SSE Generation Ireland Limited

ABP-318540-23

Proposed Open Cycle Gas Turbine (OCGT) at Tarbert Power Station, Tarbert.

Submission to An Bord Pleanala by the Development Management Section of Kerry County Council.

This Submission has been prepared in accordance with the provisions of Section 37E of the Planning and Development Act 2000 (as amended)

1.0 Proposed development.

The applicant is proposing that the site of the existing power station on Tarbert Island will provide the location for a new power station which will operate on 100% sustainable biofuel, Hydrotreated Vegetable Oil (HVO), with the potential to utilise hydrogen in the future. The proposed development consists of an Open Cycle Gas Turbine (OCGT) plant fuelled by HVO, which is produced by processing waste feedstocks to create a fossil-free alternative to diesel in accordance with EU sustainability standards. The applicants have indicated that the new station aims to support the security of electrical power supply, the continued expansion of Ireland's renewable generation capacity and will provide essential support to the electricity supply system at times of peak demand and at times when other electricity generation sources are not sufficient to meet demand.

The proposed works include:

- Demolition of existing structures on site (Including workshop and storage buildings, shot blasting shed, lube oil store, toilet block, chemical storage bund, boiler wash storage tank, canteen, demineralised water tank, water treatment plant building and associated infrastructure, 'puraflo' wastewater treatment plant, tanks and fuel lines).
- Construction of OCGT power plant (350MW) and associated building (40m x 57m x 30m high) including air intake.
- Emissions stack 55m in height (external diameter 9m) with continuous emissions monitoring systems (CEMS) platform.
- Selective Catalytic Reduction (SCR) with air intake filters, dilution fans, and skid.
- Generators fin fan coolers (OCGT) (23m x 6.4m x 6m high).
- Lube oil fin fan coolers (7m x 7.5m x 5m high).
- One unit transformer and one grid transformer with a firewall (20m x 0.6m x 15m high) separating.
- Fire suppression skid.
- Aqueous ammonia tank (2.5m diameter x 5m length).
- Propane gas tank and compound (2m diameter x 4.6m length).
- Demineralised water treatment plant (15m x 30m x 12m high).
- Demineralised water tanks (23m diameter x 18m high) (2 No. x 7,500m3 capacity).
- Raw water and fire storage water tank (21m diameter x 17 high) (5,900m3 capacity).
- Fire water module (10m x 10m x 8m high).
- HVO fuel storage tanks 3 No. tanks in total, 1 x 1500m3 capacity (14m diameter by 10m high) and 2 x 4,400m3 capacity (20m diameter x 14m high) with two unloading bays.
- Fuel polishing and transfer system building (20m x 15m x 8m high).
- HVO pipework (approximately 200m) underground in culverts
- Electrical connections from main transformer (unit) to an existing 220Kv substation (75m overhead cables).
- New wastewater treatment plant (underground).
- Administration building and workshop (40m x 13m x 5m high).
- Stores (25 x 12.5m x 10m high).

- Carparking (eight x spaces to the front of the administration and workshop building totalling 100m2).
- Flood defence wall and gates.



Figure 1: Areas of work outlined in green.

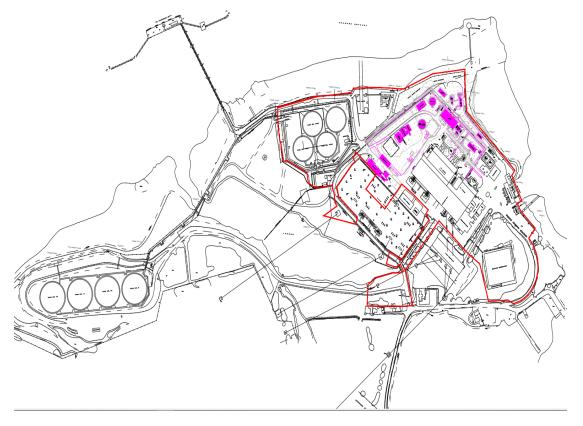


Figure 2: Demolition works outlined in pink

2.0 Development Location and Site Description.

The subject site is situated on Tarbert Island, 1.83 kilometres north of Tarbert village and surrounded by the Shannon estuary to the north, south, east and west. The site, home to the Tarbert Power Station, is approached from the south by the N67 National Secondary Public Road. The area of the site is indicated to be 15.18 hectares. On the site is a number of significant large buildings, including a water reservoir, HFO pipelines, chemical storage areas, fuel storage including the island tank farm and other low-level buildings associated with the existing Tarbert Power Station main building, flues, pylons, overhead power lines, bunds, car parking facilities, internal access road, cabins and boundary fencing.

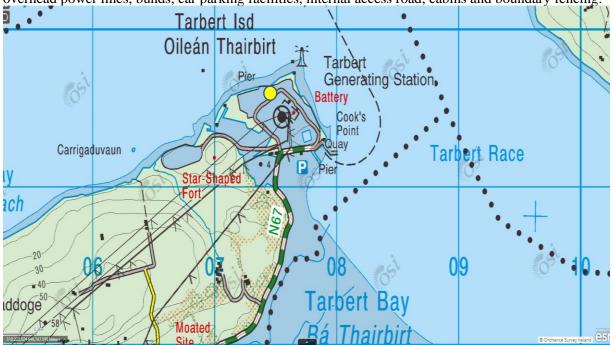


Figure 3: Geographical location including key features on Tarbert Island.



Figure 4: Detailed view of the site's footprint on Tarbert Island.



Figure 5: Aerial view of the site on Tarbert Island.

3.0 Development Plan Policy and Objectives.

3.1 Kerry County Development Plan 2022-2028

The Kerry County Development Plan 2022-2028 is the relevant statutory plan relating to the subject site and the surrounding areas. This plan was adopted in August 2022 and remains in force until 2028.

This section of the reports highlights the relevant policies and Objectives of the County Development Plan to the site.

Ch. 9 Economic Development - Section 9.6.1 Shannon Estuary.

Tarbert – **Ballylongford landbank** - This section highlights the councils recognition on the significance of Tarbert Island as a Strategic Development Location. The policy reinforces the importance of Tarbert Island as an Energy Hub and its strategic location in the context of the Shannon Integrated Framework Plan (SIFP).

Relevant objectives include KCDP 9-25 and KCDP 9-26.

Ch. 11. Environment - Section 11.6. Landscape

Section 11.6 sets out policies and Objectives relating to the protection of the rural landscape in Kerry. The relevant Objectives include Objective KCDP 11-77 and Objective KCDP 11-78.

Section 11.6.3 Land Designations

The lands are zoned Tarbert – Ballylongford Landbank in the Kerry County Development Plan 2022-2028.

4.0 Planning history of the site.

Planning permissions have been granted for the following on the site:

PRN 23/350. Permission granted. Underground electricity cabling and new switchgear bay within existing substation.

PRN 18/392. Permission granted. A ten-year planning permission to:

- Construct a battery storage facility within a total site area of up to 2.278ha, to include 50 no. self contained battery container units with associated hvac cooling units;
- 13 converter and 13 step up transformer container units, associated compound cabling and ducting, a grid transformer;
- A single storey substation / control building with welfare facilities;
- A cable route grid connection to the existing ESB substation building, maintenance lighting, security fencing;
- A CCtv monitoring system, and all associated ancillary infrastructure on lands within the Tarbert generating facility.

PRN 13/477. Permission granted. Alter existing 220kv station consisting of new single storey control building, new diesel generator building, 3 no. single storey modular buildings, 6 no. gantry support structures, 8 no. control and protection kiosks, 6 no. surge arrestors, 6 no. cable sealing ends, existing compound chain link fence and gates to be replaced with new palisade fence and gates, new holding tank and associated drainage and site works.

PRN 05/3882. Permission granted. Install electrostatic precipitators and ancillary plant and facilities.

PRN 00/3892. Permission granted. Replace and upgrade existing signage and to erect a new sign at Tarbert ferry terminal.

PRN 97/2500. Permission granted. Erection of a sewage effluent treatment plant.

PRN 95/420. Permission granted. Extend slipway.

PRN 92/1738. Permission granted. Erect office extension.

5.0 Relevant National, Regional and Local Policies

- National Planning Framework
- Regional Spatial and Economic Strategy for the Southern Region 2020
- The Kerry County Development Plan 2022-2028
- Kerry County Council Climate Change Adaptation Strategy 2019-2024
- Kerry Local Economic and Community Plan (LECP) 2016-2022

6.0 Any Special Area Amenity Order which maybe affected by the proposed development.

None.

7.0 European designations, Natural Heritage Areas which maybe affected by the proposed development.

7.1 Special Protection Areas (SPA).



Figure 6: Designated Special Protection Area in proximity to the site

- The site adjoins the River Shannon and River Fergus Estuaries SPA.
- The site is located 6.7 kilometres northwest of the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA.
- The site is located 27 kilometres northeast of the Kerry Head SPA.

Special Area of Conservation (SAC).

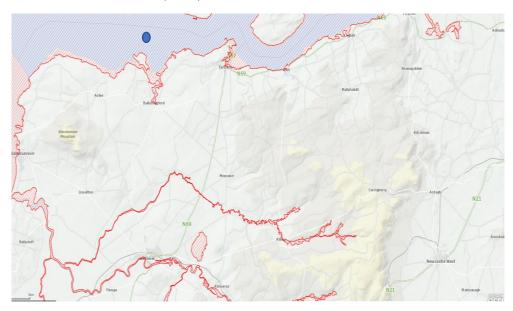


Figure 7: Designated Special Area of Conservation in proximity to the site.

- The proposed site adjoins the Lower River Shannon SAC located north of the site.
- The proposed site is 14 kilometres north of the Moanveanlagh Bog SAC.

Natural Heritage Areas.

• The site is located 8.1 kilometres north of the Bunnaruddee Bog Natural Heritage Area.



Figure 8: Designated Natural Heritage Area in proximity to the site.

Mr. Eoin Kelleher, Ecologist, Kerry County Council has provided a report and indicates that subject to implementation of appropriate water quality protection and flood risk management protection measures, there will be no adverse effect on any European Site during the construction, operation or decommissioning of the Proposed Development.

8.0 Protected Structure, Architectural Conservation Areas, Archaeology.

No Protected Structures or Architectural Conservation Areas.

A report has been provided by the County Archaeologist providing a historical background of recorded monuments that previously existed on the site. The County Archaeologist recommends no further archaeological mitigation required.

7.0 Flooding events

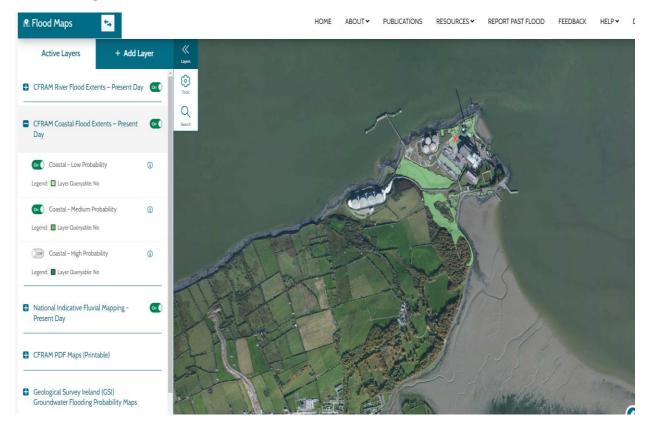


Figure 9: Location of Flooding areas on the site as indicated by Floodinfo.ie

The Coastal and Flooding Unit have provided a report. The report indicates that that the proposed development is classified as a *Highly Vulnerable Development* and within *Flood Zone A*, and that a *Justification Test* is required, which must quantify the flood risk at the proposed development and where necessary mitigate this flood risk.

The Unit recommends that given the Highly Vulnerable classification of the development, it would be more prudent to design for the more conservative Option 3 (See Section 5; Conclusion, Stage 2 Flood Risk Assessment (appendix 12 A)) with finished Flood Wall/Gate levels of +5.2m OD Malin (+7.9m OD Poolbeg) as against the +7.54m OD Poolbeg indicated in the drawings.

8.0 Availability and capacity of public surface water drainage facilities.

The site is not served by a public surface water drainage system.

9.0 Assessment of Landscape status and Visual Impact as appropriate.

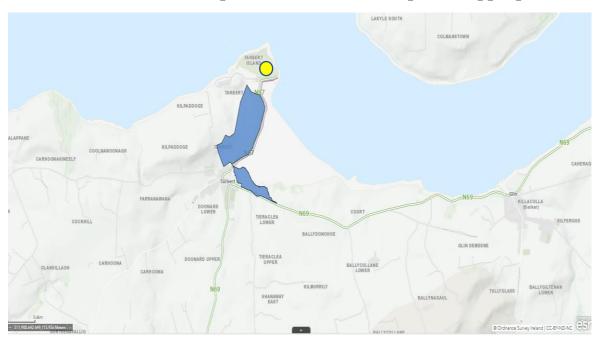


Figure 10: Designated Visually Sensitive Area and a Views and Prospects designation as per the Kerry County Development Plan 2022-2028.

The site is 0.22 kilometres north from a designated Visually Sensitive Area as per the Kerry County Development Plan 2022-2028. A 'Views and Prospects' corridor is also designated along the N67 National Secondary Public Road southeast of the site.

From a landscape and visual perspective, potential impact relating to the proposed development will be localised. However, given the presence of existing large buildings already on the site, the visual impact will be localised.

10.0 Carrying capacity safety of road network.

Tarbert island is easily accessible by a National Secondary Road, the N67 and by internal access roads throughout the site.

Listowel Municipal Roads Office have provided a report recommending planning conditions to be attached in the event planning permission is granted by An Bord Pleanala.

11.0 Environmental carrying capacity of the subject site and surrounding area, and the likely significant impact arising from the proposed development if caried out.

The Environment Section of Kerry County Council have provided a positive report and have recommended planning conditions to be attached in the event planning permission is granted. Having regard to the permitted use on the site, it is considered that the proposal is acceptable for the receiving environment subject to the conditions recommended to be attached to a grant of permission if to issue from An Bord Pleanála.

The Environment Section of Kerry County Council have highlighted the importance of water quality management and the necessity of having proper management measures in place during construction process to protect water quality.

In relation to the management of domestic wastewater onsite, the Environment Section indicates that limited information has been submitted in relation to the volume of domestic wastewater likely to be generated nor has a site assessment been carried out in line with the Environmental Protection Agency (EPA), A Code of Practice for Domestic Waste Water Treatment Systems. The Environment Section suggests that An Bord Pleanala requests the applicant to engage a suitably qualified site assessor to carry out a comprehensive site assessment and furnish An Bord Pleanala with a proposal for on-site treatment of domestic wastewater in line with the EPA Code of Practice.

With regard to the management of waste, the Environment Section notes that significant quantities of waste will arise during the demolition and construction phases of the project. However potential outlets (appropriately authorised waste facilities) for these wastes have not been identified in the reports.

The source of the 'dredging spoil' is also not clear and warrants clarification, given the difficulty in managing this waste type.

The Environment Section recommends that given the quantities of soil/stone/dredging spoil waste and other Construction & Demolition waste expected to arise from the project, and the limited facility capacity for such wastes locally; that further information should be sought on the waste management aspect of the project. This should include identifying and quantifying each waste type (including the appropriate List of Waste codes), along with proposed waste collection contractors and waste facilities to be used during the project.

The Environment Section notes in their assessment of Chapter 13 of the EIAR that site investigations have found evidence of contamination at the site as a result of past activities. The Environment Section indicates that the developer will need to consider the waste acceptance criteria set down in the EPA's "Guidance on waste acceptance criteria at authorised soil recovery facilities" (characterisation and compliance testing requirements etc) in finalising the waste management plan.

The Environment Section emphasises that it may be the case that local inert waste facilities will not be in a position to accept any or all of the waste soil and stone materials arising from the project if the relevant criteria are not met. Inert waste facilities in the locality are restricted to accepting a maximum of 25,000 tonnes of waste per annum (due to the EIA thresholds) and thus it is likely that multiple facilities would be required for the acceptance of the inert waste arising from the project (that is if such waste is deemed suitable for acceptance in accordance with the EPA criteria).

12.0 Planning authorities view in relation to the decision to be made by the Board.

This Strategic Infrastructure Development proposal for a proposed 350MW Low Carbon Open Cycle Gas Turbine (OCGT) at Tarbert Power Station, is considered acceptable in principle. The industrial site forms part of the Tarbert - Ballylongford landbank. The proposal would be considered in keeping with the established use on the site, namely the generation of electricity.

Tarbert island is considered a Strategic Development Location (SDL) under the Shannon Integrated Framework Plan (SIFP) area as part of the Shannon Estuary Coastal Network. The site is considered significant as an Energy Hub.

The strategic importance of Tarbert Island is reinforced by objective KCDP 9-25 in Ch. 9 Economic Development of the Kerry County Development Plan 2022-2028, which infers that 'proposals for marine related industry, general industrial development, and particularly those industries creating a synergism with existing uses and contributing to the development of a strategic energy hub at this location will also be encouraged'. This is further strengthened by the inclusion of Objective KCDP 9-26 which reinforces the importance to safeguard the role and function of the Power Plant Hub at Tarbert, including the NORA Strategic Oil Reserves Plant, as a key driver of economic growth in the Region, encouraging its sustainable growth and diversification, in accordance with Regional and National Energy Objectives.

The Kerry County Development Plan 2022-2028 includes an Objective (KCDP 12-1) in Ch 12. Energy which is to support and facilitate the sustainable provision of reliable energy supply in the County, derived from renewable energy resources. This proposal consists of the transition from carbon fuels which is in keeping with the councils policy on reducing carbon emissions.

Overall, the proposal complies with the policies and Objectives of the Kerry County Development Plan 2022-2028. The visual impact of the proposed development is considered low and localised. Positive reports have been received from internal sections of the planning authority relating to the proposed development. The Planning Authority recommends a grant of permission with conditions. Please see below recommended conditions to be attached to a grant of permission if issued from An Board Pleanála.

Planning authority's view on community gain conditions which maybe appropriate.

Council's policy on Community Benefit arising from proposed renewable energy projects is outlined in Section 12.5.5 of Ch.12 of the Kerry County Development Plan 2022-2028.

While the planning authority would welcome a planning condition in any grant of planning permission for a contribution to be included benefiting residents and the locality, the planning authority is mindful this is a decision for An Bord Pleanala.

Details of the relevant Section 48/49 Development Contribution Scheme conditions which should be attached.

Kerry County Council Development Contributions Scheme 2017 makes provisions for payment of development contributions for both Renewable Energy Development and Non-Renewable Energy Development.

The contributions for energy developments are assessed on the basis of power generation capacity.

Proposed development is a Renewable Energy Development with power generating capacity of 350MW.

The existing power station (Non-Renewable Development) has a generating capacity of 632MWe

As the proposed development would not increase power generation capacity on the site, no development contributions are applicable.

Details of any special contribution conditions which shall be attached along with detailed calculations and justification for conditions.

None.

Planning conditions recommended in the event planning permission is granted.

The development shall be carried out in accordance with the plans and particulars received except for any alterations or modifications specified in this decision.

Reason: To regulate and control the layout of the development.

- a. All environmental mitigation measures as set in the information submitted in support of the application to which this permission relates shall be fully implemented, except as may be otherwise required or specified by way of planning conditions.
- b. In advance of any works commencing on-site the developer shall prepare and submit a Construction Environmental Management Plan (CEMP) for approval by the Planning Authority. The CEMP shall cover all relevant environmental issues potentially associated with the development phase of the project, including air quality, noise control, water management, waste management etc.
- c. Bunds shall be installed around all temporary oil-containment facilities and the developer shall ensure that no oil, grease or other objectionable matter is discharged into any drain or watercourse.
- d. The developer shall appoint a full-time, appropriately qualified environmental manager for the duration of the construction and development phases of the project. This person shall be responsible for ensuring that all environmental control measures are fully implemented and maintained, and shall also act as the point of contact in the event of any environmental issues arising with the project.
- e. No polluting matters including sediment laden waters shall be discharged directly or indirectly to any waters from the proposed works. Suitable measures shall be put in place onsite in advance of any construction and demolition works in order to prevent sediment laden waters entering any waters. The ongoing management of these measures is critical.
- f. Particular care shall be taken with regard to **noise sensitive locations** in the vicinity of the site during the construction phase of the development. In this regard, in advance of any works commencing on-site the developer shall prepare a Noise & Vibration Management Plan for the development works. The plan shall identify the various demolition and construction methods and plant to be used on-site, identify any noise or vibration impacts potentially arising and set out in detail the mitigation measures proposed. The plan shall also set out in detail how it is proposed to implement these mitigation measures and clearly identify the person responsible for same. The plan shall be fully implemented and a copy of same shall be retained on-site for inspection by the Planning Authority if required.
- g. In the event of complaints being received regarding alleged noise nuisance from the demolition and construction phase of this development to which this permission relates and, upon investigation by Kerry County Council, such complaints are found to be justifiable the applicant shall, upon written receipt of notification from the Planning Authority, retain the services of an acoustic specialist to establish the cause of the noise or nuisance and the remediation measures required in order to abate said nuisance. The applicant shall ensure that all such measures are fully implemented and shall be liable for all costs incurred therein.
- h. Dust suppression equipment shall be available at all times to minimize the risk of excess dust generation during the construction phase of the project.

- i. If deemed necessary by the Planning Authority, the applicant shall carry out ambient noise monitoring at locations adjacent to the site during the demolition and construction phase of the development. The scope of the monitoring shall be agreed in advance with the Planning Authority.
- j. Prior to the commencement of the development, the developer or any agent acting on its behalf shall prepare a Construction and Demolition Resource Waste Management Plan (RWMP) as set out in the Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for C&D Projects (2021), including demonstration of proposals to adhere to best practice and protocols. The RWMP shall include specific proposals as to the how the RWMP will be measured and monitored for effectiveness. These details shall be placed on file and retained as part of the public record. The RWMP shall be submitted to the Planning Authority for written agreement prior to the commencement of the development and, once agreed, shall be fully implemented unless otherwise agreed with or directed by the Planning Authority. All records (including for waste and all resources) pursuant to the agreed RWMP shall be made available for inspection at the site office at all times.
- k. The burning or burial of waste is prohibited at the site.
- 1. Any and all hazardous waste/material generated at the site shall be taken directly to a suitably authorised waste facility or transfer to a suitably licensed waste collector.
- m. The development shall be provided with suitable waste storage facilities. The storage facilities shall provide adequate capacity for the proper storage and appropriate segregation of all wastes arising from the proposed development, in such as manner as to avoid any potential risk of environmental pollution.
- n. Prior to the commencement of works on-site, the developer shall arrange preparation of an Oil and Hazardous & Noxious Substances (HNS) Spill Contingency Plan for the facility and all relevant activities associated with the facility. The plan shall be prepared in accordance with the requirements of the National Maritime Oil/HNS Contingency Plan and the relevant guidance referenced therein, including Standard Operating Procedure 05-2020.
- o. A suitably stocked spill-kit, to include an adequate supply of absorbent materials, shall be retained at the facility to ensure the appropriate containment and management of any spill potentially occurring at the facility. All facility personnel shall be made aware of the location and proper use of this material

Reason: In the interest public health and to prevent pollution.

a. Proposed development shall be in accordance with the design drawings received.b. All external finishes shall be neutral in colour, tone and texture. The use of bright colours is not permitted. Earth tones are advised.

Reason: To integrate the structure into the surrounding area.

Site fencing shall be dark green in colour.

Reason: In the interest of the visual amenity of the area.

Cables within the site shall be located underground.

Reason: In the interest of visual amenity.

- a. Prior to commencement of development, a final Construction Traffic Management Plan (CTMP) shall be submitted and agreed by the planning authority showing how the developer plans to manage the interaction between the construction traffic and the traffic queuing for the Shannon Ferry's Tarbert Killimer ferry.
- b. Prior to the commencement all the recommendations of the Road Safety Audit shall be agreed with the Planning authority and implemented in full at the expense of the applicant.
- c. Pre and post construction phase survey's shall be undertaken by the applicant in conjunction with Kerry County Council to assess the condition of the proposed haulage routes roadway pre and post construction phase.
- d. A Principal Inspection of any culvert on the proposed haulage routes shall be undertaken in order to establish the condition of any culvert and shall be monitored throughout the construction phase of this project.
- e. Any works on the public road including temporary or permanent works shall be subject to a Road Opening Licence being issued by Kerry County Council on receipt of a valid application being received from the developer.
- f. Any required alterations to the road network for the transportation of materials shall be agreed in advance with the Kerry County Council and reinstated thereafter to the satisfaction of Kerry County Council. Any temporary alterations to utilities shall be agreed with the appropriate utility provider in advance by the developer. Any land acquisition or temporary access to lands required for the conveyance of abnormal loads or materials shall be incumbent on the applicant to agree with the appropriate landowner. A schedule of alterations to the road network including but not limited to signage, street furniture and vegetation shall be agreed in advance with Kerry County Council.
- g. Abnormal Load licences shall be secured by the developer in advance as required for the transportation of materials. Consultation with the Road Authority, An Garda Siochana and all necessary stakeholders shall be carried out by the developer in advance of transportation of abnormal loads.
- h. Surface water runoff from the access roads and entrance areas shall be controlled to the satisfaction of the planning authority to prevent any discharge onto the public roadway.
- i. The splayed entrance and the area between the entrance and the public road shall not interfere with roadside drainage which shall be maintained, repaired or made good by providing a dished water channel constructed of concrete or piped culvert to the satisfaction of Kerry County Council.
- j. The applicant shall make good any damage to the public road network or existing drainage network that may result from the proposed development including related construction traffic to the satisfaction of the Kerry County Council.
- k. The applicant shall institute appropriate onsite attenuation at the development to ensure drainage runoff is reduced to existing predevelopment runoff rates and where necessary to stagger peak runoff flows to the surrounding drainage network and lands from storm events.
- l. The applicant or operator shall institute appropriate measures to prevent material being drawn from the site onto the public road. No concrete, earth, soil or other material from this site shall be drawn or deposited onto the public road.
- m. Traffic Management arrangements for the works shall be in accordance Chapter 8 of the 'Traffic Signs Manual'.

n. Adequate provision shall be made within the site for storage of materials, marshalling of incoming and outgoing deliveries and on-site parking of staff involved in the construction phase of the works.

Reason: In the interest of traffic safety.

Reported: Michael Mille.

Michael Mills, Planning Officer

Date: 12th January 2024

Signed: Junch SEE

Michael J. Lynch, Senior Executive Engineer

Date: 12/01/2024

Signed:

Damien Ginty, Senior Planner

Date: 12th January 2024

Appendices

MEMORANDUM

Date/Dáta: 1st December 2023.

To/Chuig: Sharon O'Keeffe, From/O: Michael Connolly
Planning County Archaeologist

Re: Proposed 350MW Low Carbon Open Cycle Gas Turbine (OCGT) fuelled by hydrotreated vegetable oil, administration building and workshop, and ancillary plant and infrastructure. Tarbert Power Station, Tarbert, Co. Kerry.

The proposed development is located within the overall footprint of the existing Tarbert Power Station on Tarbert Island. The site contains the site of the recorded monument Ke003 002, listed in the Record of Monuments & Places as a battery and recorded as follows:

In 1782 the House of Commons recorded the payment of £360 in order 'to complete the Expence of constructing a Battery at the Island of Tarbert, with Accomodations for a Detachment of Artillery and a Company of Infantry' (Anon. 1785, 46). McEnery (2006, 42-3) recorded that 'new fortifications were erected at Tarbert between August 1794 and June 1795, with sixteen 24pounders and six 6-pounders, in a work known as the Pakenham Redoubt, after the then Lieutenant General of the Irish Board of Ordnance, the Honourable Thomas Pakenham'. Kerrigan (1995, 149) recorded that 'The batteries constructed between 1779 and 1783 at Cork Harbour, Tarbert and Passage were abandoned or disused for the next ten years, repeating the eighteenth-century pattern of the neglect of fortifications alternating with repairs and reconstruction in times of war or fear of invasion. On the outbreak of war with the French Republic in 1793, these works were again occupied or reconstructed, and other temporary works were to be erected in response to the threat of invasion. The renewal of the war in 1803 was to result in the most extensive scheme of fortification ever undertaken in Ireland'. One of six batteries (Kilcredaun CL072-027002-, Doonaha CL066-037001-, Scattery Island CL067-024015-, Kilkerin CL068-046---- and Tarbert KE003-002----) proposed by the Gother Mann Committee as part of the fortification of the Shannon estuary (McEnery 2006, 104). In 1806 Gother Mann, Inspector-General of fortifications, proposed rough costings for artillery fortifications of the Shannon estuary which included Carrig Island Battery and tower which he estimated would cost £6,000 (McEnery 2006, 76). In 1806 Gother Mann estimated that it would cost £3,000 to 'raise and improve Pakenham Redoubt; tower in gorge' (McEnery 2006, 76). In 1810 the Board of Ordnance approved estimates for the construction of the six artillery fortifications (ibid.). The contract was awarded to Mr. Flattery who excavated the trenches but failed to construct the masonry elements which was awarded to Mr Quillan a second contractor who commenced work on these fortifications in 1812 (ibid.). McEnery (2006, 104) recorded that 'The Shannon Estuary fortification proposed by the Gother Mann Committee involved six batteries. These structures, as planned by Captain J. Ross Wright, were to be redoubts secured at the gorge by towers. The sixth work involved the reconstruction in masonry of the Pakenham Redoubt at Tarbert, with a circular tower towards the Estuary. The armament concerned was set out in RA [Royal Artillery] reports for 1825 and 1829. The Pakenham Redoubt would have seven 24-pounders in its battery and two 5.5-inch howitzers on its tower'. According to Kerrigan (1995, 206), 'The Shannon Estuary batteries are all of a similar layout, with the exception of that at Tarbert, which resembled an obtuse-angled bastion in plan. The battery in each case is semi-circular or D-shaped in plan, surrounded by a dry moat with six guns (except for the fourgun battery at Doonaha [CL066-037001-]) arranged around the curved part of the perimeter, firing over the broad parapet. The rear of the battery was protected by a rectangular blockhouse or 'bombproof barrack' built in the moat at the centre of the landward side. On the roof of this structure were two guns for landward defence, either carronades or howitzers. The blockhouse

or barrack was also described in contemporary accounts as a 'defensible quardhouse' capable of accommodating all or most of the garrison of a battery or redoubt, loop-holed for musketry, the roof to be arched over if possible with a terrace or platform on top'. Tarbert Battery WAS described by Kerrigan (1995, 2008) as follows; 'Demolished during the building of the ESB power station, this battery is shown by survey plans to have been bastion shaped in plan with two faces overlooking the estuary to the north. The main armament was arranged behind these two parapets, with three guns to each and a centrally placed gun at the salient angle, giving seven pieces of ordnance in all. The battery was some 200 feet wide and had the usual arrangement of a defensible quardhouse in the rear. Entry to the battery was through an arched gateway about seven feet wide, presumably approached originally across a drawbridge over the dry moat. The battery was sited on the highest part of Tarbert Island; it is possible that it was one of the works under construction in 1794-95 or perhaps a partial rebuilding of one of these earlier structures. The defensible quardhouse was similar in dimensions and detail to those at Kilcredaun [CL072-027002-] and Kilkerin [CL068-046----], suggesting a date of construction contemporary with them, between 1808 and 1814. Tarbert battery was sited about forty feet above water level, towards the southeast side of the island; a late eighteenth-century painting of the Shannon depicts a battery with embrasures close to water level on the north side of Tarbert Island, which may be the battery of 1783 or a work built by Ferrier in the 1790s. In 1811 Tarbert was recorded as having thirteen guns, suggesting that this battery at water level or another work was in use in addition to the battery and defensible guardhouse described above'. In 1814 Arthur Watson was appointed master gunner to Tarbert Battery (McEnery 2006, 106). By 1872 Tarbert Fort contained six 68-pound smooth bore cannons and two 5.5 inch howitzers (McEnery 2006, 144). In 1892 the gunners abandoned Tarbert Battery (McEnery 2006, 134).

However, the battery no longer survives having been completely destroyed over the course of the development of the site as a power station. Archaeological monitoring of development works in 2010 showed that there were no sub-surface remains of the battery and that the site of the power station had been scarped out to a considerable depth. As such, there is no potential for sub-surface remains on the site which has been completely disturbed and excavated in the past. No archaeological mitigation is recommended.

Regards,	
Dr Michael Connolly	
County Archaeologist	

MEMORANDUM

To: Damien Ginty – Planning Department.

From : Mick Boyce, S.E.E. – Environment Department.

Re: Strategic Infrastructure Development Application – . SSE Thermal: 350MW

Low Carbon Open Cycle Gas Turbine (OCGT).

Date: 22nd December, 2023.

We note that the proposed 350MW Low Carbon OCGT will require a license from the EPA. Any license from the EPA will include environmental conditions relating to the operating of the site. On that basis, we do not propose to comment in any detail on the operational aspects of the proposed project and our focus is therefore primarily on the development phase.

We have reviewed elements of the environmental information submitted in relation to water quality, waste management and noise. However, it should be noted that we have not reviewed or commented on other aspects of the proposed development.

The following are our observations:

Water quality management is potentially a significant issue and, accordingly, any risks to water quality, particularly during the construction phase of the project, must be appropriately managed.

In relation to the management of domestic wastewater onsite, we note that it is proposed to decommission the existing septic tank, trickle filter and puraflo. It is proposed to install a Tricel Novo package wastewater treatment plant and new puraflo system. However, it would appear that limited information has been submitted in relation to the volume of domestic wastewater likely to be generated nor has a site assessment been carried out in line with the EPA Code of Practice. We would suggest that ABP request the applicant to engage a suitably qualified site assessor to carry out a comprehensive site assessment and furnish them with a proposal for on-site treatment of domestic wastewater in line with the EPA Code of Practice.

With regard to the management of waste we note that significant quantities of waste will arise during the demolition and construction phases of the project, namely:

- The demolition phase is estimated to generate 37,161 tonnes of Construction & Demolition (C&D) waste (excluding soils, stones, and dredging spoil). An additional 891 tonnes of C&D waste are estimated to arise during the construction phase.
- The excavation phase is estimated to generate 55,794 tonnes of soil, stones and dredging spoil.
- The development will also result in various hazardous wastes arising oils, chemicals, and asbestos. It is stated that asbestos will be removed, managed and disposed of in accordance with HSA guidelines.

Potential outlets (appropriately authorised waste facilities) for these wastes have not been identified in the reports. The source of the 'dredging spoil' is also not clear and warrants clarification, given the difficulty in managing this waste type. Having regard to the quantities of soil/stone/dredging spoil waste and other C&D waste expected to arise from the project, and the limited facility capacity for such wastes locally, we would recommend that further information should be sought on the waste management aspect of the project. This should identify and quantify each waste type (including the appropriate List of Waste codes), along with proposed waste collection contractors and waste facilities to be used during the project. We note from Chapter 13 of the EIAR that site investigations have found evidence of contamination at the site as a result of past activities. The developer will need to consider the waste acceptance criteria set down in the EPA's "Guidance on waste acceptance criteria at authorised soil recovery facilities" (characterisation and compliance testing requirements etc) in finalising the waste management plan. It may be the case that local inert waste facilities will not be in a position to accept any or all of the waste soil and stone materials arising from the project if the relevant criteria are not met. It should also be noted that inert waste facilities in the locality are restricted to accepting a maximum of 25,000 tonnes of waste per annum (due to the EIA thresholds) and thus it is likely that multiple facilities would be required for the acceptance of the inert waste arising from the project (that is if such waste is deemed suitable for acceptance in accordance with the EPA criteria).

Should An Bord Pleanala see fit to grant this application, we would suggest that the following conditions would be applied to any permission which might issue in relation to this application:

- All environmental mitigation measures as set in the information submitted in support of the application to which this permission relates shall be fully implemented, except as may be otherwise required or specified by way of planning conditions.
- In advance of any works commencing on-site the developer shall prepare and submit a Construction Environmental Management Plan (CEMP) for approval by the Planning Authority. The CEMP shall cover all relevant environmental issues potentially associated with the development phase of the project, including air quality, noise control, water management, waste management etc.
- Bunds shall be installed around all temporary oil-containment facilities and the
 developer shall ensure that no oil, grease or other objectionable matter is discharged
 into any drain or watercourse.
- The developer shall appoint a full-time, appropriately qualified environmental manager for the duration of the construction and development phases of the project. This person would be responsible for ensuring that all environmental control measures are fully implemented and maintained, and would also act as the point of contact in the event of any environmental issues arising with the project.
- No polluting matters including sediment laden waters shall be discharged directly or
 indirectly to any waters from the proposed works. Suitable measures shall be put in
 place onsite in advance of any construction and demolition works in order to prevent
 sediment laden waters entering any waters. The ongoing management of these
 measures is critical.

- Particular care shall be taken with regard to noise sensitive locations in the vicinity of the site during the construction phase of the development. In this regard, in advance of any works commencing on-site the developer shall prepare a Noise & Vibration Management Plan for the development works. The plan shall identify the various demolition and construction methods and plant to be used on-site, identify any noise or vibration impacts potentially arising and set out in detail the mitigation measures proposed. The plan shall also set out in detail how it is proposed to implement these mitigation measures and clearly identify the person responsible for same. The plan shall be fully implemented and a copy of same shall be retained on-site for inspection by the Planning Authority if required.
- In the event of complaints being received regarding alleged noise nuisance from the demolition and construction phase of this development to which this permission relates and, upon investigation by Kerry County Council, such complaints are found to be justifiable the applicant shall, upon written receipt of notification from the Planning Authority, retain the services of an acoustic specialist to establish the cause of the noise or nuisance and the remediation measures required in order to abate said nuisance. The applicant shall ensure that all such measures are fully implemented and shall be liable for all costs incurred therein.
- Dust suppression equipment must be available at all times to minimize the risk of excess dust generation during the construction phase of the project.
- If deemed necessary by the Planning Authority, the applicant shall carry out ambient noise monitoring at locations adjacent to the site during the demolition and construction phase of the development. The scope of the monitoring shall be agreed in advance with the Planning Authority.
- Prior to the commencement of the development, the developer or any agent acting on its behalf shall prepare a Construction and Demolition Resource Waste Management Plan (RWMP) as set out in the Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for C&D Projects (2021), including demonstration of proposals to adhere to best practice and protocols. The RWMP shall include specific proposals as to the how the RWMP will be measured and monitored for effectiveness. These details shall be placed on file and retained as part of the public record. The RWMP shall be submitted to the Planning Authority for written agreement prior to the commencement of the development and, once agreed, shall be fully implemented unless otherwise agreed with or directed by the Planning Authority. All records (including for waste and all resources) pursuant to the agreed RWMP shall be made available for inspection at the site office at all times.
- The burning or burial of waste is prohibited at the site.
- Any and all hazardous waste/material generated at the site shall be taken directly to a suitably authorised waste facility or transfer to a suitably licensed waste collector.
- The development shall be provided with suitable waste storage facilities. The storage facilities shall provide adequate capacity for the proper storage and appropriate segregation of all wastes arising from the proposed development, in such as manner as to avoid any potential risk of environmental pollution.

- Prior to the commencement of works on-site, the developer shall arrange preparation
 of an Oil and Hazardous & Noxious Substances (HNS) Spill Contingency Plan for the
 facility and all relevant activities associated with the facility. The plan shall be
 prepared in accordance with the requirements of the National Maritime Oil/HNS
 Contingency Plan and the relevant guidance referenced therein, including Standard
 Operating Procedure 05-2020.
- A suitably stocked spill-kit, to include an adequate supply of absorbent materials, shall be retained at the facility to ensure the appropriate containment and management of any spill potentially occurring at the facility. All facility personnel should be made aware of the location and proper use of this material.

As per your request, the team spent approximately ten hours dealing with the application in question.

Mick Boyce, S.E.E.

MEMORANDUM

To: Mr Michael Mills, Executive Planner, Planning Department, Kerry County Council

From: Eddie Joy Executive Engineer, Listowel MD

Date: 22nd of December 2023

Re: Proposed 350MW Low Carbon Open Cycle Gas Turbine (OCGT) at Tarbert Power

Station, Tarbert (SID) – Listowel MD Roads, Transportation and Marine Report.

Please find hereunder Listowel Municipal District's report in relation to Roads & Transportation regarding the Strategic Infrastructure Development Application for the Proposed 350MW Low Carbon Open Cycle Gas Turbine (OCGT) at Tarbert Power Station, Tarbert (SID) In addition to the design and particulars submitted as part of the SID application in the event of a grant of permission by An Bord Pleanála the following conditions are recommended by the Road Authority:

- 1. The final Construction Traffic Management Plan (CTMP) shall address how the developer plans to manage the interaction between the construction traffic and the traffic queuing for the Shannon Ferry's Tarbert Killimer ferry. The proposed access points are within the queuing area used for the ferry.
- All the recommendations of the Road Safety Audit shall be agreed with the Planning authority and implemented in full at the expense of the applicant prior to the commence of the development.
- 3. Pre and post construction phase survey's shall be undertaken by the applicant in conjunction with Kerry County Council to assess the condition of the proposed haulage routes roadway pre and post construction phase.
- 4. A Principal Inspection of any culvert on the proposed haulage routes shall be undertaken in order to establish the condition of any culvert and that this be monitored throughout the construction phase of this project.
- 5. Any works on the public road including temporary or permanent works shall be subject to a Road Opening Licence being issued by Kerry County Council on receipt of a valid application being received from the developer and a Traffic Management Plan to be agreed with the Road Authority.
- 6. Any required alterations to the road network for the transportation of materials of shall be agreed in advance with the Kerry County Council and reinstated thereafter to the satisfaction of Kerry County Council. Any temporary alterations to utilities shall be agreed with the appropriate utility provider in advance by the developer. Any land acquisition or temporary access to lands required for the conveyance of abnormal loads or materials will be incumbent on the applicant to agree with the appropriate landowner. A schedule of alterations to the road network including but not limited to signage, street furniture and vegetation shall be agreed in advance with Kerry County Council.

- 7. Abnormal Load licences shall be secured by the developer in advance as required for the transportation of materials. Consultation with the Road Authority, An Garda Siochana and all necessary stakeholders shall be carried out by the developer in advance of transportation of abnormal loads.
- 8. Surface water runoff from the access roads and entrance areas shall be controlled to the satisfaction of the planning authority to prevent any discharge onto the public roadway.
- 9. The splayed entrance and the area between the entrance and the public road shall not interfere with roadside drainage which shall be maintained, repaired or made good by providing a dished water channel constructed of concrete or piped culvert to the satisfaction of Kerry County Council.
- 10. The applicant shall make good any damage to the public road network or existing drainage network that may result from the proposed development including related construction traffic to the satisfaction of the Kerry County Council.
- 11. The applicant shall institute appropriate onsite attenuation at the development to ensure drainage runoff is reduced to existing predevelopment runoff rates and where necessary to stagger peak runoff flows to the surrounding drainage network and lands from storm events.
- 12. The applicant or operator shall institute appropriate measures to prevent material being drawn from the site onto the public road. No concrete, earth, soil or other material from this site shall be drawn or deposited onto the public road.
- 13. Traffic Management arrangements for the works shall be in accordance Chapter 8 of the 'Traffic Signs Manual'.
- 14. Adequate provision must be made within the site for storage of materials, marshalling of incoming and outgoing deliveries and on-site parking of staff involved in the construction phase of the works.

Yours sincerely,

Eddie Joy, EE , Listowel East Engineer,

Kerry County Council.

Memo

Date/Dáta: 18.12.2023

To/Chuig: Sharon O' Keeffee, Planning Department, Kerry County Council

From/O: Eoin Kelleher, Ecologist, Environmental Assessment Unit

Re/Le: 350MW Low Carbon Open Cycle Gas Turbine (OCGT) SID - Biodiversity

considerations

Development Description:

Demolition of existing structures on site (Including workshop and storage buildings, shot blasting shed, lube oil store, toilet block, chemical storage bund, boiler wash storage tank, canteen, demineralised water tank, water treatment plant building and associated infrastructure, 'puraflo' wastewater treatment plant, tanks and fuel lines); Construction of OCGT power plant (350MW), and associated building (30m high) including air intake; Emissions stack (55m high) with continuous emissions monitoring systems ('CEMS'); Selective Catalytic Reduction ('SCR') with air intake, filters and dilution fans; Skids; 2no. blocks of fin fan coolers; Power control module; Emergency generator; One unit transformer and one grid transformer with a firewall separating, and overhead cable connection to existing 220kV substation; Aqueous ammonia tank; Propane gas tank, compound and unloading bay; Demineralised water treatment plant; 2no. Demineralised water storage tanks; Raw water and fire water storage tank; Fire water module; 3no. fuel storage tanks with 2no. unloading bays; Fuel polishing and transfer system; Fuel pipework; Wastewater treatment plant; Administration building and workshop with associated car parking area (8no. spaces); Store; Flood defence wall and gates; And all associated ancillary development, site works and services including internal roads, security fencing and gates, drainage infrastructure, lighting, underground pipework and cabling. The application relates to development for the purposes of an activity requiring a license from the **Environmental Protection Agency under the Environmental** Protection Agency Act 1992, as amended. It also relates to a COMAH establishment and therefore falls under the requirements of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2015. An Environmental Impact Assessment Report ('EIAR') and Natura Impact Statement ('NIS') will be submitted with the application.

Development Address:

Tarbert, Co Kerry

Project description and context

The proposal provides for the provision of a 350MW Low Carbon Open Cycle Gas Turbine (OCGT) power plant along with associated fuel storage, unloading facility, water storage tanks, surface water drainage system, electrical grid connection to substation. A new on-site wastewater treatment plant is also provided for.

The proposed development is located within an existing and long-established Tarbert power plant site and on lands which form part of the Ballylongford Tarbert Industrial landbank as zoned in the Kerry CDP 2022-2028. It is noted that the zoning was subject to AA, SEA and SFRA as part of the Kerry CDP 2022-2028 plan making process.

It is noted that operational stage process wastewater discharge will be regulated by a new IE Licence or by amendment of the existing IE Licence P0607-02, following a review and that the process wastewater generated by the fuel polishing system and wastewater generated from blade washing will be stored in a tank onsite, prior to periodical disposal offsite by road tanker in compliance with the Waste Management Act 1996 (as amended), and associated regulations for disposal.

Biodiversity considerations

A proposal of this nature at this coastal location has potential to effect water quality, including by way of potential spillages, accidents and disasters. Interaction with Flood Risk management is of relevance to same. It is noted that potential construction stage impacts are addressed within the (outline) Construction Environmental Management Plan (CEMP). A CEMP by its nature provides safeguards for the construction stage of a proposal. Adequate operational stage safeguards, particularly against accidental spillages should also be provided for and reviewed and updated as necessary. The new IE Licence or an amendment to the existing IE Licence P0607-02 will be of importance in this regard.

It is noted that an Ecological Clerk of Works is also provided for to oversee and advise contractors and site operators on mitigation implementation and to follow measures to protect the natural environment as set out in a Construction Environment Management Plan (CEMP) for the Proposed Development.

Appropriate Assessment considerations

It is noted that the NIS submitted includes examination of the potential impacts of the project on a number of European Sites, including the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA. It is noted that the NIS included an examination of the potential impacts on these sites by way of disturbance (noise, vibration, visual).

A range of mitigation measures are set out in S5.3 of the NIS, the majority of which are embedded mitigation as part of the project design. These measures include implementation of a Construction Environmental Management Plan, which contains the following (not all of which are relevant to the NIS):-

- water quality protection measures
- dust management measures
- air quality protection measures
- lighting requirements
- soils and geology protection measures

A pre-works confirmatory survey for otter is also provided for.

Regarding potential for adverse impact on the River Shannon and River Fergus Estuaries SPA, it is considered that there will be no significant effect from noise or visual disturbance of SCI birds of River Shannon and River Fergus Estuaries SPA during the construction, operation or decommissioning of the Proposed Development. Regarding potential for impact on the Lower River Shannon SAC, it is noted that potential exists for disturbance (noise, vibration, visual) of Otter, a Qualifying Interests species for the SAC. Notwithstanding this, it is noted that no resting sites were found by targeted field survey within the Proposed Development or in the immediate area surrounding the Site. It is further noted that a pre-works confirmatory survey for otter is also provided for. It is therefore concluded that subject to implementation of appropriate water quality protection and flood risk management protection measures, there will be no adverse effect on any European Site during the construction, operation or decommissioning of the Proposed Development.

Eoin Kelleher

Executive Planner and Ecologist Environmental Assessment Unit

Comments below from the Assistant Chief Fire Officer, Kerry County Council

Executive Summary of submissions and/or observations items:

- 1. Provision of adequate firefighting water supplies and storage of water that has been used for firefighting.
- 2. Provision of adequate separation distances from fire hazards to firefighting water supplies.
- 3. Provision of adequate availability of firefighting water supplies of sufficient amount at all times not conflicting with other water uses.
- 4. To comply with the Building Control Regulations, 1997 as amended, and, to apply for relevant Fire Safety Certificates, Disability Access Certificates as applicable, and, to use the Building Control Management System (BCMS).
- 5. To comply with requirements in accordance with the COMAH/SEVESO regulations.
- 6. To provide adequate amount of supply of water for fire-fighting purposes and adequate arrangements for same.
- 7. To provide adequate amount and specification of arrangements for Firewater Runoff retention and storage.
- 8. That the applicant shall carry out consultation with the Fire Authority before end of January 2023 regarding the appropriate adequate provision of firefighting plant and equipment.
- 9. To provide adequate arrangements for the protection of nearby Oil Tanks from an uncontained turbine failure.
- 10. To provide adequate arrangements for protection and installations of propane tanks and gas installations.
- 11. To provide adequate means for isolation of Propane Gas and Other Fuel Supplies.
- 12. To provide adequate measures to prevent or to appropriately mitigate against potentially dangerous buildings.
- 13. To provide reasonably practicable fire safety measures