

The Keadby Next Generation Power Station Project

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The Keadby Next Generation Power Station Development Consent
Order [year]

Electricity Grid Connection Statement

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and
Procedure) Regulations 2009 – Regulation 5(2)(p) and 6(1)(a)(i)

Applicant: Keadby Next Generation Limited

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Glossary

Abbreviation	Description
AGI	Above Ground Installation – compound for ancillary equipment at or near to the point of connection to the natural gas pipeline.
AIL	Abnormal Indivisible Load - a load that cannot be broken down into smaller loads for transport without undue expense or risk of damage. It may also be a load that exceeds certain parameters for weight, length and width.
APFP	The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
CCGT	Combined Cycle Gas Turbine – a highly efficient form of electricity generation technology. An assembly of heat engines work in tandem using the same source of heat to convert it into mechanical energy which drives electrical generators and consequently generates electricity.
CEMP	Construction Environmental Management Plan – a plan to outline how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area.
DCO	Development Consent Order – made by the relevant Secretary of State pursuant to The Planning Act 2008 to authorise a Nationally Significant Infrastructure Project. A DCO can incorporate or remove the need for a range of consents which would otherwise be required for a development. A DCO can also include rights of compulsory acquisition.
EIA	Environmental Impact Assessment - a term used for the assessment of environmental consequences (positive or negative) of a project prior to the decision to move forward with the proposed action.
EPC	Engineering, Procurement and Construction (EPC) contractor
ES	Environmental Statement – a report in which the process and results of an Environment Impact Assessment are documented.
Ha	Hectare
HP	National Gas Transmission High Pressure (HP) gas pipeline

Abbreviation	Description
HRSG	Heat Recovery Steam Generator - an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).
kV	Kilo Volt - unit of voltage.
MW	Megawatt – unit of power.
NESO	National Energy System Operator - the energy system operator for Great Britain.
NGET	National Grid Electricity Transmission - build and maintain the electricity transmission network.
NLC	North Lincolnshire Council
NPS	National Policy Statement – Statement produced by Government under the Planning Act 2008 providing the policy framework for Nationally Significant Infrastructure Projects. They include the Government’s view of the need for and objectives for the development of Nationally Significant Infrastructure Projects in a particular sector such as energy and are used to determine applications for such development.
NSIP	Nationally Significant Infrastructure Project – defined by the Planning Act 2008 and cover projects relating to energy (including generating stations, electric lines and pipelines); transport (including trunk roads and motorways, airports, harbour facilities, railways and rail freight interchanges); water (dams and reservoirs, and the transfer of water resources); wastewater treatment plants and hazardous waste facilities. These projects are only defined as nationally significant if they satisfy a statutory threshold in terms of their scale or effect.
PINS	Planning Inspectorate - executive agency of the Department for Communities and Local Government of the United Kingdom Government. It is responsible for determining final outcomes of town planning.
SoS	Secretary of State - title typically held by Cabinet Ministers in charge of Government Departments

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Executive Summary

1. Keadby Next Generation Limited (the Applicant) is seeking development consent for the construction, operation and maintenance of a new low carbon Combined Cycle Gas Turbine (CCGT) Generating Station ('the Proposed Development'). The Proposed Development is a new gas fired electricity generating station of up to 910 megawatts (MW) of net electrical output and will be designed to run on 100% hydrogen and able to run on 100% natural gas or a blend of natural gas and hydrogen and including cooling water, electrical, natural gas and utility connections, construction laydown areas and other associated works on land to the west of the existing Keadby 2 Power Station. The Proposed Development will therefore make a significant contribution toward the UK reaching its Net Zero greenhouse gas emissions target by 2050.
2. This document sets out who will be responsible for designing and building the proposed electricity grid connection (the 'Electricity Grid Connection') for the Proposed Development and demonstrates that there is no reason why an electricity grid connection would not be possible.
3. The preferred route for the proposed grid connection has been determined based on technical and environmental considerations. It is anticipated that the Proposed Development will require a direct connection to the 400kV transmission system. The Applicant proposes to connect into the existing National Grid 400kV Substation directly to the east of the Keadby Next Generation Power Station. This is comprised in Work No. 4. The primary connection option shall be into Bay X1505, located in the South-East region of the substation.
4. An alternative connection option shall be into Bay X1205, located in the North-West region of the substation.
5. Two connection options are being considered (Work Numbers 4A & 4B), with the ability to optimise the Electricity Grid Connection to be investigated with National Grid in 2026.
6. The connection between the Keadby Next Generation Power Station (Work No. 1A) and existing National Grid 400kV Substation would comprise a 400kV single circuit cable route and control system cables which will be installed primarily below ground.
7. The indicative route of the cable and substation areas is shown on the Electricity Grid Connection Plans (**Application Document Reference 2.7**). Limits of deviation within which the works would occur are shown on the Works Plan (**Application Document Ref. 2.3**).
8. Keadby Generation Limited, a related SSE company to the Applicant, has engaged with National Grid Electricity Transmission ('NGET') and the National Energy System Operator ('NESO') as outlined in Section 3. Keadby Next Generation Limited shall be responsible for establishing connections from the transformers to the boundary of

the 400kV substation site. National Grid shall be responsible for refurbishment of existing Bays and cable connections within the substation site.

1. Introduction

1.1. Overview

- 1.1.1. This **Electricity Grid Connection Statement (Application Document Ref 7.1)** has been prepared by AECOM on behalf of Keadby Next Generation Limited ('the Applicant') which is a subsidiary of SSE plc. It forms part of the application for a Development Consent Order (DCO) ('the Application'), that has been submitted to the Secretary of State (the 'SoS') for Energy Security and Net Zero under Section 37 of 'The Planning Act 2008' ('the 2008 Act').
- 1.1.2. The Applicant is seeking development consent for the construction, operation and maintenance of a new combined cycle gas turbine ('CCGT') electricity generating station on land at, and in the vicinity of, the existing Keadby Power Station, Trentside, Keadby, Scunthorpe DN17 3EF ('the Site').
- 1.1.3. The Keadby Next Generation Power Station ('the Proposed Development') is a new CCGT electricity generating station with a capacity of up to 910MW electrical output. The CCGT electricity generating station will be designed to run on 100% hydrogen and able to run on 100% natural gas or a blend of natural gas and hydrogen and will be located on land to the west of Keadby 1 and Keadby 2 Power Stations. The Proposed Development includes connections for cooling water, electricity, hydrogen and natural gas, and construction laydown areas and other associated development. It is described in full in **Environmental Statement (ES) Volume I Chapter 4: The Proposed Development (Application Document Ref. 6.2)**.
- 1.1.4. The Proposed Development falls within the definition of a 'Nationally Significant Infrastructure Project' ('NSIP') under Section 14(1)(a) and Sections 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 electrical output (50MWe). As such, a DCO application is required

to authorise the Proposed Development in accordance with Section 31 of the 2008 Act.

- 1.1.5. The DCO, if made by the SoS, would be known as 'The Keadby Next Generation Power Station Order' ('the Order').

1.2. The Applicant

- 1.2.1. The Applicant is a subsidiary of the FTSE-listed SSE plc, one of the UK's largest and broadest-based energy companies, and the country's leading developer of renewable energy. Over the last 20 years, the SSE Group has invested over £20bn to deliver industry-leading offshore wind, onshore wind, CCGT, energy from-waste, biomass, battery-storage, energy networks and gas storage projects. Related SSE companies own and operate the adjacent Keadby 1 and 2 Power Stations and have the benefit of the DCO for Keadby 3 CCS Power Station (herein referred to as the 'Keadby CCS Power Station').
- 1.2.2. The Proposed Development is being developed with Equinor, one of the country's leading energy providers, supplying natural gas, oil and electricity. Equinor is developing multiple low-carbon hydrogen and carbon capture projects in the Humber, working towards transforming the UK's most carbon intensive industrial cluster into a net zero region.
- 1.2.3. SSE Renewables Limited operates Keadby Windfarm, which lies to the north and south of the Site and generates renewable electricity from 34 turbines, with a total installed generation capacity of 68MW.
- 1.2.4. SSE plc has set out a clear commitment to investment in low carbon power infrastructure, working with government and other stakeholders to create a Net Zero power system by 2040. This includes investment in flexible sources of electricity generation and storage for times of low renewable output which will complement other renewable generating sources, either using low-carbon fuels and/ or capturing and storing carbon emissions.
- 1.2.5. The design of the Proposed Development demonstrates this commitment and the Proposed Development will be built with a clear route to decarbonisation, consistent with SSE's Net Zero Acceleration Programme Plus and Net Zero Transition Plan which committed to the development

and progression of new low-carbon flexible power including hydrogen-fuelled generation.

1.3. The Proposed Development

- 1.3.1. The Proposed Development would comprise a high efficiency gas fired power station with an electrical output capacity of up to 910MWe and associated buildings, structures and plant and other associated development defined in Schedule 1 of the draft DCO (**Application Document Ref. 3.1**) as Work No. 1-11 and shown on the Works Plans (**Application Document Ref. 2.3**).
- 1.3.2. The Proposed Development will include:
- A new-build CCGT electricity generating station fuelled by hydrogen and/or natural gas with a power output of up to 910MW (Work No. 1) including:
 - a CCGT plant;
 - cooling infrastructure;
 - natural gas and hydrogen blending equipment;
 - supporting facilities including administration and control buildings, workshops, storage buildings, effluent treatment facilities, fire water storage tank(s), demineralised water treatment plant including storage tank(s), and permanent laydown areas for operation and maintenance activities;
 - a hydrogen supply pipeline, including a gas compound for the hydrogen supplier's apparatus and a hydrogen gas compound for the Applicant's apparatus (Work No. 2);
 - a natural gas supply pipeline including a compound for the natural gas supplier's apparatus and a natural gas compound for the Applicant's apparatus (Work No. 3);
 - electrical connection works for the export and import of electricity to and from the generating station and the existing 400kV National Grid Electricity Transmission (NGET) substation located adjacent to the Keadby Power Station site, including works within the substation (which would be undertaken by NGET) (Work No. 4);
 - water supply connection works to provide cooling and make-up water to the generating station, including intake structures and an underground and/or overground water supply pipeline running between the generating station and the Stainforth and Keadby Canal (Work No. 5);

- connections to and use of an existing outfall and associated pipework for the discharge of used cooling water, surface water and treated effluent to the River Trent (Work No. 6);
- public water connection pipeline from a new connection on Chapel Lane to provide potable water to the generating station (Work No. 7);
- new permanent access to the generating station (Work No. 8), comprising:
 - maintenance and improvement of an existing private access road from the A18, including replacement of a private bridge (Mabey Bridge) (Work No. 8A);
 - installation of layby and gatehouse with barriers, enclosures, drainage and lighting north of the A18 junction (Work No. 8B) and associated utilities connections (Work No. 8C); and
 - emergency access route comprising the maintenance and improvement of an existing private track running between the generating station and Chapel Lane and including new private bridge crossing over Glew Drain (Work No. 8D);
- temporary construction and laydown areas (Work No. 9A);
- maintenance and improvement of the existing access routes running between the A18 and construction laydown areas (Work No. 9B); and between Skew Bridge adjacent to the A18 and a temporary construction laydown area associated with Mabey Bridge replacement (Work No. 9C);
- retention, maintenance and improvement and subsequent removal of existing temporary haul route from the Waterborne Transport Offloading Facility (Work No. 9D) and the inspection and repair of the existing wharf, and temporary placement of mobile cranes including the temporary oversailing of crane arms (Work No. 9E); and
- landscaping and biodiversity enhancement measures (Work No. 10);
- an allocation of land to meet the requirements of the Carbon Capture Readiness (Electricity Generating Stations) Regulations 2013 (Work No. 11).

1.3.3. The Applicant will be responsible for the construction, operation (including maintenance) and eventual decommissioning of the Proposed

Development including the on-site connections to electricity, cooling water, hydrogen and natural gas supplies.

- 1.3.4. The Proposed Development will be capable of operating 24 hours per day, 7 days per week with programmed offline periods for maintenance.
- 1.3.5. The route for the hydrogen supply pipeline to the Proposed Development has not yet been confirmed. The supply pipeline is not included in the Proposed Development and will be progressed by a third party under a separate consent. In line with Government policy, it is recognised that developments such as the Proposed Development are needed to stimulate investment in the development of hydrogen production and supply infrastructure.
- 1.3.6. Further detail on the components of the Proposed Development is provided in **ES Volume I Chapter 4: The Proposed Development (Application Document Ref. 6.2)**. The areas within which each numbered Work (component) of the Proposed Development are to be built are defined by the coloured and hatched areas on the **Works Plans (Application Document Ref. 2.3)**.

1.4. The Proposed Development Site

- 1.4.1. The Site is located within and near to the existing Keadby Power Station site near Scunthorpe, Lincolnshire and lies within the administrative boundary of North Lincolnshire Council (NLC). The majority of land is within the ownership or control of the Applicant (or SSE associated companies) and is centred on national grid reference 482351, 411796.
- 1.4.2. The existing Keadby Power Station site currently encompasses the operational Keadby 1 and Keadby 2 Power Station sites, including the Keadby 2 Power Station Carbon Capture and Readiness reserve space.
- 1.4.3. The Site encompasses an area of approximately 77.1 hectares (ha), of which approximately 26.7 ha of land is proposed for construction laydown.
- 1.4.4. Multiple proposed land uses together make up the Site, with the different areas described in turn below and shown on **ES Volume III Figure 3.3 Indicative Parts of the Site Plan (Application Document Ref. 6.4)**. These terms have been used to describe land use zones within the Site.
- 1.4.5. The Site is divided into the following areas of permanent and temporary land use (the proposed use is described in more detail in **ES Volume I**

Chapter 3: Site and Surrounding Area (Application Document Ref. 6.2)):

- Main Site;
- Ancillary Facilities;
- Water Connections;
- Electricity Connections;
- Waterborne Transport Off-loading Area;
- Construction Laydown Areas;
- Access routes (emergency, permanent and construction);
- Connections to Keadby 1 and Keadby 2 power stations; and
- Additional areas for landscaping and biodiversity provision.

1.5. The DCO Process

- 1.5.1. The Proposed Development falls within the definition of a NSIP under Section 14(1)(a) and 15(2) of the 2008 Act as a 'generating station exceeding 50 MW'.
- 1.5.2. As a NSIP project, the Applicant is required to seek a DCO to construct and operate the generating station, under Section 31 of the 2008 Act. Section 37 of the 2008 Act also governs the form, content and accompanying documents that are required as part of a DCO application. The requirements are implemented through the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) ('APFP Regulations') which state that an application must be accompanied by an ES, where a development is considered to be 'EIA development' under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('the EIA Regulations') (as amended).
- 1.5.3. An application for development consent for the Proposed Development has been submitted to the Planning Inspectorate ('PINS') acting on behalf of the SoS. Subject to the Application being accepted, PINS will then examine it and make a recommendation to the SoS, who will then decide whether to grant a DCO. The acceptance, examination, recommendation,

and decision stages are subject to fixed timescales and the decision is therefore anticipated to fall in 2026.

- 1.5.4. A DCO, if granted, has the effect of providing deemed planning permission for a development, in addition to a number of other consents and authorisations where specified within the Order.

1.6. The Purpose and Structure of this Document

- 1.6.1. The purpose of this document is to meet the requirements of Regulation 6(1)(a)(i) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 ('APFP Regulations') (UK Government, 2009), which requires the Applicant to provide a statement setting out who will be responsible for designing and building the proposed electricity grid connection to the Proposed Development.
- 1.6.2. The document is structured as follows:
- Section 2 sets out the proposed electrical route and points of connection;
 - Section 3 outlines the contractual agreements for the proposed Electricity Grid Connection;
 - Section 4 provides details on the design-build responsibilities for the proposed Electricity Grid Connection;
 - Section 5 outlines land ownership in respect of the land required for the proposed Electricity Grid Connection;
 - Section 6 provides information on the consents required for the proposed Electricity Grid Connection works; and
 - Section 7 provides the summary and conclusions to the Statement.

2. Proposed Electricity Route and Connections

2.1. Overview

- 2.1.1. The Applicant has included within this Statement the proposed route and connection point for the Electricity Grid Connection to the Keadby Next Generation Power Station (Work No. 1A) located within the Site.
- 2.1.2. The existing electrical infrastructure in the area comprises extensive 132kV and 400kV overhead lines as well as underground cables that serve existing substations. In order to export electricity from the Proposed Development, engagement is ongoing with NGET to identify the preferred connection option, including any upgrades to existing switchgear or other existing equipment that may be required.
- 2.1.3. It is anticipated that the Electrical Grid Connection (Work No. 4) will comprise a direct connection to the 400kV transmission system and is therefore likely to connect to the existing NGET 400kV substation directly to the east of the Proposed Site. The primary connection option (Work Number 4A) shall be into Bay 1505, located in the South-East region of the substation. An alternative connection option (Work Number 4B) shall be into Bay 1205, located in the North-West region of the substation. Work No. 4 will also include fire protection, prevention, and detection facilities.
- 2.1.4. The connection between the Proposed Development and existing 400kV substation would comprise 400kV single circuit electrical cables (or suitable alternative) and control system circuits and is referred to as the 'Electricity Grid Connection Area to NGET 400kV Substation' (as shown on **ES Volume II Figure 3.3: Indicative Parts of the Site Plan (Application Document Ref. 6.4)**). The circuits would be installed primarily below ground, but some sections may be above ground.
- 2.1.5. Two connection options are being considered (Work Numbers 4A & 4B), with the ability to optimise the Electricity Grid Connection to be investigated with NGET in 2026. The proposed Electricity Grid Connection corridors, which include the working areas and space required, are shown on the **Electricity Grid Connection Plans (Application Document Ref. 2.7)**.
- 2.1.6. Environmental effects associated with the construction of the Electricity Grid Connection are assessed as part of the Environmental Impact Assessment (EIA), which is reported in the ES (**Application Document Ref. 6.1 – 6.4**).

3. Contractual Agreements

3.1. Overview

- 3.1.1. Engagement has been ongoing with NESO and NGET to identify and agree the selected Electricity Grid Connection point. SSE is engaging with NESO's Connection Reform Process. NESO has confirmed to the Applicant that there is sufficient capacity at the Keadby 400kV Substation and transmission system to accommodate the export from the Keadby Next Generation Power Station.
- 3.1.2. A signed Bilateral Connection Agreement is in place between the Applicant and NESO for the required export capacity.
- 3.1.3. The Applicant is currently in discussions with NESO to optimise the connection and a formal Modification Application (the process to modify the existing Keadby Power Station connection agreement) will be applied for prior to construction to cover any update to requirements.

4. Responsibilities for Designing and Building the Electricity Grid Connection

4.1. Design

- 4.1.1. The chosen Engineering, Procurement and Construction ('EPC') contractor will undertake detailed design of the Electricity Grid Connection.
- 4.1.2. NGET will be responsible for undertaking all works within the existing 400kV Substation, which will reuse an existing bay, and include the enabling works and facilitation of the connection bay commissioning. Discussions are ongoing with NESO to confirm the progress with regard to the minor upgrades that are required on the existing infrastructure connecting the existing 400kV Substation at Keadby to the wider electricity transmission network, to connect the Keadby Next Generation Power Station. These upgrades are expected to be completed ahead of commissioning.
- 4.1.3. It is anticipated that the EPC Contractor will undertake the design and installation of the 400kV cable connection to the Electricity Generating Station.
- 4.1.4. The detailed design of the Electricity Grid Connection will be secured by a Requirement of the **Draft DCO (Application Document Ref. 3.1)**.

4.2. Build

- 4.2.1. As the Electricity Grid Connection is likely to comprise a 400kV single circuit cable route and control system cables installed primarily below ground, it is envisaged that installation will be through the use of an 'open-cut' method, whereby a trench will be excavated, and the cables laid below ground. This method will be applied where there is sufficient space, and the work area is relatively flat. These works will generally be as follows:
- fence off works area and fit safety signage;
 - strip and store topsoil (if required);
 - a working area approximately 10-15m wide to allow for temporary trackway, and soils storage;
 - excavation of a trench (the EPC contractor will be responsible for providing all necessary trench supports and for maintaining the trenches in a safe condition and free of water); and

- cables laid at a depth of at least 1.1m on a bed of cement bound sand overlain by protective tiles and backfilled to reinstate to original state (appropriate safety measures including warning tape will be used).

- 4.2.2. The cable connection will be required to cross under several existing 400kV and 132kV overhead lines and the substation flood protection barriers. Co-ordination with the asset owners will be required to confirm availability of outages to allow the installation of cables beneath these lines using the 'open cut' method. If outages or other safe methods of work cannot be secured, alternative construction methods such as thrust-bore or pipe-jacking will be used for these crossings. The construction area required for this method can be accommodated within the construction working widths identified in the Electricity Grid Connection Corridor.
- 4.2.3. Access arrangements during construction of the Electricity Grid Connection are presented in **ES Volume I Chapter 5: Construction Programme and Management (Application Document Ref. 6.2)**. No significant effects on local roads have been identified given the route of the electricity grid connection corridor and the location of the existing 400kV Substation directly adjacent to the proposed Electricity Generating Station.
- 4.2.4. Overall construction of the Electricity Grid Connection is likely to take around 12 months.
- 4.2.5. These Electricity Grid Connection works would be undertaken in accordance with the measures outlined in a Construction Environmental Management Plan (CEMP) to be prepared by the EPC Contractor(s) in accordance with the **Outline CEMP (Application Document Ref. 7.4)** which accompanies the DCO Application.
- 4.2.6. The route will also require a special crossing from the Proposed Development into the existing NGET 400kV Substation. This is outlined in Table 1, below, and shown in the **Electricity Grid Connection Plans (Application Document Ref. 2.7)**.

Table 1 Special Crossings on the Electricity Grid Connection Corridor

Crossing Name	Grid Reference	Description	Existing/ Upgraded/ New
Existing 400kV Keadby Substation Boundary – Primary Route	482598.137, 411920.392	Substation Flood Wall Boundary Crossing	New

Crossing Name	Grid Reference	Description	Existing/ Upgraded/ New
Existing 400kV Keadby Substation Boundary – Alternative Route	482234.380, 412055.704	Substation Flood Wall Boundary Crossing	New

4.3. Operation & Maintenance

- 4.3.1. The Applicant will be responsible for the operation and maintenance of all on-site plant and apparatus over the life of the Proposed Development outside the 400kV Substation.
- 4.3.2. NGET would be responsible for the operation and maintenance of the existing 400kV Keadby Substation and their equipment.

5. Land Requirements

5.1. Overview

- 5.1.1. The Applicant has approached NGET regarding the required land interests. NGET has advised that there is formal process to follow before negotiations can commence and this is underway, as described in the **Statement of Reasons (Application Document Ref. 4.1)**.
- 5.1.2. The Applicant or related SSE plc entities have the freehold interest in all of the land on which the Electricity Grid Connection will be located, up to the boundary of the existing 400kV Keadby Substation as shown on the **Land Plans (Application Document Ref. 2.2)** and **Book of Reference (Application Document Ref. 4.3)**. NGET owns the freehold of the land on which the existing 400kV Keadby Substation is situated, with interests benefitting Keadby Generation Limited and British Telecommunications Public Limited Company. The connection agreement with NESO and the DCO will provide the necessary rights for all purposes connected with the laying, installation and operation of the grid connection and associated apparatus within the existing 400kV Keadby Substation.
- 5.1.3. Work No. 4 in Schedule 1 of the **Draft DCO (Application Document Ref. 3.1)** covers the construction and operation of the Electricity Grid Connection.

6. Consents Required

- 6.1.1. All of the works associated with the Electricity Grid Connection are included within the Application and therefore no separate planning permission is required. This includes the Electricity Grid Connection works (Work No. 4) between the Keadby Next Generation Power Station located within the Proposed Site (Work No. 1) and NGET's existing 400kV Keadby Substation, which are specified in Schedule 1 of the **Draft DCO (Application Document Ref. 3.1)** and which cover the construction and operation of the Electricity Grid Connection. These are assessed in the Chapters 8-22 of **ES Volume I (Application Document Ref. 6.2)**.

7. Conclusions

- 7.1.1. This Electricity Grid Connection Statement has been prepared to satisfy the requirements of Regulation 6(1)(a)(i) of Infrastructure Planning (Applications: Prescribed Forms and Procedures Regulations 2009 and to demonstrate that there is no reason why an electricity grid connection would not be possible for the Proposed Development, in accordance with National Policy Statement (NPS) EN-1 (Department of Energy & Climate Change, 2011).
- 7.1.2. The Statement has demonstrated that the proposed Electricity Grid Connection and associated cables included within the Application (and assessed as part of the associated EIA reported in the **ES Volume I (Application Document Ref. 6.1-6.4)**) are feasible, that the necessary agreements are being/ have been secured, and appropriate powers are included in the **Draft DCO (Application Document Ref. 3.1)** to facilitate the delivery of the Electricity Grid Connection.

8. References

- UK Government (2009). Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations) (SI 2009 No. 2264). Available online:
- [The Infrastructure Planning \(Applications: Prescribed Forms and Procedure\) Regulations 2009](#) [Accessed 28 Aug 2025]
- SSE (2020) Greenprint for building a cleaner more resilient economy. Available online: [sse-a-greenprint-for-building-a-cleaner-more-resilient-economy.pdf](#) [Accessed 28 Aug 2025]

Appendix A. Connections Summary

Name	Section Name	Owner	Start	End	Length (km)	External diameter (mm)	What will be conveyed?	Land Rights:		
								Required for crossings?	Can be reached by agreement?	Additional Comments
Electricity Grid Connection	Electricity Grid Primary Connection	National Grid Electricity Transmission	Existing National Grid 400kV Substation directly to the East of the proposed site - Bay 1505, Work no. 4A (primary option)	Keadby Next Generation Station (Work no. 1A)	0.75km (primary option)	-	Single circuit (or suitable alternative) cable route and control system cables installed primarily underground	YES	YES.	Primary connection option will require additional crossings. Agreements between different land right holders can be reached.
Electricity Grid Connection	Electricity Grid Alternative Connection	National Grid Electricity Transmission	Existing National Grid 400kV Substation directly to the East of the	Keadby Next Generation Station (Work no. 1A)	0.12km (alternative option)		Single circuit cable route and control system cables installed	YES	YES.	Alternative connection option will have fewer land rights crossings with

			proposed site - Bay 1205, Work no.4B (secondary option)				primarily underground			'National Grid Electricity Transmission plc' being a major stakeholder in all land parcels crossed. Agreements between different land right holders can be reached.
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