Date: 1 June 2021 Your Ref: 14592



For a better world of energy



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Liam Fedden Case Manager The Planning Inspectorate National Infrastructure Planning Temple Quay House 2 The Square Bristol, BS1 6PN

By email to: Keadby3@planninginspectorate.gov.uk

Dear Liam

THE KEADBY 3 LOW CARBON GAS POWER STATION PROJECT

APPLICATION FOR DEVELOPMENT CONSENT UNDER SECTION 37 'APPLICATIONS FOR ORDERS GRANTING DEVELOPMENT CONSENT' OF THE PLANNING ACT 2008 FOR A GAS-FIRED ELECTRICITY GENERATING STATION EQUIPPED WITH POST-COMBUSTION CARBON CAPTURE PLANT; GAS, ELECTRICITY GRID, COOLING WATER AND UTILITY CONNECTIONS; CONSTRUCTION LAYDOWN AREAS; NEW AND MODIFIED ACCESSES; AND OTHER ASSOCIATED DEVELOPMENT

LAND AT AND IN THE VICINITY OF THE EXISTING KEADBY POWER STATIONS (KEADBY 1 AND KEADBY 2), KEADBY, NEAR SCUNTHORPE, NORTH LINCOLNSHIRE

We enclose an application (the 'Application') submitted on behalf of Keadby Generation Limited ('the Applicant') for a Development Consent Order (a 'DCO'), that 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 '2008 Act') in respect of the Keadby 3 Low Carbon Gas Power Station Project.

The Applicant is seeking development consent for the construction, operation and maintenance of the Keadby 3 Low Carbon Gas Power Station Project ('the Proposed Development') on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF (the 'Proposed Development Site').

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(1)(a) and 15(1) and (2) of the 2008 Act, as it is an onshore generating station in England that would have a generating capacity greater than 50MW. As such, a DCO application is required to authorise the Proposed Development in accordance with Section 31 of the 2008 Act. The DCO, if made by the SoS, would be known as the 'Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order' (the 'Order').

The Proposed Development will be built with a clear route to decarbonisation and represents a substantial investment in low carbon power infrastructure, being equipped with post-combustion carbon capture technology capable of capturing and compression of circa 2Mt of CO_2 per annum. The Proposed Development could be operational by the mid-2020s, which is consistent with SSE plc's commitment to reduce the carbon intensity of electricity generated by 60% by 2030, compared to

Partners

R J Greeves BSc (Hons) MRICS G Bullock BA (Hons) BPL. MRTPI A Vickery BSc MRICS IRRV (Hons) S Price BA (Hons) DipTP MRTPI A R Holden BSc (Hons) FRICS G Denning B.Eng (Hons) MSc MRICS B Murphy BA (Hons) MRUP MRTPI A Meech BSc MRICS S Page BA MA (Cantab) MSc MRTPI P Roberts FRICS CEnv T Lodeiro BA (Hons) PGDip MSc MRICS A Pilbrow BSc (Hons) MRICS IRRV(Hons)





2018 levels, and is a major enabler for the Zero Carbon Humber Carbon Capture, Usage and Storage¹ ('CCUS') cluster.

The Applicant and relationship with the wider CCUS chain

The Applicant, Keadby Generation Limited, is the owner of a large part of the Proposed Development Site and is a wholly owned subsidiary of SSE plc ('SSE').

The Proposed Development will connect to infrastructure that will be delivered by the Zero Carbon Humber (ZCH) Partnership² and Northern Endurance Partnership (NEP)³ for the transport and offshore geological storage of CO_2 .

ZCH brings together international energy producers (including SSE), major regional industries, leading infrastructure and logistics operators, global engineering firms and academic institutions in a plan to decarbonise the UK's largest industrial region.

National Grid Carbon ('NGC'), a member of the ZCH Partnership, will be responsible for obtaining development consent for the onshore CO_2 transport pipeline that will connect to the Proposed Development.

A summary description of the elements of the CCUS chain and how development consent will be sought for each element is provided in the table below.

Element of CCUS chain	Developer	Within the scope of the DCO Application?
Electricity generating station Equipped with post- combustion carbon capture plant, along with CO ₂ compression facilities, and cooling water, gas, and electricity grid connections)	The Applicant	Yes (Work Nos. 1-7A and 8-11). In addition, requirements are proposed within the draft DCO (Application Document Ref. 2.1) that would ensure the electricity generating station being brought into commercial use, following commissioning, without the post- combustion carbon capture plant and CO ₂ compression facilities also bring brought into commercial use.
Above ground CO ₂ installation	National Grid Carbon	Yes (Work No. 7B). In addition, controls are proposed within the draft DCO (Application

¹ CCUS is a process that removes carbon dioxide emissions at source, for example emissions from a power station or industrial installation, and then compresses the carbon dioxide so that it can be safely transported to secure underground geological storage sites.

² https://www.zerocarbonhumber.co.uk/the-vision/

³ https://www.zerocarbonhumber.co.uk/news/northern-endurance-partnership/



For the export of compressed CO ₂ from the electricity generating station to the CO ₂ gathering network		Document Ref. 2.1) to prevent the electricity generating station being brought into commercial use without the above ground CO ₂ installation also bring brought into commercial use.
CO₂ gathering network Including onshore CO ₂ export pipeline(s) connecting to power and industry, and compression facilities for export to offshore geological storage	National Grid Carbon and other ZCH Partnership member companies	No (comprised in the Humber Low Carbon Pipelines Project DCO ⁴). Controls are proposed within the draft DCO (Application Document Ref. 2.1) to prevent the electricity generating station being constructed before relevant consents are in place for CO ₂ gathering network.
Offshore storage Including offshore pipeline(s) connecting the CO ₂ gathering network to the offshore geological storage site	The Northern Endurance Partnership (NEP) and member companies	No (comprised in the NEP Offshore Consent) Controls are proposed within the draft DCO (Application Document Ref. 2.1) to prevent the electricity generating station being constructed before a CO ₂ storage licence is in place for the geological storage site.

The Site

The Proposed Development Site lies within and near to the existing Keadby Power Station site and entirely within the administrative area of North Lincolnshire Council ('NLC'). The existing Keadby Power Station site currently encompasses the operational Keadby 1 and (under construction) Keadby 2 Power Station sites, including the Keadby 2 Power Station Carbon Capture and Readiness reserve space.

The Proposed Development Site extends to approximately 69.4 hectares (ha) including an area of approximately 18.7ha to the west of Keadby 2 Power Station in which the electricity generating station will be developed.

Besides the existing Keadby Power Station site the Proposed Development Site includes all areas of land and crossings required to construct and operate the Proposed Development (including the NSIP and its associated development) including: areas of previously developed land and existing connection and cooling water routes associated with Keadby 1 Power Station; an existing National Grid 400kV

⁴ https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/humber-low-carbon-pipelines/





Substation, an existing track lying to the north of the Keadby 2 Power Station connecting parts of the existing Keadby wind farm and Chapel Lane; an Internal Drainage Board ('IDB') drain adjoining the track; parts of Chapel Lane, a public highway; areas of canal embankment and river embankment (including land below mean high water springs in the tidal River Trent, part of the UK marine area); and the temporary use of an existing wharf adjoining the River Trent and an existing temporary haul route between that and the existing Keadby Power Station site used for transporting abnormal indivisible loads during the construction of Keadby 2 Power Station. These parts of the Proposed Development lie to the north of the Stainforth and Keadby Canal and the Sheffield to Scunthorpe railway line.

The Proposed Development Site also incorporates an existing private bridge crossing of the canal and railway ('North Pilfrey Bridge'), which is recently constructed and is to be reused without improvement. This is crossed by an existing SSE owned access track (used for Keadby 2 Power Station construction) running between the Keadby Power Station site and the A18, which will form the new access for the Proposed Development. To the south of the canal and railway line the Proposed Development Site is more rural in character and comprises: the same existing track and its verges; an existing laydown area used for Keadby 2 Power Station ('Pilfrey Laydown'); and an area of land adjoining the A18 encompassing two existing private bridge crossings of the Hatfield Waste Drain. Alongside the access track, areas of level agricultural land are required for temporary construction laydown purposes and are therefore also included in the Proposed Development Site.

No mapped public rights of way lie within the Proposed Development Site.

The Proposed Development

The Proposed Development comprises:

- a carbon capture equipped electricity generating station of up to 910MW gross electrical output including a combined cycle gas turbine ('CCGT') plant (Work No. 1A) with integrated cooling infrastructure (Work No. 1B), and carbon dioxide capture plant ('CCP') including conditioning and compression equipment, carbon dioxide absorption unit(s) and stack(s) (Work No. 1C), natural gas receiving facility (Work No. 1D), supporting uses including control room, workshops, stores, raw and demineralised water tanks and permanent laydown area (Work No. 1E), and associated utilities, various pipework, water treatment plant, wastewater treatment, firefighting equipment, emergency diesel generator, gatehouse, chemical storage facilities, other minor infrastructure and auxiliaries/ services (all located in the area referred to as the 'Proposed Power and Carbon Capture (PCC) Site' and which together form Work No. 1);
- natural gas pipeline from the existing National Grid Gas high pressure (HP) gas pipeline within the Proposed Development Site to supply the Proposed PCC Site including an above ground installation (AGI) for National Grid Gas's apparatus (Work No. 2A) and the Applicant's apparatus (Work No. 2B) (the 'Gas Connection Corridor');
- electrical connection works to the existing National Grid 400kV Substation for the export and import of electricity (Work No. 3A) (the 'Electrical Connection Area to National Grid 400kV Substation');
- electrical connection works to the existing Northern Powergrid 132kV Substation for the supply of electricity at up to 132kV to the Proposed PCC Site, and associated plant and equipment (Work No. 3B) (the 'Potential Electrical Connection to Northern Powergrid 132kV Substation');



- Water Connection Corridors to provide cooling and make-up water including:
 - underground and/ or overground water supply pipeline(s) and intake structures within the Stainforth and Keadby Canal, including temporary cofferdam (Work No. 4A) (the 'Canal Water Abstraction Option');
 - in the event that the canal abstraction option is not available, works to the existing Keadby 1 power station cooling water supply pipelines and intake structures within the River Trent, including temporary cofferdam (Work No. 4B) (the 'River Water Abstraction Option');
 - works to and use of an existing outfall and associated pipework for the discharge of return cooling water and treated wastewater to the River Trent (Work No. 5) (the 'Water Discharge Corridor');
- towns water connection pipeline from existing water supply within the Keadby Power Station to provide potable water (Work No. 6);
- above ground carbon dioxide compression and export infrastructure comprising an above ground installation (AGI) for the undertaker's apparatus including deoxygenation, dehydration, staged compression facilities, outlet metering, and electrical connection (Work No. 7A) and an above ground installation (AGI) for National Grid Carbon's apparatus (Work No. 7B);
- new permanent access from the A18, comprising the maintenance and improvement of an existing private access road from the junction with the A18 including the western private bridge crossing of the Hatfield Waste Drain (Work No. 8A) and installation of a layby and gatehouse (Work No. 8B), and an emergency vehicle and pedestrian access road comprising the maintenance and improvement of an existing private track running between the Proposed PCC Site and Chapel Lane, Keadby and including new private bridge (Work No. 8C);
- temporary construction and laydown areas including contractor facilities and parking (Work No. 9A), and access to these using the existing private roads from the A18 and the existing private bridge crossings, including the replacement of the western existing private bridge crossing known as 'Mabey Bridge') over Hatfield Waste Drain (Work No. 9B) and a temporary construction laydown area associated with that bridge replacement (Work No. 9C);
- temporary retention, improvement and subsequent removal of an existing Additional Abnormal Indivisible Load Haulage Route (Work No. 10A) and temporary use, maintenance, and placement of mobile crane(s) at the existing Railway Wharf jetty for a Waterborne Transport Offloading Area (Work No. 10B);
- landscaping and biodiversity enhancement measures (Work No. 11A) and security fencing and boundary treatments (Work No. 11B); and
- associated development including: surface water drainage systems; pipeline and cable connections between parts of the Proposed Development Site; hard standings and hard landscaping; soft landscaping, including bunds and embankments; external lighting, including lighting columns; gatehouses and weighbridges; closed circuit television cameras and columns and other security measures; site preparation works including clearance, demolition, earthworks, works to protect buildings and land, and utility connections; accesses, roads, roadways and vehicle





and cycle parking; pedestrian and cycle routes; and temporary works associated with the maintenance of the authorised development.

A more detailed description of the NSIP (Work No. 1), the associated development (Work Nos. 2-11) and the ancillary development required in connection with and subsidiary to the above elements of the Proposed Development is detailed in Schedule 1 of the draft DCO (**Application Document Ref. 2.1**) and in Chapter 4 'The Proposed Development' in ES Volume I (**Application Document Ref. 6.2**). The areas within which each of the numbered works are to be built are denoted by the coloured and hatched areas on the Works Plans (**Application Document Ref. 4.3**).

Pre-Application Consultation

Extensive consultation has been carried out during the pre application stage. This has included:

- 'Stage 1' (non statutory) pre-application consultation from 22 June 2020 to 3 August 2020, informed by a consultation strategy that NLC were consulted on;
- A stage of statutory consultation ('Stage 2') from 24 November 2020 to 20 January 2021 in accordance with Sections 42, 47 and 48 of the PA 2008 and Regulation 13 of the EIA Regulations, and in accordance with a Statement of Community Consultation ('SoCC') that NLC were consulted upon formally prior to publication. The Stage 2 consultation was carried out by SSE Generation Limited, another wholly owned subsidiary of SSE. The name of the Applicant changed in 2021 following an internal company restructuring.
- The Applicant carried out an additional round of publicity in accordance with Section 48 of the PA 2008 and Regulation 13 of the EIA Regulations, along with targeted pre-application consultation in accordance with Section 42 in relation to very small areas of expansion of the Order Limits and to consult certain non prescribed aviation interests suggested by the Civil Aviation Authority. These were combined into a 'Stage 2.1' consultation round which ran from 29 March 2021 to 1 May 2021. In the new Section 48 Notice the Applicant made clear that there was no need to resubmit comments submitted in response to the previous Section 48 notice and consultations, since these have been and would be considered by the Applicant.

The consultations used a mixture of traditional and virtual methods to maximise participation and the safety and wellbeing of communities and consultees during the ongoing COVID-19 pandemic. In particular, substantially longer response periods were provided than the statutory minimum, and a virtual exhibition room was available online, for the Stage 1 and Stage 2 consultations. Traditional but 'distanced' methods were also used in parallel such as post and telephone. The consultation was carried out in full compliance with the published SoCC and the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 ('the APFP Regulations') as amended by temporary and permanent regulations during 2020.

The pre-application consultation undertaken and the regard had to responses received is documented within the Consultation Report and its Appendices (Document Ref. 5.1). The full text of Section 42/48 consultation responses received is provided in Appendices 9.6 and 13.5 of the same and the full text of Section 47 (community) consultation responses can be provided on request.

NLC, the relevant local planning authority ('LPA'), has provided an interim opinion as to the methods employed in the SoCC and the overall adequacy of the consultation. The opinion, dated 26 May 2021, is appended to this letter and includes the following:



"The pre-application consultation undertaken in respect of the Keadby 3 project is acceptable and adequate to comply with the statutory requirements in this regard set out in the Planning Act 2008.

The SoCC produced for this scheme applies an appropriate flexible approach to consultation given the unusual circumstances that have been presented by the COVID-19 virus and the associated Government restrictions.

Furthermore, I can confirm that the LPA are content that the more recent, targeted s42 consultation undertaken in respect of the minor changes to the order limits was both adequate and proportionate to the nature of the changes proposed."

Environmental Impact Assessment

The Proposed Development represents an Environmental Impact Assessment ('EIA') development and the Application therefore includes an Environmental Statement ('ES') that reports the findings of the EIA undertaken. The EIA has been carried out, and the ES prepared, in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

The ES comprises the following documents, which form part of the Application:

- Environmental Statement Non-Technical Summary (Application Document Ref. 6.1).
- Environmental Statement Volume I (Main Report) (Application Document Ref. 6.2).
- ES Volume II (Appendices) (Application Document Ref. 6.3).
- ES Volume III (Figures) (Application Document Ref. 6.4).

A confidential badger survey report is included which we request is not published (Appendix 11D of ES Volume II, Application Document Ref. 6.3.15). This has been clearly named and watermarked as such.

Overview of the Application

The Application Guide (**Application Document Ref. 1.2**) lists the documents, including the ES, that make up the Application and how these comply with relevant legislative and policy requirements. The Application Guide is a 'live' document that will be updated during the examination of the Application, as required.

Schedule 1 of the draft DCO (**Application Document Ref. 2.1**) provides the detailed formal description of the Proposed Development and its elements and identifies the individual numbered works for those elements (shown on the Works Plans).

Schedule 2 of the draft DCO contains a number of 'requirements' that will control the detailed design of the Proposed Development in addition to its construction and operation to ensure that it remains within the scope of the EIA carried out and does not result in unacceptable impacts. These will require the submission to and approval by the relevant local planning authority of further details.

The draft DCO seeks powers of compulsory acquisition of interests and rights in land (including new rights) within the Order limits to enable the Proposed Development to be constructed, operated and



maintained. The provisions relating to compulsory acquisition are set out at Part 5 'Powers of acquisition' (Articles 19 to 33) and Schedules 6, 7, and 8.

These provisions relating to compulsory acquisition are explained in the Explanatory Memorandum (**Application Document Ref. 2.2**). The Explanatory Memorandum also explains the purpose and effect of each article and schedule of the draft DCO, as required by Regulation 5(2)(c) of the APFP Regulations. It justifies the inclusion of relevant articles and requirements, including setting out the legal power which enables the SoS to include certain provisions. It has been prepared with regard to the advice in Planning Inspectorate ('PINS') Advice Note 13 (2019) and the advice provided during a pre-application submission review by PINS.

Information on the interests and rights that exist in relation to the land within the Order limits is provided by the Book of Reference (**Application Document Ref. 3.1**). The justification for the proposed compulsory acquisition of interests and rights in land is set out in the Statement of Reasons (**Application Document Ref. 3.2**), and the Applicant's ability to fund this confirmed by the Funding Statement (**Application Document Ref. 3.3**).

The Proposed Development includes works within the UK Marine Area and the draft DCO therefore includes a Deemed Marine Licence ('DML'). The DML provisions are set out at Part 6 'Miscellaneous and general' (Article 41) and Schedule 13 of the draft DCO.

The location of the Site is shown on the Site Location Plan (**Application Document Ref. 4.1**) and the extent of the land for the Proposed Development (the 'Order land'), including land over which powers of compulsory acquisition are sought, is shown on the Land Plans (**Application Document Ref. 4.2**). The Works Plans (**Application Document Ref. 4.3**) show the 'Order limits' and identify the location and areas (the Works Nos. areas) within which each of the main elements of the Proposed Development will be constructed and installed. The extent of the Works Nos. is denoted by the coloured and hatched areas on the Works Plans. New and altered means of access are shown in the Access and Rights of Way Plans (**Application Document Ref. 4.4**). The small areas of Crown Land that lie within the Proposed Development Site are shown on the Crown Land Plans (**Application Document Ref. 4.5**). The intended designs, levels and drainage outfalls for the A18 junction works are shown in the Highway Works Plans (**Application Document Ref. 4.6**).

Indicative drawings including plans, elevations, sections of various elements of the Proposed Development are provided (**Application Document Refs. 4.7-4.17**). The SSE Land Ownership Plan (**Application Document Ref. 4.18**) shows the land ownership by SSE group company both within and adjoining the Order Limits providing contextual information of relevance to biodiversity commitments and other matters contained in various application documents.

Two existing construction facilities (the 'Pilfrey laydown area' and the 'haul road') are being utilised for the Keadby 2 Power Station project, each subject to a dedicated extant planning permission (the 'Pilfrey laydown planning permission' and the 'haul road planning permission' respectively). These facilities are to be retained for use by the Proposed Development then the land subsequently restored. In order to ensure that the conditions applicable to these existing permissions are adequately reflected in the Application, similarly worded requirements are included in Schedule 2 of the Draft DCO, which reference approved material from the extant planning permissions, as provided in the Haul Road Plans (**Application Document Ref. 4.19**) and the Pilfrey Laydown Plans (**Application Document Ref. 4.20**). Article 38 of the draft DCO requires the Applicant to restore the land comprised in these two facilities in the event that the DCO is made but not implemented.





Information prescribed by regulation 6 of the APFP Regulations is provided within the Electricity Grid Connection Statement (Application Document Ref. 5.2) and the Gas Connection Statement (Application Document Ref. 5.3). Information to demonstrate compliance with CHP ready guidance and the CCR Regulations is set out in the Combined Heat and Power Readiness Assessment (Application Document Ref. 5.7) and the Carbon Capture Statement (Application Document Ref. 5.8) respectively.

The approach to the design of the Proposed Development including the approach to design flexibility and a statement of design principles is set out in the Design and Access Statement (Application Document Ref. 5.4).

The Planning Statement (Application Document Ref. 5.5) sets out the need that exists for the Proposed Development and its compliance with the relevant National Policy Statements and other important and relevant matters such as recent UK energy and climate change policy and official evidence, other national planning policies, and local planning documents. The Planning Statement also provides an overview of the benefits and impacts of the Proposed Development and considers its overall acceptability in planning terms.

In respect of ecological interests and amenity, the Application includes a Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 5.10), an Indicative Lighting Strategy (Application Document Ref. 5.11), and a Habitats Regulations Assessment Screening Report (Application Document Ref. 5.12).

Certain other documents provide controls and mitigation, comprising the Framework Construction Environmental Management Plan (Application Document Ref. 7.1), Framework Construction Traffic Management Plan (Application Document Ref. 7.2), Framework Construction Workers' Travel Plan (Application Document Ref. 7.3) and the Outline Written Scheme of Investigation (Application Document Ref. 7.4).

The Application Documents should be downloaded using the secure fileshare link and password provided via e-mail separately. An e-mail will also provide a copy of the required Application Index and the Word version of the Draft DCO.

The required fee on submission of \pm 7,263.00 was paid to PINS by BACS and was received by the PINS finance team on 13 May 2021.

We look forward to receiving PINS' acknowledgement of receipt of the Application and in due course a decision on acceptance. In the meantime, should you have any questions with regard to the Application, please do not hesitate to contact Colin Turnbull (<u>Colin.Turnbull@</u> and Jordan Martin (<u>Jordan.Martin@</u> at this office.

Yours sincerely



DWD On behalf of Keadby Generation Limited



Appendix A - Interim Opinion of Relevant Planning Authority on the SoCC and Consultation Adequacy

Rob Booth

From: Andrew Law <Andrew.Law@northlincs.gov.uk> Sent: 26 May 2021 09:23 To: Rob Booth <rob.booth@dwdllp.com> Subject: RE: Keadby 3 - NLC meeting notes and adequacy of consultation

Good morning Rob,

Thank you for your email.

On behalf of NLC as local planning authority I can confirm that I am of the opinion that the pre-application consultation undertaken in respect of the Keadby 3 project is acceptable and adequate to comply with the statutory requirements in this regard set out in the Planning Act 2008.

The SoCC produced for this scheme applies an appropriate flexible approach to consultation given the unusual circumstances that have been presented by the COVID-19 virus and the associated Government restrictions.

Furthermore, I can confirm that the LPA are content that the more recent, targeted s42 consultation undertaken in respect of the minor changes to the order limits was both adequate and proportionate to the nature of the changes proposed.

NLC will obviously provide a formal response to PINs once the application have been submitted and we are requested to do so, but hopefully this informal opinion is sufficient to aid you in the completion of your Consultation Report. Please do not hesitate to contact me should you wish to discuss this matter further.

Kind Regards

Andrew Law

Development Management Specialist

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