

THE EGGBOROUGH CCGT PROJECT – STAGE 1 CONSULTATION: PROJECT INFORMATION DOCUMENT

Welcome

Eggborough Power Ltd (EPL) is proposing to develop a new gas-fired power station on the site of its existing coal-fired power station at Eggborough near Selby, North Yorkshire (please see the aerial image and site location plan overleaf).

We will be consulting the local community and other stakeholders on our proposals during the course of September and October 2016. A number of public exhibitions will be held close to the site (details below) at which there will be an opportunity to meet members of the project team, ask questions, discuss the proposals and provide comments.

This is the first stage of consultation (Stage 1) on the Project. A further stage of consultation (Stage 2) on our more developed proposals will be held in early 2017.

Public Exhibitions

Date	Venue	Time
27 September 2016	East Cowick Village Hall, High Street, East Cowick, DN14 9EP	2:00 to 9:00pm
28 September 2016	Selby Town Hall, York Street, Selby, YO8 4AJ	2:00 to 9:00pm
29 September 2016	Knottingley Town Hall, Hilltop, Headlands Ln, Knottingley, WF11 9DG	2:00 to 9:00pm
30 September 2016	Eggborough Power Station Sports and Social Club, Eggborough, Goole, DN14 0UZ	2:00 to 9:00pm

The aims of the consultation

The aims of this event are to:

- introduce the Eggborough CCGT Project and to explain the need for a new gas-fired power station;
- show where the power station may be located and how it may look;
- provide information on how the power station would work;
- outline how the consenting process works;
- provide details of the studies being undertaken to assess the potential environmental effects of our proposals; and
- to gather feedback that will help shape our proposals as they are developed in more detail.







About Eggborough Power Limited

Eggborough Power Ltd (EPL) owns and operates the existing 2,000 megawatt (MW) Eggborough coalfired power station, including the land upon which the new gas-fired power station would be built.

EPL was acquired by EP UK Investments Ltd (EP UK) in late 2014; a subsidiary of Energetický A Průmyslový Holding (EPH).

EPL has appointed a consultant team comprising Dalton Warner Davis LLP, AECOM, Fichtner, Ardent and Pinsent Masons LLP to undertake the necessary technical and environmental studies and prepare an application for consent that it is currently envisaged would be submitted in late spring/early summer 2017.

Overview of our proposals

The new gas-fired power station would generate around 2,000 megawatts (MW) of electricity, similar to that generated by the existing coal-fired power station. It would be a combined cycle gas turbine (CCGT) power station comprising a number of CCGT units. It may also include a number of smaller 'fast response' gas-fired 'peaking plants' and what is known in the industry as 'black start' capability. The new power station would be located within the boundary of the existing coal-fired power station site.

The primary fuel source would be natural gas supplied from the main UK gas network (the National Transmission System) to the north via a new gas pipeline. The electricity produced would be exported to the grid via an existing electricity substation located within the site. There would be some diesel storage on site for black start purposes. The black start would allow the new power station to restart the national electricity grid in the event of a partial or total loss of power on the grid. The 'fast response' or 'peaking' plant would provide electricity to the network at short notice during times of high demand or unexpected shortfalls elsewhere on the network. As with the existing coal-fired power station, cooling water would be taken from and discharged to the River Aire using the same abstraction and discharge points. Some water would also be taken from existing boreholes within the site.

Subject to EPL receiving consent and making a final investment decision, construction could begin in 2019 with the power station potentially being operational by 2022. It would take around 3 years to build the power station, with the installation of the gas pipeline taking in the region of 9-12 months.

There would be around 800 workers on site during the peak of construction. Once the power station is operational, there would be around 40 full-time staff employed on site on a 24 hour shift basis. Additional workers would be needed on site during plant maintenance periods.

Why are we proposing a gas-fired power station?

The UK needs to develop new electricity generation capacity to replace its aging coal-fired power stations, which are due to close over the next few years. This needs to happen to help safeguard the security of electricity supply to the country's homes and businesses. The urgent need for new generation capacity is set out in Government policy.

The UK is increasingly reliant on renewable energy, primarily wind energy, which is intermittent in nature and dependent on weather conditions. Gas-fired power stations provide flexibility within the UK's generation mix, being able to respond rapidly to fluctuations in supply (e.g. when the wind isn't



blowing) and ensure that enough electricity is generated. Gas-fired power stations are also cleaner than those using coal or oil and emit significantly lower CO₂ emissions per MW than other fossil fuels.

The Eggborough CCGT Project would be capable of generating enough electricity to supply around 2 million homes per year, which is equivalent to providing up to 4% of the UK's electricity. It would therefore make a significant contribution to UK electricity supply in terms of both security and flexibility, while contributing to the Government's carbon reduction targets.

The proposed development site

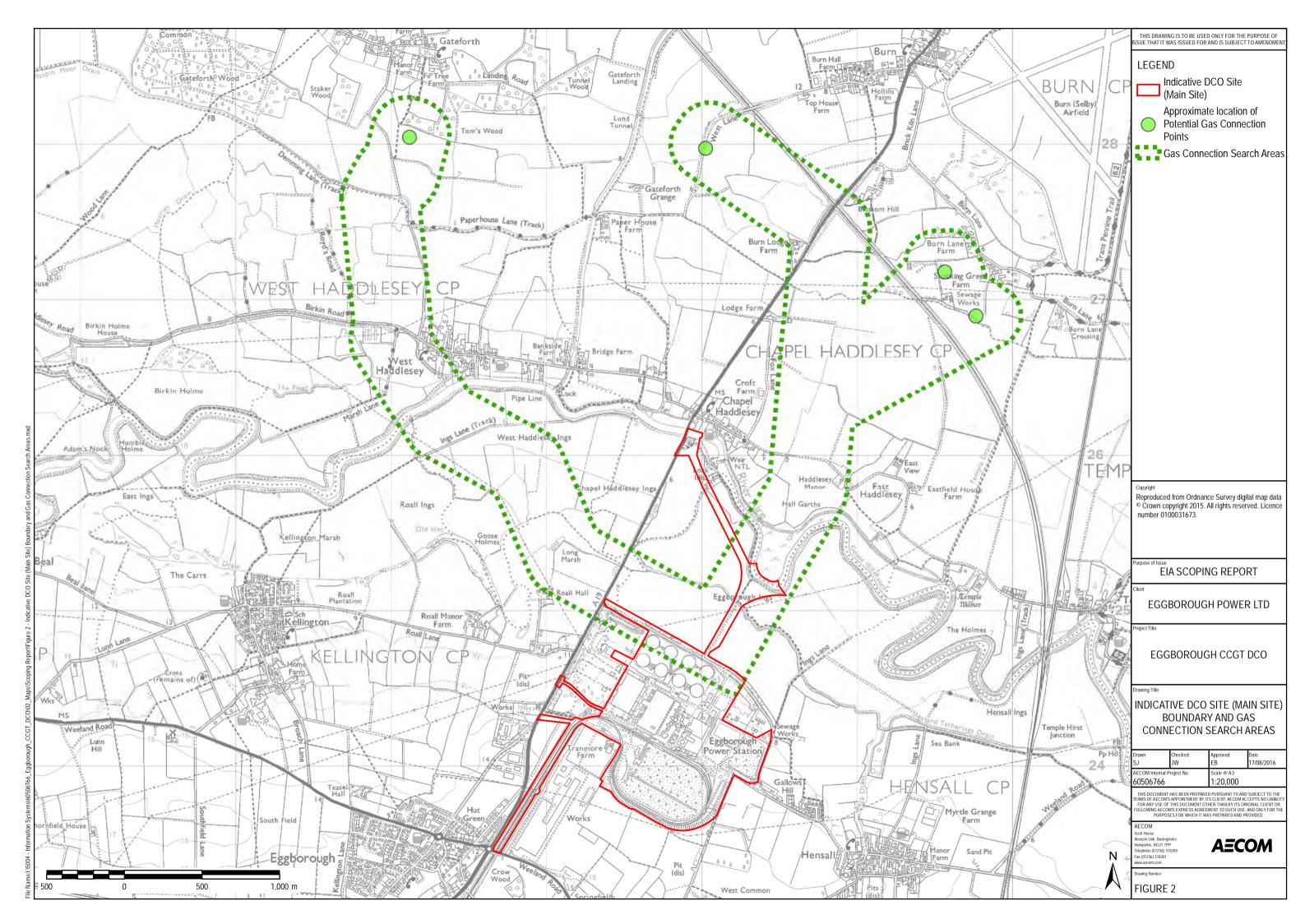
The new gas-fired power station would be built within the boundary of the existing coal-fired power station site, to the north-east of Eggborough village and south-west of Selby in North Yorkshire.

The site has a long history of power generation use and comprises brownfield land benefiting from existing electricity grid connection, water supply, road and rail infrastructure. Local planning policy also recognises the importance of the site for power generation.

The likely extent of the site for the new power station covers around 114 hectares and is outlined in red on the plan overleaf. This includes the land required for the power station in addition to associated infrastructure connections and other works.

Not all of the site would be built on. Some of the land would only be required on a temporary basis for the construction stage (e.g. for the laydown and storage of materials and plant). We also need to design the power station to be 'Carbon Capture Ready'. This means that we need to 'reserve' land within the site to accommodate potential future carbon capture facilities, if and when the technology is both viable and technically feasible.

The new gas pipeline would run north approximately 3-4 kilometres from the new power station to the National Transmission System pipeline that was recently installed by National Grid. We are currently considering two potential corridors of land for the pipeline outlined by the green dotted lines on the plan included overleaf.



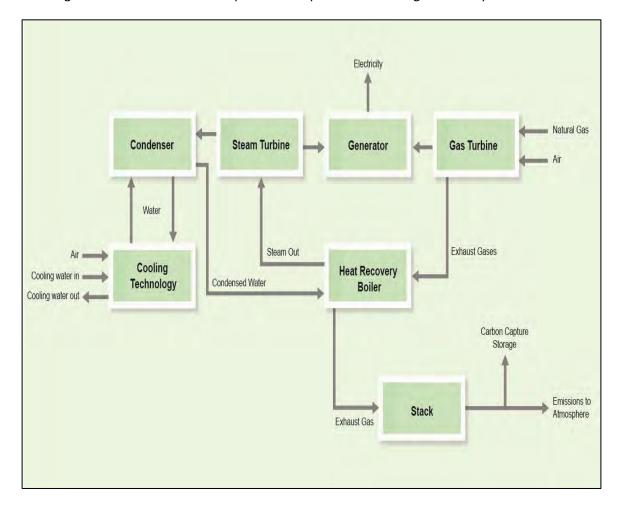


What is CCGT?

The new power station would employ combined cycle gas turbine (CCGT) technology. In a CCGT power station, natural gas fuel is fired in the combustion system to drive a gas turbine, which is connected to a generator to produce electricity. The hot exhaust gases generated by the gas turbine are passed through a heat recovery boiler to recover more of the heat. The boiler generates steam to produce further electricity via a steam turbine. The steam leaving the steam turbine is then condensed and this water is returned to the process for reuse.

A cooling system is required to condense the steam used in the generation process. This is why a connection to the River Aire for cooling water is required.

The electrical efficiency of a modern CCGT power station, dependent on technology selection, can be greater than 60%. This is considerably higher than conventional coal or oil-fired power stations, which have an efficiency of around 35-40%.



The diagram below illustrates the inputs and outputs of the CCGT generation process.



Power station siting and layout options

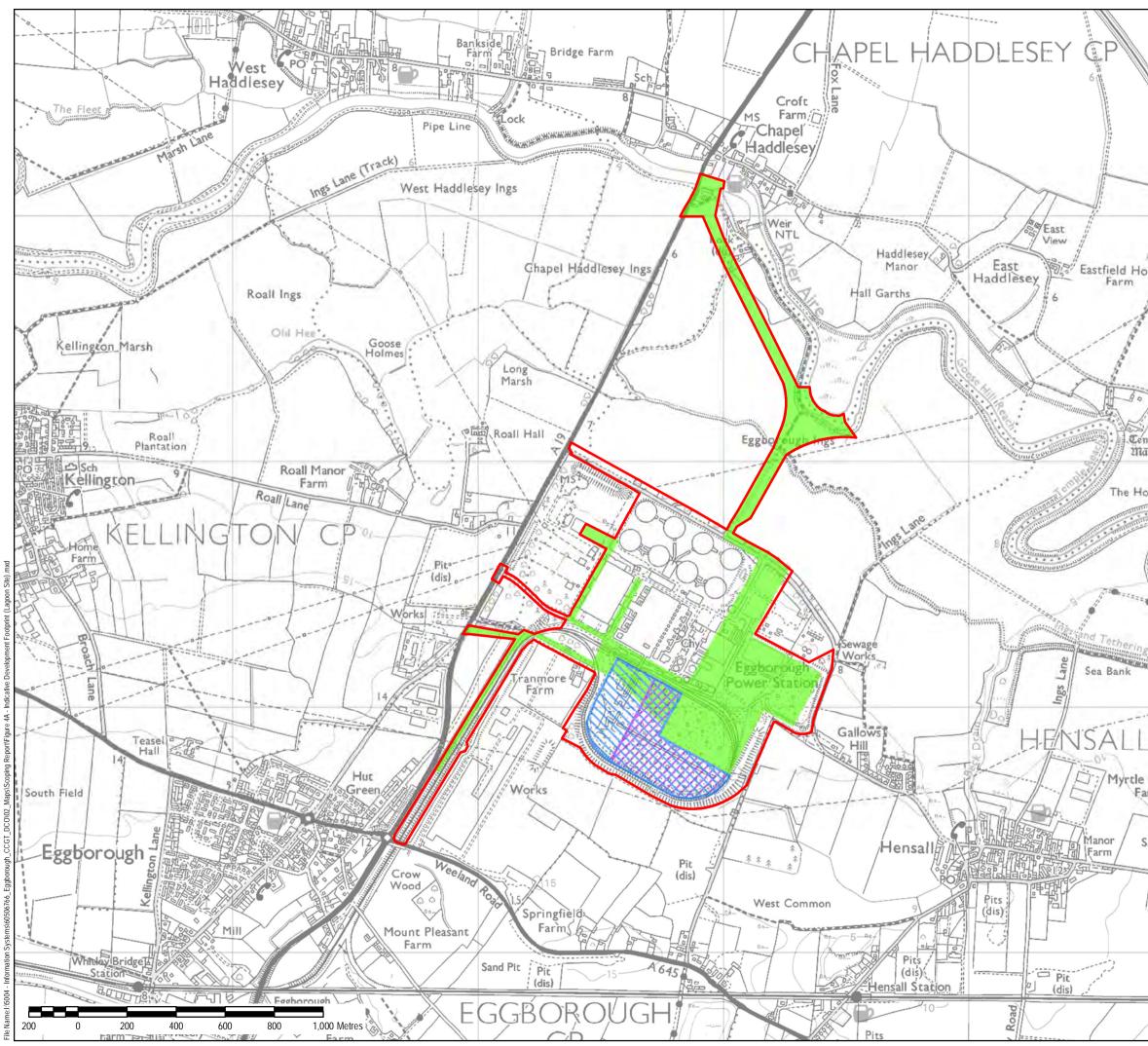
A number of potential siting options have been considered for the new power station within the boundary of the existing coal-fired power station. These options have been the subject of detailed technical and environmental assessments. Following these assessments, we have selected two siting options for further consideration. These options are:

- the 'Coal Stockyard Site', located within the existing coal stockyard; and
- the 'Lagoon Site', located to the north-east of the coal stockyard, on land currently comprising a man-made lagoon, strategic coal stockyard (not in use) and contractor site offices.

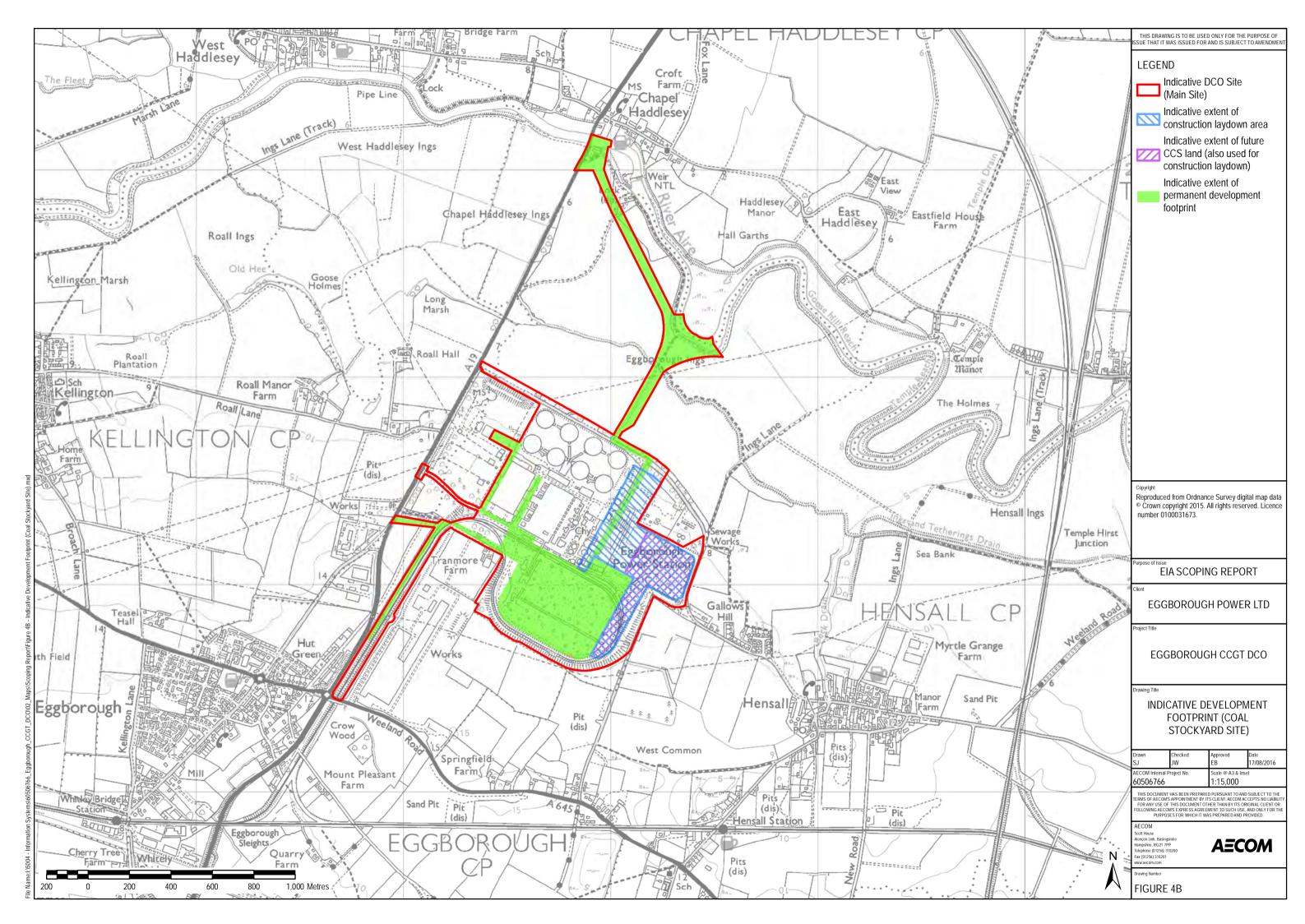
The above are shown on the plans overleaf.

These options were preferred on the basis that they involve primarily brownfield land (meaning there would be no significant loss of greenfield land) and would allow the new power station to be built without impacting upon the continued operation of the existing coal-fired power station for the next few years. The coal-fired station would cease to operate before the new power station started to generate electricity.

The two siting options are currently the subject of further assessment work and a decision on the preferred option will be made toward the end of this year. Alongside this work, we are in the early stages of developing the layout for power station. We will consult on the preferred siting option and the layout of the power station as part of our Stage 2 consultation in early 2017.



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What will the new power station look like?

To help give you an idea of the scale and appearance of the new power station, we have produced some indicative 3D images for the two siting options being considered, taking account of the initial layout work. These are shown overleaf.

The 3D images are based upon a maximum 'built envelope' that takes account of the range of different plant technologies that could be selected for the power station. A final decision on plant technology would not be made until after consent has been received. The consented envelope for the power station therefore needs to be large enough to accommodate the different plant technology options that are available so as not to constrain the Project at this early stage. The detailed design of the power station (following technology selection) is likely to result in many of the power station buildings and structures being smaller in scale and massing than shown here.

Further work will be undertaken on the scale, massing and appearance of the power station later this year and this will form part of the Stage 2 consultation in early 2017.







The gas pipeline

We are currently considering two potential corridors of land within which to locate the gas pipeline (outlined by the green dotted on the plan included earlier in this document). These run north approximately 3-4 kilometres from the existing coal-fired power station site to the National Gas Transmission System. The corridors comprise mainly agricultural land and may cross features such as roads, a railway line, drainage ditches and the River Aire.

Not all of the land within the green dotted lines would be needed for the pipeline. The corridors are currently being surveyed and will be assessed for suitability taking account of technical, environmental, planning and landownership considerations to assist us in selecting a preferred pipeline route. The selected route will seek to avoid constraints wherever possible and minimise impacts. The assessment of the corridors will be completed later this year.

The pipeline itself would be approximately 600 millimetres in width and buried to a depth of at least 1.2 metres. The majority of the pipeline would be installed using an 'open cut' method, where a trench is excavated and pipe laid within it. Once the pipeline is installed the trench would be backfilled and the land reinstated. Where the pipeline needs to cross roads, railways or the River, boring or horizontal directional drilling methods would be used. These in effect involve tunnelling under the feature in question, with a section of pipeline then being fed through to connected to the sections of pipeline either side that have been installed by the open cut method.

The 'working width' during construction (the corridor of land within which construction activities would take place) would generally be no more than 36 metres. Once the pipeline has been installed the land would be reinstated to its former use and condition, which for the most part would be for agricultural purposes.

An above ground installation (AGI) would be required at the chosen connection pipeline connection point to the National Transmission System (indicated by the green dots above). This would comprise a compound with small buildings and the necessary connection infrastructure.

We will provide information on the selected gas pipeline route during the Stage 2 consultation.

Assessing potential environmental impacts

As part of the consenting process for the Eggborough CCGT Project, we are undertaking an Environmental Impact Assessment (EIA) to consider the effects of the Project on the environment and to develop measures to avoid or reduce any impacts (known as mitigation).

The EIA will look at all potential impacts on the environment associated with site preparation works, construction, operation and eventual decommissioning of the new power station and gas pipeline. We will also take account of any potential impacts arising in combination with other consented and planned developments in the wider area.

Based on information currently available regarding the Project and our knowledge of the site and surroundings, a proposed scope for the EIA has been developed. This is set out in our Scoping Report, which is available to view at this event and on the project website: www.eggboroughccgt.co.uk.



The findings of the EIA will be set out in an Environmental Statement (ES) which will include:

- a description of the gas-fired power station and pipeline;
- an outline of the main alternatives considered and the reasons for the decision made with regard to matters such as siting and layout;
- the data to identify and assess the main effects which the Project is likely to have on the environment; and
- a description of the measures required to avoid or reduce environmental impacts the proposed mitigation.

We are currently assessing the likely impacts of the Project in relation to the following environmental topics:

- air quality;
- noise and vibration;
- ecology;
- flood risk and water resources;
- geology, hydrogeology and land contamination;
- archaeology and cultural heritage;
- traffic and transport;
- land use, agriculture and socio-economics;
- landscape and visual impact;
- waste management; and
- sustainability and climate change.

The above will be reported in the ES. Several of the key topics are outlined in this exhibition.

Air Quality

As part of the Environmental Impact Assessment (EIA) process, the potential impacts of the new power station on air quality will be assessed.

The power station, when operational, would result in some emissions to air, via one or more emissions stacks. These emissions would include nitrogen oxides, carbon monoxide, CO_2 and potentially additional trace pollutants. The power station would be designed to comply with the requirements of the Industrial Emissions Directive (IED) and would be regulated by the Environment Agency through an environmental permit. In overall terms, the emissions would be significantly less than the existing coal-fired power station; in particular, no dust (a common feature of coal stations) and minimal sulphur dioxide would be emitted to the atmosphere.

We are currently assessing whether one or more stacks (chimneys) would be required for the power station. The height of the stack(s) will be determined based on detailed air quality modelling and set at a height to protect sensitive receptors (e.g. people and wildlife sites) from any effects associated with the emissions. At present it is anticipated that the stack(s) would be up to 90 metres in height. For



information, the main stack associated with the existing coal-fired station is approximately 200 metres high.

The air quality assessment will also consider potential impacts arising from traffic associated with the Project. However, as the fuel for the power station (natural gas) would be delivered by pipeline, there is expected to be a reduction in operational traffic and associated emissions compared to the existing coal-fired station.

Noise

Potential noise impacts associated with the Project will also be assessed as part of the EIA.

The closest residential properties to the new power station plant are likely to be in Gallows Hill and Hensall to the east. A number of residential properties are also located to the west and south of the proposed site for the new power station and in the vicinity of the gas pipeline corridors currently under consideration.

Noise levels at these properties during the construction, operation and decommissioning of the Project will be predicted, and measures to reduce or control noise will be introduced to the design of the Project where necessary, in order to prevent any unacceptable noise levels at these properties.

Traffic and transport

A preliminary assessment has been undertaken to establish the level of traffic that is likely to be associated with the Project.

The principal vehicle movements are anticipated to be associated with the construction phase and therefore would be temporary. The volume of construction vehicles associated with the delivery of plant and materials and the labour force has not been determined at this stage, but based on other similar sized projects is likely to be between 600 and 900 one-way vehicle movements per day during the peak construction period.

To address the impacts of the construction phase on the transport network, a Transport Assessment will be produced. The scope for the assessment will follow the guidelines set out in relevant government guidance.

During the operational phase of the development, it is anticipated that there would be a workforce of approximately 40 people that would be required on a shift basis to be spread over a 24 hour period. Staff would travel to and from work in a variety of directions. The primary fuel source (natural gas) would be delivered by pipeline and other operational and maintenance consumables are likely to be minimal. Therefore, it is considered that the effects of operational traffic would be negligible and a detailed assessment of the operational phase of the Project is not proposed, although consideration is being given to traffic volumes during plant shutdown and maintenance periods.

Environmental inputs to the design of the power station

Detailed baseline information is currently being collected for each environmental assessment topic to be considered in the Environmental Impact Assessment (EIA).



Sensitive receptors, including residential properties, schools, important wildlife habitats and species, and heritage assets are being identified for further assessment.

The layout and design of the new power station is being developed to avoid and minimise environmental effects wherever possible. For example, the suggested siting options minimise loss of existing woodland within the existing coal-fired power station site to protect the existing landscape and wildlife habitats and to make the most of the screening it provides.

The power station will also be designed to avoid any change to the existing risk of flooding on and off site.

Photomontages are being prepared from various representative points to illustrate views of the new power station from key locations around the site. These will be available during the Stage 2 consultation.

Additional mitigation will be developed as the EIA progresses, where it is needed. This may include measures that are embedded into the design of the power station, as well as method statements and management plans to control impacts during construction, operation and decommissioning.

Land required for the Project

The two siting options for the new power station are within the area of land owned by EPL. This means that it is unlikely that any additional land would be required from third parties for this part of the Eggborough CCGT Project.

The other elements of the Project, including the gas pipeline and its connection point to the National Transmission System, would require construction works and then the retention and operation of equipment on land that EPL does not currently own. As the exact route for the gas pipeline remains under consideration, EPL cannot state at this stage which areas of land it is likely to need. However, the corridor of land required for the installation of the pipeline (the temporary working width) would only be around 36 metres.

What will happen to the coal-fired power station?

In the next few years the existing coal-fired power station will cease to operate. The exact timing of the closure of the coal-fired station and its subsequent decommissioning and demolition is still under review. However, the coal-fired station will have ceased generation by 2022, which is the earliest date by which the new power station would be operational.

It would not be possible for the two power stations to operate at the same time, because they require the same grid connection, river water intake and discharge infrastructure, and groundwater boreholes. However, there is expected to be some overlap in the timing of the demolition of the coal-fired station and the construction and operation of the new power station. This will be considered within the Environmental Impact Assessment for the Eggborough CCGT Project in order to provide a robust assessment of the potential combined environmental impacts.

The decommissioning and demolition of the existing coal-fired station is being progressed independently of the Eggborough CCGT Project and will not form part of the application for consent.



The application process

Before the Eggborough CCGT Project can be built, we need to apply for a Development Consent Order (a 'DCO') from the Secretary of State for the Department of Business, Energy and Industrial Strategy (BEIS) under the Planning Act 2008.

The main parts of the DCO process are summarised below:

- We must consult on our proposals before an application is submitted (this Stage 1 consultation forms part of that consultation and will be followed by the Stage 2 consultation in early 2017). We will then need to prepare a consultation report showing how we have taken the comments received during consultation into account in formulating our final proposals.
- The DCO application will then be submitted to the Planning Inspectorate ('PINS'), a Government agency that is responsible for administering the DCO process on behalf of the Secretary of State.
- Following submission of the application, PINS will decide whether it can be 'accepted' for examination. If PINS confirm the application is accepted for examination we will then need to notify interested parties of this.
- The examination of the application will be run by an Inspector (known as the 'examining authority') appointed by PINS and must be completed within 6 months. During the examination there will be an opportunity for interested parties to make comments and attend the hearings into the Project that will be held by the Inspector.
- At the end of the examination the Inspector has 3 months to write a report and to recommend to the Secretary of State whether or not he should grant the DCO.
- The Secretary of State has 3 months to consider the Inspector's recommendation and make his decision on whether or not to grant the DCO.
- The DCO would be in the form of a statutory instrument (i.e. it would be a piece of legislation) and it can include or remove the need for various consents and powers. These include planning permission, highways works powers and the ability to compulsorily acquire land or rights over land.
- The powers and consents that we will ask are included in the DCO will be determined as our proposals develop up to the submission of the DCO application.



What happens next?

Further information on the DCO application process can be found at:

- www.infrastructure.planningportal.gov.uk; or
- call 0303 444 5000

The outcome of the Stage 1 consultation will be used to inform the development of our proposals. During the Stage 2 consultation we will consult you on our preferred options and more developed proposals having reviewed comments received at Stage 1 and undertaken further studies.

We will advertise our Stage 2 consultation events nearer the time, through letters, newsletters, newspaper notices and the Project website.

Feedback and further information

As part of the Stage 1 consultation process we would be grateful if you could let have us your comments by **14 October 2016**.

You can provide your comments and feedback on our proposals by:

- filling in a feedback form at one of the public exhibitions and giving it to a member of the project team;
- Filling in a feedback form and posting it to: Eggborough CCGT Consultation, c/o Dalton Warner Davis LLP, 21 Garlick Hill, London, EC4V 2AU;
- filling in a feedback form on the project website at: <u>www.eggboroughccgt.co.uk</u>; or
- sending comments to us by email: consultation@eggboroughccgt.com.

Further information on our proposals can be found at the project website: <u>www.eggboroughccgt.co.uk</u>