage Business Park. There will be no impact to known archaeological features/ remains as a result of the proposed development. The proposed development is located within the extent of the existing Huntstown Power Plant complex, which represents an area of previous ground disturbance. The construction of the proposed development on existing developed lands coupled with the minimal earthworks required to enable the proposed development, reduces any significant impact on unknown archaeological remains. There are no Protected Structures or Architectural Conservation Areas within 1km of the proposed development. No impact will occur to structures listed on the Record of Protected Structures, or those listed on the National Inventory of Architectural Heritage. The impacts on archaeology, architectural and cultural heritage were assessed in Chapter 9 (of Appendix A); Section 9.4 details the assessment of the effects as a result of the proposed development and concludes that no adverse impacts on archaeology, architectural or cultural heritage will result and consequently no mitigation measures are required for any phase of the development. The proposed development will not result in any significant impact landscapes and sites of historical, cultural or archaeological significance.

4.3 Type and Characteristics of Potential Impact

Criteria	Discussion
The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected)	The magnitude of the impact of the proposed development is limited geographically, as the footprint of the works are of limited spatial extent (4.2 hectare) and occur within an existing power plant complex. The ecological population likely to be affected is limited and localised. The biodiversity value of areas of the proposed development which extend outside the existing Huntstown Power Plant complex are of local value as they compromise mainly small areas of managed grassland, an area of degraded dry calcareous and neutral grassland which has been heavily grazed by horses and hedgerows. There is limited impact to any wildlife populations as a result of the proposed works. The human population which will be affected by the proposed development is limited due to the separation distances between the proposed development and the largest residential areas (Northway Estate), located along the R135 approximately 1.4km to the southeast of the proposed development. The closest residential receptors (Ravenswood Estate), situated approximately 400m northeast of the proposed development, will not be significantly adversely impacted by the proposed development due to the embedded mitigation measures within the design related to air quality (limited operational hours) and noise disturbance (generator attenuation and noise barriers). The impacts on the ecological population have been assessed and are presented in Chapter 5 of Appendix A. There are no European sites, habitats, flora or fauna that will be significantly impacted by the proposed development. The proposed development will not result in any significant impact based upon the magnitude and spatial extent of the impact.
The nature of the impact	The proposed development is a type of project which is common in Ireland; as such, the operation of the proposed temporary emergency development will be an activity regulated by a revised Industrial Emissions Licence (P0483-04) and will therefore ensure that compliance with the licenced stormwater emissions limit values when operational under Schedule B of the IE Licence. The emissions and therefore the nature of their impacts on the environment are known and have been considered in the design and planning of the proposed development. The nature of the impact is described in detail in each of the thematic headings of this report. The assessments concluded that prior to mitigation, the proposed development does not result in any significant impacts on natural resources, namely, soil, land, water or biodiversity. Notwithstanding the limited impacts, mitigation measures will be provided to safeguard natural resources from any impact on the relative abundance, availability, quality and regenerative capacity. Mitigation measures within this report have been transposed to the CEMP (included as Appendix B) and will be implemented by the appointed Contractor(s). The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The construction and decommissioning phase impacts are also common and not of a complex nature with standardised construction methods utilised during the anticipated four-month construction programme.
The transboundary nature of the impact	The project will not result in transboundary impacts.
The intensity and complexity of the impact	Potential construction impacts are not considered to be complex when appropriate environmental management techniques are employed as described in the relevant individual thematic chapters of this report, nor intense due to the nature of the development, as described in sections 2.2 and 2.3. Operational phase impacts are not deemed to be intense or complex. Each Individual thematic chapter presented in Appendix A to this report has assessed any residual impacts once embedded mitigation measures and additional mitigation measures are considered, there have been no significant residual impacts identified during the assessments, the effects were characterised as either slight/neutral/imperceptible/negligible or no residual effects were stated to occur. Decommissioning/dismantling activities closely mirror those of construction phase activities, as such, the impacts during the construction and decommissioning phases are considered to be no significant.
The probability of the impact	The proposed development is a type of development which has been subject to previous assessments of impacts such that impacts can be predicted with confidence and

Criteria	Discussion
	effective mitigation can be readily implemented to ensure that significant adverse impacts are not likely. During construction, conventional construction and best environmental practice techniques will be readily employed. In order to minimise disruption, the CEMP (included as Appendix B) will be implemented. The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. It is concluded that significant environmental impacts would not occur during the construction phase. The proposed development has been designed in accordance with any relevant Best Available Techniques (BAT) to reduce the impact to the environment during the operational phase. The decommissioning phase impacts are similar in nature and scale to those which will occur during the construction phase, as such, the probability of the impacts are readily assessed on similar projects and the assessment of effects presented in each thematic chapter of this report can be confidently predicted.
The expected onset, duration, frequency and reversibility of the impact	It is expected that construction works will commence following receipt of the necessary statutory approvals and the duration of the works (including site preparation) will be approximately ten months. Normal working hours during the construction period are expected to be Monday to Friday 07:00 to 19:00, and Saturday 08:00 to 13:00. No works will be undertaken on Sundays or public holidays. Works outside these hours will be with advance agreement of the local authority. The selection and implementation of established best practice procedures, as set within the CEMP will ensure potential environmental impacts during the construction phase are offset. The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The operational phase of the proposed development is of a limited duration which will not exceed five years, following which it will be decommissioned. The proposed development will run only when required. A typical daily operational period is four hours per day; however, the Transmission System Operator will stipulate when additional generation is required to mitigate critical power shortage on the grid. Under Condition 10 of the existing IE Licence, a decommissioning plan is required to be submitted to the EPA following the cessation of activities for more than six months within any part of the licenced site boundary. This will ensure that the site is rendered free of plant, structures, materials and soils that may result in environmental pollution.
The cumulation of the impact with the impact of other existing and/or approved projects	On the basis of their scale, nature, and duration, when considered in-combination with the proposed development, the potential for other existing and/or permitted development to cause significant cumulative impacts can be considered as not significant. The potential for significant cumulative impacts to occur has been assessed for each environmental topic in chapters 2 to 11 of Appendix A to this EIA Screening Report. The detailed assessment on cumulative effects is provided in Chapter 5 of this report for each of the following thematic headings: • Material Assets (Section 5.4.2) • Soils, Geology and Hydrogeology (Section 5.4.3) • Surface Water including Flood Risk (Section 5.4.4) • Biodiversity (Section 5.4.5) • Noise (Section 5.4.6) • Air Quality and Climate (Section 5.4.7) • Archaeology, Architecture and Cultural Heritage (Section 5.4.8) • Landscape and Visual (Section 5.4.9) • Traffic and Transportation (Section 5.4.10) The respective cumulative effects assessments individually concluded there are no significant cumulative impacts.
The possibility of effectively reducing the impact	The possibility of effectively reducing the impact of the proposed development on the environment has been a central consideration in the design and planning of the proposed development. Construction phase impacts have been assessed and appropriate mitigation measures have been provided to mitigate and reduce potential impacts. A CEMP (provided in Appendix B) has been prepared in accordance with recommended best practice (CIRIA

Criteria	Discussion
	Environmental Handbook for Building and Civil Engineering Projects: Part 2 Construction). The CEMP will be implemented by the appointed Contractor(s). The CEMP will remain a 'live' document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. The detailed design of the proposed development has taken into consideration environmental risks during the lifetime of the development. Technical components of the proposed development, such as surface water management and noise mitigation, have been developed to address these specific elements, in line with established best practice and statutory requirements. The design of the proposed development has been optimised to ensure that environmental impacts are minimised as much as possible. As described previously, this includes embedded mitigation such as the proposed drainage linking to the existing stormwater drainage network, the absence of process wastewater, limited generation of foul wastewater which will be collected for disposal off-site, exhaust silencer, acoustic barriers, modular nature of the development to reduce the construction duration, reuse of existing hardstanding and limited groundworks. The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project; as such, the decommissioning phase will be required to employ best practices techniques which are applicable as set out in the CEMP (refer to Appendix B).

5 Cumulative Effects

5.1 Introduction

This chapter outlines the development planning history of the existing Huntstown Power Plant 'complex' in which the proposed development will be sited. A review of permitted, planned (lodged with the relevant planning authority) or EPA licenced developments (including EPA licence applications), which may result in potential cumulative impact(s) with the proposed development has been undertaken and is detailed in Table 5.1.

For each technical topic, the nature and scale of other developments has been evaluated and the potential for spatial and temporal overlap within the topic-specific zone of influence (ZoI) has been assessed, having regard to the potential for significant cumulative effects. Therefore, projects relevant to particular disciplines are detailed within each environmental topic section.

The EC "Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions" (European Commission, 1999) provides the following definition for cumulative impacts; "The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects".

As further outlined in the EPA "Guidelines on the information to be included in Environmental Impact Assessment Reports" (EPA, 2022), "while a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or significant), result in a cumulative impact that is collectively significant. A single effect which may, on its own, have a significant effect, may also have a reduced and insignificant impact when combined with other effects".

5.2 Development History within Huntstown Power Plant

The lands contained within the application site have historically comprised a significant number of development applications. These have established existing uses in the area and contribute to the environmental baselines to be considered within the cumulative impact assessment.

The development site is located within Huntstown Power Station (Huntstown 1) (output of up to 600 MW) was granted planning permission by Fingal County Council and An Bord Pleanála on appeal in 1999 (Ref. F98A/1313 / PL 06F.110954) and became commercially operational in November 2002. Various alterations to permitted development within the station were granted by Fingal County Council between 2001 and 2004 with the most significant being an increase in the nominal power output of the plant from 600 MW to 740 MW (Ref. F04A/0408). Huntstown 2 was granted planning permission (alteration to F98A/1313) by Fingal County Council in 2003 (F03A/0272) and was commissioned in October 2007.

The two CCGT's share some services including the demineralisation plant, storm water drainage and sanitary effluent treatment. However, the CCGT's are licensed under separate Industrial Emissions Licences which are licenced and enforced by the Environmental Protection Agency in accordance with the requirements of the Industrial Emissions Directive (2010/75/EU).

Fingal County Council granted planning permission on 30th April 2019 for a modular battery energy storage system (BESS) (Ref. FW19A/0015) within the installation boundary of Huntstown Power Station (Huntstown 2). The permitted BESS facility is designed to provide stabilising services to the national grid, as required, to facilitate increased integration of renewable energy technologies. The BESS is not a type of activity which requires a licence from the Environmental Protection Agency. The BESS although granted planning permission has not yet been constructed.

5.3 Developments with Potential for Cumulative Effects

A review of developments which have been granted or approved by the relevant planning authority (Fingal County Council or An Bord Pleanála) within the last five years, on the basis of the 5-year validity lifespan of a planning application. In the absence of specific guidance on cumulative effect assessment study areas, consideration was given as to the distance over which impact pathways from other projects could potentially combine with the impact pathways of the proposed temporary emergency generation plant, to have likely significant effects on relevant receptors for each environmental topic. A radius of 1km of the proposed development was therefore used. Given the built-up nature of the site and surrounding area, a 1km radius is considered sufficient; based on professional judgement as being sufficient to capture the area where other projects would most likely interact with the proposed development and which could reasonably be exposed to cumulative effects in combination with other developments. Those developments which have the potential to result in cumulative effects with the proposed development, either due to their scale, size or industrial/ utility nature are included in Table 5.1. Applications which have been refused or annulled were discounted from consideration.

The review also includes any known planned developments which have been lodged with the relevant planning authority. Table 5.1 includes two planned applications which are currently pending a decision from An Bord Pleanála. These relate to Mooretown 220kV substation (VA06F.311528) and a data centre development (FW21A/0151) which are respectively overlapping and directly adjoining the application boundary of the proposed development.

In addition, and on the same basis as above, any developments which are ‘operational’ licenced activities by the Environmental Protection Agency (Industrial Emissions, IPC, Waste, Water Discharge licensed activities), and EPA licence applications, have also been reviewed for inclusion in Table 5.1.

The developments detailed in Table 5.1 are predominately of an industrial, utility infrastructure or commercial nature and do not include minor developments such as change of use, residential alterations/extensions, and other minor developments (including small scale road developments), as these types of non-industrial developments do not possess the characteristics that could result in any potential significant cumulative impacts.

Table 5.1: Existing, Planned & Licenced Developments which have the potential for Cumulative Impacts

Planning/Licence Reference	Description of Development	Date Granted/Licenced
Developments directly overlapping with the Planning Application Boundary		
P0483-04	Industrial Emissions Licence for Huntstown 1 CCGT	Licenced 12/02/2013
P0072-02	Industrial Emissions Licence for Huntstown 2 CCGT	Licenced 30/01/2013
FW21A/0144	Installation of electrical infrastructure between Finglas 220 kV Substation and Huntstown Power Station to facilitate the retirement of existing Electricity Supply Board overhead powerlines and facilitate site clearance for the future development of a data centre and substation (subject to separate planning applications).	Granted 05/10/2021
Strategic Infrastructure Development application VA06F.311528	Construction of a 2 storey 220kV GIS substation known as ‘Mooretown’, 4 underground transmission cables and all associated and ancillary site development and construction works (Fingal Co.Co. Ref. SID/03/21 – the application was made concurrent with the proposed data hall development proposal – Ref. FW21A/0151)	Pending decision by ABP (Decision date publicly listed as 08/04/2022)

Planning/Licence Reference	Description of Development	Date Granted/Licenced
Other Industrial, Utility Infrastructure and Commercial Developments within 1km		
W0277-03	Waste Licence for Huntstown Inert Waste Recovery Facility. This relates to the infill of a quarry void using natural stone and soil and to the recovery of C&D waste at the new C&D waste recovery facility.	Licenced 11/10/2018
P0993-02	Industrial Emissions Licence for the operation of an anaerobic digestion plant (including the associated wastewater treatment plant) operated by Huntstown BioEnergy Limited)	Licenced 27/08/2020
FW19A/0015	The development will consist of a Battery Energy Storage System (BESS) which will include up to 9 no. containerised battery storage modules (up to 14m length, 2.44m wide and 2.9m high) and ancillary equipment	Granted 30/04/2019
SID/02/18 (ABP 301798-18)	Regional Biosolids Storage Facility (Strategic Infrastructural Development) – as part of Ringsend WwTP upgrade SID	Granted 24/04/2019
FW18A/0159	An increase in the annual volume of waste to be imported to the permitted bioenergy plant at Huntstown, North Road, Finglas, Dublin 11. The proposed increase is 9,900 tonnes, which would take the permitted volume from 90,000 tonnes to 99,900 tonnes.	Granted 30/01/2019
FW19A/0090	Installation of 10 no. containerised gas fired generating units with an export electricity capacity of 20 megawatts and underground cabling route c 1.45 km along the R135 road.	Granted 10/01/2020
FW20A/0021	The development will consist of storage and logistic facilities comprising yards, warehouses, workshops and ancillary offices at Plots 1, 3, 4, 5, 6, 7, and 9 and amendment to permitted development (Reg. Ref. FW19A/0101 and F18A/0139) at Plot 8 and internal road network at Dublin Inland Port. All development to take place on a site of c. 10.4 ha. The application is for a 10 year planning permission.	Granted 02/07/2020
FW20A/0219	Permission for an amendment to the original planning permission, at this site, for a gas peaking facility with 10 no. containerised gas fired generating units, with an export capacity of 20 megawatts (MV) under planning reference FW19A/0090. Amendments are proposed to the gas peaking will consist of the installation of 6 no. battery storage units with an export electricity capacity of 10-15 MV and 4 no. containerised gas fired generating units with an export electricity capacity of 10 MV, in replacement for the 10 no. containerised gas fired generating units, granted under planning reference FW19A/0090. 3 no. inverter transformers will also be added to the site, being the battery storage units.	Granted 25/02/2021
Strategic Infrastructure Development application PA06F.301908/PA06F.312131	Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility	Granted by ABP with conditions 11/11/2019. Board's Decision quashed by Order of the High Court (Perfected on 16th July 2021), New Case Number ABP-312131-21.
FW20A/0211	The development will consist of 3 no. buildings for industrial/warehouse/logistics use (Units 3,4 and 5) with gross floor area of 24,356sq.m. Each building will measure 18.1m high (at parapet level) and have 2 storey ancillary offices. Elevational signage will be provided. The units will form Phase 2 of the Vantage Business Park, with Phase 1	Granted 19/05/2021

Planning/Licence Reference	Description of Development	Date Granted/Licenced
	to the south (units 1 and 2) under construction. The proposed development includes 39 HGV parking spaces, 224 car parking spaces, 134 cycle parking spaces, 29 dock levellers and 7 grade loading bays. All associated site works including diversion of existing foul rising main, boundary treatments, landscaping, service yards, internal road and footpaths, swales, lighting, 3 no. free standing signs, signage at entrance, refuse storage, substation, foul pumping station, extension of foul infrastructure from Phase 1, modified vehicular entrance off the R135 (including new entrance gate and pillars) and dedicated new footpath and cycleway along the east side of the R135.	
FW20A/0126 (ABP-309855-21 -1st party appeal)	The development will comprise the provision of 4 No. warehouses with marshalling offices, ancillary office space, staff facilities and associated development. The buildings will have a maximum principal height of 17.070 No. metres to the top of the parapet above ground floor level and will comprise the following areas: Unit 1 will have a gross floor area of 21,578 sq.m. including a warehouse (20,252 sq.m.), marshalling office (66 sq.m.), ancillary office space (1,216 sq.m.) and plant (44 sq.m.); Unit 2 will have a gross floor area of 9,206 sq.m. including a warehouse (8,347 sq.m.), marshalling office (66 sq.m.), ancillary office space (757 sq.m.) and pant (36 sq.m.); Unit 3 will have a gross floor area of 16,525 sq.m. including a warehouse (15,478 sq.m.), ancillary office space (944 sq.m.) and plant (37 sq.m.); and Unit 4 will have a gross floor area of 7,342 sq.m. including a warehouse (6,648 sq.m.), marshalling office (66 sq.m.), ancillary office space (589 sq.m.) and plant (39 sq.m.). A gate house with a gross floor area of 14 sq.m. will be positioned to the south-west corner of the site. The development will also include the repositioning of the access from the L3125 Road to the north of the site to provide a new entrance and a second vehicular access will be provided from the R135/Elm Road to the south-west. Road upgrade works are proposed along the L3125 to the north of the site which include the partial upgrade of Kilshane Cross signalised junction to incorporate a left turning lane and upgraded signals on the L3125 Local Road eastern approach arm and the provision of cycle paths and pedestrian footpaths. There will also be internal roadways; pedestrian access; 502 No. ancillary car parking spaces; bicycle parking; HGV parking and yards; level access goods doors; hard and soft landscaping; boundary treatments; ESB substations; signage; PV panels; lighting and associated site development works above and below ground. The total gross floor area of the development is 5,763 sq.m. (including warehouse structures, gate house and ESB substations).	Granted 12/07/2021 Decided by ABP (11/10/20221)
FW21A/0151/ PL06F.313583 (3rd Party appeal)	Construction of 2 no. data hall buildings (Buildings A and B) comprising data hall rooms, mechanical and electrical galleries, ancillary offices including meeting rooms, workshop spaces, staff areas including break rooms, toilets, shower/changing facilities, storage areas, lobbies, outdoor staff areas, loading bays and docks, associated plant throughout, photovoltaic panels and screened plant areas at roof levels, circulation areas and stair and lift cores throughout.	Granted 20/04/2022 Currently on appeal to An Bord Pleanála (Appeal decision due 19/09/2022)

Planning/Licence Reference	Description of Development	Date Granted/Licenced
FW22A/0068	The development will consist of 1 no. building for warehouse/logistics use, to be known as Unit 6, with a gross floor area of 9,821 sq.m. The building will measure 18.1m high (at parapet level) and have 2 storey ancillary offices. Elevational signage will be provided. The unit will form part of Phase 2 of Vantage Business Park along with Units 3, 4 and 5 (permitted under reference FW20A/0211), Phase 1 to the south consists of Unit 1 under construction and Unit 2 complete in 2019. The proposed development includes 6 no. HGV parking spaces, 82 no. car parking spaces, 58 no. cycle parking spaces, 8 no. dock levellers and 2 no. grade loading bays. All associated siteworks including diversion of existing foul rising main, boundary treatments, landscaping, service yards, internal road and footpaths, dry detention basins/swales, lighting, 1 no. free standing sign, security and access control room, signage at entrance, refuse storage, heat pumps and all associated siteworks including drainage infrastructure.	Decision made 03/06/2022 (Final Grant pending)

It is considered that the alterations to extant or expired planning permissions for commercial business parks or extensions of such commercial business parks listed in Table 5.1 will not result in significant cumulative effects, specifically Vantage Business Park Phase 2 (FW20A/0211 and FW22A/0068), and Plots at Dublin Inland Port [Site A] (FW20A/0021) which has a ten-year permission to allow the orderly relocation of existing operators at Dublin Port. These permissions are for established businesses located within the vicinity of the proposed development and are conditioned to ensure the fulfilment of their respective mitigation. The nature of the above business uses within their business park context is such that no real air or noise emissions are likely to arise and the types of effects arising from such uses/ development, is limited.

The information publicly available with the planning or licence application documentation for the developments listed in Table 5.1 has been used to determine the cumulative impacts during the construction, operational and decommissioning phases of the proposed development.

5.4 Cumulative Effects Assessment

5.4.1 Introduction

A description of the cumulative impacts of the proposed temporary emergency generation plant in combination with the existing, planned and licenced developments as described in Table 5.1 for each environmental topic is described in the proceeding sections of this chapter. For each environmental topic, the full list of consented and planned developments as listed in Table 5.1 was considered, and those requiring further consideration or assessment are described under the relevant sub-headings.

As stated earlier within section 5.1 (Introduction), for each technical topic, the nature and scale of other developments has been evaluated and the potential for spatial and temporal overlap within the topic-specific zone of influence (ZoI) has been assessed, having regard to the potential for significant cumulative effects. Therefore, projects relevant to particular disciplines are detailed within each environmental topic section.

Developments listed in Table 5.1 also include a number of projects owned by/ being advanced by Energia/ Huntstown Power Company Limited (HPCL). Prior to commencement of construction and during the construction phase of the subject proposed development, engagement with the proponents of other developments in the area (which includes Energia/

HPCL developments), will be undertaken. Where there is potential for the proposed subject temporary emergency generation works to be carried out in parallel, appropriate mitigation measures will be implemented, including the scheduling of works and regular liaison meetings between project teams (particularly those within the control of Energia/ HPCL), to ensure that plans are co-ordinated and impacts are minimised.

5.4.2 Material Assets

Construction Phase

With regard to material assets, the majority of projects listed in Table 5.1 are not considered to be capable of combining to produce significant cumulative effects during construction. From the Table 5.1 list, the following projects however, may result in simultaneous construction phases with the proposed development:

- Data Centre application (FW21A/0151 / PL06F.313583, 3rd Party appeal, decision date due for 19/09/2022)
- Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528)
- Electrical infrastructure between Huntstown Power Station and Finglas 220 kV Substation (FW21A/0144)

Given the short construction phase associated with the proposed development, the fact that construction and decommissioning waste will be managed though the provision of a Construction Resource and Waste Management Plan (contained within the CEMP included as Appendix B), and that all construction activities on the proposed temporary emergency generation plant will be carried out in accordance with the existing IE Licences (P0483-04 and P0777-02), and following consultation with the EPA, it is considered that there will be no likely significant cumulative impacts in respect of the material assets.

There is no potential for cumulative impacts of the proposed temporary emergency generation plant in combination with the existing Huntstown Power Station during the construction phase. The temporary emergency generation plant will be constructed as a stand-alone generation station and the construction will not interfere with the operations of the existing units at Huntstown Power Station. Integration with Gas Network Ireland's AGI is planned to coincide with planned outages on the existing units. Any potential disruptions to the existing power station as a result of the construction of the proposed development will be managed through the CEMP (Appendix B).

Operational Phase

The existing, planned and licenced projects set out in Table 5.1 have been considered as part of the receiving environment for the operational phase. This is on the basis that these proposals would already be connected to and utilising services (e.g. water, power, gas etc) and/ or in the case of recently granted (but not yet implemented) planning applications and those currently pending a planning decision, would have had to go through a process of confirming availability of capacity for service provision to the proposed development from the relevant utility service providers.

The development will operate on natural gas from an existing Gas Networks Ireland (GNI) Above Ground Installation (AGI), located to the north-west of the proposed temporary emergency power generation facility. The requisite 50 MW emergency electricity generation can be achieved through the utilisation of available headroom capacity above the registered capacity from the 28barg and 42barg systems of the existing AGI. An assessment of the headroom capacity available (as advised by Gas Networks Ireland), over the registered supply capacity and during peak consumption, was therefore undertaken. The assessment concluded

that there is sufficient headroom available from the existing 28barg and 42barg gas supplies which supply Huntstown Unit 1 and 2, to supply the required gas to the proposed temporary emergency generation plant.

Power generated by the temporary emergency generating facility will be exported to the national grid via an underground cable connection to the existing Finglas 220kV substation (consented under Planning reference: FW21A/0144), located c.800m to the south-east of the proposed development.

Water will be supplied to proposed development via the existing Irish Water connections to the Huntstown Power Station and there is sufficient existing water supply on site to meet the demand, without impacting on the supply to the existing power station. In relation to the planned data centre development (FW21A/0151 / PL06F.313583) and the Mooretown 220kV substation (VA06F.311528), it is stated in the EIAR Addendum Report that '*Irish Water have confirmed through the PCE (ref: CDS20004468) that there is available supply within the network foul water and potable water for the Overall Development [data centre together with substation development]*.'

In terms of cumulative effects on resources, other gas fired power plants currently consented and/or operational (e.g. Huntstown 1 and Huntstown 2 and the Gas peaking plant consented under Pl. Ref. FW20A/0219 and FW19A/0090), will also be utilising gas in combination with other gas fired power plants. All gas fired power plants are subject to supply agreements with GNI. The proposed development is able to utilise headroom capacity from Huntstown 1 and 2 and will not impact any agreements for other gas power plants. The addition of the emergency power generation plant will have an imperceptible effect on gas resources.

Decommissioning Phase

Following the cessation of the emergency generation plant the generator units will be disconnected and removed from site. This equipment is likely to be shipped from Ireland, via Dublin Port for use at another location.

Remaining equipment such as, pipework and cabling, will be made safe and retained on site for potential future uses at Huntstown Power Station. Equipment will be stored under appropriate conditions and the site will be secured.

Waste materials generated during the decommissioning of the plant will be removed from site in accordance with the Waste Management Act, 1996 and associated regulations.

The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project, and significant cumulative effects of the proposed development in combination with other developments are not considered likely.

In conclusion, the cumulative effects of the proposed development when considered with other relevant projects are not considered to be significant in relation to material assets during any phase of the proposed development.

5.4.3 Soils, Geology and Hydrogeology

Construction Phase

Relevant existing and future development projects proposed in the surrounding area that have the potential for construction phases to occur within the same time period as the proposed Huntstown Emergency Generating Plant in relation to soils, geology and hydrogeology have been reviewed. Three relevant developments that have been identified are summarised in Table 5.2. The remaining projects identified in Table 5.1 are not considered to be capable of combining to produce significant cumulative effects during construction.

Table 5.2: Existing and future projects in the surrounding area

Planning Ref. No.	Application Portal	Project Name	Project Status	Decision Grant date	Distance from Site
FW21A/0151	Fingal County Council	Huntstown data centre facility	Proposed project	Pending	Off-site (approx. 50m south-east.
311528	An Bord Pleanála	220kV GIS 'Mooretown' Substation and Ancillary Structures	Proposed project	Pending	Off-site (approx. 50m south-east)
FW21A/0144	Fingal County Council	Installation of electrical infrastructure between Finglas 220 kV Substation and Huntstown Power Station including underground cable	Permission granted	11.08.2022	Off-site (approx. 50m south-east

Construction phase effects relevant to the Huntstown Emergency Generation Plant, when considered in isolation are anticipated to be localised, temporary in duration and are classified as slight or neutral/imperceptible.

The activities that could potentially result in cumulative impacts on soils, geology and hydrogeology when combined with any/all of the projects identified in Table 5.2 are:

- Storage of excavated material during construction may lead to erosion and run-off of material.
- Accidental spillages and leakage from construction traffic and construction materials may occur, which could result in localised contamination of soils and groundwater underlying the site.

Any impacts to the hydrogeological receiving environment associated with cumulative effects associated with the above identified projects will be adequately mitigated through the implementation of the CEMP and the CRWMP (refer to Appendix B), and through the existing IE licences (which will be subject to review) on the Huntstown Power Station site. It is noted that the maximum depth of excavation on the proposed development is 2.0m, which is anticipated to be above the predicted water table (based on previous ground investigation monitoring data). Effects on hydrogeology from the proposed development are considered to be neutral therefore the contribution to cumulative effects is insignificant.

The construction phase impacts identified for the temporary emergency generation plant are slight or neutral, and mitigation measures to reduce these further, will be incorporated in the CEMP. Mitigation includes measures to prevent contamination of the underlying bedrock, appropriate storage of excavated materials, and a suitable monitoring regime.

The developments listed above are/ will be subject to planning conditions which will also include appropriate mitigation measures to minimise the impacts on soils, geology and hydrogeology. These measures will reduce the cumulative effects, when they are added to the effects of the proposed development, to make the cumulative effect insignificant.

Therefore, it is concluded that the proposed temporary emergency generation plant is not likely to result in any significant cumulative impacts in combination with the developments listed in Table 5.1.

Operational Phase

There are not anticipated to be any operational-phase effects on geology, soils and hydrogeology associated with the temporary emergency generation plant that will, when combined with the developments identified in Table 5.1 result in a significant cumulative effect.

The following aspect associated with the operational stages of the proposed development could result in a cumulative impact if not adequately mitigated:

- Use and storage of chemicals, as well as discharges including foul water, firewater and additional on-site chemicals and oils which could result in a risk of contamination of the aquifer;

This impact will be mitigated by the implementation of the CEMP

During the operation of the emergency power plant, the proposed development will comply with the conditions set out in the IE licence P0483-04 (which will be subject to review), including but not limited to, any requirements for groundwater sampling and monitoring.

Decommissioning Phase

The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project, and significant cumulative effects of the proposed development in combination with other developments is not considered likely.

In conclusion, the cumulative impacts of the proposed development when considered with other relevant plans or projects are not considered to be significant in relation to soils, geology or hydrogeology during any phase of the proposed development.

5.4.4 Surface Water including Flood Risk

Construction Phase

Table 5.1 which lists the existing, consented and planned projects within 1km of the proposed development was reviewed in order to inform the identification of any potential cumulative impacts of the proposed temporary emergency generation plant in combination with other developments in relation to surface water and flood risk. Of those listed in Table 5.1, the following projects may result in simultaneous construction phases with the proposed development:

- Data Centre application (FW21A/0151 / PL06F.313583, 3rd Party appeal, decision date due for 19/09/2022)
- Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528)
- Electrical infrastructure between Huntstown Power Station and Finglas 220 kV Substation (FW21A/0144)
- Greater Dublin Drainage (ABP SID Application GDD: PA0055 & PA06F.312131)

During construction of the proposed development existing drainage pathways will remain unblocked and therefore the potential effect on flood risk of the proposed development, and the existing Huntstown Power Station, and the surrounding area is considered imperceptible. Potential effects of the proposed development on water quality during the construction phase are assessed as temporary minor negative and imperceptible on the Ward River (refer to Table 4.7; Chapter 4 Surface Water including Flood Risk of Appendix A - Supporting Information to the EIA Screening Assessment) prior to mitigation. The CEMP (included as Appendix B) includes measures to protect water quality in compliance with the legislative standards for receiving water quality (European Communities Environmental Objectives (Surface Water) Regulations (S.I. 272 of 2009 and S.I. 77 of 2019).

Given the short construction phase associated with the proposed development (approximately 10 months), any overlap between the construction phases will be temporary. The developments listed above are/will be subject to planning conditions which include appropriate mitigation measures to minimise potential impacts on surface water including flood risk.

Implementation of these measures, combined with the measures in the above-identified applications, will ensure that there will be no significant negative effects. Therefore, the cumulative impact of the proposed temporary emergency generation plant in combination with those listed above, is considered to be imperceptible.

Notwithstanding, the developments identified above, are all (aside from the Greater Dublin Drainage Project) owned by/ being advanced by, Energia/Huntstown Power Company Limited (HPCL). Prior to commencement of construction and during the construction phase of the subject proposed development, Energia/ HPCL will ensure cooperative engagement with/ between the project teams of these developments. Where there is potential for the proposed subject temporary emergency generation works to be carried out in parallel with these other development, appropriate mitigation measures will be implemented, including the scheduling of works and regular liaison meetings between project teams, to ensure that plans are co-ordinated and impacts are minimised.

Operational Phase

All permitted developments are required to comply with the Greater Dublin Strategic Drainage Strategy (GDSDS) and local authority requirements by providing suitable attenuation on site to ensure greenfield run-off rates and ensure that there is no increase in off-site flooding as a result of development. Existing developments within a 1km radius of the site have been included in the baseline assessment with regards to surface water flooding. Those projects that are planned and are likely to developed within the operational life of the temporary emergency generating plant (maximum of five years) will be required to ensure that there is no increase in off-site flooding as stated above. Therefore, there is no potential for cumulative impacts with respect to surface water flooding.

During the operation of the proposed temporary emergency generation plant, there will be no wastewater discharge. The only discharges are limited to stormwater runoff via oil interceptors to the Huntstown Stream, which discharges to the Ballystrahan Stream, a tributary of the Ward River. These discharge points will continue to be operated in compliance with the revised IEL (P0483-04). All chemicals and oils will be stored in suitably bunded areas. Operational impacts of the proposed temporary emergency generation proposal in terms of water are therefore considered imperceptible.

It is concluded that the proposed temporary emergency generation plant is not likely to result in any significant cumulative impacts in combination with the developments listed in Table 5.1 and the effects will be imperceptible during the operational phase.

Decommissioning Phase

The activities associated with the decommissioning phase will be similar to those associated with the construction phase of the project, and significant cumulative effects of the proposed development in combination with other developments is not considered likely.

In conclusion, the cumulative impacts of the proposed development when considered with other relevant projects are not considered to be significant in relation to surface water and flood risk during any phase of the proposed development.

5.4.5 Biodiversity

The cumulative assessment for biodiversity included a review of all the developments detailed in Table 5.1. The nature and scale of other developments has been evaluated and the potential for spatial and temporal overlap within the topic-specific zone of influence (ZoI) has been assessed, having regard to the potential for cumulative impacts. Several developments which overlap with, or are in proximity to, the proposed development were considered to have the potential for cumulative impacts which may result in significant impacts on biodiversity. Those specific

developments which warranted further investigation due to proximity to the proposed development and potential similar timing of construction works (3, 4 and 5 below), air quality (2), and possible cumulative effects on European sites (1) include the following five projects:

- Greater Dublin Drainage (ABP SID Application GDD: PA0055 & PA06F.312131)
- Renewable Bioenergy Plant Wastewater Treatment Plant (IE Licence No. P0933-02)
- Data Centre (Data Hall) application (FW21A/0151 / PL06F.313583, 3rd Party appeal, decision date due for 19/09/2022)
- Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528)
- Electrical infrastructure between Huntstown Power Station and Finglas 220 kV Substation (FW21A/0144)

Construction Phase

In relation to European sites the AA Screening prepared for the proposed development concluded that *"The current assessment investigated the potential for significant effects on the Natura 2000 Network arising from the proposed development. The assessment considered whether the proposed works, alone or in combination with other projects or plans, will have potential for significant effects on any European sites. It is concluded that there is no potential for significant effects on any European sites from the proposed development, either alone or in-combination with other plans and/or projects, in view of the best scientific information and the sites conservation objectives. No measures are required to avoid or reduce harmful effects on European sites."*

The construction phase impacts, in the absence of mitigation, on habitats and fauna from the project alone were assessed within Chapter 5 of Appendix A to this report. Potential impacts from the proposed development, in the absence of mitigation, are assessed as not resulting in any significant impacts. Residual impacts, with mitigation result in imperceptible effects.

When the impacts on habitats and fauna are assessed cumulatively with other developments, which may be under construction simultaneously, in particular projects outlined above as being in proximity to the proposed development, there is no potential for significant impacts.

This assessment is based on:

- imperceptible impacts from the project alone construction phase,
- the construction phase of the proposed development being limited in duration and any potential overlap with the aforementioned developments, even when no mitigation measures are applicable for the proposed development, would not result in significant impacts as these developments will be conditioned under their respective planning permissions to implement their CEMPs to minimise risk to local biodiversity receptors.
- Implementation of CEMP will be required for all projects including the proposed development.

In summary cumulative impacts on biodiversity during the construction phase will be short term and imperceptible and no significant effects will result to biodiversity receptors.

Operational Phase

The proposed development when considered in isolation was assessed as resulting in no significant residual adverse impacts on biodiversity including in the absence of mitigation. Any of the aforementioned developments which were identified as having potential for significant impacts have been assessed.

Cumulative operational phase impacts determined that NOx concentrations (air quality indicator) as a result of the proposed development, are small relative to the background NOx concentrations, therefore NOx concentrations are negligible and considered to have imperceptible effects on biodiversity receptors alone and cumulatively with all projects outlined in Table 5.1.

The impact of light spill on bats is deemed to be imperceptible from the project alone. Therefore, no significant cumulative effects are likely to bats.

In relation to cumulative habitat It is noted that the closest project, Mooretown 220 kV substation (overlapping application boundary with the proposed development), outline measures to "*maintain and enhance the ecological value of the site through a substantial green belt around the northern, eastern and southern boundaries and the integration of surface water attenuation basins, landscaping and planting to provide a wild life corridor and a soft transition to neighbouring sites and the public realm".* These measures will provide opportunities for bats and other wildlife.

The Data Centre (Data Hall) includes a Landscape Strategy which *provides for increased biodiversity through the additional planting. The protection and enhancement of the existing landscape is an important aspect of the overall landscape strategy. The landscape strategy proposes to enhance and strengthen the existing hedgerow using native hedgerow and woodland species, while retaining the existing trees planted in and around the hedgerow. In addition to strengthening the remnants of the existing hedgerow, planting of a new native hedgerow is also proposed. Through selective management of the hedgerows, the network of existing ecological corridors will be strengthened to support the local wildlife of the surrounding area.*

In summary no significant habitat loss will arise from the project that are additional to habitat loss (hedgerows and modified grassland) associated with the five projects outlined above.

There are no other potential operational impacts identified, when these impacts are reviewed in combination with the above-mentioned developments there is no potential for significant cumulative impacts.

In specific respect of significant impacts on European Sites, the AA Screening has ruled out any significant effects on any European Sites from the proposed works, either alone or in-combination with other plans and/or projects during all phases of the development.

Decommissioning Phase

The decommissioning phase activities are similar to those which will be undertaken during the construction phase hence the resulting impacts will not be significant. Any future planning applications will be conditioned to prepare and implement a CEMP to ensure that significant effects on biodiversity are avoid, minimised or mitigated.

In conclusion, the cumulative impacts of the proposed development when considered with other projects are not considered to be significant in relation to biodiversity during any phase of the proposed development.

5.4.6 Noise

Construction Phase

Relevant existing and future development projects that have the potential for construction phases to occur within the same time period as the proposed Huntstown Emergency Generating Plant and have the potential to affect the existing ambient noise environment have been reviewed. Three relevant developments have been identified and are summarised in Table 5.3.

Table 5.3: Existing and future projects in the surrounding area

Planning Ref. No	Planning Authority	Project Name	Project Status	Decision Grant Date
FW21A/0151	Fingal County Council	Huntstown data centre facility	Proposed project	Pending
311528	An Bord Pleanála	220kV GIS 'Mooretown' Substation and Ancillary Structures	Proposed project	Pending
FW21A/0144	Fingal County Council	Installation of electrical infrastructure between Finglas 220 kV Substation and Huntstown Power Station including underground cables	Permission granted	11.08.2022

Detailed timeline information relating to these other development projects is not known at present. However, for the purpose of assessment, the highest resulting noise levels from each development construction phase is assumed to occur within the same period to represent the worst-case scenario.

Noise assessments submitted for each development have been reviewed. Predicted noise levels at sensitive receptors (where available) from these assessments have been combined in the following table. These values do not include the benefit of additional mitigation measures.

Table 5.4: The predicted cumulative noise level from surrounding projects and generators for daytime period

NSL ID	Baseline noise level, LAeq T dB	FW21A/0151 construction noise (Site Preparation), LAeq T dB	311528 construction noise (Site Preparation), LAeq T dB	Emergency Generating Plant Construction noise (Demolition phase), LAeq T dB	Predicted cumulative noise level, $L_{Aeq\ T}$ dB	Resultant noise level, LAeq, T dB
NSL01	75	-	-	48	-	-
NSL02	75	-	-	49	-	-
NSL03	61	53	51	54	57.6	62.6
NSL04	61	68	55	55	68.4	69.1
NSL05	61	57	47	49	58.0	62.8
NSL06	61	-	-	49	-	-
NSL07	61	-	-	49	-	-
NSL08	61	50	45	47	52.6	61.6
NSL09	62	50	45	44	52.0	62.4
NSL10	62	50	44	44	51.8	62.4
NSL11	62	49	45	43	51.2	62.3
NSL12	62	-	-	43	-	-
NSL13	62	-	-	42	-	-
NSL14	59	46	47	43	50.4	59.6
NSL15	72	-	-	32	-	-
NSL16	72	-	-	38	-	-
NSL17	74	-	-	37	-	-
NSL18	74	-	-	37	-	-

Resultant noise levels due to the combined effect of construction activities occurring within the same period would increase existing baseline noise levels by less than 3 dB at all receptors which is assessed to be negligible and not significant except at the Dogs Trust (NSL04). Results indicate noise levels at the Dogs Trust would increase the existing ambient noise level by more than 3 dB and may result in adverse impacts. These adverse impacts however are due to site preparation construction stages of the Data Centre development which were assessed to be not significant due the short-term nature of these activities and implementation of mitigation measures.

Results show noise levels would increase by a negligible amount due to cumulative impacts during this worst-case scenario but would remain dominated by the closest construction activity. No significant adverse effects would arise due to the cumulative effect of construction activities associated with the data centre, Mooretown substation and emergency generation plant developments.

The assessment of noise from construction associated with the installation of underground cables development (FW21A/0144) indicates impacts would be greatest at the Dogs Trust site during construction works which occur at the closest approach (within 10m). The assessment advises mitigation would be provided including the use of acoustic barriers to minimise adverse impacts and prevent significant adverse effects. Noise levels at this receptor would be dominated by construction associated with the underground cable development and would not materially increase due to the cumulative effect of other construction activities should they occur during the same period.

The cumulative noise impacts of construction activities associated with the underground cable development, data centre, Mooretown substation and emergency generation plant developments underground cables including the effect of mitigation measures has the potential to temporarily increase noise levels at the nearest sensitive receptors but would not result in significant adverse effects.

Noise levels from the emergency generator plant construction activities are at least 5 dBA below the existing baseline noise levels at all noise sensitive receptor locations such that the component of noise level increases due to emergency generator plant alongside other concurrent construction activities are very limited.

The above assessment considers a worst-case scenario during a combination of simultaneous construction activities. In practice noise levels from each construction phase are unlikely to align within the same time period and resultant noise impacts would be lower than shown.

Cumulative construction noise impacts are assessed to be adverse but not significant. Cumulative noise impacts associated with the construction will be managed by the principal contractor alongside any other concurrent construction projects nearby to minimise potential cumulative noise impacts.

Operational

Relevant existing planned and licensed development projects listed in Table 5.1 that have the potential to affect the existing ambient noise environment have been reviewed from the Fingal County Council Planning Portal, An Bord Pleanála application database and Environmental Protection Agency permitting database. In relation to the operational phase several developments have been assessed alongside the proposed developments. These are identified in Table 5.5.

Table 5.5: Existing and future projects in the surrounding area

Planning/Licence Ref. No	Project Name	Project Status	Operational Period
W0227-03	Huntstown C&D waste recovery facility	Existing project	Daytime
P0993-02	Huntstown renewable bioenergy plant incl. wastewater treatment plant	Existing project	Daytime, evening and night-time
FW21A/0151	Huntstown data centre facility	Proposed project	Daytime, evening and night-time
VA06F.311528	220kV GIS 'Mooretown' Substation and Ancillary Structures	Proposed project	Daytime, evening and night-time

The noise assessment data from the above-mentioned developments has been used to assess cumulative noise impacts with the proposed development.

Cumulative operational noise impacts from the projects listed in Table 5.5 and the proposed development site (Generator operational noise) have been assessed in Table 5.6 to Table 5.8 for daytime, evening and night-time periods respectively. It is noted that the Huntstown C&D waste recovery facility is only operational during daytime periods while the Huntstown renewable bioenergy plant operational noise level used is according to 'Scenario A'[3] as it best reflected the likely operational noise of the site.

Table 5.6: The predicted cumulative noise level from surrounding projects and generators for daytime period

NSL ID	Baseline noise level, $L_{Aeq\ T}$ dB	W0227-03 operational noise, $L_{Aeq\ T}$ dB	P0993-02 operational noise, $L_{Aeq\ T}$ dB	FW21A/0151 operational noise, $L_{Aeq\ T}$ dB	311528 operational noise, $L_{Aeq\ T}$ dB	Generator operational noise, $L_{Aeq\ T}$ dB	Predicted cumulative noise level, $L_{Aeq\ T}$ dB
NSL01	75	48	-	-	-	44	75.0
NSL02	75	48	-	-	-	42	75.0
NSL03	61	44	36	33	27	45	61.2
NSL04	61	44	36	37	24	45	61.2
NSL05	61	42	33	38	24	43	61.2
NSL06	61	42	33	-	-	43	61.1
NSL07	61	42	33	-	-	43	61.1
NSL08	61	42	33	31	18	41	61.1
NSL09	62	42	29	28	21	40	62.1
NSL10	62	42	29	28	21	40	62.1
NSL11	62	40	29	28	21	40	62.1
NSL12	62	40	29	27	22	38	62.0
NSL13	62	40	29	27	22	38	62.0
NSL14	59	29	31	35	35	35	59.1
NSL15	72	31	-	-	-	35	72.0
NSL16	72	34	-	-	-	32	72.0
NSL17	74	36	-	-	-	26	74.0
NSL18	74	36	-	-	-	30	74.0

[3] SLR June 2018, Proposed modification to the consented wastewater treatment plant for the renewable bioenergy plant at Huntstown, Appropriate Assessment Screening Report. SLR ref no: 501.00501.0001 (fingalcoco.ie)

Table 5.7: The predicted cumulative noise level from surrounding projects and generators for evening period

NSL ID	Baseline noise level, LAeq T dB	W0227-03 operational noise, LAeq T dB	P0993-02 operational noise, $L_{Aeq\ T}$ dB	FW21A/0151 operational noise, LAeq T dB	311528 operational noise, LAeq T dB	Generator operational noise, LAeq T dB	Predicted cumulative noise level, LAeq T dB
NSL01	63	-	-	-	-	44	63.1
NSL02	63	-	-	-	-	42	63.0
NSL03	58	-	36	33	27	45	58.3
NSL04	58	-	36	37	24	45	58.3
NSL05	57	-	33	38	24	43	57.2
NSL06	57	-	33	-	-	43	57.2
NSL07	57	-	33	-	-	43	57.2
NSL08	57	-	33	31	18	41	57.1
NSL09	59	-	29	28	21	40	59.1
NSL10	59	-	29	28	21	40	59.1
NSL11	59	-	29	28	21	40	59.1
NSL12	59	-	29	27	22	38	59.0
NSL13	59	-	29	27	22	38	59.0
NSL14	58	-	31	35	35	35	58.1
NSL15	64	-	-	-	-	35	64.0
NSL16	64	-	-	-	-	32	64.0
NSL17	68	-	-	-	-	26	68.0
NSL18	68	-	-	-	-	30	68.0

Table 5.8: The predicted cumulative noise level from surrounding projects and generators for night time period

NSL ID	Baseline noise level, LAeq T dB	W0227-03 operational noise, LAeq T dB	P0993-02 operational noise, $L_{Aeq\ T}$ dB	FW21A/0151 operational noise, LAeq T dB	311528 operational noise, LAeq T dB	Generator operational noise, LAeq T dB	Predicted cumulative noise level, LAeq T dB
NSL01	64	-	-	-	-	44	64.0
NSL02	64	-	-	-	-	42	64.0
NSL03	55	-	37	33	27	45	55.5
NSL04	55	-	37	37	24	45	55.5
NSL05	54	-	34	38	24	43	54.5
NSL06	54	-	34	-	-	43	54.4
NSL07	54	-	34	-	-	43	54.4
NSL08	54	-	34	31	18	41	54.3
NSL09	55	-	31	28	21	40	55.2
NSL10	55	-	31	28	21	40	55.2
NSL11	55	-	31	28	21	40	55.2
NSL12	55	-	31	27	22	38	55.1
NSL13	55	-	31	27	22	38	55.1
NSL14	54	-	37	35	35	35	54.2
NSL15	61	-	-	-	-	35	61.0
NSL16	61	-	-	-	-	32	61.0
NSL17	62	-	-	-	-	26	62.0
NSL18	62	-	-	-	-	30	62.0

Application FW19A/0090 relating to a Gas Peaking Facility development[4] (10 containerised generator units) is also relevant to cumulative noise impacts but has not been included in Tables 5.5 to 5.8. A noise assessment associated with this application determined noise levels from the development at the nearest noise sensitive receptor (NSL1, the Ravenwood Development) to be 53.6 dBA LAeq,T which was no greater than the existing background noise levels and significantly less than baseline noise levels. This proposed development was revised to include fewer generator units (6 units instead of 10) and planning consent approved (Application FW20A/0219) in April 2021. No additional noise assessment was prepared with the revised scheme on the basis noise impacts for the original scheme were low, the original noise assessment represents a worst case cumulative scenario. It is not possible to quantitatively assess cumulative noise impacts associated with the approved revised scheme where the noise level values are not known. However, on the basis noise from the scheme (based on the original noise assessment with application FW19A/0090) would not significantly alter existing baseline noise levels cumulative noise impacts due to FW20A/0219 in addition to those assessed above would be negligible and not result in significant adverse impacts.

The assessment of cumulative impacts shows that the increase in baseline noise levels due to the generator units, in addition to other nearby development projects is less than 0.5 dB for all NSLs for all time periods (day, evening and night). The cumulative noise impact is assessed to be negligible and significant adverse impacts due to operational noise are not likely.

Decommissioning Phase

The decommissioning phase will include similar activities to those laid out for construction and hence will also results in negligible noise impacts. The resultant noise levels arising from decommissioning activities are expected to be low due to the distance from working areas to noise sensitive locations and significant effects are unlikely to occur. Therefore, it concluded that significant adverse impacts due to decommissioning noise are not likely.

In conclusion, the cumulative impacts of the proposed development when considered with other relevant plans or projects are not considered to be significant in relation to noise during any phase of the proposed development.

5.4.7 Air Quality & Climate

The nature of GHG emissions means that the ultimate receptor is the global climate system. The GHG assessment does not consider cumulative effects, as GHG emissions do not result in regional or local effects on climate and, therefore, the effects of the project's emissions on climate will not differ when combined with other developments.

Construction Phase

The proposed development was assessed on its individual construction phase impact, it was concluded in Section 7.5.1 (of Appendix A – Supporting Information to the EIA Screening) that the risk of dust soiling effects and PM_{10} effects are 'Negligible' to 'Low' without mitigation. The application of the CEMP in Appendix B will further reduce risk. Any developments listed in Table 5.1 and future developments which may be constructed simultaneously with the proposed development will be required to implement CEMPs submitted with their respective planning applications; planning permission is subject to conditions to ensure that plans and particulars are adhered too, including mitigation measures to minimise environmental impacts. The proposed development has a limited construction period of ten months and therefore any potential impact will be temporary. Therefore, it concluded that significant adverse impacts due

[4] Same site as 2019 planning application (Planning Ref. FW19A/0090) - approx. 460m north of the proposed temporary emergency generation plant

to construction phase dust and PM_{10} emissions are not likely. Construction phase impacts will be neutral and negligible.

Operational Phase

As discussed in Section 7.3.3.2 ('Model Scenarios – Cumulative'), given the energy generation capacity of the proposed development and that of the existing (Huntstown Power Station Unit 1 and 2 and anaerobic digestion plant (AD plant) and other proposed developments (consented Data Centre) adjacent to the proposed development site, a cumulative modelling scenario has been undertaken.

The consented Gas Peaking Facility (CGPF) located in Newtown (FW20A/0219), approximately 470m north of the proposed development, was considered a potentially relevant development in relation to the cumulative air quality assessment. When operational, the CGPF will consist of four gas engines operating at ad hoc periods to meet peak demand. Based on a NOx mass emission of 0.47g/s per engine, presented in the CGPF planning application and assuming continuous operation of four engines all year, the total NOx mass emissions would be less than 100 tonnes per year. On this basis, the CGPF has been excluded from the cumulative assessment in accordance with EPA AG4 guidance.

The assessment of cumulative effects considers both the 1 hour and annual mean NO_2 AQS. The assessment of the cumulative 1-hour and annual mean NO_2 cumulative effect is considered conservative as it assumes all plant would operate simultaneously and would coincide with the worst meteorological conditions.

Baseline concentrations are from Swords suburban background monitor and have been obtained from the EPA data archive, as summarised in Table 7.8 (contained in Appendix A – Supporting information to the EIA Screening).

Cumulative criteria

EPA AG4 asks the following questions to define the significance of cumulative effects:

- **Question 1:** Does cumulative modelling indicate an exceedance of the AQS in the region of overlap between the proposed installation (i.e. the proposed development) and other existing or proposed installations? If so, is the AQS exceeded in the absence of the proposed installation?
- **Question 2**: Does the proposed installation (i.e. the proposed development) exceed 25% of an AQS (known as the PSD increment) in the region of overlap between the proposed installation and other existing or proposed installations?

The cumulative effects subsection below discusses the short term cumulative modelling results in the context of the above questions.

Scenario 3 and 4, as detailed in Section 7.3.3.2 - Model Inputs, are utilised to answer Question 1 and 2 to define the significance of cumulative effects.

Cumulative effects

Question 1

Table 5.9 and Table 5.10 presents the cumulative maximum predicted 1-hour and annual mean NO_2 concentrations for scenarios 3 and 4 for comparison against the AQS. All predicted

concentrations for these averaging periods are taken from the maximum offsite gridded receptor location[5].

In both scenario 3 and 4, the 1-hour AQS is not predicted to be exceeded and the predicted environmental concentrations are below 70% of the AQS.

In scenario 3 and 4, the annual mean AQS is not predicted to be exceeded and in scenario 3 the predicted environmental concentrations are below 70% of the AQS.

In scenario 4, the annual mean predicted environmental concentration is above 70% of the AQS although the AQS is not exceeded. Other than the background concentration of 14.8µg/m^3, the largest NO_2 contribution is from the data centre which is predicted to consume 27% (10.9 µg/m^3) of the AQS at its maximum point of offsite impact, with the proposed developments process contribution remaining relatively low at just under 4% (1.5µg/m^3) of the AQS at its maximum point of impact.

Modelled hourly NO_2 concentrations at discrete receptor locations for scenario 3 and 4 are presented in Table 5.11 and Table 5.13 which shows that, at all receptors for both scenarios, the resultant PECs are below 47% of the 1-hour AQS.

Modelled annual mean NO_2 concentrations at discrete receptor locations for scenario 3 and 4 are presented in Table 5.12 and Table 5.14, which shows that, at all receptors for both scenarios, the resultant PECs are below 58% of annual mean AQS.

In scenarios 3 and 4 for all averaging periods, there are no exceedances of the AQS either with or without the proposed development.

Table 5.9:Scenario 3: Modelled Maximum Results (µg/m^3) – Cumulative

Pollutant	Averaging Period	AQS	Existing Plant[a]	Proposed development	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
NO_2	1 hour 99.79	200	58.5	62.3	64.3	32.2	29.6	93.9	47.0
	Annual mean[b]	40	7.0	1.5	7.1	17.8	14.8	21.9	54.8

Notes: Existing plant includes HPS and AD Plant; CPC: Cumulative Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

The arithmetic sum of Existing plant and proposed development will not equal CPC due to NOx to NO_2 relationship

[a] Results presented are at the predicted maximum point of impact at offsite locations and may differ for each plant

[b] Representative of 1460 hours per year.

[5] Maximum offsite gridded receptor refers to the location within the model domain where the maximum concentration for each averaging period is predicted but excludes land occupied within the site boundary, HPS and AD Plant. Land occupied by the Data Centre is also excluded in scenario 4 as it becomes an industrial facility and would not be publicly accessible.

Table 5.10: Scenario 4: Modelled Maximum Results (µg/m^3) – Cumulative

Pollutant	Averaging Period	AQS	Existing Plant[(a)]	Data Centre[(a)]	Proposed development[(a)]	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
NO_2	1 hour 99.79	200	58.4	54.2	61.3	64.4	32.2	29.6	94.0	47.0
	Annual mean[(b)]	40	6.8	10.9	1.5	16.2	40.6	14.8	31.0	77.6

Notes: Existing plant includes HPS and AD Plant; CPC: Cumulative Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

The arithmetic sum of Existing plant, Data Centre and proposed development will not equal CPC due to NOx to NO_2 relationship

[(a)] Results presented are at the predicted maximum point of impact at offsite locations and may differ for each plant

[(b)] Representative of 1460 hours per year.

Table 5.11: Scenario 3: Hourly 99.79 %ile NO_2 Results at Human Health Discrete Receptors (µg/m^3) – Cumulative

Receptor	AQS	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
H1	200	60.7	30.4	29.6	90.3	45.2
H2		61.1	30.6		90.7	45.4
H3		59.0	29.5		88.6	44.3
H4		57.3	28.7		86.9	43.5
H5		57.2	28.6		86.8	43.4
H6		55.9	27.9		85.5	42.7
H7		64.0	32.0		93.6	46.8
H8		59.7	29.9		89.3	44.7
H9		61.2	30.6		90.8	45.4

Notes: PC: Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

Table 5.12: Scenario 3: Annual mean NO_2 Results at Human Health Discrete Receptors (µg/m^3) – Cumulative

Receptor	AQS	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
H1	40	1.5	3.8	14.8	16.3	40.8
H2		1.7	4.1		16.5	41.1
H3		5.2	13.1		20.0	50.1
H4		0.7	1.8		15.5	38.8
H5		2.4	6.0		17.2	43.0
H6		1.9	4.8		16.7	41.8
H7		5.1	12.8		19.9	49.8
H8		2.6	6.5		17.4	43.5
H9		2.4	5.9		17.2	42.9

Notes: CPC: Cumulative Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

Representative of 1460 hours per year.

Table 5.13: Scenario 4: Hourly 99.79 %ile NO_2 Results at Human Health Discrete Receptors (µg/m^3) – Cumulative

Receptor	AQS	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
H1		60.8	30.4		90.4	45.2
H2		61.2	30.6		90.8	45.4
H3[(a)]		-	-		-	-
H4		57.5	28.8		87.1	43.6
H5	200	58.3	29.1	29.6	87.9	43.9
H6		57.9	28.9		87.5	43.7
H7		64.1	32.0		93.7	46.8
H8		62.0	31.0		91.6	45.8
H9		62.1	31.1		91.7	45.9

Notes: CPC: Cumulative Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

Receptor 3 is subject to demolition as part of the Data Centre planning application.

Table 5.14: Scenario 4: Annual mean NO_2 Results at Human Health Discrete Receptors (µg/m^3) – Cumulative

Receptor	AQS	CPC	CPC as % of AQS	BC	PEC	PEC as % of AQS
H1		2.2	5.5		17.0	42.5
H2		2.3	5.8		17.1	42.8
H3[(a)]		-	-		-	-
H4		1.0	2.4		15.8	39.4
H5	40	3.5	8.8	14.8	18.3	45.8
H6		2.8	7.0		17.6	44.0
H7		8.2	20.5		23.0	57.5
H8		3.5	8.8		18.3	45.8
H9		3.1	7.9		17.9	44.9

Notes: CPC: Cumulative Process contribution; BC: Baseline concentration; PEC: Predicted environmental concentration

Representative of 1460 hours per year.

[(a)] Receptor 3 is subject to demolition as part of the Data Centre planning application.

Question 2

In both scenario 3 and scenario 4, the proposed development operating in isolation does not exceed 25% of the annual mean AQS at any location. The below discussion focusses on the 1-hour NO_2 AQS, where in isolation, the proposed development's process contribution does exceed 25% of the 1-hour AQS in the are of overlap.

The modelling approach for both scenario 3 and 4 is highly conservative in its nature as it assumes that all plant would be operating simultaneously when the meteorological conditions causing the highest impacts are present. The risk of this situation occurring multiple times per year is considered highly unlikely given that the proposed development would operate to meet peak energy demands and the data centre engines are emergency backup only and are unlikely to run for multiple continuous hours on multiple occasions.

Figure 5.1 and Figure 5.2 present contour plots for scenario 3 and 4 of the cumulative 1-hour NO_2 process contributions and the PSD increment area (demarked by a red line) which is the area where the proposed development's PC in isolation is above 25% of the 1-hour NO_2 AQS.

The land-use in this area is primarily fields and industrial use although does include a kennel and approximately 10 residential properties, represented by receptors H1 and H2 in Table 5.11 to Table 5.14 above.

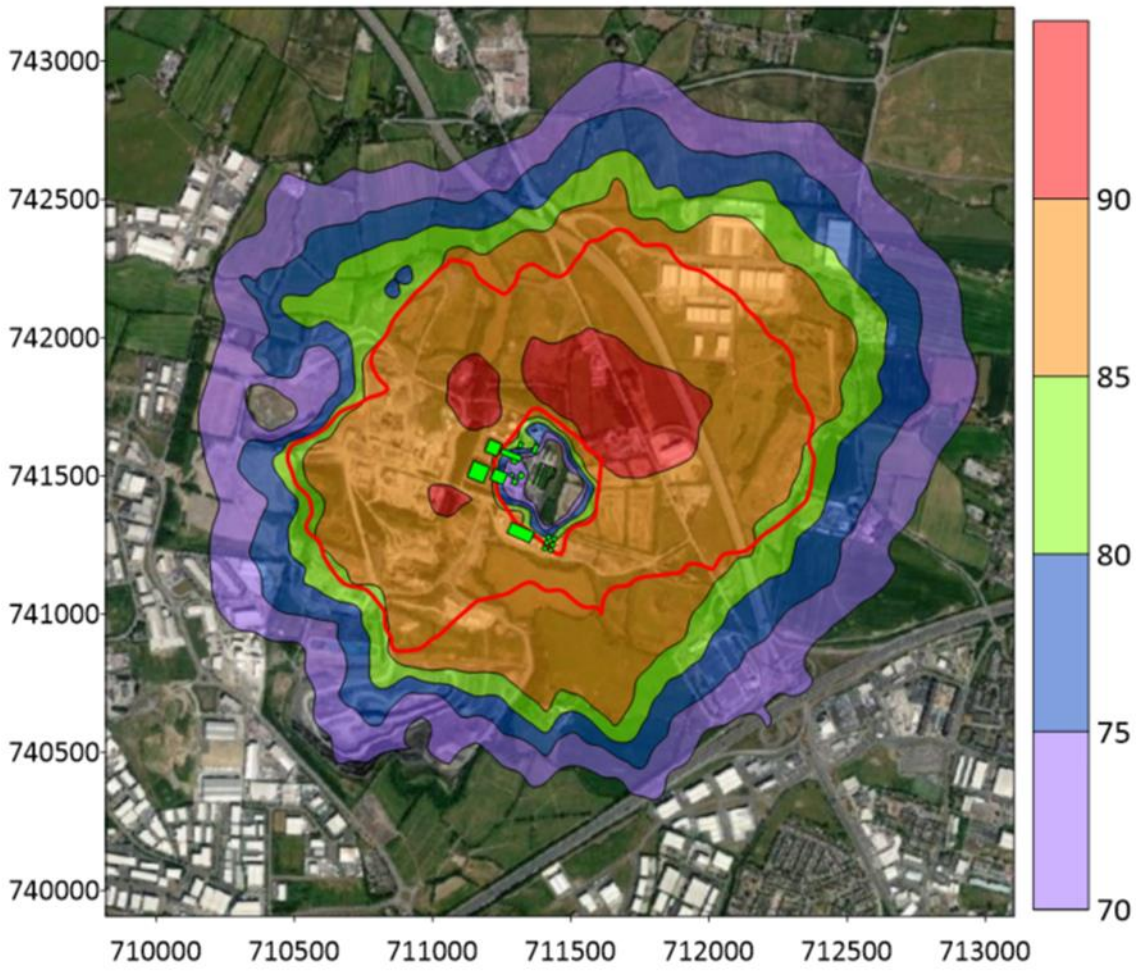
In both scenario 3 and 4, the difference between the largest predicted 1-hour NO_2 concentration for the cumulative process contribution and the proposed development in is less than 2% of the 1-hour AQS likely as the airshed is ozone limited[6] and no exceedances of the AQS are predicted.

In scenario 3, at the point of maximum impact at offsite locations, within the PSD increment area, the cumulative process contribution (CPC) 1-hour NO_2 concentration is 64.3µg/m^3 (32.2% of the 1-hour AQS) as presented in Table 5.9 above. Table 5.9 also presents the proposed development in isolation and demonstrates that the maximum predicted 1-hour NO2 concentration is 62.3µg/m3 (31.2% of the 1-hour AQS) while the existing plant's 1-hour NO2 concentration is 58.5µg/m3 (29.3% of the 1-hour AQS). Therefore, although the Proposed Development's process contribution is above 25% when operating in isolation, the incremental difference between the proposed development's process contribution and the cumulative process contribution is minimal, likely as the airshed is ozone limited.

In scenario 4, at the point of maximum impact at offsite locations, within the PSD increment area, the CPC 1-hour NO_2 concentration is 64.4µg/m^3 (32.2% of the 1-hour AQS) as presented in Table 5.10 above. Table 5.10 above also presents the proposed development in isolation and demonstrates that the maximum predicted 1-hour NO_2 concentration is 61.3µg/m3 (30.7% of the 1-hour AQS) while the Existing Plant's 1-hour NO_2 concentration is 58.4µg/m3 (29.2% of the 1-hour AQS). Therefore, although the Proposed Development's process contribution is above 25% when operating in isolation, the incremental difference between the proposed development's process contribution and the cumulative process contribution is minimal, likely as the airshed is ozone limited.

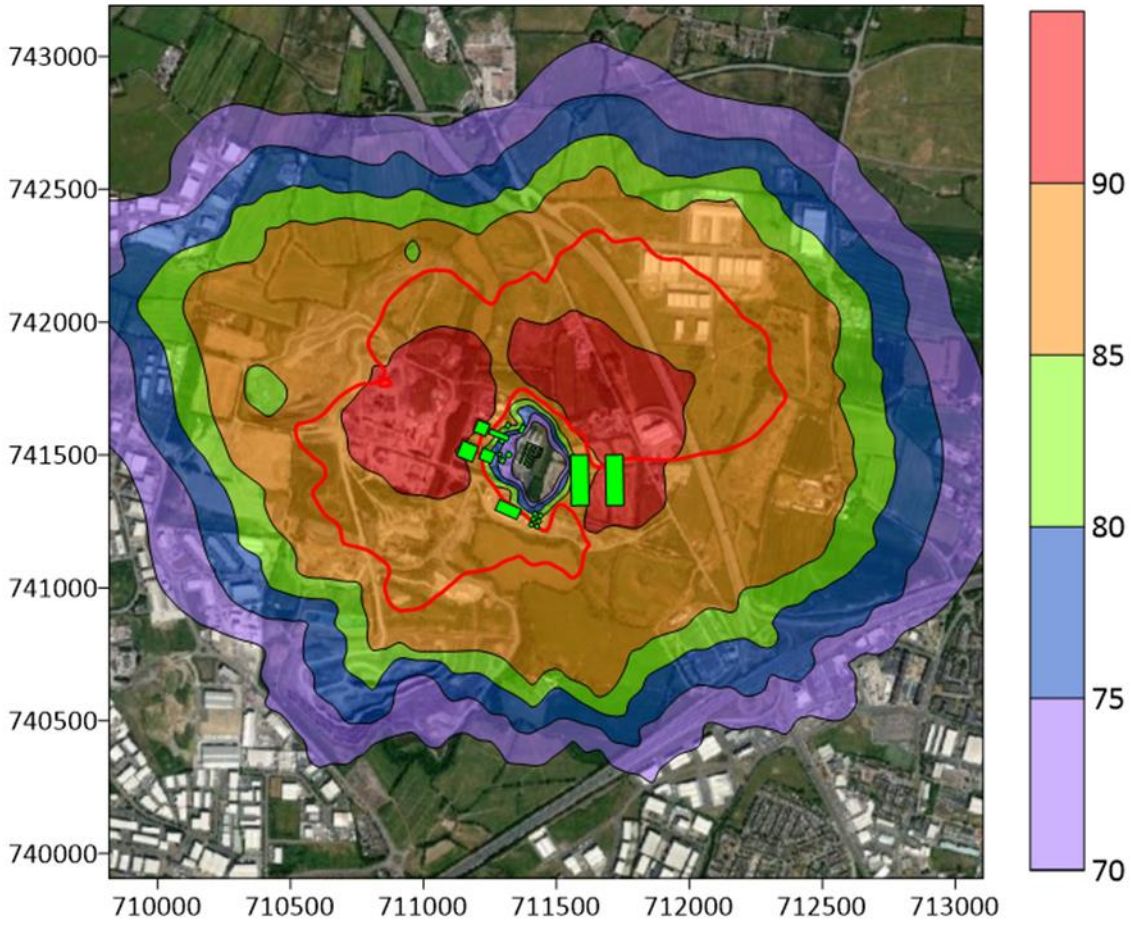
[6] Ozone limited means that the concentration of ozone is not high enough to convert all the available NO, within the emitted NOx, to NO2.

Figure 5.1: Scenario 3: 1-hour NO_2 99.79 percentile PEC – Cumulative (µg/m^3)



Notes: Red line indicates proposed development's PC at 25% (50µg/m^3) of the 1-hour AQS known as the PSD increment area; Minimum contour level: 70µg/m^3: Maximum contour level: 90µg/m^3; Contour interval 5µg/m^3, Meteorological year 2020, PC = Process contribution

Figure 5.2: Scenario 4: 1-hour NO_2 99.79 percentile PEC – Cumulative (µg/m^3)



Notes: Red line indicates proposed development's PC at 25% (50µg/m^3) of the 1-hour AQS known as the PSD increment area; Minimum contour level: 40µg/m^3: Maximum contour level: 100µg/m^3; Contour interval 10µg/m^3, Meteorological year 2018, PC = Process contribution

Operational Cumulative Effects Summary

Cumulative effects are not significantly greater than the proposed development in isolation which meets the maximum allowable process contribution (MAPC) criteria set out in EPA AG4. In addition, there is no predicted exceedances of the 1-hour AQS in either scenario 3 or scenario 4. On this basis and given the highly conservative nature of assessing the 1-hour averaging period, cumulative significant effects are not likely.

Decommissioning Phase

Decommissioning phase mitigation measures are commensurate with construction phase mitigation measures presented above. Thus, no significant impacts will result during the decommissioning phase in relation to air quality.

In conclusion, the cumulative impacts of the proposed development when considered with other relevant projects are not considered to be significant in relation to air quality during any phase of the proposed development.

5.4.8 Archaeology, Architecture and Cultural Heritage

Construction Phase

A review of the developments listed in Table 5.1 was undertaken to determine the potential for cumulative effects in relation to archaeology, architecture and cultural heritage. This review has identified the following projects directly overlap with the application boundary for the proposed development and which will run concurrently:

- Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528)
- Electrical infrastructure between Huntstown Power Station and Finglas 220 kV Substation (FW21A/0144)

It is noted that both above-mentioned projects although overlapping with the proposed development boundary have not conducted archaeological geophysical or testing within the application boundary for the proposed temporary emergency generating plant, at it forms part of the operational Huntstown Power Plant complex. The areas where the overlap in construction occurs is related to the new OHL tower and electrical infrastructure (FW21A/0144) and an area of new hardstanding surrounding the existing carpark at Huntstown 1 by the proposed temporary emergency generating plant. The data centre application (FW21A/0151 / PL06F.313583) will also be under construction concurrently but does not overlap with the proposed development. The data centre application site has already been subject to geophysical and extensive archaeological testing under licence from the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht.

Given that the proposed temporary emergency generating plant lies within the landtake of the developed grounds of Huntstown Power Station with an area of previously disturbed ground there are no anticipated adverse impacts associated with the proposed development during the construction phase and as such no possible in combination impacts.

The above developments have been subject to archaeological, architectural and cultural heritage impact assessment as part of their associated environmental impact assessment and/or consenting processes. A method statement and license to undertake the archaeological excavation (preservation by record) of these features will be agreed with the National Monuments Service for the abovementioned projects. These excavations will record (through preservation by record) these features in full. Therefore, the cumulative impact of proposed development in combination with those listed above is imperceptible.

There are no impacts on the architectural or cultural heritage of the receiving environment as a result of the construction of the proposed development when considered with other relevant projects listed in Table 5.1.

Operational Phase

There are no potential impacts on archaeological, architectural and cultural heritage expected as a result of the proposed temporary emergency power generation plant. Therefore, there are no cumulative impacts expected with other existing, planned and licenced developments set out in Table 5.1.

Decommissioning Phase

Decommissioning activities will not result in excavations outside of the pre-disturbed areas excavated during the construction phase. Therefore, there are no cumulative impacts expected with other existing and permitted developments.

In conclusion, no cumulative impacts upon the archaeological, architectural or cultural heritage resource have been identified when all phases of the proposed development are considered with other relevant projects.

5.4.9 Landscape and Visual

Construction Phase

The existing developments listed in Table 5.1 have been considered as part of the baseline environment in the landscape and visual impact assessment presented in Chapter 10 (within Appendix A – Supporting Information to the EIA Screening). The construction of the proposed temporary emergency generation plant will take place largely on the existing Huntstown Power Station site and will be characterised by higher intensity of activity at the site than during the operational phase. This will consist of heavy vehicle movement to and from the site as well as construction machinery within the site. Nonetheless, the movement of HGVs along the surrounding road network travelling to and from the site is typical in this part of the study area, as the existing Roadstone Huntstown facility currently generates a high degree of HGV traffic. It will also include temporary site lighting and the temporary storage of construction materials and excavated ground. Construction phase impacts on the landscape are considered to be temporary as the construction stage is likely to take in the order of 10 months to complete.

Additional cumulative effects may arise from the combined effects of the proposed development with the planned developments listed in Table 5.1. A review of the developments listed in Table 5.1 identified the following projects which may be constructed concurrently with the proposed development:

- Data Centre application (FW21A/0151 / PL06F.313583, 3rd Party appeal, decision date due for 19/09/2022)
- Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528)
- Electrical infrastructure between Huntstown Power Station and Finglas 220 kV Substation (FW21A/0144)

An increase in construction activity on the proposed site in combination with construction activity on the data centre development site (FW21A/0151 / PL06F.313583) and the Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528), will result in marked increased intensity of activity within the site and its immediate surrounds and will marginally detract from the visual amenity in the local landscape context. Nonetheless, the increase in activity during the construction phase will be temporary in duration and will not result in any significant cumulative impacts when considered with the above-mentioned projects or others listed in Table 5.1, as the existing immediate site context is currently characterised by existing industrial land uses where large scale machinery, extensive bunds and existing HGV traffic are characteristic elements of the local landscape context.

Operational Phase

The existing developments listed in Table 5.1 have been considered as part of the baseline environment in the landscape and visual impact assessment presented in Chapter 10 (within Appendix A – Supporting Information to the EIA Screening). A review of the planned projects within 1km of the application site as set out in Table 5.1 was undertaken. Those planned developments closest to the proposed development that are relevant with respect to potential landscape and visual cumulative impacts are the data centre development (FW21A/0151 / PL06F.313583) and the Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528), both of which are situated immediately east and southeast of the proposed temporary emergency generation plant.

These planned developments are considered as relevant cumulative developments in relation to the proposed temporary emergency generation plant as they are the nearest and largest planned developments to the site and have the most potential to generate cumulative landscape and visual effects.

As described in section 10.6.2 of Appendix A - Supporting Information to the EIA Screening Assessment, the assessment of visual impacts at each of the selected viewpoints (refer to Figure 10.2) is aided by photomontages of the proposed development. These photomontages are presented in Appendix F. The Outline View includes an outline of the planned data centre development (FW21A/0151 / PL06F.313583) and the Mooretown 220kV substation application (Strategic Infrastructure Development application VA06F.311528).

The data centre development (FW21A/0151 / PL06F.313583) is of a considerable size and will be one of the most defining features in the local landscape context due to its broad scale. Indeed, due to its scale, the data centre development will heavily screen both the proposed temporary emergency generation plant and the proposed substation development (VA06F.311528) from local receptors to the east (refer to photomontage VP05 presented in Appendix F). Nonetheless, the proposed development in combination with the proposed substation (VA06F.311528) and data centre (FW21A/0151 / PL06F.313583) will notably increase the intensity of built development in this local landscape context. Whilst a combined view of the three developments has the potential to be afforded from some surrounding receptors, the modest and slender forms of the proposed development will appear distinctly separate from the more visually prominent data centre development, which is principally defined by broad, extensive warehouse type buildings.

Despite the broad combined scale of the three developments, they will not appear incongruous in this busy, transitional landscape context, which is characterised by numerous similar development types. Indeed, this part of county Dublin (the immediate outskirts of the M50 motorway) is heavily influenced by large-scale, commercial and industrial land uses in addition to Dublin Airport. Thus, the main cumulative effect is the intensification of existing land uses, not the introduction of a new and unfamiliar one.

Overall, the combined scale of the proposed development in combination with the data centre (FW21A/0151 / PL06F.313583) and proposed Mooretown 220 kV substation (Strategic Infrastructure Development application VA06F.311528) will have some notable landscape and visual effects. However, it is not considered that these reach the significant threshold. Thus, the proposed development is not considered to result in a significant cumulative impact.

Decommissioning Phase

Decommissioning activities will be less intensive than those undertaken during the construction phase and will ultimately result in returning the application site to a similar or reduced number of above ground structures. Therefore, the decommissioning phase will not result in any significant cumulative impacts in relation to landscape and visual impact when considered with projects listed in Table 5.1.

In conclusion, the cumulative impacts of the proposed development when considered with other relevant plans or projects are not considered to be significant in relation landscape and visual impacts during any phase of the proposed development.

5.4.10 Traffic and Transportation

This section of the chapter presents the assessment carried out to examine other proposed developments within the study area or in proximity of Huntstown Temporary Emergency Power Plant and their cumulative effect on the baseline environment. The assessment considers the effects of the proposed power plant on the local and regional traffic and transportation network

and has taken account of existing and proposed infrastructure within the vicinity of the application site. It is considered that traffic accessing the proposed development will have to do so via the junctions outlined in Figure 11.1 (within Section 11.4 of Appendix A - Supporting Information to the EIA Screening). The infrastructure in the vicinity of the application site will also use these junctions and as such the assessment is undertaken on these junctions and associated network. For the purposes of this section the impacts are assessed for different scenarios as outlined below.

Regional Biosolids Storage Facility (SID/02/18 / ABP Ref. 301798-18)

Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility. The proposed RBSF is to be constructed at Newtown, Dublin 11. The construction was stated as beginning in 2021 and take approximately two years to complete (construction has not begun). The site comprises approximately 11ha of partially developed land approximately 1.6km north of Junction 5 (Finglas) on the M50 motorway.

It is estimated that, at the peak of the regional biosolids storage facility construction, there will be 40 construction traffic vehicles arriving and departing the site per day. Construction traffic comprises both HGVs and staff cars. As the construction of the proposed Huntstown Temporary Emergency Power Plant will take place for 10 months the overlapping effect will be slight and temporary as this development is located north of Junction 2 indicating that the potential for the construction traffic for the two developments to overlap will be limited to this junction.

The operational traffic consists of 14 vehicles, 4 HGVs and 10 staff vehicles. The cumulative impact will be imperceptible as the operational traffic will spread out throughout the day and the two developments are located on different sides of Junction 2.

Energy Stability Services Ltd (FW19A/0090 / FW20A/0219)

The proposed development will consist of the installation of 10 No. containerised gas fired generating units with an export electricity capacity of 20 megawatts and underground cabling route c 1.45 km along the R135 road. The development will include 1 no. single storey electrical substation building, 1 no. customer switchgear, electrical inverter/transformer station modules, concrete support structures, heating, ventilation and air conditioning units (HVAC units).

Amendments are proposed to the gas peaking consisting of the installation of 6 no. battery storage units with an export electricity capacity of 10-15 MV and 4 no. containerised gas fired generating units with an export electricity capacity of 10 MV, in replacement for the 10 no. containerised gas fired generating units, granted under planning reference FW19A/0090. 3 no. inverter transformers will also be added to the site, being the battery storage units.

The application doesn't state the start date for the construction; however, it is scheduled for 4-6 months. Similarly, to the previous development, this development is located on the other side of Junction 2 from the proposed Huntstown Temporary Emergency Power Plant. It is estimated that there will be 20 arrivals and departures to the site including deliveries and construction personnel. The construction impact will be slight and temporary as construction traffic overlap would be restricted to Junction 2.

Viridian Renewables ROI Limited (FW19A/0015)

The development will consist of a Battery Energy Storage System (BESS) which will include up to 9 no. containerised battery storage modules (up to 14m length, 2.44m wide and 2.9m high) and ancillary equipment including up to: 9 no transformers (2.5m wide and 2.9m high), 7 no. power conditioning unit blocks (8m length and 1.5m wide), 1 no. power conditioning unit block (5m length by 5m wide), 9 no. switchgear units (1.5m length, 1.5m wide and 1.6m high), a sub-station container (4.5m length, 3.0m wide and 3.0m high) and all other associated site

development works as required to facilitate the development. The BESS will be contained within a 0.0507 hectare site located entirely within the boundary of the existing Huntstown Power Station which is regulated by the Environmental Protection Agency through Industrial Emission Licenses P0483-04 AND P777-02.

It was anticipated that the construction would start in 2020 and would take a maximum of 24 months but this has not occurred yet. However, the traffic for this development will be 19 vehicles (38 journeys in total) per day. This, in combination with the proposed development, will have a slight effect as it will cause a change but shouldn't affect the overall characteristics of the traffic network. However, this will only occur during the construction phase and is temporary in nature.

Operational traffic for this development will be 1-2 vehicles per hour which will occur quarterly. This will have an imperceptible impact on the surrounding area.

Huntstown Power Company Ltd (Data Centre) (FW21A/0151 / PL06F.313583) (Pending ABP appeal decision)

Construction of two data hall buildings (Buildings A and B) comprising data hall rooms, mechanical and electrical galleries, ancillary offices including meeting rooms, workshop spaces, staff areas including break rooms, toilets, shower/changing facilities, storage areas, lobbies, outdoor staff areas, loading bays and docks, associated plant throughout, photovoltaic panels and screened plant areas at roof levels, circulation areas and stair and lift cores throughout.

The first data centre aims to be operational in Q1 of 2024. During peak construction there will be 36 vehicles (72 movements) entering the site during the AM peak hour and 29 vehicles (58 movements) leaving the site during the PM peak hour. The effect of this construction combined with the proposed development will have a moderate effect in that it is likely to affect the character of the existing road network. It should be noted that this moderate effect is largely due to the Data Centre traffic with 36/29 vehicles entering/leaving the site as opposed to 16/18 for the proposed emergency development. However, it should be noted that it will be temporary in duration and will only be that effect over the one-month period of peak construction.

During the operational phase there will be 1-2 heavy/long vehicles per day. This equates to an imperceptible effect when combined with the proposed development.

Huntstown Power Company Ltd (Substation) (ABP-311528) (Pending ABP SID decision)

Construction of a 2 storey 220kV GIS substation known as 'Mooretown', 4 underground transmission cables and all associated and ancillary site development and construction works.

The CEMP states that the construction duration will be 24 months. Onsite parking will be provided for up to 33 LGVs. There will be 12 vehicles (24 movements) entering the site during the AM peak hour and 8 vehicles (16 movements) leaving the site during the PM peak hour. For the worst-case scenario when this development and the proposed development overlap the effect will be slight as the total traffic movement will be in excess of 40 movements during the AM peak hour and 34 movements during the PM peak hour. This would mostly affect Junction 1 and 2 but will be temporary in nature with no long-lasting effect on the surrounding road network and as such is deemed a slight effect.

For the operational phase, there will be 2 van visits to the site per day. This will have an imperceptible effect on the surrounding road network.

TLI Group Ltd (FW21A/0144) – Undergrounding of electrical infrastructure

The development will consist of the installation of electrical infrastructure between Finglas 220 kV Substation and Huntstown Power Station to facilitate the retirement of existing Electricity Supply Board overhead powerlines and facilitate site clearance for the future development of a

data centre and substation (subject to separate planning applications). This will include (i) the installation of approximately three underground cable circuits between the existing ESB Finglas 220 kV Substation and an agreed location within Huntstown Power Station (ii) installation of one double circuit cable end tower and one single circuit angle mast (iii) removal of existing timber polesets, lattice steel tower & associated overhead line electrical infrastructure.

The EIAR suggests that the construction for this development will take 6 months and will be completed in Q2 of 2022, however, the works haven't started yet. During the construction works it is predicted that there will be 20 vehicles entering and leaving the site during the AM and PM peak hours. Construction traffic will be accessing the development from the Quarry/Power Station road and the R135 North Road. However, it should be noted that this development is to be largely complete prior to the construction of the proposed development so there is no appreciable cumulative impact.

For the operational phase, intermittent inspections and maintenance will be taking place. Therefore, the significance of the effects will be imperceptible.

Huntstown Temporary Emergency Power Plant & TLI Group Ltd (FW21A/0144) & Huntstown Power Company Ltd (Data Centre) (FW21A/0151 / PL06F.313583) (Pending ABP appeal decision)

The Huntstown Power Company Ltd (Data Centre) (FW21A/0151/ Pl06F.313583) will be assessed together with the proposed development and TLI Group Ltd (FW21A/0144) development. The EIAR for the data centre development estimates that there will be 36 vehicles (72 movements) entering the site during the AM peak hour and 29 vehicles (58 movements) leaving the site during the PM peak hour.

The AM peak hour for the proposed data centre development is 08:00-09:00 and the PM peak hour is 16:30-17:30. The PM peak hours for the data centre overlaps with the peak hours for the Huntstown Temporary Emergency Power Plant development and the TLI Group Ltd development. There will be an overlap in the AM/PM Peak hours. Assuming half of the Data Centre traffic in the proposed development peak hours, the cumulative effect of the proposed development, the data centre and the TLI developments remains as moderate.

Huntstown Temporary Emergency Power Plant & TLI Group Ltd (FW21A/0144) & Huntstown Power Company Ltd (Data Centre) (FW21A/0151 / PL06F.313583) (Pending appeal decision) & Huntstown Power Company Ltd (Substation) (ABP-311528) (Pending decision)

The Huntstown Power Company Ltd (Substation) (ABP-311528) will be assessed together with the proposed development, TLI Group Ltd (FW21A/0144) development and the Huntstown Power Company Ltd (Date Centre) (FW21A/0151 / Pl06F.313583). Based on the EIAR for the substation development, there will be 12 vehicles (24 movements) entering the site during the AM peak hour and 8 vehicles (16 movements) leaving the site during the PM peak hour.

The AM peak hour for the substation development is 08:00-09:00 and the PM peak hour is 16:30-17:30. Both peak times for the substation are the same as for the data centre development. As the peak hours overlap by ½ hour in the morning and all of the PM peak the assessment is done on the basis that the peak hour traffic is divided equally over the peak hours, i.e. half the Data Centre/Substation traffic overlaps the proposed development. Therefore, the cumulative number of vehicles arriving and departing the site during the peak hour for the proposed development is 66 in the AM Peak and 60.5 in the PM peak. The combined effect will be moderate and temporary in nature during the peak construction period.

Construction Phase

All abovementioned developments will be now assessed together for the traffic congestion.

Table 5.15 (overleaf) summarises the AM and PM peak hours and the number of vehicles entering and departing the proposed development in question and the five adjacent developments. The granted gas peaking plant (FW19A/0090) was omitted from Table 5.15 as a limited number of vehicles will enter or depart the site (20 daily movements – 2 per hour), therefore its contribution is limited and will not result in any significant cumulative impacts.

All construction traffic will either utilise Junction 2 or Junction 3 to access North Road (R135), with an assumption that most construction traffic will be using Junction 2, which will lead to the respective development sites. However, most of the adjacent developments, including the proposed development are located on a private road which can be accessed through Junction 1.

For the cumulative effects a worst-case scenario is assumed with the construction phase for all developments listed in Table 5.15 overlapping. It is assumed that this scenario will have a total duration of 1 month. As the area surrounding the proposed development is of an industrial nature there is limited traffic generated by the local residential population, therefore the main traffic which will be affected by the development sites is existing industrial traffic

Table 5.15: Developments Peak Times and Vehicle Numbers

	Data centre facility (FW21A/0151)		Mooretown GIS Substation (ABP-311528)		Electrical Infrastructure (FW21A/0144)		Battery Energy Storage System (FW19A/0015)		Regional BioSolids Storage Facility (ABP-301798)		Huntstown Temporary Emergency Power Plant	
Type	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
	(08:00-09:00)	**(16:30-17:30)**	**(08:00-09:00)**	**(16:30-17:30)**	**(08:00-09:00)**	**(16:30-17:30)**	**(08:00-09:00)**	**(16:30-17:30)**	**(08:00-09:00)**	**(17:00-18:00)**	**(07:30-08:30)**	**(16:00-17:00)**
LGVs	23	23	4	4	16	16	16	16	30	30	7	9
HGVs	13	6	8	4	4	4	3	3	10	10	9	9
Total	29	53	12	8	20	20	19	19	40	40	16	18

*Note these figures are for incoming traffic in the AM peak and outgoing traffic in the PM peak

In total, there will be 143 construction vehicles from Table 5.15 arriving at the North Road (R135) during the AM peak hours. The range for the AM peak hour for any of these developments is between 07:30 and 09:00, with a baseline of 426 vehicles arriving at Junction 1 from Junction 2 and 3 between 07:30 and 09:00. In total, the construction vehicles will increase the baseline traffic volume by 33.5% over the 1.5 hours. However, the site for the construction vehicles for the Regional BioSolids Storage Facility (ABP-301798) is between Junction 2 and Junction 3, which will reduce the traffic volume towards Junction 1. Additionally, half of the vehicles for the electrical infrastructure development (FW21A/0144) will enter the site via a farm and development accesses from the Quarry/Power Station road, which will further reduce the traffic congestion towards Junction 1. As the AM peak hour is spread out over a one and a half-hour period, it can be assumed that not all vehicles will arrive at R135 simultaneously and hence the construction traffic from all the developments will have a cumulative moderate and temporary effect on the baseline traffic figures.

In total, there will be 134 construction vehicles from Table 5.15 departing the North Road (R135) during the PM peak hours. The range PM peak hour for these developments is between 16:00 and 18:00. The baseline number of vehicles departing Junction 1 and 2 between 16:00 and 18:00 is 511. In total, the construction vehicles will increase the baseline traffic volume by 26.2% over this 2 hour period. However, the site for the construction vehicles for the Regional BioSolids Storage Facility (ABP-301798) is close to Junction 3, which will not have a significant effect on the traffic coming from Junction 1 and 2. Additionally, half of the vehicles for the electrical infrastructure development (FW21A/0144) will depart the site via a farm and development accesses from the Quarry/Power Station road which will further reduce the traffic congestion from Junction 1 and 2. As the PM peak hour is spread out over a 2 hour period, it can be assumed that not all vehicles will depart R135 simultaneously and hence the construction traffic from all the developments will have a cumulative moderate and temporary effect on the baseline traffic.

Operational Phase

The proposed development site is expected to have an operational lifespan of five years. Table 5.16 states the number of operational vehicles arriving and departing the respective sites throughout a 24-hour period. Based on the provided values as detailed in Table 5.16, the cumulative impact will be imperceptible and neutral in nature as it will be spread throughout the day.

Table 5.16 Operational Phase Vehicles

Data centre facility (FW21A/0151)	Mooretown GIS Substation (ABP-311528)	Electrical Infrastructure (FW21A/0144)	Battery Energy Storage System (FW19A/0015)	Regional BioSolids Storage Facility (ABP-301798)	Huntstown Temporary Emergency Power Plant
1-2	4	Intermittent	Not stated	14	21

It is anticipated that the decommissioning process will be similar to the construction phase and will include removal of equipment and dismantling of the site. Therefore, the cumulative effects for the dismantling phase will be similar to the cumulative effects for the construction phase. No significant impacts will result from the decommissioning phase.

5.5 Conclusion

As detailed within this chapter, the proposed temporary emergency generation plant will not result in any significant cumulative effects on the environment during the construction, operation or decommissioning considered in combination with other relevant projects.

In all instances the worst-case scenarios have been applied to assessments and the worst-case consequences have been mitigated against to ensure that no significant effects to the environment occur in the context of the EIA Directive and Schedule 7 and 7A of the Planning and Development Regulations 2001, as amended.

6 Conclusion

The proposed development has been assessed in the context of mandatory thresholds for EIA as set out in Schedule 5 (Parts 1 and 2) of the Planning and Development Regulations 2001 (as amended). Further assessments, including the Screening for Appropriate Assessment (in accordance with the Habitats Directive (92/43/EEC)) and COMAH Assessment (in accordance with The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015, S.I. No. 209 of 2015), have been completed considering the criteria for sub-threshold EIA, as set out in Schedule 7 and 7A of the same regulations and it is concluded that impacts associated with the construction, operation and decommissioning of the proposed temporary emergency generation plant, are not considered to give rise to significant effects in the context of the life cycle of the proposed development. The proposed development does not require mandatory EIA, and as a sub-threshold project, the effects are not considered significant to warrant the preparation of sub-threshold EIA for the proposed temporary emergency generation plant.

This conclusion is based on the findings of the analysis provided in the preceding sections in relation to:

- Characteristics of Project
- Location of Project
- Type and Characteristics of Potential Impacts

The project is not considered to present a risk of significant environmental impact during its construction, operation or decommissioning due to its scale, nature and duration. The proposed development site is located in an area that is an existing brownfield site already subject of an operational power generation station, with additional industrial type land uses and similar facilities within the surrounding general area, thus forming part of a cluster of similar activities within the landscape and in accordance with the existing zoning objective within Fingal Development Plan.

As with all construction works, there is potential for the generation of dust, noise and waste. However, these aspects, given the modular and off-site construction/ pre-assembly methodology being employed, are minimised and can be readily managed by the implementation of routine good practice construction measures and adherence to the CEMP. The CEMP will remain a ‘live’ document which will be reviewed regularly and revised as necessary to ensure that the measures implemented are effective. Demolition/dismantling works required during the preparation of the site are limited in scale and nature and will not give rise to any significant impacts. Any possible construction impacts will be temporary and short term. Construction works are expected to commence as soon as possible following receipt of the appropriate consent(s) and will be carried out on a phased basis, with a total duration of approximately 10 months, confined to the area of the proposed development and being temporary in nature. As with construction/ implementation, decommissioning and dismantling will also be managed through the removal of entire modular units off-site, for re-use elsewhere, as required.

As part of the above analysis, a broad range of environmental media have been assessed, including material assets, soils, surface water, biodiversity, air quality, noise, archaeology and cultural heritage, landscape and traffic and transportation, in combination with planning and land-use considerations in the context of construction, operational and decommissioning phases. Each thematic heading was assessed cumulatively with relevant existing, consented or

future projects which may result in potential significant impacts. The conclusion of the respective cumulative effects assessments was that no significant impacts were likely.

HPCL is a responsible developer and is committed to demonstrating to the Competent Authority and other planning stakeholders that the proposed development will not result in significant effects on the environment. As such, HPCL has prepared this EIA Screening Report, along with the' supporting information' provided in Appendix A.

On the basis of the above, supported by the information provided in the EIA Screening and the 'Supporting information to the EIA Screening", no potential likely significant effects were identified during any phase of the proposed development. It is concluded that an EIA is not required for the proposed development.

Appendices

A. Supporting Information to the EIA Screening

B. Construction Environmental Management Plan

C. Traffic Management Plan

D. COMAH Land Use Planning Assessment

E. Air Quality Supporting Information

F. Visual Assessment Photomontages

G. Landscape Plan