Appendix 1A

Scoping Review Table

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TABLES

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TYNAGH NORTH – SCOPING REVIEW

Introduction

Background

AECOM has been appointed by EP Energy Developments to undertake an assessment of the environmental impact of a proposed development project for an Open Cycle Gas Turbine (OCGT) plant, acoustic barriers, secondary fuel storage and unloading facility, distillate fuel gantry, water storage tanks, surface water drainage system and all associated ancillary development, site works and services ('the Proposed Development') on land to the north of Tynagh Power Station in Derryfrench, Loughrea, Co. Galway.

The Existing Site and Surroundings

The existing Tynagh Power Station is situated in Derryfrench, Loughrea, Co. Galway, Ireland (Irish Grid Reference X: 174329 Y:213068). The Site on which the Proposed Development will be located is to the immediate north of the existing Power Station Site and is accessed through the existing power station facility from the LP4310 Gurtymadden to Tynagh Road. The entire Site is located within the administrative area of Galway County Council (GCC).

Historic and Current Use

The Tynagh mines opened in the 1960s and were an important source of lead and zinc concentrates. From 1965 to 1981 the mines were managed by the Northgate Group subsidiary Irish Base Metals Ltd. For almost twenty years Irish Base Metals Ltd was a major source of employment for east Galway and the mines were worked on an opencast and underground basis until closure in the early 1980s, after which a period of partial restoration and site rehabilitation was undertaken.

In 2003 planning consent (Ref: 03/2943) was granted (following submission of an Environmental Impact Statement – April 2003) for a 400 MW CCGT at the power station site to be located on the western portion of the former mine site (west of the tailing pond and north of the mine lagoon). In addition to the CCGT generating plant, planning consent was also secured in 2004 for a high pressure buried gas pipeline supplying fuel to the power station, and for a 220 kV overhead line to connect the power station to the National Grid at Oldstreet, 8 km to the south-east of the site.

In November 2021, a planning application and EIAR were submitted to GCC for a separate development project, a 299MW OCGT plant on the western portion of the existing Tynagh Power Station site. Approved Development Ref: 21/2192 will demolish the existing Tynagh Power Station site workshop, administration building and car park, relocate these items to the brownfield lands to the immediate north of the Tynagh Power Station facility and develop a separate OCGT plant on the western part of the Power Station Site.

The Surrounding Area

Within the wider area the Site surroundings include the following features with approximate distances indicated from the Site:

- Within – Former mine brownfield and existing woodland;

- North-west – Existing woodland (0m) and residential properties with outbuildings (420m);
- North-east – Milchem Equestrian Centre (260m);
- East – Mine trailing pond (40m)
- South-west – Industrial buildings of Sperrin Galvanisers (100m) and LP4310 Gurtymadden (note - some public documents refer to this road as Gortymadden) to Tynagh Road (300m), residential properties at Derryfench (330m); and
- South – Mine lagoon (280m), residential property (710m), industrial buildings (1.4km), village of Tynagh (1.8km).

Environmental and Planning Review

The applicant will be submitting an Environmental Impact Assessment Report (EIAR) with this planning application and as such the development will be considered Environmental Impact Assessment (EIA) development. The aim of EIA is to protect the environment by ensuring that the planning authority, when deciding whether to grant planning permission for a project which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision-making process.

AECOM has undertaken a high level environmental and planning review of the existing site and surrounds, historic planning consents and Environmental Statements, and available data in relation to the potential site and technical options being proposed by EP Kilroot. The focus of the approach is to identify environmental and planning 'Red Flags'

The key focus of the approach is to be an appraisal of the following:

- Likelihood to Scope out Environmental Impact Assessment (EIA)/ Appropriate Assessment (AA) (e.g., likely significant impacts) – a high level Screening Appraisal (tabular format) will be undertaken. A summary of the size and scale of the proposed project, sensitive receptors and the initial conclusions reached in relation to whether the Proposed Development will have any likely significant environmental effects will be provided. The opinions will be drawn from a systematic review of the proposals and site against the requirements of the EIA Regulations.

The Applicant

The applicant, EP Energy Developments Ltd., is a subsidiary of EP UK Investments Ltd. (EPUKI) which owns and operates a number of power stations in Ireland and the UK. These include the existing Tynagh CCGT Power Station (run by Tynagh Energy Limited, of which EPUKI hold a majority stake) in the Republic of Ireland, Kilroot Power Station and Ballylumford Power Station in Northern Ireland, Langage Power Station and South Humber Power Station, which are gas-fired power stations located near Plymouth and Immingham and Lynemouth Power Station, a biomass fuelled power plant in Northumberland. EPUKI also owns sites with consent for new power stations in Norfolk, North East Lincolnshire and North Yorkshire.

EPUKI is a subsidiary of Energetický A Prumyslový Holding ('EPH'). EPH owns and operates energy generation assets in the Czech Republic, Slovak Republic, Germany, Italy, Hungary, Poland, Republic of Ireland and the United Kingdom.

Is the Proposed Development Likely to Result In Significant Effects on the Environment?

Table 2.1 provides a summary of the sensitive receptors surrounding the Site and the conclusions reached in relation to whether the Proposed Development will have any likely significant environmental effects.

The opinions below have been drawn from a systematic review of the site, available background information and the proposed plant against the requirements of the EIA Regulations.

Summary of Potential Environmental Impacts

The criteria for determining whether a development would or would not be likely to have significant effects on the environment have been reviewed and a summary is provided in Table 1.1. The table also details the mitigation and documents which would be developed and submitted to support a planning application including an Environmental Statement.

Table 1.1: Summary of the Sensitive Receptors Surrounding the Site

ENVIRONMENTAL TOPIC	SENSITIVE RECEPTORS
Air & Climate	There are 18 human health sensitive receptors identified for Air Quality within 6km from the stack. There are also 24 ecological receptors identified. The nearest SAC / SPA is located approximately 6.1km from the stack.
Cultural Heritage	A total of 34 assets were identified through a desk-based assessment as being within a 5km zone that could be impacted by the Proposed Development.
Biodiversity	There are 13 international nature conservation designations located within 15km of the Proposed Development Site. None of which fall within the Proposed Development Site. The Site comprises suboptimal habitat to support commuting and/ or foraging bats and suitability for roosting bats is negligible. Badger, Irish hare, hedgehog, and smooth newt are known to occur within 2 km of the Site, however only smooth newt was identified within the Site. A total of 24 species of breeding bird were recorded on site, of which 4 are species of conservation concern in Ireland. Marsh fritillary, a vulnerable Annex II species, and wood white, a near-threatened butterfly were also recorded outside the Site boundary. Smooth newt, breeding birds and butterflies were also recorded within the vicinity of the site.
Landscape & Visual	The proposed emission stacks will be around 40m high (to be confirmed on air quality modelling and stack height determination). The land-use surrounding the site is mainly agricultural lands, primarily pastureland for livestock. There are four main sensitive receptors, located within the study area for effects on landscape. Eight viewpoints illustrate the Proposed Development and Overall Project for the following main visual receptor groups: local residents, vehicle travellers, and pedestrians.
Noise and Vibration	Five areas of noise sensitive receptors have been identified - four of which are residential in nature and one of which is an equestrian centre.
Water Environment	The site is located within the Lisduff sub-basin of the Lower Shannon surface water catchment as well as the Historic mine groundwater body. 3 minor streams (Lisduff Stream, Cloonprask/Barnacullia Stream, Mill Stream) to the south and east of the site, which flow into the Kilcrow river. The former Tynagh Mine open pit mine is an enclosed open water body and the former Tynagh Mine tailings ponds remain and form open water bodies.
Soils & Geology	There are no statutory designated sites within the site or within 5km of the boundaries. The overall former mine site, including the proposed development, is classified as a site of Geological Heritage by the Geological Survey of Ireland (site GY133 Tynagh Mine, IGH

	codes IGH 6 Mineralogy, IGH15 Economic Geology). The remaining area is considered of local importance and of low sensitivity. The soil resources within the Site are classified as Urban land use and of negligible sensitivity.
Traffic	Access to the Site, during the construction phase, will be through the existing site access road. Construction will temporarily increase the volume of traffic, with a maximum of up to 133 LGVs and 30 HGVs accessing the Site each day. The construction traffic will be temporary. The operational phase traffic will be negligible, however, emergency situations may occur during the operational phase resulting in 60HGV arrivals to the site per day to deliver back up fuel. The Proposed Development is not likely to result in any major issues in traffic terms with impacts on the local roads being negligible.
Land Use	The Site is bordered to the north and east by the former Tynagh mine and to the immediate south by the existing Tynagh Power Station and therefore there will be no effect on Land Use. There will be no direct or indirect effects on residential or community land uses surrounding the Site.
Population & Human Health	The construction does not require any unusual or complex activities that would result in significant adverse human health effects.
Cumulative Effects	The construction phase will be 18 – 24 months, the final details of which will be determined by the E&C Contractor and presented in a Construction Environmental Management Plan (CEMP) which will be agreed by the planning authority. Planning application Ref. 21/2192 was submitted to Galway County Council in November 2021 and subsequently approved by ABP. The Applicant intends to build out and operate both Approved Development Ref: 21/2192 and the Tynagh North OCGT however the overlap on the construction phase of the projects is likely to be 3 months.

Table 1.2: Summary of likely significant effects

ENVIRONMENTAL TOPIC	LIKELY EFFECTS	COMMENT
Air & Climate	Construction Phase: The construction processes for the Proposed Development would largely take place north of the existing buildings. General dust management best practices would be adhered to. No further mitigation or enhancement measures would be required. Operational Phase: The environmental effects from operation of the Proposed Development have been identified as negligible or minor at sensitive receptor locations, therefore considered not significant at all receptors. Accordingly, no further mitigation is required. Decommissioning Phase: There would be a decommissioning plan that would include dust management practices considered to be best practice at that time. Any additional mitigation will be identified if conditions have changed at that time.	Mitigation provided within oCEMP will safeguard from any significant effects during construction. Embedded Mitigation included within the scheme design such as the construction of an appropriate stack will safeguard from any significant effects during operation of the Proposed Development.
Cultural Heritage	The Proposed Development is located within the existing power station and former mine site. There are no recorded heritage assets within the Proposed Development with the only unrecorded heritage asset noted being a former laneway which provided access to the settlement of Gortareask outside the Proposed Development to the northwest. This and any other potential unrecorded heritage assets will have been removed by modern development and will not be impacted. There will be no physical impact to recorded or unrecorded heritage assets within the Proposed Development. Likely effects will be impacts to the settings of designated heritage assets arising from dust and noise	No mitigation required in association with possible impacts to recorded and unrecorded heritage assets within the Proposed Development. Embedded Mitigation included within the scheme design to be adopted during Construction would be adopted as described in the oCEMP to reduce the impact of noise and dust during construction. This would include limiting the hours of work and vehicle movements. Measures to avoid / reduce adverse impacts on Designated Assets have been incorporated to avoid or reduce adverse

	during construction related activities. Similarly, visual impacts to setting could arise from the physical presence of the Proposed Development, in particular the proposedemission flue gas stack. In particular, the Protected Structures thatched cottage (RPS 3648) and Castletown Bridge (RPS 3651) would experience minor impacts upon their settings,	impacts through the Proposed Development creating a visual impact. This includes the following strategy: • The Proposed Development will be a neutral grey palate to match the existing adjoining power station buildings.
Biodiversity	No likely significant effects to any European sites are anticipated due to a lack of source-pathway-receptor relationships. Construction Phase: Loss of habitats, notably species-rich grassland which may also support protected species including invertebrates, breeding birds, and smooth newt. Pollution of freshwater habitats from contaminated surface-water runoff, causing potential displacement or injury / mortality of smooth newt. Disturbance or displacement of Irish hare, hedgehog, common lizard, breeding birds and invertebrates through noise , light and visual disturbance. Physical damage or disturbance of nesting sites. Mortality / injury of protected species, including newts, breeding birds, lizard and butterflies. Operational Phase Pollution of freshwater habitats from contaminated surface-water runoff, causing potential displacement or injury / mortality of smooth newt.	Mitigation provided within oCEMP will safeguard protected species from likely significant effects during construction, resulting in no significant residual effects. Mitigation measures for the protection of smooth newt centre on pollution prevention. Drainage systems to manage runoff and pollution risk during the operational phase. Standard noise mitigation will prevent disturbance to birds and mammals at night. Removed of vegetation to be completed outside the bird breeding season, and following checks for smooth, lizard and marsh fritiallary larvae in August-September. Compensation habitat to be created on site, or adjacent to the site, to provide suitable habitat for breeding birds, invertebrates, newt and lizard. Survey of the grassland for breeding marsh fritillary. Enhancement of the Site for newt and lizard through provision of hibernacula. No significant residual effects are anticipated following mitigation measures,

		and net biodiversity gain may be achieved through compensation and enhancement measures.
Landscape & Visual	Construction Phase: Likely significant landscape and visual effects of construction works will concentrate in areas located in close proximity (approximately up to 500m radius) from the boundary of the Overall Project Site and along roads where construction traffic will travel. Operational Phase: Visual effects of Overall Project design are likely significant within approximately up to 500m radius from locations with open or partial views of primarily the proposed emissions stack and sections of the building . Decommissioning Phase: Similar to construction phase	Embedded Mitigation included within the scheme design to be adopted during Construction would be adopted as described in the oCEMP to reduce landscape and visual effects during construction including: • Minimise external lighting related to construction works; and • Removal of temporary vehicle parking facilities as well as compounds, material and plant storage facilities following the completion of construction works. The principal visual mitigation measures are inherent in the design of its architecture including the colour scheme of the various proposed development components.
Noise & Vibration	Construction Phase: The predicted construction noise, and noise from the increase in traffic during the construction phase indicate that significant adverse effects are unlikely. Operational Phase: With mitigation in place, the predicted noise during the operational phase of the development indicates that significant adverse effects are unlikely.	The anticipated construction works are not predicted to result in significant construction noise effects. Mitigation as set out in the oCEMP will minimise construction noise impacts. The anticipated volume of construction traffic is not predicted to result in significant increases in traffic noise levels on nearby local roads. No specific mitigation measures are proposed. With mitigation in the form of the choice of plant and noise barriers in place significant

		operational phase noise effects are not predicted.
Water Environment	Construction Phase: Impacts on surface and groundwater water quality due to deposition or spillage of soils, sediments, oils, fuels, or other construction chemicals/ wastewater, or through mobilisation of contamination following disturbance of contaminated ground, sediments, or groundwater, or through uncontrolled site run-off; Dewatering of excavations, if required, may increase discharges from the site of potentially contaminated construction site runoff; Potential increase in volume and rate of surface water runoff from new impervious areas during construction, leading to an impact on flood risk; Increased risk of groundwater flooding or recharge as a result of any below ground excavations; and Alteration in fluvial and overland flow paths as a result of works associated with the Proposed Development and Overall Project. Operational Phase: Impacts on receiving surface and groundwater bodies from urban pollutants in surface water runoff (including accidental chemical spillages); Potential nutrient enrichment/ acidification of waterbodies located adjacent to the Planning Application Site from atmospheric deposition of pollutants emitted from the generation equipment; and Potential increase in volume and rate of surface water runoff from new impervious areas, leading to an impact on flood risk, upstream and downstream of the site.	Mitigation provided within oCEMP will safeguard from any significant effects during construction. Embedded Mitigation included within the scheme design such as the construction of a Surface Water Drainage system will safeguard from any significant effects during operation of the Proposed Development

Soils & Geology	Construction Phase: Site is former industrial (mine) site covered by hard standing and fill material, therefore damage to soil structure through smearing and compaction is not anticipated (Negligible impact) Mobilisation of existing contaminants in soil as a result of ground disturbance (Minor adverse impact). Introduction of new contamination to the subsurface as a result of spillages (Minor adverse impact). Mobilisation of existing contaminants in soil as a result of ground disturbance into surface runoff and surface water receptors (Negligible impact). Migration of introduced contaminants in soil as a result of spillages into surface water receptors (Negligible impact). Mobilisation of existing contaminants in soil as a result of ground disturbance into groundwater (Negligible impact). Migration of introduced contaminants in soil as a result of spillages into groundwater receptors (Negligible impact) Inhalation of contaminated dust (Negligible impact). Dermal contact with contaminated soil (Negligible impact). Operation Phase: Permanent loss of approximately 5.53ha of existing industrial land for the proposed development (Minor adverse impact). Introduction of new contamination to the subsurface as a result of leakages from the OCGT machinery (Minor adverse impact). Migration of introduced contaminants in soil as a result of accidental spillages or leakages from the OCGT machinery into surface water receptors (Negligible impact).	Prior to construction starting onsite, a Final CEMP will be prepared by the Contractor to be approved by the planning authority. The Final CEMP will detail the measures necessary to avoid, prevent and reduce adverse effects where possible upon soil and geological receptors. The CEMP will be supported by a Water Management Plan (WMP), which will provide greater detail regarding the mitigation to be implemented to protect the water environment from adverse impacts during construction.

	Migration of introduced contaminants in soil as a result of accidental spillages or leakages from the OCGT machinery into groundwater receptors (Negligible impact). Removal/ treatment/ mitigation of encountered contamination (Moderate beneficial impact). Decommissioning Phase: Damage to soil structure through smearing and compaction is not anticipated (Negligible impact). Introduction of new contamination to the subsurface as a result of spillages (Minor adverse impact). Migration of introduced contaminants in soil as a result of spillages into surface water receptors (Negligible impact). Migration of introduced contaminants in soil as a result of spillages into groundwater receptors (Negligible impact) Inhalation of contaminated dust (Negligible impact).	
Traffic	Construction Phase: The additional traffic generated on all surrounding roads is likely to have an insignificant impact in traffic terms. Operational Phase: No significant effects expected due to low traffic generation and infrequency of outages.	Due to the low traffic generation, the traffic impact is insignificant. However, notwithstanding this, a CTMP will be in place to ensure work activities in, near, or having impact upon the public highway, are undertaken safely and with minimal impact on traffic movement and existing infrastructure throughout the works programme. A pavement assessment and bridge condition survey have also been undertaken to allow for monitoring of impacts to bridges and the road surface quality.
Land Use	No significant effects expected as the Proposed Development is within the existing Kilroot power station complex and no additional land is required.	Mitigation provided within oCEMP will safeguard from any significant effects during construction.

Population & Human Health	Likely effects may be increased noise, dust deposition, air pollution, potential spillages into water courses and increased traffic on the surrounding road network.	This information will be as reported in the technical chapters relevant to human health: Air & Climate; Noise & Vibration; Soils & Geology; Water Environment; and Traffic

Conclusions and Recommendations

The Scoping Review has outlined the approach, methodology, and topics that will be assessed in respect of the Layout options. During construction, the Proposed Development has the potential to give rise to a range of environmental impacts and effects e.g., arising from construction activities and traffic movements.

Table 1.3 outlines the scope of each environmental topic, specifically the aspects of each assessment that have been scoped in and scoped out of the process.

Table 1.3: Scoping of Assets

ENVIRONMENTAL TOPIC	SCOPED INTO THE ES	SCOPED OUT OF THE ES
Air & Climate	Impacts to European and national ecological sites, human health and amenities from construction phase activities and on site operational emissions to air.	Impacts to European and national ecological sites, human health and amenities from road traffic emissions during the operational phase. This was scoped out due to the minimal traffic generation.
Cultural Heritage	Settings impacts to heritage assets- archaeological sites, protected structures and historic gardens	Physical impacts to heritage assets
Biodiversity	General impacts from construction, such as loss of species-rich grassland which may also support protected species including invertebrates, breeding birds, and smooth newt. Pollution of freshwater habitats from contaminated surface-water runoff, causing potential displacement or injury / mortality of smooth newt. Disturbance or displacement of Irish hare, hedgehog, common lizard, breeding birds and invertebrates through noise, light and visual disturbance. Physical damage or disturbance of nesting sites Mortality / injury of protected species, including newts, breeding birds, lizard and butterflies. Operational Phase Pollution of freshwater habitats from contaminated surface-water runoff,	Impacts to European and national sites Impacts to non-statutory sites and Ancient / Long-established Woodland. Impacts to habitats which are of Site or negligible value. Impacts to wintering birds which do not use the Site and are present in adjacent areas only irregularly and in low numbers. Impacts to bats, badger and otter which are not present on Site or may use the Site only sporadically or to a limited extent for commuting and foraging.

	causing potential displacement or injury / mortality of smooth newt.	
Landscape & Visual	Effects on physical and visual appearance and character of the landscape as it is experienced today. Effects on national and regional landscape character areas / types. Effects on local landscape policy areas. Effects on walking and cycling routes. Effects on protected views and prospects.	Effects on heritage assets. Effects on historic landscapes.
Noise & Vibration	Impact of construction noise construction traffic and operational noise.	Impact of construction vibration due to the intervening distance between the works and sensitive receptors Impact of operational vibration as no plant which would generate significant vibration levels is proposed Impact of operational traffic due to the minimal traffic generation.
Water Environment	Impact on water bodies from potential pollution events during construction and operation. Impact on flood plains associated with development.	Impacts to European and national ecological sites.
Soils & Geology	Impact to soils and bedrock at the site. Baseline Environmental site investigation undertaken, and Generic Quantitative Risk Assessment (GQRA) report completed.	During the ground investigation undertaken in May and June 2022 supplemented with historical ground investigation data, soil samples were obtained at regular intervals throughout the soil profile. Samples were obtained within Made Ground deposits and in the underlying superficial deposits. No visual or olfactory evidence of contamination was observed during the soil sampling, and no significant anthropogenic material

		was encountered during the site investigation. A review of the soil data analysed from the site shows that all soil analytical results were either below laboratory detection limits or below relevant generic assessment criteria.
Traffic	Impact of construction traffic including acknowledgment of abnormal load deliveries.	Operational traffic assessment. This was scoped out due to the minimal traffic generation.
Land Use	Assessment of Land Use impacts on different land use types including residential, community, industry and business development land, telecommunications and aviation.	Effects on heritage assets. Effects on conservation areas.
Population & Human Health	Key population statistics and data, and aspects of the technical assessments that are relevant to human health.	Human Health Assessment
Material Assets	Impact of construction and operational phases waste generation on available landfill capacity in the CUR region. Impact on material assets such as electrical and gas utilities during construction and operational phases.	Staff generated waste.
Major Accidents and Disasters	Effects of major accidents and disasters, both natural and man-made, on: population and human health; biodiversity; land and soil; water and groundwater; air and climate; material assets; cultural heritage; and landscape.	