

# The Eggborough CCGT Project

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The Eggborough CCGT (Generating Station) Order

Land at and in the vicinity of the Eggborough Power Station site, near Selby, North Yorkshire, DN14 0BS

**Statement of Common Ground with the Environment Agency** 

**The Planning Act 2008** 



**Applicant: Eggborough Power Limited** 

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## **GLOSSARY**

Abbreviation	Description	
ACC	Air cooled condenser	
AGI	Above Ground Installation	
BAT	Best Available Technique	
CCGT	Combined Cycle Gas Turbine	
CCR	Carbon capture readiness	
CHP	Combined heat and power	
DCO	Development Consent Order	
EA	Environment Agency	
EPH	Energetický A Prumyslový Holding	
EPL	Eggborough Power Limited (the Applicant)	
EPR	Environmental Permitting Regulations 2010	
ES	Environmental Statement	
FRA	Flood Risk Assessment	
HDD	Horizontal directional drilling	
kV	kilovolts	
m	metres	
mAOD	metres Above Ordnance Datum	
MW	Megawatts	
NTS	National Transmission System	
NYCC	North Yorkshire County Council	
PA 2008	Planning Act 2008	
PEI	Preliminary Environmental Information	
SDC	Selby District Council	
SoCG	Statement of Common Ground	
SoS	Secretary of State	



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#### 1.0 INTRODUCTION

#### Overview

- 1.1 This Statement of Common Ground has been prepared on behalf of Eggborough Power Limited ('EPL' or the 'Applicant') in respect of its application (the 'Application') for a Development Consent Order (a 'DCO').
- 1.2 The Application has been submitted to the Secretary of State (the 'SoS') for Business, Energy and Industrial Strategy, under Section 37 of 'The Planning Act 2008' (the 'PA 2008'). It seeks consent for the construction, operation and maintenance of a new gas-fired electricity generating station with a gross output capacity of up to 2,500 megawatts ('MW') and associated works (the 'Proposed Development') on land at and in the vicinity of the existing Eggborough coal-fired power station, near Selby, North Yorkshire.
- 1.3 A DCO is required for the Proposed Development as it falls within the definition and thresholds for a 'Nationally Significant Infrastructure Project' (a 'NSIP') under Sections 14 and 15(2) of the PA 2008.
- 1.4 The DCO, if made by the SoS, would be known as the 'Eggborough CCGT (Generating Station) Order' (the 'Order').

#### **EPL**

- 1.5 EPL owns and operates the existing Eggborough coal-fired power station (the 'coal-fired power station'), near Selby, including a significant proportion of the land required for the Proposed Development.
- 1.6 EPL was acquired by EP UK Investments Ltd (EP UK) in late 2014; 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 and the United Kingdom.

#### The Site

- 1.7 The Proposed Development Site (the 'Site') is located at and in the vicinity of Eggborough coal-fired power station south of Selby. The River Aire is located just to the north with the A19 immediately to the west. Eggborough Village situated to the south-west.
- 1.8 The entire Site lies within the administrative boundaries of Selby District Council ('SDC') and North Yorkshire County Council ('NYCC').
- 1.9 The coal-fired power station was officially opened in 1970 and comprises four coal-fired boiler units, which together are capable of generating up to 2,000 MW of electricity. The coal-fired power station also includes a turbine hall and boiler house, an emissions stack (chimney) of approximately 198 metres ('m') in height, eight concrete cooling towers of approximately 113 m in height, an administration and control block, coal stock yards and a dedicated rail line for the delivery of coal, in addition to ancillary buildings, structures and infrastructure and utility connections.
- 1.10 The Site itself extends to approximately 102 hectares and comprises land within the operational area of the existing coal-fired power station for the new generating station and electrical



- connection in addition to corridors of land outside this area for the water connections and gas supply pipeline. The generating station would be located on the existing main coal stock yard.
- 1.11 The land required for the generating station and electrical connection is owned by EPL, as well as the majority of the land for water connections. The land required for the gas supply pipeline is not owned by EPL.
- 1.12 The area surrounding the Site is predominantly flat and for the most part comprises agricultural land interspersed with small settlements and farmsteads. The area is however crossed by transport infrastructure, notably the A19 and railway lines, including the East Coast Mainline, in addition to overhead electricity lines associated with the coal-fired power station and other power stations within the wider area.

#### **The Proposed Development**

- 1.13 The main components of the Proposed Development are summarised below:
  - an electricity generating station fuelled by natural gas with an electrical output capacity of up to 2,500 MW located on the main coal stock yard area of the coal-fired power station, comprising:
    - a combined cycle gas turbine ('CCGT') plant, comprising up to three CCGT units, including turbine and heat recovery steam generator buildings, emissions stacks, cooling towers and cooling water treatment plant, administration/control building, ancillary buildings, plant and equipment;
    - a peaking plant and black start plant fuelled by natural gas with a combined electrical output of up to 299 MW, emissions stacks and ancillary buildings, plant and equipment; and
    - other ancillary buildings, enclosures, plant, equipment and infrastructure connections and works;
  - electrical connection works, comprising up to 400 kilovolt ('kV') underground cables to the existing National Grid 400 kV substation and works within the substation;
  - cooling water connection works, comprising works to the existing cooling water supply and discharge pipelines and intake and outfall structures within the River Aire;
  - raw and towns water supply connection works, comprising works to the existing towns water pipelines and ground water boreholes and pipelines;
  - an underground gas supply pipeline connecting to the National Transmission System ('NTS')
    for gas of up to 1,000 millimetres (nominal bore) in diameter and approximately 4.7 km in
    length running north, under the River Aire, to a connection point with the NTS to the southwest of Burn Village; and
  - an 'Above Ground Installation' ('AGI') to the south-west of Burn Village for the connection of the gas supply pipeline to the NTS.
- 1.14 The Proposed Development also includes a temporary construction laydown area for the accommodation of plant and materials and contractors compounds and facilities during the construction phase, which would last for approximately three years. This would be provided on land within the operational area of the coal-fired power station, north of the main coal stock yard.



1.15 In addition, land would be set aside adjacent to the new generating station to accommodate any future carbon capture plant, should the deployment of such technology become viable in the future. It is proposed that this 'reserve' land would be provided on the area to be used for temporary construction and laydown area during construction of the Proposed Development.

#### The purpose of this Statement of Common Ground

- 1.16 The purpose of this SoCG is to set out the agreement that has been reached between EPL and the Environment Agency (the 'EA') in respect of a number of matters relating to the Proposed Development, including:
  - air quality and permitting;
  - noise impacts;
  - flood risk;
  - water resources, including permitting for any proposed works within eight metres of the flood defences for the River Aire;
  - landscape and biodiversity provisions;
  - demonstration of use of Best Available Technology ('BAT') for choice of cooling technology;
  - surface water and groundwater water abstraction / discharges and compliance with the Eel Regulations;
  - combined heat and power ('CHP') readiness;
  - carbon capture readiness ('CCR'); and
  - relevant DCO requirements to safeguard against potential environmental effects.
- 1.17 Section 2 records consultation with the EA by EPL, Sections 3 to 11 of the SoCG set out the areas of agreement in relation to the above matters while Section 12 sets out any areas of disagreement between the parties.



## 2.0 **CONSULTATION WITH THE ENVIRONMENT AGENCY**

2.1 The consultation that has taken place with the EA up to the time of the submission of the Application concerning the issues raised within this SoCG is presented in Table 2.1.

Table 2.1: Consultation with the EA

Date	Details		
August 2016	Meeting with EA to introduce the Eggborough project and discuss permitting approach, cooling options and BAT justifications		
August/September	EA consulted by PINS in respect of application for an EIA Scoping Opinion		
2016	made by the Applicant. Response provided by EA on 16 September 2016		
	stated that the scoping report identifies the key matters to be addressed in the Environmental Statement (ES). Response also provided advice on		
	groundwater, flood risk, fish, Water Framework Directive, environmental		
	permit and abstraction licences, Combined Heat and Power (CHP) Ready		
requirements and Carbon Capture Ready (CCR) requirements.			
November 2016	BAT justification provided to EA for choice of cooling technology. Position		
	agreed that air cooling does not represent BAT for the installation; other		
	cooling options retained until a permit application supported by a BAT		
	justification has been submitted.		
January 2017	EA consulted in accordance with Section 42 of PA 2008 (Duty to consult)		
	and provided with consultation documents including PEI Report. EA		
	response included advice on air quality, noise, flood risk, water quality,		
	biodiversity, water resources, environmental permitting and CHP and CCR		
F.L 2047	requirements.		
February 2017	Meeting with EA to discuss progress on the project and the intention to		
A !! 204.6	draft a SoCG prior to the start of examination.		
April 2016	EA provided with copy of draft Environmental Statement chapters on air		
	quality, noise, water resources, as well as the draft landscape and		
	biodiversity strategy, for review and comment. EA response received Friday		
	5th May.		



#### 3.0 AIR QUALITY AND PERMITTING

- 3.1 It is agreed that the Proposed Development will be subject to the Environmental Permitting regime under the Environmental Permitting Regulations 2010 ('EPR'). It is further agreed that the preferred approach to permitting the Proposed Development is to apply for a substantial variation to the existing Environmental Permit (reference EPR/VP3930LH/V007).
- 3.2 It is agreed that the SoS must be satisfied that potential releases from the Proposed Development can be adequately regulated under the EPR, as outlined in paragraph 4.10.7 of EN-1. Having considered the general content of the ES for the Proposed Development, the EA is satisfied and agrees that it is of a type and nature that should be capable of being adequately regulated under EPR. At this point the EA is not aware of anything that would preclude the granting of an Environmental Permit, and wishes to point out that the permit application has been submitted and 'Duly Made'. Only once the EPR application has been technically assessed can the EA decide whether it would be appropriate to grant an Environmental Permit and if so the conditions that should be attached to the Permit.
- 3.3 It is agreed by both parties that pollutant emissions to air could arise from the operation of the Proposed Development, primarily from combustion sources within the plant, notably via the main emissions stacks for the CCGT units, the emission stacks associated with the proposed peaking plant and the black start facility, as well as smaller releases from auxiliary boilers.
- 3.4 Emissions will be controlled to meet the requirements of the Industrial Emissions Directive, and, as appropriate, the revised Large Combustion Plant BAT Reference document conclusions. Provision will be made for the potential installation of secondary abatement technology for the control of nitrogen oxide emissions (such as the use of Selective Catalytic Reduction ('SCR')), although the need for SCR will be established through a BAT justification as part of the Environmental Permit application.
- 3.5 Stack heights have been determined through dispersion modelling and the CCGT stack heights have been fixed in the DCO at a height of 99.9 metres Above Ordnance Datum (99.9mAOD). It is agreed that co-located stacks will be used for the CCGT units as this may improve dispersion. For the CCGT and peaking plant, it is agreed that the appropriateness of the height thresholds of the stacks will be subject to the results of technical assessments submitted with the EPR application.
- 3.6 It is further recognised by both parties that there will be air emissions from traffic, in particular emissions from HGVs during construction of the Proposed Development. However, the EA's focus in relation to air quality is on emissions from point sources (i.e. the stacks) associated with the operational plant rather than traffic. Air emissions from HGVs during construction are not subject to EA regulation.
- 3.7 The EA will examine information on air quality (including the air dispersion modelling), noise and other emissions to the environment which will be provided by the Applicant as part of the Environmental Permit application. At this point in time the EA is not aware of any reason why it would not be possible to address these matters as part of the EPR application process and issues that may arise.



#### 4.0 **NOISE IMPACTS**

- 4.1 As outlined in Section 3 of this SoCG, it is agreed that the Proposed Development will be subject to the Environmental Permitting regime under the EPR.
- 4.2 It is agreed that a noise assessment has been undertaken as part of the ES for the Proposed Development, and that as the design progresses, the noise model will be refined, and additional acoustic assessment will be undertaken to determine the most appropriate mitigation options. For the purposes of an EPR application, a revised BS4142 noise modelling assessment was submitted that included proposed or draft mitigation measures to demonstrate that operational noise emissions can be reduced to acceptable levels. It is agreed that, if detailed mitigation proposals are not specified within the EPR application, a pre-commencement improvement condition may be included within the Environmental Permit to review the noise assessment at the detailed design stage and ensure that it is still valid.
- 4.3 If the permit application is deemed permissible, it is agreed that, if appropriate and relevant to do so, a pre-operational condition may be inserted for the operator to demonstrate that the detailed plant design of their proposed mitigation measures will not exceed levels permitted.
- 4.4 It is also agreed that, in order to provide appropriate operational noise safeguards for the EA and Selby District Council, as local planning authority, the following requirement has been included within the draft DCO, the wording of which has been agreed between EPL and the EA:

#### Requirement 24: Control of noise - operation

- "(1) No part of the authorised development must be brought into commercial use until a scheme for noise management including monitoring during operation of the authorised development has been submitted to and approved by the relevant planning authority.
- (2) Noise (in terms of the BS 4142 rating level) from the operation of the authorised development must be no greater than around +5 dB different to the defined representative background sound level adjacent to the nearest residential properties at such location as agreed with the relevant planning authority in order to avoid a significant adverse impact as defined by BS 4142:2014.
- (3) The scheme must be implemented as approved unless otherwise agreed with the relevant planning authority."



#### 5.0 FLOOD DEFENCES

- 5.1 In its Relevant Representation the EA raised concern about the method proposed to construct the Proposed Gas Connection under the River Aire and through flood defences either side of the River. This concern related to the effect that an open-cut method may have on the EA's flood defences, if used. EPL has proposed that it will use horizontal directional drilling ('HDD') under the River and to extend this underneath the flood defences to the north and south of the River. EPL has included controls in the DCO in the form of Requirement 5 'Detailed design', subparagraph (8)(d), which requires the approval of the relevant planning authority to "the route and method of installation of the high pressure steel pipeline". EPL is content to amend the wording of the Requirement to include the EA as a consultee and to amend sub-paragraph (8)(d) as follows:
  - "(d) the route and method of installation of the high pressure steel pipeline and any electrical supply, telemetry and other apparatus, including under and within the footprint of any flood defences;..."
- 5.2 While HDD is likely to offer a preferable construction method for the Proposed Gas Connection within the vicinity of the EA's flood defences, the EA has confirmed that it will require safeguards in the form of settlement monitoring, which will ensure that the works do not affect its flood defences. In order to secure this, the parties have agreed that the following requirement will be included within the DCO:
  - "(1) Prior to commencement of Work No. 6, a scheme for monitoring ground subsidence in and around the flood defences for the River Aire must be submitted to and, following consultation with the Environment Agency, approved by the relevant planning authority.
  - (2) The scheme must set out:
    - (a) the details of the work which is to be subject to monitoring;
    - (b) the extent of land to be monitored;
    - (c) the manner in which ground levels are to be monitored;
    - (d) the duration of monitoring activities; and
    - (e) the extent of ground subsidence which, if exceeded, will require the undertaker to submit a ground subsidence mitigation scheme for the Environment Agency's approval in accordance with sub-paragraph (3).
  - (3) If the monitoring identifies that ground subsidence has exceeded the level described in subparagraph (2)(e), a scheme setting out mitigation measures in relation to the ground subsidence must be submitted as soon as is reasonably practicable to and, following consultation with the Environment Agency, approved by the relevant planning authority.
  - (4) The mitigation scheme approved pursuant to sub-paragraph (3) must be implemented as approved, unless otherwise agreed in writing with the relevant planning authority."



#### 6.0 FLOOD RISK

- 6.1 A Flood Risk Assessment ('FRA') has been submitted with the DCO application (Appendix 11A to the ES). It confirms that the majority of the Site, and in particular where the generating station will be built, lies within Flood Zone 1 and is therefore at low risk of fluvial flooding from the River Aire or tidal flooding.
- 6.2 The Proposed Gas Connection corridor is located predominantly in Flood Zones 2, 3a and 3b and is therefore deemed at medium or high risk of flooding from fluvial/ tidal sources (but only belowground infrastructure will be installed in Flood Zone 3, so potential impacts relate to construction only). The site for the Above Ground Installation compounds at the northern end of the Proposed Gas Connection, where it connects to the existing National Grid National Transmission System for gas, has been selected in part as it is outside Flood Zone 3.
- 6.3 The proposed works represent 'Essential Infrastructure' and are therefore appropriate to Flood Zones 3a and 3b subject to satisfying the Exception Test.
- 6.4 As a precaution, flood resilience and resistance measures for managing the residual flood risk to the Proposed Development will be adopted. For example, placement of main plant and flood sensitive equipment above the River Aire 1 in 100-year flood level plus an allowance for climate change (7.65mAOD); finished floor levels raised 300 mm above adjacent ground levels where possible; adequate containment of storage areas to ensure material does not wash away and cause pollution etc.
- 6.5 It is agreed that the introduction of impermeable surfaces as part of the Proposed Development would increase the surface water run-off generated at the Site. Surface water runoff from the areas of the Site within the existing coal-fired power station will be collected and stored in an attenuation system that can store the 1 in 30 year + climate change assuming 30% permeability across the Proposed Power Plant Site. This will subsequently be discharged from the Site to Hensall Dyke (agreement in principle has been made with Danvm Drainage Commissioners following the conclusions of hydraulic modelling for the Hensall Pumping Station catchment) at a rate restricted to the existing greenfield runoff rate (a maximum of 1.4 litres per second per hectare based on current guidance). Surface water drainage design details will also be agreed with the Lead Local Flood Authority in accordance with a DCO requirement.
- 6.6 The proposed works involve new crossings of the River Aire, Ings and Tetherings Drain and other smaller local watercourses. It is agreed that separate formal flood risk activity permit will be obtained by EPL from the EA for any development adjacent to or within a watercourse, or for works in, over, under or within the byelaw's distance of a flood defence. At this point in time the EA is not aware of any reason why it would not be possible to issue a permit for such works. Approval from the relevant IDB for works located within the IDB byelaw distance and from the Marine Management Organisation for works in the tidal part of the River Aire (a deemed marine licence is included as part of the DCO) will also be required.
- 6.7 EPL will also subscribe to the EA's Flood Warning Information Service and a Flood Risk Management Action Plan/ Method Statement will be created for the Site for the construction phase. The plan will detail the procedures for site occupants to undertake in the event that a flood warning is issued, including the details of appropriate evacuation routes from the Site.



6.8 In order to address the above and provide appropriate safeguards for the EA, the following Requirement has been included within the draft DCO, the wording of which has been agreed between EPL and the EA:

#### **Requirement 14: Flood Risk Mitigation**

- "(1) No part of the authorised development must commence until a scheme for the mitigation of flood risk during construction, has, for that part, been submitted to, and after consultation with the Environment Agency, approved by the relevant planning authority.
- (2) The scheme approved pursuant to sub-paragraph (1) must be implemented as approved and maintained throughout the construction of the authorised development unless otherwise agreed with the relevant planning authority.
- (3) No part of the authorised development must be commissioned until a scheme for the mitigation of flood risk during operation has, for that part, been submitted to and, after consultation with the Environment Agency, approved by the relevant planning authority.
- (4) The schemes submitted and approved pursuant to paragraphs (1) and (3) of this requirement must be in accordance with the principles set out in chapter 11 and appendix 11A of the environmental statement.
- (5) The scheme approved pursuant to sub-paragraph (3) must be implemented as approved and maintained throughout the operation of the authorised development unless otherwise agreed with the relevant planning authority.
- (6) The authorised development must not be commissioned until the flood risk mitigation has been implemented and a flood emergency response and contingency plan has been submitted to, and after consultation with the Environment Agency, approved by the relevant planning authority.
- (7) The plan approved pursuant to sub-paragraph (6) must be implemented throughout the commissioning and operation of the authorised development unless otherwise agreed with the relevant planning authority."
- 6.9 It is agreed between EPL and the EA that the ES provides a satisfactory assessment of the potential flood risks to and resulting from the Proposed Development and that the mitigation measures identified are appropriate. Furthermore, that the inclusion of draft DCO Requirement 14 'Flood risk mitigation' would ensure that the identified mitigation measures are applied and that this would prevent impacts in terms of flooding.



#### 7.0 WATER RESOURCES

- 7.1 It is agreed between EPL and the EA that the ES provides a satisfactory assessment of the potential pollution risks to surface water and groundwater during construction and operation of the Proposed Development and that the mitigation measures identified are appropriate. Furthermore, that the inclusion of draft DCO Requirements 13 'Surface and foul water drainage', 15 'Contaminated land and groundwater', 18 'Construction environmental management plan' and 25 'Piling and penetrative foundation design' would ensure that the identified mitigation measures are applied and that this would prevent impacts on surface water and groundwater, which would contribute to the achievement of Water Framework Directive objectives.
- 7.2 In order to address the above and provide appropriate safeguards for the EA, the following draft Requirements have been included within the draft DCO, the wording of which have been agreed between EPL and the EA.

#### Requirement 13: Surface and foul water drainage

- "(1) No part of the authorised development must commence until details of the temporary surface and foul water drainage systems, including means of pollution control in accordance with the construction environmental management plan and a management and maintenance plan to ensure that the systems remain fully operational throughout the construction of the relevant part of the authorised development have, for that part, been submitted to, and after consultation with the Environment Agency, lead local flood authority and relevant internal drainage board, approved by the relevant planning authority.
- (2) The scheme approved pursuant to sub-paragraph (1) must be implemented as approved and maintained throughout the construction of the authorised development unless otherwise agreed with the relevant planning authority.
- (3) Details of the permanent surface and foul water drainage systems, including a programme for their implementation, must be submitted to, and after consultation with the Environment Agency and relevant internal drainage board, approved by the relevant planning authority prior to the start of construction of any part of those systems.
- (4) The details submitted and approved pursuant to paragraphs (1) and (3) of this requirement must be in accordance with the principles set out in chapter 11 and appendix 11A of the environmental statement.
- (5) The scheme approved pursuant to sub-paragraph (3) must be implemented as approved and maintained throughout the operation of the authorised development unless otherwise agreed with the relevant planning authority."

### Requirement 15: Contaminated land and groundwater

"(1) No part of the authorised development must commence until a scheme to deal with the contamination of land, including groundwater, which is likely to cause significant harm to persons or pollution of controlled waters or the environment, has, for that part, been submitted to and, after consultation with the Environment Agency, approved by the relevant planning authority.



- (2) The scheme submitted and approved must be in accordance with the principles set out in chapter 12 of the environmental statement and the environmental statement commitments register and must be included in the construction environmental management plan submitted pursuant to requirement 18.
- (3) The scheme must include a risk assessment and a site investigation to identify the extent of any contamination and the remedial measures to be taken to render the land fit for its intended purpose, together with a materials management plan, which sets out long-term measures with respect to any contaminants remaining on the site.
- (4) The authorised development, including any remediation, must be carried out in accordance with the approved scheme unless otherwise agreed with the relevant planning authority."

### Requirement 18: Construction environmental management plan

- "(1) No part of the authorised development must commence until a construction environmental management plan has been submitted to and approved by the relevant planning authority.
- (2) The plan submitted and approved must be in accordance with the principles set out in appendix 5A of the environmental statement and the indicative landscaping and biodiversity strategy and incorporate—
  - (a) a code of construction practice, specifying measures designed to minimise the impacts of construction works;
  - (b) a scheme for the control of any emissions to air;
  - (c) a soil management plan;
  - (d) a sediment control plan;
  - (e) a scheme for environmental monitoring and reporting during the construction of the authorised development, including measures for undertaking any corrective actions; and
  - (f) a scheme for the notification of any significant construction impacts on local residents and for handling any complaints received from local residents relating to such impacts during the construction of the authorised development.
- (3) All construction works associated with the authorised development must be carried out in accordance with the approved construction environmental management plan unless otherwise agreed with the relevant planning authority."

## Requirement 25: Piling and penetrative foundation design

"(1) No part of the authorised development comprised within Work No. 1 must commence until a written piling and penetrative foundation design method statement, informed by a risk assessment, for that part, has been submitted to and, after consultation with the Environment Agency, approved by the relevant planning authority.



(2) All piling and penetrative foundation works must be carried out in accordance with the approved method statement unless otherwise agreed with the relevant planning authority."



#### 8.0 LANDSCAPE AND BIODIVERSITY PROVISIONS

- 8.1 It is agreed that a landscaping and biodiversity provision is required as part of the Proposed Development in order to enhance the Site provision. It is also agreed that an integrated landscape and biodiversity strategy is preferable to considering each aspect in isolation.
- 8.2 It is agreed that the Indicative Landscape and Biodiversity Strategy (Application Document Ref. 5.10) covers the key points that need to be included in the approved strategy.
- 8.3 For any works associated with the decommissioning of the lagoon on the Site, it is agreed that any contractor undertaking fish removal must hold all the appropriate permits to enable them to carry out such works.
- 8.4 The Strategy states that all grass cuttings from managed areas of the Site will be removed and used to create habitat piles in woodland edge areas and around the attenuation pond to provide habitat for species such as grass snake. Given the potential large volume of grass cuttings, it is agreed that that grass compost heaps will not be positioned in such a manner which allows run-off/leachate to organically enrich surface waterbodies.
- 8.5 In order to address the above and provide appropriate safeguards for the EA, the following requirement has been included within the draft DCO, the wording of which has been agreed between EPL and the EA.

## Requirement 6: Landscaping and biodiversity protection, management and enhancement

- "(1) No part of the authorised development must be commenced until a landscaping and biodiversity protection plan for that part has been submitted to and, after consultation with North Yorkshire County Council and the Yorkshire Wildlife Trust, approved by the relevant planning authority.
- (2) The plan submitted and approved pursuant to sub-paragraph (1) must include details of—
  - (a) measures to protect existing shrub and tree planting that is to be retained; and
  - (b) biodiversity and habitat mitigation and impact avoidance.
- (3) The plan submitted and approved pursuant to sub-paragraph (1) must be implemented as approved throughout the construction of the authorised development unless otherwise agreed with the relevant planning authority.
- (4) No part of the authorised development must be commissioned until a landscaping and biodiversity management and enhancement plan for that part has been submitted to and, after consultation with North Yorkshire County Council and the Yorkshire Wildlife Trust, approved by the relevant planning authority.
- (5) The plan submitted and approved pursuant to sub-paragraph (4) must include details of—
  - (a) all new shrub and tree planting;
  - (b) measures to enhance existing shrub and tree planting that is to be retained;



- (c) measures to enhance biodiversity and habitats;
- (d) an implementation timetable; and
- (e) annual landscaping and biodiversity management and maintenance.
- (6) Any shrub or tree planted as part of the approved plan that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased, must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless otherwise agreed with the relevant planning authority.
- (7) The plan submitted and approved pursuant to sub-paragraph (4) must be in accordance with the principles of the indicative landscaping and biodiversity strategy.
- (8) The plan must be implemented and maintained as approved during the operation of the authorised development unless otherwise agreed with the relevant planning authority. "



#### 9.0 USE OF BAT FOR CHOICE OF COOLING TECHNOLOGY

- 9.1 While it is recognised that several potential options exist for the selection of the cooling technology for the Proposed Development, a site specific Best Available Technique ('BAT') justification entitled 'BAT Assessment for Cooling Water, Eggborough CCGT' was prepared by AECOM, dated December 2016 and submitted to the EA in order to agree which technology represents BAT for the plant.
- 9.2 It is agreed that the use of Air Cooled Condensers does not represent BAT for the installation, since they cause a reduction in plant efficiency and an increase in noise impacts over other cooling technologies.
- 9.3 While direct cooling is recognised to be indicative BAT, for the capacity of plant proposed this would require substantially more water to be abstracted from the River Aire than the current licenced abstraction volumes for the existing coal-fired power station and subsequently the need to discharge the used water with significant heat load back to the River. This is agreed to be likely to lead to unacceptable impacts on the river environment. Whether direct cooling represents BAT will be considered as part of the EPR application.
- 9.4 Potentially the use of wet cooling towers or hybrid cooling towers represents BAT for the installation and the final decision between these has not been made by EPL as part of the DCO submission. The decision as to which cooling technology will be selected will be supported by a revised BAT justification as part of the EPR application. This will consider the potential efficiency penalties associated with each technology as well as an appraisal of potential environmental effects, including consideration of visible plume formation, noise impacts and water use.



## 10.0 SURFACE WATER AND GROUNDWATER ABSTRACTIONS/ DISCHARGES

- 10.1 It is agreed that EPL currently holds licences for the abstraction of surface water from the River Aire for cooling purposes, and groundwater from two boreholes into the Sherwood Sandstone Principal Aquifer, for raw water provision to the existing coal-fired power station.
- 10.2 It is also agreed that these existing abstraction licences will be retained for use by the operational Proposed Development. The volumetric requirements of each abstraction will be reviewed by EPL to ensure they remain within the current licensed provision. Cooling water would continue to be abstracted from the River Aire at the existing abstraction point on the south side of the River at Chapel Haddlesey, and discharged at the existing discharge point on the south side of the River at Eggborough Ings.
- 10.3 It is agreed that the Proposed Development will be required to meet the requirements of the Eels (England and Wales) Regulations 2009, which will require the installation of an eel screen on the surface water abstraction point, and potentially also on the discharge point. The eel screens by Requirement 5 'Detailed design', sub-paragraph (6)(b). The ES has therefore considered, and assessed, the need for temporary cofferdams, which may be installed within the River Aire at both locations to enable construction works to take place in the River.
- 10.4 It is agreed that process water and cooling water discharges from the Proposed Development will be appropriately treated and monitored on site prior to discharge to the River Aire, with any discharge only permitted in accordance with the requirements of the Environmental Permit for the installation.



## 11.0 COMBINED HEAT AND POWER ('CHP') READINESS

11.1 It is agreed that the CHP Assessment submitted as part of the DCO Application (Application Document Ref. 5.7) adequately demonstrates the 'CHP-Ready' status of the plant in accordance with the three BAT Tests outlined in the EA CHP-Readiness Guidance, dated February 2013. Furthermore, it is agreed that draft Requirement 28 'Combined heat and power' adequately secures space and routes for the provision of CHP over the lifetime of the Proposed Development (should CHP become economically viable in the future).

#### Requirement 28: Combined heat and power

- "(1) The authorised development must not be brought into commercial use until the relevant planning authority has given notice that it is satisfied that the undertaker has allowed for space and routes within the design of the authorised development for the later provision of heat pass-outs for off-site users of process or space heating and its later connection to such systems, should they be identified and commercially viable.
- (2) The undertaker must maintain such space and routes during the operation of the authorised development unless otherwise agreed with the relevant planning authority.
- (3) On the date that is 12 months after the authorised development is first brought into commercial use, the undertaker must submit to the planning authority for its approval a report ('the CHP review') updating the CHP assessment.
- (4) The CHP review submitted and approved must—
  - (a) consider the opportunities that reasonably exist for the export of heat from the authorised development at the time of submission; and
  - (b) include a list of actions (if any) that the undertaker is reasonably to take (without material additional cost to the undertaker) to increase the potential for the export of heat from the authorised development.
- (5) The undertaker must take such actions as are included, within the timescales specified, in the approved CHP review unless otherwise agreed with the relevant planning authority.
- (6) On each date during the operation of the authorised development that is five years after the date on which it last submitted the CHP review or a revised CHP review to the relevant planning authority, the undertaker must submit to the relevant planning authority for its approval a revised CHP review.
- (7) Sub-paragraphs (4) and (5) apply in relation to a revised CHP review submitted under subparagraph (6) in the same way as they apply in relation to the CHP review submitted under sub-paragraph (3)."



## 12.0 CARBON CAPTURE READINESS ('CCR')

12.1 EPL considers that the Carbon Capture Readiness ('CCR') Assessment submitted as part of the Application (Application Document Ref. 5.8) adequately demonstrates that the Proposed Development meets the requirements of the CCR Guidance URN 09D/810, dated November 2009. Furthermore, EPL considers that Requirements 31 'Carbon capture readiness site' and 32 'Carbon capture readiness monitoring report' adequately secure space for the provision of carbon capture and compression equipment over the lifetime of the Proposed Development (should CCR become economically viable in the future).

### Requirement 31: Carbon capture readiness site

- "(1) Until such time as the authorised development is decommissioned, the undertaker must not, without the consent of the Secretary of State—
  - (a) dispose of any interest in the carbon capture readiness site; or
  - (b) do anything, or allow anything to be done or to occur,

which may reasonably be expected to diminish the undertaker's ability, within two years of such action or occurrence, to prepare the carbon capture readiness site for the installation and operation of carbon capture equipment, should it be deemed necessary to do so."

#### Requirement 32: Carbon capture readiness monitoring report

- "(1) The undertaker must make a report ('carbon capture readiness monitoring report') to the Secretary of State—
  - (a) on or before the date on which three months have passed from first commercial use; and
  - (b) within one month of the second anniversary, and each subsequent even-numbered anniversary, of that date.
- (2) Each carbon capture readiness monitoring report must provide evidence that the undertaker has complied with requirement 31—
  - (a) in the case of the first carbon capture readiness monitoring report, since this Order was made; and
  - (b) in the case of any subsequent report, since the making of the previous carbon capture readiness monitoring report, and explain how the undertaker expects to continue to comply with requirement 31 over the next two years.
- (3) Each carbon capture readiness monitoring report must state whether the undertaker considers the retrofit of carbon capture technology is feasible explaining the reasons for any such conclusion and whether any impediments could be overcome.
- (4) Each carbon capture readiness monitoring report must state, with reasons, whether the undertaker has decided to seek any additional regulatory clearances, or to modify any existing regulatory clearances, in respect of any carbon capture readiness proposals."



- 12.2 The EA initially disagreed with the statement in paragraph 11.1 that the CCR assessment demonstrates that the development meets the requirements of the CCR guidance (URN 09D/810). In its Relevant Representation the EA's Relevant Representation stated that before it could conclude that there are no foreseeable barriers to the technical feasibility of carbon capture retrofit, it required the following information:
  - "The location of the hybrid cooling towers dedicated to the carbon capture plant needs to be clearly identified on the plot plan (Figure 1); 2. The extent of the 120,000m2 area allocated to the carbon capture plant and equipment needs to be clearly marked on the plot plan (Figure 1); 3. A statement is required on the sizing of the flue gas ductwork."
- 12.3 An updated version of Figure 1 'Carbon Capture Indicative Layout Rev. 2.0' was provided to the EA in advance of Deadline 2. The EA has confirmed that the updated version of Figure 1 provides the necessary information. A copy of Figure 1 was submitted at Deadline 2 as Appendix 1 of Document Ref. 9.2 (The Applicant's Comment on Relevant Representations).
- 12.4 On this basis, the EA accepts the conclusions of the CCR Assessment.



## 13.0 AREAS OF DISAGREEMENT

13.1 There are no areas of disagreement between the parties.

Signed		* sv
Print name and position. MICH PEODER	PLANNING	SPECIALIST
On behalf of the Environment Agency  Date	ε	

Signed

Geoff Bullock, Partner

On behalf of Eggborough Power Limited

Date 17.11.17



## **APPENDIX 1: CARBON CAPTURE PLANT INDICATIVE LAYOUT PLAN**

