

THE EGGBOROUGH CCGT PROJECT – STAGE 1 CONSULTATION: SOME OF YOUR QUESTIONS ANSWERED

Who is Eggborough Power Ltd?

Eggborough Power Ltd (EPL) owns and operates the existing 2,000 megawatt (MW) Eggborough coal-fired power station and also manages the nearby Gale Common ash disposal site.

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

What is the Eggborough CCGT Project?

EPL is preparing an application for a Development Consent Order (DCO) under the Planning Act 2008 for the construction and operation of a combined cycle gas turbine (CCGT) power station at the existing Eggborough Power Station site, near Selby, North Yorkshire. The project is known as the Eggborough CCGT Project (the 'Project').

The new power station would have a capacity of around 2,000 MW (similar to the existing coal-fired power station), comprising a number of high efficiency CCGT units. It may also include a number of smaller 'fast response' gas-fired turbines peaking plants and what is known in the industry as 'black start' capability.

The primary fuel source would be natural gas supplied from the main UK gas network (the National Gas 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.

What is a Development Consent Order?

The Project falls within the definition of a 'nationally significant infrastructure project' (NSIP) under Section 15(2)(c) of the Planning Act 2008 as a 'generating station exceeding 50 MW'. As the Project is an NSIP, 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 before it can be built.

A DCO is a piece of legislation that is required before construction on an NSIP, such as the Project, can take place and it includes various consents and powers to enable a project to be developed. These include planning permission, highways works powers and the ability to compulsorily acquire land or rights over land, if required. The consents and powers that EPL will seek to include in the DCO will be determined as the Project develops, up to the submission of the DCO application.

The main parts of the DCO application process are summarised below:

- Following consultation, 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 is a piece of legislation) and it can include or remove the need for various consents and powers. As stated above, these can 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.

Why and who are we consulting?

We must consult on our proposals before the DCO application can be submitted to the Secretary of State. This Stage 1 consultation forms part of that consultation and will be followed by our Stage 2 consultation in early 2017. We will need to prepare a consultation report (to accompany the DCO application) showing how we have taken the comments received during consultation into account in formulating our final proposals.

We will be consulting with the local community (including residents and businesses) and other key local stakeholders (e.g. local elected members), local authorities such as Selby District Council and North Yorkshire County Council and technical consultees such as the Environment Agency, Natural England, Historic England and Highways England, amongst others.

How can comments be made?

We wish to receive your comments on our proposals and would be grateful if you could let us have these 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 that is being held in late September 2016 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: www.eggboroughccgt.co.uk; or
- sending comments to us by email: consultation@eggboroughccgt.com.

Why is the new power station needed?

The Project would provide a long-term replacement for the existing coal-fired power station at the site. It would continue power generation at the site, providing a high efficiency gas-fired power station that can achieve a similar electrical output to the existing coal-fired 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, including gas-fired power stations, 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 Project would make a significant contribution to UK electricity supply in terms of both security and flexibility, while contributing to the Government's carbon reduction targets.

What will happen to the coal-fired power station?

In the next few years the existing coal-fired power station will cease to operate, as required by the Government. 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.

How much electricity would be generated by the new power station?

The 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. As stated above, this is similar to the existing coal-fired power station, although gas-fired power stations are more efficient and have lower carbon emissions.

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%.

Where would the power station and gas pipeline be located?

The power station would be built within the boundary of the existing coal-fired power station site. Following consideration of a number of potential siting options, two locations within the coal-fired power station site are being considered further for the power station. These are the 'Coal Stockyard' and the 'Lagoon Site', comprising a man-made lagoon, strategic coal stockyard (not in use) and contractor site offices.

The new gas pipeline would run north approximately 3-4 kilometres from the new power station to the National Transmission System. We are currently considering two potential corridors of land for the pipeline.

What land is 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 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.

We will be engaging with landowners and are committed to negotiating with the owners of the relevant land to acquire the interests needed by agreement.

How high would the emissions stack be?

We are currently assessing whether the new power station would require one or more emissions stacks (chimneys). The height of the stack(s) will be determined by air quality and air dispersion modelling to ensure that the power station complies with emissions standards. It is anticipated that the stack(s) would be up to 90 metres in height. To place this in context, the main stack for the coal-fired power station is 198.5 metres in height and the cooling towers are 114 metres in height.

How long would it take to construct the power station and gas pipeline?

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.

How many jobs would be created?

There would be around 800 workers on site during the peak of the 3 year construction period, with an average of around 500 workers throughout this period.

Once operational there would be approximately 40 full-time staff employed on site on a 24 hour shift basis. Additional workers would be needed on site during plant maintenance periods.

It is expected that the local economy would benefit from additional business for local hotels, restaurants and other service providers during the construction of the Project and that there would be supply chain opportunities both during construction and operation.

Would the Project be safe?

Yes. The new power station would have to comply with strict regulations and it would be regulated through an environmental permit issued by the Environment Agency and would also be subject to regulation by the Health and Safety Executive.

As with all the gas pipelines running across the country, the new gas pipeline to be installed would be designed to meet stringent safety requirements and would be fully tested before it is used.

Would the DCO application include an environmental statement?

Yes. 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) that will form part of the DCO application. This 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 considered below.

What would be the impact on air quality?

All modern power stations are fitted with air emissions control technologies to monitor and control potential emissions. The extent of air emissions control technology coupled with stringent environmental regulations means that the new power station will be designed and operated to have no significant impact on air quality or health.

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, CO₂ 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.

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. As stated above, at present it is anticipated that the stack(s) would be up to 90 metres in height.

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 significant reduction in operational traffic and associated emissions compared to the existing coal-fired station.

What would be the impact on 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 would also be 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.

What would be the impact on traffic?

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.

What is the process and timeline for the Project?

The process and timeline for the Project is currently as follows:

- Stage 1 consultation (this consultation) - September/October 2016.
- Stage 2 consultation on more developed proposals - early January 2017.
- Submission of the DCO application - late spring/early summer 2017.
- Examination of the application by PINS - autumn 2017 to spring 2018.
- Recommendation by the Inspector to the Secretary of State - by summer 2018.
- Secretary of State decision - by autumn 2018.
- Construction - may begin early 2019.
- Operation - power station could be operational by 2022.