09 November 2023

An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

ABP Reference: ABP-317810-23

Dear Sir / Madam,

RE: Open cycle gas turbine power plant and associated infrastructure
Land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway
Response to Submissions

On behalf of the Applicant, EP Energy Developments Ltd.[1], we hereby provide a response to the submissions received by An Bord Pleanála (ABP) in relation to the above-referenced Strategic Infrastructure Development (SID).

Submissions have been made by individual members of the public as well as a number of statutory bodies including An Taisce, Transport Infrastructure Ireland (TII), the Department of Housing, Local Government and Heritage (DHLGH) and the Health and Safety Authority (HSA). The points raised in the individual submissions are addressed by the project team[2] in turn below.

In response to the submission made by the HSA each point has been addressed individually, however in order to provide a comprehensive response the COMAH Land Use Planning Assessment Report has been updated[3] to respond to the information requested by the HSA.

Two hard copies and one electronic copy of the following have been submitted:

- Response to submissions
- COMAH Land Use Planning Assessment (prepared by Byrne Ó Cléirigh Consulting)

[1] 3rd Floor, The Crescent Building, Northwood Park, Santry, Dublin 9, D09 X8W3
[2] With input as required from technical experts at Aecom and Byrne O'Cleirigh
[3] The submission of this updated document has been agreed to be appropriate with the SID section of An Bord Pleanála (email dated 08/11/2023).

We trust that this response will be of assistance to An Bord Pleanála in completing its assessment. Please do not hesitate to contact the undersigned in the event of any queries.

Yours sincerely,

Sean Breslin
Senior Consultant
sbreslin@gravisplanning.com

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Summary of Submissions and Applicant Response

An Taisce

The submission by An Taisce has raised points relating to climate and the Climate Action Plan.

Item No.	Topic	Comment	Applicant Response
1.1	Climate	*The submission draws ABP's attention to the requirement, under Section 15 of the Climate and Low Carbon Development (Amendment) Act 2021, to demonstrate that projects align with the Act's objectives around decarbonisation, net zero requirement, and sectoral limits and points out that the electricity sector has a stringent limit.*	A Climate assessment was carried out as part of the Environmental Impact Assessment Report (EIAR) submitted for the Proposed Development. Chapter 7 of the EIAR considers Air Quality and Climate and a Greenhouse Gas assessment was carried out and provided in Volume II – Appendix 7B: Greenhouse Gas Emissions of the EIAR. Appendix 7B of the submitted EIAR presents an assessment of the impacts of the Proposed Development on climate change as a result of greenhouse gas emissions (GHGs) during construction, operational life (including maintenance) and decommissioning. The methodology of the GHG assessment takes into consideration Ireland's carbon budgets that were available at the time of the assessment (Carbon Budget 2021-2025, 295 Mt CO2e, 2026-2030, 200 Mt CO2e and 2031-2035, 151 Mt CO2e). The first two budgets must demonstrate a 51% reduction against a 2018 baseline by 2030. Additionally, Ireland has committed to net zero by 2050. The 2018 baseline for Ireland is approximately 60MtCO2e (SEAI, 2022). A 51% reduction by 2030 equates to ca. 30MtCO2e. Ireland's latest GHG inventory (2020) is approximately 56 MtCO2e (SEAI, 2022). In addition, there are Sectoral Emissions Ceilings for key sectors, including electricity generation. The electricity sector has a sectoral ceiling for 2023 of 3MtCO2e.

			The EIAR acknowledges that whilst the ROI is moving towards decarbonising the grid, gas-fired 'peaking plant' power stations are required as an important part of the overall transition fuel mix in order to ensure the ROI's energy security. This is also acknowledged within Ireland's Climate Action Plan (CAP23). The operational requirements of the Proposed Development will inevitably change during its design life and it will be subject to regular reviews to identify potential modifications and amendments to enable continued alignment with ROI climate goals.
1.2	Climate	*An Taisce note that it is unclear how the operation of the proposed plant over its lifetime will be compatible with increasingly stringent carbon budgets.*	It is acknowledged within the national Climate Action Plan that whilst the ROI is moving towards decarbonising the grid, gas-fired peaking plant power stations are required as an important part of the overall transition toward a more renewables-based system and to maintain security of supply. The operational requirements of the Proposed Development will inevitably change during its design life and it will be subject to regular reviews to identify potential modifications and amendments to enable continued alignment with ROI climate goals.
1.3	Climate	*If Climate Action Plan 2024 is released before the decision on this application ABP will need to take the 2024 action plan into account. The EPA's GHG emissions projection report suggests that existing carbon budgets are expected to be exceeded. An Taisce suggests that this will likely lead to more stringent budgets in the remaining years.*	Noted, this point has been addressed under 1.1 and 1.2.
1.4	Climate	*Notwithstanding which Climate Action Plan is in force at the time of the decision on the subject application, it is submitted that the Board's obligations under*	Noted.

		s.15(1) of the Climate Act require it to demonstrate how the proposal is compatible with the objectives of emissions reductions in line with carbon budgets.	

Department of Housing, Local Government and Heritage

The submission by Department of Housing, Local Government and Heritage (DHLGH) has raised points relating to biodiversity, vegetation clearance and net biodiversity loss.

Item No.	Topic	Comment	Applicant Response
2.1	Biodiversity, vegetation clearance	*The Department recommends all vegetation clearance occurs outside of the bird nesting season 1st March to 31st August and recommends that this is a condition of any consent granted.*	Noted and agreed.
2.2	Biodiversity, not net loss	*The Department notes that biodiversity enhancement/compensation measures have been suggested but no specific details have been outlined.* *It promotes Action 1.1.3 of the National Biodiversity Action Plan, emphasising the move toward no net biodiversity loss for developments.*	Construction will minimise loss of all natural habitats and seek to use all remaining existing hardstanding areas as storage areas/set down areas before using previously undeveloped areas. On completion of the Proposed Development, any undeveloped areas of bare ground will be left without planting or landscaping to colonise naturally in order to form new areas of grassland for butterflies and replicate the existing habitats which would be lost. An Ecological Clerk of Works (ECoW) will monitor this colonization and advise on whether larval food plants should be planted for the marsh fritillary.

			Recolonisation of the bare ground on Site will provide alternative habitat for common lizard which is potentially present on Site. A biodiversity impact assessment has been carried out within Chapter 9 of the EIAR prepared for the Proposed Development and submitted with the planning application.
2.3	Biodiversity	*Matters raised should be considered in line with natural heritage and biodiversity objectives and the Galway County Development Plan*	Noted. Galway County Council's (GCC) County Development Plan 2022-2028 (CDP) has been referred to in Chapter 9 (Biodiversity), Section 9.3.7 of the EIAR and has been taken into consideration during the biodiversity impact assessment.

Transport Infrastructure Ireland

The submission by Transport Infrastructure Ireland (TII) has raised points relating to haulage routes, road safety audit, abnormal weight loads and greenways.

Item No.	Topic	Comment	Applicant Response
3.1	Proposed Haulage Route	*The applicant/developer should consult with all PPP companies, MMaRC Contractors and roads authorities over which the haul routes traverse to ascertain operational requirements and to ensure that the strategic function of national roads is maintained.*	Noted. This will be undertaken by the appointed contractor prior to construction, as is typical for infrastructure projects of this nature.
3.2	Proposed Haulage Route, Road Safety Audit	*Any proposed works to the national road network to facilitate component delivery to site shall comply with TII publications and shall be subject to a Road Safety Audit as appropriate.* *Works should ensure the ongoing safety for all road users and prior to any development all required*	Noted.

		licences, approvals, permits or agreements with PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) Companies and local road authorities, as necessary, shall be in place.	
3.3	Proposed Haulage Route, Deed of Indemnity	*Where temporary works are required in any MMaRC Contract Boundary to facilitate the transport of development components to site, the applicant/developer shall contact thirdpartyworks@tii.ie in advance, as a works specific Deed of Indemnity will be needed by TII before works can take place.*	Noted.
3.4	Proposed Haulage Route	*TII requests referral of all proposals agreed between the road authority, PPP Concessions and MMaRC Companies and the applicant impacting on national roads. Mitigation measures identified by the applicant should be included as conditions in any decision to grant permission*	It is envisaged that the Construction Environmental Management Plan (CEMP), including a Construction Traffic Management Plan (CTMP) and abnormal load assessment, will be conditioned under planning as required. The CEMP will be a live document and will be updated by the appointed Contractor throughout the course of the project. The Contractor CEMP shall be submitted to the planning authority for agreement prior to the commencement of development.
3.5	Proposed Haulage Route	*Any damage caused to the pavement of the existing national road due to the turning movements of abnormal length loads shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.*	Noted. An abnormal load assessment and details of routing (including any road condition surveys) will be undertaken by the appointed Contractor prior to construction once the delivery routing details are finalised and procurement/sourcing details secured.
3.6	Abnormal weight loads	*It is unclear if abnormal loads referred to relate to abnormal oversized loads or abnormal weight loads.*	Abnormal loads will be defined in the abnormal load assessment to be carried out prior to the commencement of construction on site.
3.7	Abnormal weight loads,	*It is critical that a full assessment by the applicant/developer of all structures on the national*	Noted.

	survey of existing structures	*road network along the haul route should be undertaken, where relevant, and all road authorities along the haul routes should confirm their acceptance of proposals by the applicant.*	An abnormal load assessment and details of routing (including any road condition surveys) will be undertaken by the appointed Contractor prior to construction once the delivery routing details are finalised.
3.8	Abnormal weight loads, technical load assessment of structures	*It is critical that a full assessment by the applicant/developer of all structures on the national road network along the haul routes should be undertaken, where relevant, to confirm that all structures can accommodate the proposed loading associated with the delivery of development components to site where the weight of the delivery vehicle and load exceeds that permissible under the Roads Traffic Regulations.*	Noted. An abnormal load assessment (including any road condition surveys) will be undertaken by the appointed Contractor prior to construction commencing, once the delivery routing details are finalised.
3.9	Abnormal weight loads	*The Authority requests referral of all proposals agreed between the road authorities and the applicant impacting on national roads.*	Noted.
3.10	Greenways	*In relation to any Greenway or Active Travel proposals in the vicinity of the proposed works, consultation with Galway County Council's own internal project and/or design staff is recommended.*	Noted.

Health and Safety Authority (HSA)

The submission by the Health and Safety Authority (HSA) has raised a number of points relating to the COMAH Land Use Planning Assessment. An updated COMAH Land Use Planning Report has been prepared by Byrne O'Cleirigh, with individual responses to each point set out below.

Item No.	Topic	Comment	Applicant Response
4.1	Site boundaries for all three COMAH installations	*The report should include a drawing showing the site boundaries and the location/routes of all major hazards for all three COMAH installations — the current Tynagh Energy site, along with the Tynagh South and North sites. The drawing should show over ground and underground gas pipelines, AGIs, fuel storage bunds, CCGT and OCGT gas turbine enclosure locations, power station turbine hall, hydrogen operations etc. The report does not make clear the location of the Tynagh North OCGT turbine enclosures (only the AGI, fuel bund and underground gas pipelines are shown).*	Drawings showing the layout of each site are clarified in Appendix 1 of the revised report[4] which show the major hazard installations for the existing, proposed OCGT and approved OCGT (ref: 21/2192) sites. The original drawing has been updated (refer to Appendix 2) to show the existing AGI, as well as the main population receptors such as the security building, control room and workshop. The three site boundaries are shown on this map. EP Energy Development Ltd. acknowledges that the COMAH establishment boundaries may differ from these site boundaries and intends to consult with the HSA after the planning phase to agree on the extent of the COMAH boundaries for each establishment. The land use planning assessment has taken into account the potential for domino effects between the sites.
4.2	Shared facilities	*Section 7.2 indicates that these are 3 separate sites within a domino group. But Section 7.3 states that they "all share administration and workshop space. In addition, the three sites will have a single security gatehouse". In terms of the COMAH Regulations, each COMAH establishment shall have a clear boundary, it is not permissible to traverse one establishment to access*	The three site boundaries are shown on this map in Appendix 2 of the revised report. EP Energy Developments Ltd. acknowledges that the COMAH establishment boundaries may differ from these site boundaries and intends to consult with the HSA after the planning phase to agree on the extent of the COMAH boundaries for each establishment. Where workers are required to move between establishments, EP Energy Developments will implement additional control measures, as

[4] Updated COMAH Land Use Planning Assessment (Ref: 578-23X0041 R4)

		another. Further details required on shared facilities to determine compliance with COMAH Regulations.	required, such as key card access (for personnel location tracking) and security fencing.
4.3	Clarification on inventory of dangerous substances.	*Clarification is required on the inventory of dangerous substances to be stored/used on the proposed site.*	The Proposal will be required under the Eirgrid *Grid Code* to maintain a secondary fuel supply of approximately 6,600 m_3 (5,400 tonne) of back up fuel (distillate or hydrotreated vegetable oil) which will be contained in a tank within a bunded area. Refer to Section 2 of updated report.
4.4	Risk with the VCE	*Section 5.1 — the report does not seem to consider the risks associated with a VCE in a gas turbine enclosure for the OCGT. This should be justified or included in the assessment.*	Sections 6.3.1.2 and 6.3.3.3 of the report have been updated to include for a VCE event at the gas turbine enclosure. This event was not included in the original assessment because it is not included in the HSA's *Guidance on Technical Land Use Planning* (February 2023).
4.5	Risk with the AGI	*Section 5.1 — the report does not seem to consider the risks associated with the AGI. This should be justified or included in the assessment.*	Events involving releases from above-ground natural gas pipelines at the AGI have been considered in the assessment. The pipelines at the site comprise underground sections and above ground sections at the AGI. Both are considered and included in the risk assessment. Text updated in Section 6.3.1.1 to reflect this.
4.6	Gas pipeline	*Also, to note in section 5.1, and 5.2.1 — rupture of a natural gas pipeline and a pipeline rupture can lead to a fireball. This should be considered as it is often the dominant risk.*	Section 3.5.1 of the HSA's *Guidance on Technical Land Use Planning* states that: *NG pipeline ruptures and leaks are assumed to be continuous rather than instantaneous. The consequences associated with the LOCs are jet fires, flash fires, and VCEs.* A continuous release of natural gas from a pipeline, with direct ignition, is taken in the model to result in a jet fire, not a fireball. The consequences and associated risks from jet fires are included in the assessment.
4.7	HSE Events #087 and #088	*Section 5.2.1 Table 4 — the HSA refs should be to HSE Events #087 and #088 in the current TLUP (February 2023)*	Corrected.

4.8	Gas pipeline	*Section 5.2.1 - actual diameter and routes of the 75 bar and 30 bar gas pipelines to be set out. (250mm seems to be an 'example').*	The diameter of the proposed natural gas pipelines is 250 mm. The routes of the above- and below- ground sections of natural gas pipeline are shown in the map in Appendix 2 of the report.
4.9	Horizontal jet fire modelling	*Section 5.22.1 — vertical jet fires have been modelled as per the current advice in TLUP Section 2.9. This may be reasonable in some cases, but it is now more standard/conservative to consider a horizontal jet fire. This may be particularly important when considering the risk of escalation/domino events. Horizontal jet fire to be modelled.*	Section 6.3.3.1 of the report has been updated to include for modelling jet fires as horizontal releases. This event was not included in the original assessment because it is not included in the HSA's *Guidance on Technical Land-Use planning advice.*
4.10	Modelling of the jet fire hazard range	*Section 5.2.2.1 — details on which model was used to generate the jet fire hazard ranges? It would help to quote all the key modelling inputs.*	The consequences from each of the hazardous events –thermal radiation and overpressures – have been determined using the GEXCON EFFECTS modelling software (version 12.0.01). The modelling considered a variety of jet fire, flash fire and VCE scenarios as methane in the EFFECTS model. The meteorological conditions are set out in Section 5.1 of the revised report. The modelling has been updated to assess the jet fires as horizontal releases and a 50% likelihood has been assigned to either event (horizontal jet fire or vertical jet fire) occurring. Refer to Sections 6.2, 6.3.2 and 6.3.3.1 of updated report.
4.11	Flash fire hazard range	*Section 5.2.2.2 — no information is provided on flash fire hazard ranges. How have flash fires been modelled?*	The consequences for a flash fire are treated as follows: (i) For people outdoors, fatality levels of 100% are assumed inside the Lower Flammable Limit (LFL) envelope, with 0% fatalities outside that envelope (ii) Indoor fatality levels are conservatively assumed to be 10% within the flash fire envelope. For each scenario the modelling has assessed the size of the flammable cloud and how this cloud varies with distance from the release point. The modelled maximum distance to flammable concentration was used to determine the hazard distances. Refer to Section 6.3.2.2 of updated report.
4.12	Data on flash fires for gas releases	*Section 5.2.2.2 — provide detail on meteorological data probabilities (i.e. 80/20 for D5/F2) or wind rose, which are relevant for flash fires for gas releases.*	Flash fires and vapour cloud explosions, depend on both wind speed and atmospheric stability. These events have been assessed under two meteorological conditions: (i) Typical conditions (D5): a wind speed of 5 m/s and a Pasquill stability class of D, assumed to occur 80% of the time

			(ii) Calm conditions (F2): a wind speed of 2 m/s and a Pasquill stability class of F, assumed to occur 20% of the time. The data in Table 5 of the updated report shows that the wind speed is less than 5 m/s approximately 75.2% of the time, and is greater than 5 m/s approximately 24.8% of the time; these frequencies have been applied to the 'low' and 'high' wind speeds for assessing the impacts from fire events. .Refer to Section 5.1 of updated report.
4.13	Pipeline VCE hazards	*Section 5.2.2.3 — provide detail on the direction used for the release for pipeline VCE hazards?*	The influence of wind on the dispersal of vapour has been assessed. The meteorological data used in this assessment is set out in Section 5.1.
4.14	Ignition location for gas pipeline	*Section 5.2.3 — what approach has been taken to ignition location for gas pipeline VCE events?*	The VCE consequences were estimated from the centre of the cloud using the EFFECTS model. Using the flammable cloud dimensions (from the EFFECTS model), the blast centre was placed at a variety of locations using the wind probability distribution from the wind rose model described in Section 5.1 of the updated report.
4.15	Events #123, #125, #127	*Section 5.3.1 Table 7 — HSA refs should be Events #123, #125, #127.*	Corrected.
4.16	Key modelling inputs	*Section 5.3.1 Table 7 — what model has been used to calculate these pool fire hazard ranges? And what material was used to represent distillate? It would help to quote all the key modelling inputs.*	The modelling has considered the consequences for a variety of pool fire scenarios as gasoline in the EFFECTS model. Meteorological conditions are set out in Section 5.1; the dimensions of the bund are detailed in Section 2. This has also been addressed in Items 4.10 and 4.11 and refer to Sections 6.2 and 6.4.3 of updated report.
4.17	Frequency of overtop pool fire	*Section 5.3.2 — what frequency has been used for an overtop pool fire? TLUP Section 3.6.3 indicates 5 x 10-8/yr per tank, provide further detail.*	A probability of 5×10^{-8} per year was applied for the unbunded pool fire scenario. A statement to this effect has been added to Section 6.4.1.
4.18	Risks to people from overpressure	*Section 6.3 — provide detail on how the risks to people indoors from overpressure have been evaluated?*	For people located indoors, the probability of fatality changes to account for both the protective effects of buildings / shelter in the case of thermal radiation, and the increased risk from a projectiles / a collapsed or damaged building in the case of overpressures. In the case of thermal effects, for people located indoors the HSA advises that the

			building may provide some protection from the fire and that this should be taken into account: (i) for exposure to fluxes in excess of 25.6 kW/m2 the building is conservatively assumed to catch fire quickly and a 100% fatality risk is applied (ii) for exposure to fluxes less than 12.7 kW/m2 the people inside the building are assumed to be protected and a 0% fatality risk is applied (iii) for exposure to fluxes in between these two values, people are assumed to escape outdoors and, therefore, have a risk of fatality corresponding to that outdoors. Refer to Section 7.4 of updated report.
4.19	Domino risk	*In terms of the domino risk set out in Section 7.1, you are required to complete an assessment of the domino risk from the proposed North OCGT to the other two sites i.e. the operational Tynagh Energy along with the Tynagh South OCGT site. It is expected the most significant events would be a major release/rupture at the AGI leading to a fireball and a VCE in a turbine enclosure or turbine hall.*	Releases from above ground sections of the pipeline at the AGI were included in the original report. At the request of the HSA, we have included additional modelling for a VCE event following a release of natural gas into the gas turbine enclosure. The consequences of this event are less significant than some of the other scenarios, e.g. a full rupture of the 75 bar natural gas pipeline. Please refer to Section 8 of updated report.
4.20	Clarify contours	*Section 7.2 Figure 3 — it is unclear whether the risk contours relate to a hypothetical residential population (outdoors 10% of time, indoors 90% of time, always present) as required for TLUP LUP zones.*	The contours relate to all individuals and not solely the hypothetical residential population. Refer to Section 7.4 of updated report.
4.21	Query on Section 7.3	*Section 7.3 Table 13 —row 3 IR - query should this be 0.3 not 0.2?*	Corrected. This was a typographical error and the Section 7.3 Table 13 —row 3 IR - should read 0.3.
4.22	Location of areas	*Section 7.3 Table 13 — the location of all these areas should be shown on a site drawing.*	For clarity, the security building, control room and workshop have been added to the drawing in Appendix 2.
4.23	Risk values	*Section 7.3 Table 13 — have the 'Risk' values quoted for different locations considered the design of each building (in terms of indoor overpressure vulnerability)*	Please refer to the response provided in Item 4.18 and refer to Section 7.4 of updated report.

		and indoor/outdoor probability? The approach used for calculating risks should be made clear.	
4.24	Risk to an individual security guard.	*Section 7.3 — below Table 13 it is stated that 'The level of risk to an individual security guard is calculated to be 4.2 cpm" which does not seem to be consistent with Table 13 which indicates 1.57 x 10-7 as the risk level at this location.*	Corrected. This was a typographical error in the text below Table 13 in the original report.

Mr. Colm Shaughnessy

The submission by Mr. Colm Shaughnessy has raised points relating to visual impact, light pollution, noise, air quality, ground stability and human health. It should be noted that Mr. Shaughnessy raised similar points in a submission to planning reg. Ref. 21/2192 (referenced in the EIAR as the Approved Development Ref: 21/2192), and they have been considered in the current EIAR assessment and also in the approval of planning permission for the Approved Development Ref: 21/2192 by both Galway County Council and An Bord Pleanála.

Item No.	Topic	Comment	Applicant Response
5.1	Visual	*Visual impact from second chimney on the surrounding area.*	A Landscape and Visual assessment was carried out as part of the Environmental Impact Assessment Report (EIAR) for the Proposed Development (Chapter 10 of the EIAR). This included Zone of Theoretical Visibility (ZTV) mapping for a 10km radius from the centre of the emissions stack of the Proposed Development to illustrate the theoretical visual extent of the highest point of the Proposed Development (Figure 10.2, EIAR Volume III), as well as a photomontage booklet (Appendix 10A, EIAR Volume II). It should be noted that the proposed emissions stack which forms part of the Proposed Development, at 40m high, will be lower in height than the emissions stack which forms part of the existing CCGT Power Station. The existing stack is 55m high and, as illustrated in the Landscape and Visual

			Impact Assessment included within the submitted Environmental Impact Assessment Report (EIAR, Ch. 10 & Appendix 10), will remain the most prominent feature in views of the site.
5.2	Light pollution	*An existing 40 metre chimney overlooks the Shaughnessy house and at night the light from the chimney and power station shines directly at the back of the house and through the windows.*	It should be noted that Mr. Shaughnessy is incorrect in referring to the existing stack as 40m high. The existing stack is 55m high and is significantly taller than the Proposed Development. The impact of lighting from the Proposed Development on surrounding receptors will be limited, with lighting of the proposed 40m stack being provided for maintenance access only – it will not be permanently lit. Chapter 10 of the EIAR sets out a number of mitigation measures to reduce visual effects in relation to additional lighting from the Proposed Development, including the following: • Lighting will be minimal and low level and kept to essential locations only, with the position and direction of lighting being designed to minimise intrusion and disturbance to adjacent areas; • Use of full cut-off lanterns are proposed to minimise light spillage and upward escape of light onto adjacent areas; and • Lighting (including on stacks and Continuous Emissions Monitoring System (CEMS) platform) monitoring will be turned off where possible when not in use except to meet the minimum requirements for Health and Safety. The above measures will be implemented immediately and come into effect following the completion of construction works. A lighting plan will be developed during the detailed design stage of the Proposed Development to ensure that there are no vertical splits or glare issues into adjoining areas which are not required to be lit.

5.3	Noise	*The noise is just about bearable now but with an additional power station the noise will be doubled.* *On the 12th of August 2020 we had an explosion of noise where a high pressure steam pipe blowout and the noise were extremely frightening to our young family as it happened when they were sleeping. This happened a few months later ….. Is this something we should be expected to get used to as we will have two power stations to worry about?*	Acoustic barriers have been provided as part of the inherent mitigation of the Proposed Development. The acoustic barriers provided as part of the design of the Proposed Development are as follows - a 7.0m high acoustic barrier around the fin fan cooler, a 8.0m high acoustic barrier around the transformers, and a 10.0m high barrier around the generator, turbine, diffuser and stack base (refer to EIAR Volume III, Figure S3577-8310-0004). This configuration ensures a significant reduction in noise emissions from the OCGT. A Noise and Vibration impact assessment has been carried out as part of the Chapter 11 of the EIAR submitted with the planning application. The Noise and Vibration chapter presents an assessment of the likely significant environmental effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development with respect to noise and vibration. As part of the Noise and Vibration assessment a baseline survey was carried out at four locations (M1-M4 located to the north-west, west, south-west and north-east) on the 01 and 02 July 2021 to determine existing ambient noise levels around the Site. The monitoring locations used are shown on Figure 11.1 (see Volume III of the EIAR). The sound modelling procedure is outlined in Appendix 11B, EIAR Volume 2 and the results are presented in Appendix 11A, EIAR Volume II. The operator of the existing Tynagh Power Station facility was consulted and confirmed that the plant was operational during the survey. It is also understood that Sperrin Galvanisers, west of the existing power station, were operating at the time. The assessment demonstrates that, with mitigation, sound emissions from the Proposed Development comply with the relevant criteria at all the selected receptors. The residual effects of noise from the operation of the Proposed Development are assessed to be not significant.

			The Proposed Development would be operated under an EPA Industrial Emissions Licence and would be required to adhere to permissible noise emission limits for licensed facilities. The pipe blowout event that Mr. Shaughnessy refers to in this submission (and the previous submission made in respect of the Approved Development Ref: 21/2192) was recorded with the EPA and was caused by the failure of a steam pipe that forms part of the HRSG ('Heat Recovery Steam Generator') of the existing CCGT Power Station. This is a very rare occurrence, and led to the existing Power Station being offline for a short period while the piping concerned was replaced. The Proposed Development does not include a HRSG, and will not increase the risk of such events occurring in the future.
5.4	Air Quality/ Climate/ Human Health	*The amount of pollution of CO2 gas in our living and surrounding area will double as the amount of gas being burned to run the power stations will have doubled as they will be running two power stations.*	An Air Quality and Climate impact assessment has been carried out as part of Chapter 7 and Appendix 7B of the EIAR submitted with the planning application. Carbon dioxide (CO_2) is not considered to be toxic at environmental concentrations and no health-based environmental standards have been set for local air quality management. Any change in local concentrations of CO_2 would not therefore be considered to have an adverse effect on local air quality in the vicinity of the site.
5.5	Air Quality/ Climate/ Human Health	*When they are cleaning the system sulphur comes from the chimney and this can be found around our area, and this will also be doubled. This is very scary as a father of a young family living so close to the power station.*	The unit proposed for the new power plant would be fuelled predominantly by natural gas, which contains only trace concentrations of sulphur. Emissions of measurable concentrations of sulphur dioxide (SO_2) from the exhaust stack would not therefore be expected, either during normal operation or maintenance events. As set out within paragraph 5.2.16 of Chapter 5 of the EIAR a combination of the high exhaust gas temperature, low NOx content, and absence of visible combustion particulates mean that the proposed OCGT plant will

			not form a visible plume. The exhaust temperature is such that water vapour in the flue gas is unlikely to condense close to the stack structure before dispersal, even during times of very low ambient temperature. The OCGT is compliant with current best available techniques for NOx limits meaning the characteristic yellow tint to the flue gases from the presence of high levels of NOx will not be visible. The operation of the Proposed Development will fall within the remit of the EU's Industrial Emissions Directive (2010/75/EU). The primary aims of the Industrial Emissions Directive are to prevent or reduce pollution from industrial activities, to reduce waste and to promote energy efficiency. The operator will be required to obtain an Industrial Emissions (IE) Licence from the EPA for the proposed OCGT Power Plant. The Proposed Development will be designed such that process emissions to air comply with the ELV requirements specified in the IED.
5.6	Ground Stability	*I hope this power station and its location go through rigorous testing as the first power station after construction began to sink as it was built on an old mine with numerous tunnels under the site. Now they want to build another one directly beside the old one. This does not fill me with confidence all correct procedures and requirements are followed correctly during construction.*	The Proposed Development will be constructed in accordance with current engineering standards, including site investigation and understanding of ground conditions to inform construction works and design. A Soils and Geology impact assessment has been carried out as part of Chapter 13 of the EIAR submitted with the planning application. The Soils and Geology chapter provides full detail of the baseline ground conditions (Section 13.4) at the site gained from a detailed programme of site investigation (refer to EIAR Appendix 13A - Ground Investigation Report). The ground conditions are therefore fully understood, and have informed the siting and layout of the Proposed Development. As noted in Chapter 13, Paragraph 13.4.24, as part of a site visit completed by AECOM on 29 June 2021 the granular platform on which the Site is located was assessed for potential signs of instability. Observations made during this visit indicate the granular platform, which

			has been constructed with an approximate 1:1 battered face and stands between 1.5m and 5m above original ground level, shows no sign of instability. Paragraph 13.4.25 of the EIAR notes there is an approximate 10m high mound, comprising spoil material (angular gravel, cobbles, and boulders of dark grey fossiliferous limestone) and demolition waste material consisting of fragments of reinforced concrete and crushed concrete, with minor other anthropogenic content) which is considered to originate from demolition of the previous Tynagh mine working buildings and structures located in the northern part of the Site. The mound appears to be stable within no indication of slope failure. Further assessment of this slope will be considered prior to design and construction of the Proposed Development. If, during construction stage, excavations are required adjacent to the slope (e.g. in connection with the construction of the backup fuel tank), then appropriate measures will be considered to maintain stability during reprofiling of the existing slope. A review of the historic open pit located to the south of the Site and the existing Tynagh Power Station, with underground mine workings extending to the east from there has been carried out within Chapter 13 of the EIAR. A drawing for the 2003 planning application (refer to Figure 13.4: Locations of Shafts and Tunnels, EIAR Volume III) shows historic mine shafts and tunnels underly the current Tynagh Power Station but do not indicate mine workings beneath the Proposed Development plant.
5.7	Human Health	*Link provided in submission –* https://www.epa.gov/power-sector/human-health-environmental-impacts-electric-power-sector *The article discusses health and environmental impacts. Emissions discussed in the article include nitrogen*	An EIAR has been prepared for the Proposed Development and submitted with the planning application. Assessments carried out as part of the EIAR include an Air Quality impact assessment. The Air Quality and Climate chapter (Chapter 7 and Appendix 7A of the EIAR) assesses the potential environmental effects associated with releases to atmosphere

		oxides (NOX), sulphur dioxide (SO_2), mercury (Hg) and fine particle emissions, and carbon dioxide (CO_2).	during the construction, operation (including maintenance) and decommissioning of the Proposed Development. The assessment considers the effects from the Proposed Development during operation, with consideration of potential impacts at sensitive human and ecological receptors. A cumulative assessment was also carried out as part of Chapter 7 of the EIAR. In addition, it should be noted that the Proposed Development will comply with the requirements of the European Union (Large Combustion Plants) Regulations 2012 S. I. No. 566 of 2012 under its IE Licence (to be applied for) so that any impacts of emissions to air, soil, surface and groundwater, and effects on the environment and human health, will be minimised and avoided where possible. Emissions from the stack of the Proposed Development will be monitored continuously using Continuous Emission Monitoring Systems (CEMS) and reported in accordance with the requirements for the operation of the Proposed Development under an IE License which will be applied for in due course.

Mr. Enda and Philomena Briscoe

The submission by Mr. Enda and Philomena Briscoe has raised points relating to public health concerns, pollutants in the atmosphere, toxicity to livestock, dust, ground stability, noise and vibration, water quality and emissions.

Item No.	Topic	Comment	Applicant Response
6.1	Public Health Concerns	*Concern for family's health with the development and disturbance of the soil on the old mine site. The site was described as one of the most contaminated mine sites in Europe, with concentrations of metals exceeding guidelines. EPA labelled the mine as the most hazardous mine site in the country with arsenic levels higher than safety limits.*	Similar concerns were expressed by local residents in submissions to the Approved Development – Planning Reg. Ref. 21/2192; ABP Ref. 313528-22). Comprehensive site investigations were undertaken and are detailed in Appendix 13A (Ground Investigation Report) and Appendix 13B (Generic Quantitative Risk Assessment Report) of the EIAR. Analytical results and details of the analytical methodology are provided in the Laboratory Certificates Appendix 13A of the EIAR. The existing ground

			conditions are therefore understood and have informed the siting and layout of the Proposed Development. It should be noted that, unlike the original Tynagh Power Station construction, the Proposed Development involves significantly less excavation as the footprint is smaller and some of the development area is hardstanding. The Proposed Development will be constructed in accordance with current engineering standards, including site investigation and understanding of ground conditions to inform construction works and design. Excavation of material will be minimal and no excavated material will be exported off site. It is intended to raise ground levels using clean imported fill (crushed aggregate 21,000m^3 of imported material) in the south-eastern part of the Proposed Development Site to elevations similar to the existing Tynagh Power Station. New, clean imported fill material will break any potential direct human contact pathway with subsoils containing elevated heavy metals. Potential construction phase risks from elevated metals in soils will be managed appropriately during groundworks. Mitigation measures for construction works including soil handling are incorporated into the submitted Construction Environmental Management Plan (CEMP) (EIAR Volume II Appendix 5A) which will form the basis of the final CEMP to be implemented by the appointed E&C Contractor who will conduct the works. Should GCC consider independent supervision of these works to be required at the expense of the developer, the Applicant would be agreeable to this being implemented through an appropriately-worded planning condition.

			During operation the Proposed Development will follow the standards set out in the IE Directive (IED) under its IE Licence. This is set out to limit and minimise the impacts to air, soil, surface and groundwater, and the effects on environment and human health. Water quality monitoring will be undertaken pre, during and post construction. Post construction monitoring requirements will be in accordance with the requirements of the IE licence (to be applied for in due course).
6.2	Public Health Concerns	*There are staggering figures showing the amount of people that have died from cancer that worked in the old mine. And also the amount of people currently sick and suffering from various illness in the local area. With the development and disturbance of soil and local waterways can assurances be given to families and neighbouring dwellings that the water supply will not be affected and if so who is responsible?*	An EIAR has been submitted for the Proposed Development which includes chapters on Soils and Geology (Chapter 13), and Water (Chapter 12). These chapters assesses the likely significant effects of the Proposed Development on geology and soils and water. As noted in the response to Item 4.1, mitigation measures for construction works are incorporated into the submitted CEMP (EIAR Volume II Appendix 5A) which will form the basis of the final CEMP to be implemented by the appointed E&C Contractor who will conduct the works. The CEMP will be followed during the construction of the Proposed Development and will describe the principles for the protection of the water environment. A Flood Risk and Drainage Assessment is presented within Appendix 12A (refer to EIAR Volume II). This shows the proposed strategy for dealing with surface water runoff. During operation the Proposed Development will follow the standards set out in the IE Directive (IED) under its IE Licence. This is set out to limit and minimise the impacts to air, soil, surface and groundwater, and the effects on environment and human health.

			Water quality monitoring will be undertaken pre, during and post construction. Post construction monitoring requirements will be in accordance with the requirements of the IE licence (to be applied for in due course). Excavation of material will be minimal and no excavated material will be exported off site. It is intended to raise ground levels using clean imported fill (crushed aggregate 21,000m^3 of imported material) in the south-eastern part of the Proposed Development Site to elevations similar to the existing Tynagh Power Station. New, clean imported fill material will break any potential direct human contact pathway with subsoils containing elevated heavy metals. Potential construction phase risks from elevated metals in soils will be managed appropriately during groundworks.
6.3	Risk of releasing pollutants into the Environment	*Submission refers to the 2003 EIA Report stating the EPA recommends that unplanned and unauthorised disturbance of mine waste should not take place due to a risk of releasing pollutants into the environment. The submission questions/looks for clarity on the difference between planned and unplanned disturbance on a hazardous site.*	Please refer to response provided in Items 6.1 and 6.2.
6.4	Risk of releasing pollutants into the Environment 2003/EPA EIA Report	*Submission refers to the 2003 EIA Report stating that "relevant environmental protection legislation must also be strictly enforced by GCC to ensure that any existing or future development taking place on or around the site does not result in environmental pollution". The submission raises concerns with the levels of toxicity present and asked if assurance can be given to ensure there is no environmental pollution.*	Please refer to the response provided for Item 6.1.

6.5	Toxicity to livestock and animals	*Fear that once the ground is disturbed the wastes, tailings and stream sediments will cause potential toxicity to all the animals on Briscoe farm and neighbouring farms. Conclusion No.7 of the EPA EIA report states "livestock should be prevented from ingesting and /or drinking turbid water in the area of the Barnacullia stream". These streams are tributary streams for Lough Derg.*	Refer to detail of site investigations provided under Items 5.6 and 6.1 (refer to EIAR Appendix 13A - Ground Investigation Report).
6.6	Dust Monitoring / 2003 EPA EIA Report	*A dust deposition monitoring programme was also mentioned. It is queried in the submission if this is an ongoing program and if there are any findings as of late.*	It has been assumed by AECOM that the statement regarding a dust deposition monitoring programme is in relation to the EPA EIA Report which is outside the control of the Applicant and outside the remit of the EIAR. It is, however, noted that the Air Quality and Climate chapter of the EIAR (Chapter 7) includes an assessment of potential construction dust impacts associated with the Proposed Development. The assessment considers the risk of dust impacts to sensitive receptors resulting from potential emissions from earthworks, construction and track out activities (HGV movements on unpaved roads and offsite mud on the highway), by taking into account the nature and scale of works, the location of receptors relative to the works, and the local meteorological conditions. The application of good working practice measures and mitigation regularly employed in the construction industry and included within the submitted CEMP (refer to Appendix 5A, EIAR Volume II) will reduce potential effects at receptors to a not significant level. During the operational phase Emission limit values will be set by the IE Licence and air quality emissions will be monitored and controlled as part of the IE Licence required for the Proposed Development.
6.7	Ground stability	*The current power station lies directly above the mine shaft used to transport material to the surface and is close to the shafts used to extract fumes. Is the ground stable enough to hold the weight of the existing and proposed power stations and another turbine. Have*	Ground stability has been considered under Item 5.6 and is addressed within the EIAR

		the underground tunnels been taken into consideration? *Are there drawings of where these tunnels are located?*	
6.8	Noise and Vibration	*Are these shafts the cause of recent noise pollution and vibrations in the ground?*	Noise assessments have been carried out at the current Tynagh Power Station, however the existing site is autonomous of the Proposed Development and, as such, the noise assessments at the existing site have been carried out independently of the Proposed Development. A review of the historic open pit located to the south of the Site and the existing Tynagh Power Station, with underground mine workings extending to the east from there has been carried out within Chapter 13. A drawing for the 2003 planning application (refer to Figure 13.4: Locations of Shafts and Tunnels, EIAR Volume III) shows historic mine shafts and tunnels underly the current Tynagh Power Station but do not indicate mine workings beneath the Proposed Development.
6.9	Water Quality	*The main tailings pond and other smaller tailings ponds are located near these shafts. Will the disturbance of the ground and vibrations cause these tailings ponds to leak into the Waterways?*	A Soils and Geology impact assessment has been carried out as part of Chapter 13 of the EIAR submitted with the planning application. The Soils and Geology chapter provides full detail of the baseline ground conditions (Section 13.4) at the site gained from a detailed programme of site investigation (refer to EIAR Appendix 13A - Ground Investigation Report). The ground conditions are therefore fully understood, and have informed the siting and layout of the Proposed Development. During operation the Proposed Development will follow the standards set out in the IE Directive (IED) under its IE Licence. This is set out to limit and minimise the impacts to air, soil, surface and groundwater, and the effects on environment and human health. Water quality monitoring will be undertaken pre, during and post construction. Post construction monitoring requirements will be in

			accordance with the requirements of the IE licence (to be applied for in due course).

Mr. John Briscoe

The submission by Mr. John Briscoe has raised points relating to the impact of pollutants in the environment, traffic, noise, air quality, visual, light pollution and human health.

Item No.	Topic	Consultee Comment	Applicant Response
7.1	Risk of releasing Pollutants into the Environment/ Water Quality	*Disturbing old mines, potential to cause hazards to the local area, water supplies. Concerned construction works will cause leakage to water supplies and microorganisms being present in water wells.*	Disturbance to soil and water has been considered under Items 6.1, 6.2 and 6.5 of this letter.
7.2	Traffic/ Noise/ Air Quality	*Construction traffic will cause traffic disturbance leading to more noise and air pollution*	A traffic assessment was carried out in Chapter 14 of the EIAR prepared for the Proposed Development and submitted with the planning application. In addition traffic was considered within Chapter 7 Air Quality and Climate and Chapter 11 Noise and Vibration. A series of traffic surveys have been conducted to provide baseline traffic data for the construction phase traffic assessment. For the construction phase, all transport links assessed operate within capacity, even in situations where a culmination of existing traffic, development traffic and outage traffic associated with the existing Tynagh Power Station would be on the network at the same time.

			During construction no significant adverse effect is expected at residential receptor positions with regard to construction phase traffic noise levels generated by additional traffic flows on existing roads and the residual effects of construction traffic noise are assessed to be not significant. (Chapter 11 of the EIAR). In relation to air quality the magnitude of the change in pollutant concentrations due to construction traffic on the road network associated with the Proposed Development during the construction phase is predicted to be imperceptible or low for all pollutants at all receptor locations. A change of this magnitude is considered to have a negligible effect and is considered to be not significant (Chapter 7 of the EIAR). In addition, a CEMP and Construction Traffic Management Plan (CTMP) will be implemented throughout the construction phase of the Proposed Development. A CTMP has been produced as part of the EIAR and is provided within Volume II Appendix 14E of the EIAR.
7.3	Visual	*The existing power plant has a 40m chimney with a red light on top of it and is already overlooking the house in particular 2 bedrooms.*	It should be noted that Mr. Briscoe is incorrect in referring to the existing stack as 40m high. The existing stack is 55m high and is significantly taller than the Proposed Development proposed stack. A Landscape and Visual assessment was carried out as part of the EIAR for the Proposed Development. The visual impact of an additional stack has been considered under Item 5.1 of this letter.
7.4	Light Pollution	*The proposed development would be closer to the house and the light in the chimney would have a detrimental impact at night time when trying to put young children to bed as the lights are bright and shines in their window.*	Light pollution from the light on the stack (i.e. chimney as referred to by Mr. Briscoe) has been considered under Item 5.1 and 5.2.
7.5	Noise	*The noise from the current power plant is just about bearable, noise levels will double and the proposed*	Noise levels associated with the Proposed Development has been considered under Item 5.3 of this letter.

		plant will be in closer proximity to the house. Noise will be worse than the existing plant.	
7.6	Air Quality/ Climate/ Human Health	*Double the amount of CO_2 and Sulphur if the proposed plant goes ahead.*	CO_2 and Sulphur have been considered under Items 5.4 and 5.5 of this letter.
7.7	Human Health/Noise	*Concerned for wellbeing of 3 young children. There is already noise and air pollution from the existing plant, concerned the new proposal would lead to double the amount of pollution as well as noise and air pollution from traffic during construction and from the construction site.* *High pressure steam blowout in August 2020 was distressing to the 3 young children in the household.*	Traffic, Air Quality and Noise and Vibration assessments were carried out as part of the EIAR prepared for the Proposed Development and submitted with the planning application (Chapter 7 Air Quality and Climate, Chapter 11 Noise and Vibration and Chapter 14 Traffic). Cumulative assessments were carried out within each of these chapters. Noise levels associated with the Proposed Development have been considered under Item 5.3. Air Quality aspects have been considered under Items 5.4, 5.5 and Items 6.6 of this letter. The pipe blowout has been considered under item 5.3 of this letter. During operation the Proposed Development will comply with the requirements of the European Union (Large Combustion Plants) Regulations 2012 S. I. No. 566 of 2012 under its IE Licence so that any impacts of emissions to air, soil, surface and groundwater, and effects on the environment and human health, will be minimised and avoided where possible. The IE Licence will set out Emission Limit Values to be adhered to throughout the operation of the Proposed Development.

Niamh and Stephen Loughrey

The submission by Niamh and Stephen Loughrey has raised points relating to air quality, visual impact, noise, human health, traffic and the risk of releasing pollutants into the environment.

Item No.	Topic	Comment	Applicant Response
8.1	Emissions/ Air Quality/ Climate/ Human Health	*Fumes and yellow discharge come from the current power station and lack of filtering system at Sperrin galvanisers cannot be good for the environment or health. The addition of another power station would increase carbon emissions and emissions of other materials from the towers that would be harmful. Request that carbon and other harmful materials that will be emitted from site are calculated.*	An Air Quality and Climate impact assessment has been carried out as part of Chapter 7 and Appendix 7B of the EIAR submitted with the planning application. Appendix 7B includes a Greenhouse Gas Assessment. Cumulative assessments have been carried out as part of Chapter 7 and Appendix 7B. Air Quality aspects have been considered under Items 5.4 and 5.5 and Items 6.6 of this letter.
8.2	Visual	*Second power station would cause a large eyesore to view from home.*	A Landscape and Visual assessment has been carried out as part of the EIAR for the Proposed Development. Refer to Chapter 10 of the submitted EIAR.
8.3	Noise	*The current power station has a constant hum and the galvanising plant is letting steel fall and breaking noise laws and working outside of permitted hours. Second station would increase noise to an unbearable level.*	A Noise and Vibration impact assessment has been carried out as part of the Chapter 11 of the EIAR submitted with the planning application. Noise levels associated with the Proposed Development have been addressed under Item 5.3 of this response.
8.4	Air Quality	*Galvanising plant breaking laws for air pollution and working outside of permitted hours.*	The galvanising plant is a separate development and is not associated with the Tynagh Power Stations in any way. As a result, the galvanising plant is outside the control of the Applicant but has been considered as part of the baseline assessment of the EIAR.
8.5	Human Health / traffic	*Fear for health and safety related to traffic increase on an already busy road.*	A traffic assessment was carried out in Chapter 14 of the EIAR prepared for the Proposed Development and submitted with the planning application. Construction traffic has been considered as part of the EIAR within Chapter 14. In relation to operational traffic Chapter 14, Paragraph 14.5.69 of the submitted EIAR notes the potential impacts associated with the operational phase of the development have been determined to be negligible due to the small daily traffic flow generation (5 -10 daily

			arrivals). This generation is expected to be LGVs and is not believed to have any major impact on the local road network. During the operation phase no issues with road capacity were identified, even in the event of the existing Tynagh Power Station experiencing an outage. A CEMP and Construction Traffic Management Plan (CTMP) will be implemented throughout the construction phase of the Proposed Development. A CTMP has been produced as part of the EIAR and is provided within Volume II Appendix 14E of the EIAR.
8.6	Risk of releasing Pollutants into the Environment/ Air Quality/ Water Quality	*Concerned with disturbance to contaminated soil, the old mine site has extremely large amounts of arsenic in its soil and when disturbed will cause serious issues to waterways, local soil and the air surrounding.*	Disturbance to soil and water has been addressed under Items 6.1, 6.2, and 6.5 of this response.

Mr. Pat Whelan

The submission by Mr. Pat Whelan has raised points relating to flooding, air quality, human health and noise.

Item No.	Topic	Comment	Applicant Response
9.1	Flood Risk	*Proposed development will increase water flow to client's land and could cause considerable flooding*	A Flood Risk and Drainage Assessment has been carried out for the Proposed Development and is provided in Volume II, Appendix 12A of the EIAR. The Stage 3 Detailed Flood Risk Assessment states that the surface water run-off from the ground-level hardstanding will be routed to the existing

			surface water drainage infrastructure of CCGT power station. The proposed surface water discharge rate will be equivalent to the greenfield run-off rate. However, in order to avoid blocking the network by vegetation, the flow rate is set at 5.0 l/s with a storage volume of approximately 1465m^3. An underground geocellular storage and hydrobrakes or similar systems that control the flow rate will be implemented as mitigation. Historical flood events at the existing Tynagh Power Station site indicate they were caused by prolonged periods of rainfall. Mitigation measures have been implemented since these events occurred.
9.2	Air Quality/ Human Health	*Proposed development will cause considerable dust on client's dwellinghouse and lands which will be injurious to his health and to the health of his livestock*	The Air Quality and Climate chapter of the EIAR (Chapter 7) includes an assessment of potential construction dust impacts associated with the Proposed Development. The assessment considers the risk of dust impacts to sensitive receptors resulting from potential emissions from earthworks, construction and track out activities (HGV movements on unpaved roads and offsite mud on the highway), by taking into account the nature and scale of works, the location of receptors relative to the works, and the local meteorological conditions. The application of good working practice measures and mitigation regularly employed in the construction industry and included within the CEMP (refer to Appendix 5A, EIAR Volume II) will reduce potential effects at receptors to a not significant level. The CEMP will be followed during the construction of the Proposed Development and will describe the principles for the protection of the environment. During the operational phase Emission limit values will be set by the IE Licence and air quality emissions will be monitored and controlled as part of the IE Licence required for the Proposed Development.
9.3	Nosie/ Human Health	*The existing power station caused considerable noise which has had an adverse effect on the health of Mr Whelan and his livestock. There is no doubt the noise*	Acoustic barriers have been provided as part of the inherent mitigation of the Proposed Development. The acoustic barriers provided as part of the design of the Proposed Development are as follows - a 7.0m high

		level will increase considerably if this development proceeds.	acoustic barrier around the fin fan cooler, a 8.0m high acoustic barrier around the transformers, and a 10.0m high barrier around the generator, turbine, diffuser and stack base (refer to EIAR Volume III, Figure S3577-8310-0004). This configuration provides a significant reduction in noise emissions from the OCGT. A Noise and Vibration impact assessment has been carried out as part of the Chapter 11 of the EIAR submitted with the planning application. Chapter 11 also includes a cumulative impact assessment. The Proposed Development would be operated under an EPA IE Licence and would be required to adhere to permissible noise emission limits for licensed facilities. Noise levels associated with the proposed development have also been addressed under Item 5.3 of this response.

Mr. Ralph Conroy

The submission on behalf of Mr. Ralph Conroy refers to agricultural equine impacts and noise.

Item No.	Topic	Comment	Applicant Response
10.1	Agriculture - Equine impacts/ Noise/ impact to viability of business	*Clients business is the training and breeding of horses for show jumping and eventing. He specialises in high quality animals which perform on the international stage. The noise that will emanate from the proposed development will cause massive problems for his business and could possibly mean that his business will not be able to operate even on a restricted scale.*	A Noise and Vibration impact assessment has been carried out as part of the Chapter 11 of the EIAR submitted with the planning application. Chapter 11 also includes a cumulative impact assessment. The use of construction noise and vibration mitigation measures including the adoption of 'best practicable means' will ensure that the construction noise and vibration levels are controlled to the lowest levels practicable. The residual effects of construction traffic noise are assessed to be not significant. The predicted residual operational noise levels are at or below the relevant criteria (as set out within Chapter 11 of the EIAR) at all the

			selected receptors. The residual effects of noise from the operation of the Proposed Development are assessed to be not significant. Noise levels associated with the proposed development have also been addressed under Item 5.3 and 9.3 of this response. The Proposed Development would be operated under an EPA IE Licence and would be required to adhere to permissible noise emission limits for licensed facilities.

We trust that this letter satisfactorily addresses the points raised in submissions to the application. The information provided does not constitute additional information. It is provided for clarification, and to direct the reader to relevant aspects of the submitted material. The applicant would be pleased to provide additional information on any aspect in due course, if deemed necessary by ABP.

We trust that this response will be of assistance to An Bord Pleanála in completing its assessment. Please do not hesitate to contact the undersigned in the event of any queries.

Yours sincerely,

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