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KEADBY II

PLANNING STATEMENT

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Ref: 2941B

CONTENTS

1.0 BACKGROUND

1.1 This Planning Statement (Statement) on behalf of Keadby Developments Limited (the Company), together with an environmental statement (ES) accompanies the present Application (the Application) made to the Secretary of State for Energy and Climate Change (the Secretary of State) to vary an extant consent (the Original Consent) issued on 10 September 1993 under section 36 of the Electricity Act 1989, and to exercise her powers to direct that the planning permission deemed to be granted in 1993, be replaced or varied. The Original Consent permits the construction and operation of a combined cycle gas turbine generating station (CCGT) of "about 710MW" to be known as Keadby II, situated on land at Keadby originally delineated red on drawing 6517/Sk100, adjacent to the existing 745MW CCGT named Keadby I which has been operational since 1996.

1.2 The Application by the Company to the Secretary of State is made pursuant to section 36C of the Electricity Act 1989 for the Original Consent to be varied (a Variation Application) and under section 90(2) and (2ZA) of the Town and Country Planning Act 1990 either to give a direction for planning permission to be deemed to be granted, or to give a direction to vary the existing deemed planning permission.

1.3 It is requested that the Variation Application should permit a) an increase in the total generating capacity of the Proposed Development to up to 820MW with either a single or multi-shaft gas and steam turbine configuration; b) either a single bank of 12 no. hybrid cooling towers or back to back bank of 16 no. cooling towers; and c) permit an increase in the Application site area (the Application Site) to accommodate associated infrastructure and possible future carbon capture equipment.

1.4 The Variation Application includes an environmental statement February 2016 (the ES) prepared by consultants ERM in accordance with The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000 as modified by The Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013 (the 2013 Regulations). The ES has been informed by consultation during 2012-15 with statutory and other organisations and local residents and assisted by production of a scoping report (March 2015) and the Secretary of State's scoping opinion of 24.07.15. As recommended, the Company and its consultants have discussed the Proposed Development with the Department of Energy and Climate Change (DECC).

1.5 The ES chapter 1 refers to the Original Consent being based on a project design and technology developed more than 20 years ago, since when there have been significant advances in the

technologies available to the Company which is "why it is proposed that the relevant section 36 consent should be varied"[1]. The ES objectively records the assessment of likely significant effects of the Proposed Development on the environment and provides an analysis of the main respects in which these would differ from those described in the 1992 Environmental Assessment (EA). The ES also considers such mitigation as is proportionate with the aim of reducing or eliminating significant effects.

1.6 The ES in Chapter 3 sets out the regulatory context for the Variation Application in respect of the Proposed Development; the main legislative changes since submission of the Original Application; Government's 2011 National Policy Statements (NPS) for energy; the National Planning Policy Framework 2012 (NPPF); National Planning Practice Guidance (NPPG); and North Lincolnshire Council's (the Council) development plan and other adopted documents. This Statement includes an assessment of compliance with those policies based on the assessments and other findings set out in the ES.

1.7 When deciding applications for planning permission, the local planning authority (LPA) must have regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which states "If regard is to be had to the development plan for the purpose of any determination to be made under the planning acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise." However it has been decided that section 38(6) is not applicable in the case of a direction that planning permission be deemed to be granted pursuant to section 90 of the Town and Country Planning Act 1990 in connection with an application for consent made under the Electricity Act 1989.[2] The development plan is to be considered alongside other material considerations. If the Secretary of State considers it is appropriate to do so, she may decide to give greater weight to policies within NPSs for Energy than to policies in the development plan.

1.8 A copy of the Secretary of State's Original Consent under section 36 of the Electricity Act 1989 and the direction under section 90 of the Town and Country Planning Act 1990, dated 10 September 1993 is included within this Statement (Document 7). The terms "Existing Consent" and "Original Consent" are used in the Department of Energy and Climate Change (DECC) guidance note July

[1] The Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013 (the 2013 Regulations), regulation 3(1) (c) (i).
[2] R – on the application of Samuel Smith Old Brewery (Tadcaster) v Secretary of State for Energy and Climate Change [2012] EWHC 46 (Admin)

2013 "Varying consents granted under section 36 of the Electricity Act 1989 for generating stations in England and Wales, however for purposes of this Application the term "Original Consent" has been adopted.

1.9 The relevant planning authority, North Lincolnshire Council (the Council), confirmed in 1998 that the development of Keadby II had been commenced for the purposes of section 56 of the Town and Country Planning Act 1990; accordingly the Original Consent and deemed planning permission is extant. The Original Consent requires that the development shall be undertaken in accordance with specified drawings, "or in accordance with any additional or alternative drawings as may be approved in writing by the … Council" (Document 7, condition 13).

1.10 The Statement refers in the following sections to the:

- regulations and guidance associated with the making of a variation application and the submission of this Variation Application to the Secretary of State (section 2);
- consultation undertaken by the Company, the outcome of scoping and the planning history of Keadby I and Keadby II (section 3);
- consideration of the question of need particularly as stated in EN-1 and matters of need and site selection discussed in EN-2 (section 4);
- assessment of whether the Proposed Development complies with relevant policies taking into account the findings of the environmental statement (section 5);
- a brief conclusion (section 6).

2.0 REGULATIONS/GUIDANCE AND VARIATION APPLICATION

Regulations/Guidance

2.1 The Growth and Infrastructure Act 2013 ("the 2013 Act") section 20 (Variation of Consents under Electricity Act 1989) amends the Electricity Act 1989 ("the 1989 Act") by inserting section 36C (Variation of consents under section 36). Section 36C(4) of the 1989 Act provides:

"On an application for a section 36 consent to be varied, the appropriate authority may make such variations to the consent as appear to the authority to be appropriate, having regard (in particular) to:-

(a) the applicant's reasons for seeking the variation;

(b) the variations proposed;

(c) any objections made to the proposed variations, the views of consultees and the outcome of any public inquiry."

(d) In this case "the appropriate authority" means "the Secretary of State".

2.2 The 2013 Act at section 21 (Consents under Electricity Act 1989: deemed planning permission) (1) states "Section 90 of the Town and Country Planning Act 1990 (deemed planning permission: development with Government authorisation) is amended as set out in subsections (2) and (3)." Section 21(2) substitutes for section 90 sub-section (2) the new sub-sections (2) and (2ZA) empowering the Secretary of State on varying a consent under section 36 of the Electricity Act to issue a direction to either deem a new planning permission granted, or to issue a direction to vary an existing deemed planning permission as requested in this Application.

2.3 The Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013 ("the 2013 Regulations") set out the procedures for handling applications to vary consents for the construction, extension and operation of electricity generating stations that have been granted consent under section 36 of the Electricity Act 1989 (section 36 consents). Regulation 3 of the 2013 Regulations sets out what must be included in or accompany a Variation Application (see the Application list in paragraph 2.9).

2.4 DECC recommends that prospective applicants have regard to its Guidance Note July 2013 (Guidance) on "Varying consents granted under section 36 of the Electricity Act 1989 for generating stations in England and Wales", amongst which the following are considered relevant to this Application.

a) *Varying a section 36 consent: the problem* (paragraph 12).

It is acknowledged in the Guidance that generating station "consents are often not implemented until some years after they are granted." "Each consent reflects technology and industry practice at the time it was applied for, but such practices do not stand still even in relatively mature sectors" and may "sometimes be uneconomic or have more detrimental effects on the environment". The changes may not be very great but may involve work that would not be consistent with the existing consent e.g. "installing more efficient technology generating more power without radically changing the physical dimensions of the buildings and/or structures". The Application is consistent with the above Guidance.

b) *What type of proposal is the section 36 variation process aimed at?* (paragraphs 21/22).

It is stated that there are "two broad categories of case in which it is likely that the Secretary of State…may consider it appropriate to exercise the power in section 36C", namely to enable:

(i) The construction or extension of a generating station (whose construction or extension has either not yet commenced or has not yet been completed) along different lines from those in the existing consent;

(ii) "The operation of a generating station (whether or not it is already operational) in a way that is different from that specified in the existing consent", may sometimes involve making limited physical alterations to a generating station but should not involve work that could be characterised as an "extension" of an existing generating station which has been granted section 36 consent (see section 36(9) of the Electricity Act 1989).

The Application is consistent with the Guidance as the main reason for making the application for the variation licence is to allow efficient and up to date technology to be used.

2.5 Determining that a proposed variation "is "appropriate" to be made under section (36C (4) potentially requires the Secretary of State… to exercise judgement on two distinct questions" (paragraph 23):

a) "whether the change proposed… is of a kind that it would be reasonable to authorise by means of the variation procedure (regardless of its merits in planning/energy policy terms)";

b) "if the answer to question a) is positive, whether (from a planning/energy policy point of view), the variation should in fact be made, thereby authorising whatever development the making of the variation will permit to be carried out."

The Application is consistent with the Guidance. In relation to the first question, "the scope of what can be authorised under the variation procedure will depend on the provisions of the existing consent, the specific circumstances of the project and the nature and extent of the proposed changes and their environmental impacts" (paragraph 25).

2.6 The key point is that the variation procedure is not intended to result in development that would be fundamentally different in character or scale from what is authorised by the existing consent. Starting from the following broad assumptions as regards what is and is not appropriate to authorise under the section 36C variation procedure, the following are relevant (paragraph 26):

a) "Changes in the plant's main fuel or other power source are unlikely to be considered suitable subject matter for a variation", for example a consented but not constructed plant "could result in the modified plant having fundamentally different environmental impacts" from those originally consented;

b) examples of some less significant changes that may be suitable under the variation procedure are different boiler or turbine designs, or operating a CCGT generating station in open-cycle mode;

c) design changes in generating stations "consented but not constructed, which would allow them to generate an amount of power that would be inconsistent with the original consent are likely to be appropriate subject matter for a variation application provided there are no major changes in the environmental impact of the plant".

The Application is consistent with this aspect of the Guidance.

Changes involving development outside the "red line boundary" (paragraph 28)

2.7 In principle, there is nothing to stop the section 36 variation process being used to facilitate changes which would involve development outside the "red line" indicated in the existing consent, "however a substantial expansion of development outside the original boundary may indicate that what is being proposed is really a new project". Consequently, it will be very important to demonstrate that interested parties are aware of what is proposed and that any resulting environmental impacts not covered in the original ES and consent have been properly assessed. The Application proposes to increase the Application Site area as the Proposed

Development includes land for possible future carbon capture equipment (used initially for the contractor's laydown area) and for connection to gas and electricity transmission infrastructure along with routes for pipelines to water abstraction and discharge points.

The Application is consistent with this aspect of the Guidance.

Variation Application

2.8 This Statement accompanies the Application to the Secretary of State in requesting to vary the Original Consent pursuant to section 36C of the Electricity Act 1989 with corresponding changes pursuant to sections 90(2) and (2ZA) of the Town & Country Planning Act 1990.

2.9 The Documents 1) - 12) are listed in the Variation Application letter and the consultee letter enclosed with the Keadby II CD; documents 13/14 supplement that

1. Variation Application letter dated 5 February 2016 on behalf of Keadby Developments Limited (the Company) together with Appendix A - SSE Keadby, Compliance with Regulation 3 The Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013;
2. Application Site Plan scale 1:5000 Keadby 2_DWD_001;
3. Site Location Plan Keadby 2_DWD_002;
4. Ownership Plan Keadby 2_DWD_003;
5. SSE Consolidated Parameter Layout and Elevations - drawing 105_0805_0040;
6. Keadby Developments Limited Environmental Statement and Non-Technical Summary 2016;
7. Original Section 36 Consent and deemed planning permission with Site Boundary Drawing Number 6517/Sk100 10 September 1993;
8. Section 36 Consent and Deemed Planning Permission - Tracked Changes (a draft of the variations which the application proposes to the Original Consent of 10 September 1993);
9. SSE (Engineering Centre) Carbon Capture Readiness Report for Keadby 2 CCGT 15.10.15;
10. SSE Generation Ltd Keadby 2 combined cycle gas turbine generating station Combined Heat and Power Assessment 15.10.15;
11. DWD Keadby II Planning Statement (February 2016) (this document)
12. Schedule of Proposed Consultees;

13. SSE Generation Ltd Illustrative Drawings (see paragraph 2.20);

14. Newspaper notice

2.10 The Application requests certain variations to the Original Consent including the tracked changes in paragraph 2 (Document 8) duplicated as follows in this paragraph:

"a) One combined cycle gas turbine generating station of ~~about 710 MW~~ up to 820 MW consisting of:

(i) ~~two~~ one industrial gas turbine ~~each~~ with ~~an~~ associated boilers and single exhaust stack; and

(ii) one steam turbine

~~b) an access road~~

c) ancillary plant and equipment; and

d) the necessary buildings (including administration offices) and civil engineering works."

NOTE: The Original Consent which pre-dates electronic copies has been retyped.

2.11 When granting the Original Consent the Secretary of State directed that planning permission be deemed to be granted subject to some 60 conditions under paragraph 4 which are grouped into (1) Definitions; (2) The Site; (3) Time Limits; (4) and (5) New Access Road; (6) - (9) Heavy Commercial Vehicle Traffic Movements; (10) - (12) Suppression of Dust and Dirt; (13) - (19) Layout and Design; (20) - (24) Construction Noise; (25) - (30) Noise During Operation; (31) - (34) Landscaping; (35) - (42) Prevention of Contamination of Water Course and Water Requirements; (43) - (50) Fuel; (51) Emissions and Discharges; (52) and (53) Monitoring of Emissions; (54) Archaeology; (55) Contaminated Waste; (56) - (59) Local Liaison Committee and Complains Procedure; (60) Default of Agreement.

2.12 The conditions which the Applicant requests should be deleted are as follows: (3) Development was commenced and confirmed to be extant; (4) and (5) a new access road provided; (41) the permission duplicates other controls which are not evident in recent planning permissions; (44) - (50) distillate oil for fuel will not be used. Additional conditions have been added to (54) archaeology; (62) variations will be limited to immaterial changes to condition; (63) carbon capture storage; (64) use of waste heat. For information, conditions (13) and (18) require the approval of layout and design details.

2.13 The Proposed Development will include the following major components (ES 2.3.2):

- a gas turbine generator;
- waste heat recovery boiler;
- a condensing steam turbine generator;
- hybrid cooling towers 12 no. - 16 no;
- control room and instrumentation system;
- water treatment plant;
- cooling water abstraction and discharge pipework;
- offices and workshop
- stack with a height of up to 75-85 metres;

Details of those components of the development will be submitted to the Council for approval. (See also paragraph 2.20). Note: There is no requirement for this Application to be accompanied by a design and access statement (The Town and Country Planning (Development Management Procedure) (England) Order 2015 article 9(4)(c).

2.14 The hybrid cooling towers in the western part of the Site will comprise either a single bank of 12 no. units or two banks of back-to-back banks totalling 16 no. units. The gas and steam turbines can be installed in the form of a single shaft or multi-shaft configuration; ES figure 2.3 illustrates layout options for both configurations. The Application Site is proposed to be extended to accommodate both a laydown area for contractors during the construction phase and the potential installation of carbon capture equipment at a later date

2.15 Cooling options include:

- water cooling through direct abstraction from and discharge to the River Trent as currently serving Keadby 1;
- indirect water cooling using water from the Stainforth and Keadby Canal cooling system as proposed for the Consented Development;
- indirect cooling using water from the River Trent;
- air cooling;

The Keadby II indirect cooling system will be installed either in its own trench within the existing pipeline wayleave or inserted into the existing Keadby I pipeline, or if Keadby I permanently

ceased operation before the Proposed Development takes place, it is possible that the existing Keadby I cooling water intake infrastructure could be re-used including the existing pump house.

2.16 A new gas pipeline within the Application Site will be connected to the existing gas compound to serve Keadby II with its own supply of natural gas. The alternative of using distillate oil is not being pursued and references to distillate oil in Document 8 are shown as being deleted.

2.17 Connection to the National Grid 400 kV electricity transmission system will be via a new overhead line to an existing transmission tower which currently facilitates a connection from Keadby I, thus requiring a new tower to re-align and reconnect Keadby I to the system. Both the new connection and the re-alignment of the Keady I connection will be subject to a separate applications pursuant to section 37 of the Electricity Act 1989 and for deemed planning permission (unless permitted development rights apply).

2.18 Other matters relevant to this Application are:

- as part of the main construction works, a landscaping strategy will be agreed with the LPA and relevant stakeholders (see conditions 31-34);
- all construction waste materials will be regularly removed from the proposed development;
- all hazardous wastes and waste containers will be appropriately stored and removed by a licensed contractor (see also condition 56);
- a drainage strategy will be produced to manage flood volumes and water quality and a sustainable drainage strategy (SuDS) will be adopted as part of the design (ES2.4.7);
- ahead of construction, a Construction Environmental Management Plan (CEMP) will be finalised in consultation with the LPA the Environment Agency (EA1 and other relevant parties) (2.4.12);
- there will be a construction workforce of approximately 104 people over the construction programme of approximately three years, with a peak of 500 people (ES 2.4.10);
- when operational, the Proposed Development will employ approximately 18 people (assuming continued operation of Keadby I);
- the Company will put in place a liaison committee over the term of the construction programme (see conditions 57-60).

2.19 The Application description requests approval for:

- a total generating capacity of up to 820MW with either a single shaft or a multi-shaft configuration;
- either a single bank of 12. no. cooling towers or two back to back banks of 16 no. cooling towers; and
- an increase in the Application Site area to accommodate associated infrastructure and possibly future carbon capture equipment.

2.20 The Application drawing 105_0805_0040 Rev 02, defines the parameters of the Proposed Development indicating the main structures and plant including dimensions, against which further detailed engineering design will be undertaken at a later date with prospective contractors to provide details for submission to the Council for approval. The Application will also include illustrative drawings comprising "single shaft" 105_0805_10 Rev 03; 105_0805_11 Rev 03; 106_0805_12 Rev 03; 106_0805_13 Rev 03; "condenser layout" 105_0805_0015 Rev 03; 105_0805_0016 Rev 05, 105_0805_0019 Rev 04; "multi shaft" 105_0805_0023 Rev 02; "cooling towers"; 105_0805_15 Rev 03; 105_0805_16 Rev 05; "ancillary buildings" 105_0805_33 Rev 01; 105_0805_34 Rev 01;"multi shaft layout & elevations" 105_0805_0035 Rev 01; "single shaft layout & elevations" 105_0805_0036 Rev 02; "multi shaft layout" 105_0805_042; 105_0805_0043; 105_0805_0044; 105_0805_0045. The illustrative drawings are not to be treated as part of the Application.

3.0 CONSULTATION, SCOPING, PLANNING HISTORY

Consultation

3.1 In November 2012 and September 2014 SSE held local exhibitions (see below) which attracted local residents and others from locations including Keadby, Scunthorpe, Epworth, Amcotts, Crowle, Belton and Ealand.

Table – SSE Exhibitions – Keadby 2

DATE	TIME	VENUE
20 September 2014	9am-12pm	St Oswalds Church Hall, Station Road, Keadby
19 September 2014	2pm-7pm	Ealand Victory Hall, New Trent Street, Ealand
9 November 2012	10am-4pm	Crowle Community Hub, High Street, Crowle
8 November 2012	2pm-8pm	St Oswalds Church Hall, Station Road, Keadby

3.2 Apart from expressions of general interest about SSE's plans for the future development of a CCGT generating station, matters raised by those attending included wildlife; landscaping of ash mounds from the former coal fired power station; swan habitats near North Pilfrey Bridge; access for emergency vehicles; access for cyclists; mains gas supply; noise during steam venting; employment/apprenticeship opportunities during construction and operation; power station technology; management of ash and asbestos associated with the former power station; traffic movement via Chapel Lane, Eastoft, Luddington and Amcotts; cracks in roads; flood risk and insurance; and emissions.

3.3 In January 2016, SSE published and circulated to local people a newsletter providing an update on current plans for the Proposed Development, including options for either a single or multi shaft gas turbine, proposed revisions to the existing consent, an increase in the site area to accommodate contractors, cooling connections and the addition of land for carbon capture storage.

Scoping

3.4 A Scoping Report was submitted on behalf of the Company to the Secretary of State on 18 March 2015 requesting a scoping opinion on the Proposed Development which would have the effect of varying the description of the rated output in the section 36 consent from "about 710MW" to "up

to 800MW" including supplementary firing. After further consideration SSE has decided that the Application is to be amended to a capacity not more than 820MW, which reflects the largest commercially available CCGT with supplementary firing and applying a growth factor that will provide an element of future proofing for advancement in gas turbine technology.

3.5 By agreement with DECC consultation was undertaken with statutory consultees (Document 11 - Environment Agency (EA); Natural England; English Heritage (Historic England); Civil Aviation Authority (CAA); Health and Safety Executive (HSE); North Lincolnshire Council; Highways Agency (Highways England); NATS En-route (NERL) Safeguarding; Met Office; Ministry of Defence. Other organisations consulted were North Lincolnshire Clinical Commissioning Group; RSPB; Community Lincs; Greater Lincolnshire Local Enterprise Partnership (LEP); Lincolnshire Wildlife Trust; Shire Group 1DB: Lincolnshire Fire and Rescue; Lincolnshire Police; Anglian Water; National Grid; Humber Nature Partnership; Robin Hood Airport; Humberside Airport.

3.6 It is noted in the Scoping Report that the Company had previously considered various configurations of generating plant, including development of up to two gas turbines and up to two steam turbines in broadly similar configuration to the Consented Development of two gas turbines connected to a single steam turbine. It was further stated that studies into cooling indicated that while water provision could be assured for circa 700MW of generation, any significant additional generating capacity might require alternative solutions and the point was made that if Keadby I was taken permanently out of operation in the future, the option of utilising direct cooling in association with a larger capacity generation for Keadby II may be re-examined (Scoping Report 1.2).

3.7 In describing the Proposed Development envisaged in the Scoping Report, Figure 2.1 illustrated the Original Application site while Figure 2.3 illustrated the 1993 Consented Development and the Proposed Development, which would allow the project to benefit from advances in turbine design and the changed circumstances summarised in the Scoping Report Table 2.1, in particular:

a) site boundary in two parts connected by a corridor for cooling water pipes (also modifications to accommodate the possible future need for carbon capture equipment);

b) possible revision to include route corridors between the Application Site and the Stainforth and Keadby Canal and the site and the River Trent to follow an existing wayleave used for Keadby I;

c) gas turbine with capacity up to 800MW (since amended to 820MW) including supplementary firing; although there is a suggestion that the uplift in capacity will not add materially to the site area requirements;

d) one steam turbine;

e) internal access road;

f) an optimised array of cooling towers e.g. two back to back banks of eight cooling towers i.e. 16 no. in total or a single bank of 12 no. cooling towers;

g) ancillary plant and equipment;

h) administrative buildings;

i) allocation of an area for future carbon capture installation; and

j) no fuel oil storage tanks required for standby fuel.

It was stated in the Scoping Report that the ES accompanying the Application would consider the main alternatives, in this case certain technology options within the context of a CCGT development considered by the Company, in particular those relating to generating/turbine capacity, carbon capture readiness (CCR) and cooling options for the units and while there is no requirement to consider alternative sites, the Site was considered justified in the context of flood risk (section 2.3.2).

3.8 Other aspects of the Scoping Report were that section 3 considered legislative, energy and planning policy; section 4 summarised the main effects of the Consented Development based on the findings reported in the 1992 EA and briefly the main likely effects of the Proposed Development taking into account the 2012/2013 EIA screening exercise Section 5 described the broad principles of the methodology to be adopted for the subsequent EIA; section 6 commented on the scoping process to be undertaken including consultation and the likely structure of the ES.

3.9 In the Scoping Opinion of 24 July 2015 (ES Annex B), it is noted that the Secretary of State is aware that the consent and deemed planning permission are extant (paragraph 5) and that the new ES would report the likely significant effects, as well as an analysis of the main matters in which the likely significant effects on the environment would differ from those described in the 1992 EA and thereby allow a comparison, which would be helpful (paragraph 7).

3.10 Comments in the Scoping Opinion addressed the following matters:

a) Highways (paragraphs 15/16) - Guidance on Transport Assessment has been superseded by Planning Practice Guidance on "Travel plans, transport assessments and statements in decision-taking"; Circular 02/13 should be taken into consideration in any ES. North Lincolnshire Council stated that a Transport Statement and Construction Phase Traffic Management Plan will be required.

b) Water Resources (paragraph 17) - the EA's comments should be noted and acted upon, which included advice on water availability within the tidal River Trent and the need to consider the Humber Estuary Marine Site to ensure no adverse impact is apparent via any environmental impacts received from the River Trent.

c) Water Framework Directive (paragraph 18) - the EA recommends an assessment of potential impacts of the development during construction and operation on watercourses in the vicinity, particularly regarding abstraction/discharges and ecological concerns including invertebrates and fish.

d) Flood Risk Assessment (paragraphs 19-21) - The EA drew attention to the site being included in Flood Zone (FZ3) and a high risk area of flooding. It recommends "the platform level should be raised above the resulting level of the Isle of Axholme Critical Flood Level which would protect against the risk of flooding from the inland drainage network"; the EA referred to opportunities for partnership working to improve levels of protection in the area. Anglian Water indicated it would be helpful if the ES considered the environmental effects of sustainable drainage methods (SuDS).

e) Environmental Permitting (paragraphs 22/23) - the consenting authority (DECC) will require a written indication from the EA prior to determination of the variation application, that the EA can regulate the operational process prior to a section 36 variation decision being taken specifically in relation to atmospheric emissions (i.e. pollution, prevention and control permit) and water abstraction (i.e. water abstraction licence).

f) Ecology and Nature Conservation (Habitats Regulation Assessment) (paragraphs 24-31) - The EA refers to the Humber Estuary SSSI, Special Area of Conservation (SAC) and Ramsar site and Thorne Moor SAC as being "reasonably close" to the Proposed Development and to the significance of the Conservation of Habitats and Species Regulations 2010 (as amended) ("the Habitats Regulations"). It is noted that DECC is the competent authority; measures proposed to mitigate impacts can be taken into consideration provided those measures are embedded within the application; the applicant should provide sufficient information to

inform any Habitats Regulation Assessment (HRA) to be verified by Natural England; the ES should assess the impacts of all phases on protected species including great crested newts, reptiles, birds, water voles, badgers, bats; North Lincolnshire Council has also indicated that potential impacts on otters should be considered. A Phase 1 Habitat Survey should include any species occupying adjoining land which may use the proposed development site; note also comments from North Lincolnshire Council and the Lincolnshire Wildlife Trust.

g) Other Matters (paragraph 32) - Natural England has raised issues in relation to heritage landscapes, access and recreation, rights of way, access land, coastal access and national trails, soil and agricultural land quality, air quality, climate change adaptation and cumulative and in combination effects;

h) Aviation (paragraph 33) - The CAA raised a number of issues as being suitable for assessment. NATS had no comment; the MOD commented that the proposal relates to a site outside its safeguarding area;

i) Environmental Health (paragraphs 34-37) - North Lincolnshire Council has agreed the proposed locations for the assessment of noise impacts, including cumulative impacts of Keadby 1 and Keadby II with a request for sufficient information in respect of construction, demolition and site clearance to enable suitable noise limits to be determined, and an assessment of possible vibration effects. The Council accepted the proposed methods for assessing air quality and the control of dust and asked for a discussion of light emissions from construction compounds to be included in the EIA.

j) Archaeology (paragraphs 38/39) - Historic England pointed to the proximity to a scheduled monument and Grade 1 listed building on which impacts should be assessed; also to note North Lincolnshire Council suggestions for a desk based assessment including the Isle of Axholme Special Historic Landscape and additional monuments in the immediate vicinity.

k) National Grid Assets (paragraph 40) - National Grid referred to some of its infrastructure being in close proximity to the site and that any potential impacts should be assessed in the ES.

l) Carbon Capture Readiness (paragraph 41) - refers to CCR guidance on the DECC website; A guidance note for section 36 Electricity Act 1989 consent applications URN 09D/810 November 2009.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43609/Carbon_capture_readiness_-_guidance.pdf

m) Combined Heat and Power (paragraph 42) refers to the CHP guidance on the DECC website.

https://www.gov.uk/consents-and-planning-applications-for-national-energy-infrastructure-projects#exploring-combined-heat-

Planning History

Keadby I

3.11 The original Keadby Power Station was described as being within the Isle of Axholme, part of the area administered by Boothferry Borough Council which was abolished and incorporated with Scunthorpe and Glandford Councils into North Lincolnshire Council, established as a unitary authority in 1996 (the Council). The Council is the local planning authority (LPA) in respect of applications for planning permission made under the Town and Country Planning Act 1990 and is the relevant planning authority with regard to any application under the Electricity Act 1989 and for the discharge of conditions pursuant to any consent for an electricity generating station under section 36 of the Electricity Act.

3.12 The site at Keadby has been used since the 1950s for energy generation, however power production at the coal fired generating plant ceased about 1986 when the plant was disconnected from the National Grid. Energy Resources Limited acquired the site and on 25.9.90 submitted an application as part of a joint venture with Scottish Hydro for the modification and refurbishment of the then existing power station to create a 720MW CCGT generating station. On 4 March 1991, consent was given by the Secretary of State under section 36 of the Electricity Act and a direction was made under section 90(2) of the Town and Country Planning Act 1990 authorising the construction and operation of a generating station of about 720MW comprising three industrial gas turbines, each with an associated boiler and exhaust stack, one steam turbine, ancillary plant and equipment and the necessary buildings (including administration offices) and civil engineering works.

3.13 The Secretary of State later issued a revised consent on 8 August 1991 in which it was stated:

"Pursuant to paragraph 3(1) of the consent granted by him under section 36 of the Electricity Act 1989 on 4 March 1991 (the Consent), the Secretary of State for Energy hereby directs that the Development referred to therein may be constructed otherwise than in accordance with the technical and particulars referred to in that paragraph, provided that the Development is constructed in accordance with paragraph 2 below".

The revised consent amended the description of the Development to:

a) "One combined cycle gas turbine generating station of about 680MW consisting of:

(i) two industrial gas turbines each with an associated boiler and exhaust stack; and

(ii) one steam turbine

b) ancillary plant and equipment; and

c) the necessary buildings (including administration offices) and civil engineering works."

Keadby II

3.14 When considering the application for the development of Keadby II the Secretary of State had regard to the 1992 Environmental Assessment and a further document on 13 August 1993 entitled "Feasibility Study for a new access for Heavy Goods Vehicles associated with the proposals to construct Keadby Power Station II". It was explained in the accompanying letter of 10.9.93 (Document 7 paragraph 3.4) that the Secretary of State had considered some late objections on the movement of heavy commercial vehicle traffic during construction via the villages of Ealand and Keadby. This was to be addressed by way of conditions regulating heavy commercial vehicle traffic movements, with further conditions requiring the establishment of a local liaison committee and complaints procedure.

3.15 Document 7 is a copy of the Original Consent together with the site area delineated red on Drawing Number 6517/Sk100. Paragraph 2 defines "the Development". Paragraph 3 refers to the Consent being granted subject to two conditions (1) and (2) which state:

(1) "Except where the prior written agreement of the Secretary of State has been given to any variation in design, construction or operation of the Development, the Development shall not be constructed or operated otherwise than in accordance with the technical and other particulars contained in the Company's application of 2 September 1992.

(2) Except with the written agreement of the Secretary of State, the construction of the Development shall not be begun after the expiry of five years from the date of this consent."

3.16 The construction of the development was begun before the expiry of five years from the date of the consent, and the section 36 consent and the deemed planning permission are extant.

3.17 Paragraph 4 of the Consent directed that planning permission for the Development was deemed to be granted pursuant to section 90(2) of the Town and Country Planning Act 1990 subject to

conditions, among which Condition 4 (1) defined "Permitted Preliminary Works", as meaning the following:

(i) "construction within the Site of the access road, and related alterations to existing on-Site roads;

(ii) provision of wheel cleansing facilities pursuant to Condition (9);

(iii) landscaping works, provided these do not require the delivery of bulk filling materials to the Site;

(iv) installation and diversion of utility services within the Site;

(v) surveys and geotechnical investigation works;

(vi) erection of boundary and security fences; and

(vii) provision for temporary contractors facilities within the Site as necessary for (i) - (vi) above or for the construction of off-Site highway works pursuant to the provisions of condition (5);"

Among the above, the "Permitted Preliminary Works" enabled these activities to be undertaken without the obligation to comply with Condition 5 which required the prior construction of a by-pass route for Ealand.

3.18 In 1998 the Government introduced a White Paper Cm 4071 indicating that it had adopted a stricter power station consents policy for a limited period while other reforms of the electricity market were put in place. A central element of that policy was that new natural gas-fired generation would normally be considered inconsistent with the Government's energy policy. The Secretary of State took account of representations made on behalf of Keadby Development Ltd and expenditure it had incurred on the project, but nevertheless directed that "the proposal be not carried out", although it was stated that he would expect to review his decision once the stricter consents policy was relaxed. In May 2000 DTI wrote to the Company referring to the recent Secretary of State announcement on the intention to lift the policy, inviting the Company to proceed with its proposal if it wished. The Company chose not to proceed further with the Consent at that time although it has maintained contact with the Department such that at an appropriate time it may pursue development of the project.

3.19 Having considered various options for access, the Council subsequently granted planning permission for the construction of a road running south from North Pilfrey Farm to the A18. The

road crosses the Doncaster-Scunthorpe Railway and Stainforth and Keadby land by means of a high level bridge on a raised embankment. SSE confirmed in the 2012 exhibition that the access road had been built and a new bridge over the canal was under construction.

4.0 ENERGY POLICY - NEED AND SITE SELECTION

Background

4.1 NPS EN-1 sets out national policy for defined types of energy infrastructure and has effect in combination with the relevant technology specific NPS EN-2, which together with EN-1 provides the primary basis for decisions. The Planning Act 2008 sets out the thresholds for NSIPs in the energy sector, namely onshore electricity generating stations of more than 50MW (and 100MW offshore) including gas-fired generating stations

4.2 This section considers first the question of need on which policy is contained in EN-1. It then refers briefly to EN-2 and to other energy related considerations involving gas fired electricity generation, namely a) the Secretary of State's decision when granting section 36 consent to Sutton Bridge power station; b) the 2015 Statutory Security of Supply Report and c) the Secretary of State's announcement on "a new direction for UK energy policy". The section also considers briefly the matter of Site selection and its suitability as a location for the Proposed Development.

Need

NPS EN-1

4.3 Overarching NPS EN-1 (Planning for new energy infrastructure) Part 2 concerning Government policy on energy and energy infrastructure development states that "energy is vital to economic prosperity and social well-being and so it is important to ensure that the UK has secure and affordable energy" and that "producing the energy the UK requires and getting it to where it is needed necessitates a significant amount of infrastructure both large and small" (EN-1, 2.1.2). There is a reminder that within a market based system and with constraints on public expenditure, the long term policy framework should facilitate investment by the private sector in necessary new infrastructure (EN-1, 2.2.2). It is also stated that "the role of the planning system is to provide a framework which permits the construction of whatever Government - and players in the market responding to rules, incentives or signals from Government - have identified as the types of infrastructure we need in the places where it is acceptable in planning terms" (EN-1, 2.2.4).

4.4 NPS EN-1 Part 3 (The need for new nationally significant energy infrastructure projects) sets out planning policy in respect of the Government's need for new energy infrastructure projects (paragraph 2.2.26) which is stated as follows:

- *The UK needs all the types of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions.*

- *It is for industry to propose new energy infrastructure projects within the strategic framework set by Government. The Government does not consider it appropriate for planning policy to set targets for or limits on different technologies.*
- *The [relevant authority] should therefore assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part.*
- *The [relevant authority] should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for… consent…"*

4.5 The introduction to Part 3 (section 3.2) refers to the essential nature of energy such as in our homes, transport, critical services and workplaces. It states that substantial weight should be given by the relevant authority to considerations of need and that the weight which is attributed to this in any given case "should be proportionate to the anticipated extent of a project's actual contribution to satisfying the need for a particular type of infrastructure" (paragraph 3.2.3).

4.6 Section 3.3 concerning the need for new nationally significant electricity infrastructure projects states that "electricity meets a significant proportion of our overall energy needs and our reliance on it is likely to increase…" (paragraph 3.3.1). The key reasons why the Government believes there is an urgent need for new electricity NSIPs is addressed under the topics of meeting energy security and carbon reduction objectives; the need to replace closing electricity generating capacity; the need for more electricity capacity to support an increased supply from renewables; future increases in electricity demand; the urgency of the need for new electricity capacity; alternatives to new large scale electricity generation capacity by reducing demand, more intelligent use of electricity and interconnection of electricity systems (Section 3.3).

4.7 The Proposed Development was consented in 1993 and construction commenced within five years; the section 36 consent and deemed planning permission remain extant. For the reasons explained, the project did not continue at that time (paragraph 3.18) but the Company has continued its investment in North Lincolnshire in respect of a) the operation and maintenance of Keadby I; b) the development of Keadby windfarm; c) the construction of the new road link and bridge crossing; d) the long-term opportunity in maintaining the future of this Site's investment potential, which is consistent with the Government's policy on need. There is a clear need for the Proposed Development and EN-1 is complied with.

NPS EN-2

4.8 The NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2) Part 1 states that this NPS, with NPS EN-1, provides the primary basis for decisions on applications for "nationally significant fossil fuel electricity generating stations". Applications should be consistent with instructions and guidance in this NPS, EN-1 and any other NPSs relevant to the Application (EN-2, 1.2.1/2). NPS, EN-2 covers electricity generating infrastructure over 50 MW namely a) coal-fired, b) gas-fired, c) integrated coal gasification combined cycle and d) oil-fired (EN-2, 1.8.1).

4.9 Part 2 Assessment and technology-specific information notes that the policies set out in this NPS are additional to those on generic impacts in NPS EN-1, in which it concludes that there is "a significant need for new major energy infrastructure" and that, in the light of this, "the need for the infrastructure covered by this NPS has been demonstrated" (EN-2, 2.1.2).

4.10 Returning to the matter of the relationship with EN-1, EN-2, 1.3.1 states that it should be read in conjunction with EN-1 which covers (among other considerations) "the need and urgency for new energy infrastructure to be consented and built with the objective of contributing to a secure, diverse and affordable energy supply and supporting the Government's policies on sustainable development, in particular by mitigating and adapting to climate change".

Recent Events

4.11 On 16 September 2015 the Secretary of State authorised consent under section 36 of the Electricity Act 1989 for the development of a new 1800 MW CCGT generating station on land at Sutton Bridge. The Secretary of State, in considering objections stated that the "Overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)... sets out the national need for development of new nationally significant electricity generating infrastructure of the type proposed by the Applicant in order to maintain security of supply. Though made under the Planning Act 2008 regime, the National Policy Statements (NPSs) are material to the Secretary of State's consideration of the proposed development". It continues "EN-1 also advises at paragraph 4.10.3 that focus should be on whether the development itself is an acceptable use of the land and on the impacts of that use, rather than the specific subsequent control of processes, emissions and discharges themselves; the assumption should be that the relevant pollution control regime, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator." (3.5a). In reaching the decision, The Secretary of State referred to a number of issues as being material to the merits of the section 36 consent application, including:

"Government's policies on the need for and development of new electricity generating infrastructure and specifically gas-fired generating stations…" (paragraph 9.2 vii) Note: in addition to the matter of need, the decision letter refers to assumptions on pollution control etc. which are also relevant to this Application in parts of section 5.

4.12 The DECC/Ofgem Statutory Security of Supply Report 15 October 2015, was presented to Parliament pursuant to section 172 of the Energy Act 2004 as amended by section 80 of the Energy Act 2011. DECC's website describes this as "Annual report to Parliament on the availability of electricity and gas for meeting the reasonable demands of consumers in Great Britain." It is stated in the introduction to the Report (paragraphs 40/41):

- "GB's gas system has delivered security to date and is expected to continue to function well, with sufficient capacity to deliver to meet demand.
- The UK Continental Shelf (UKCS) remains a major source of gas in the GB market with supplies also coming from a variety of international partners via pipelines and LNG cargoes.
- There are a range of future supply outlooks but all show sufficient gas available from the combination of domestic, regional and global markets."

The GB gas system was described as being "robust to all but extreme and unlikely combinations of events", with the cautionary note that "there is always future uncertainty".

4.13 On 18.11.15 the Secretary of State for Energy and Climate Change made a speech on "*a new direction for UK energy policy*" in which she included the following statements:

- energy security has to be the first priority - it is fundamental to the health of our economy and the lives of our people;
- energy security has been best served by government staying out of the way and allowing markets to find an answer;
- in the next 10 years, it's imperative that we get new gas fired power stations built;
- one of the greatest and most cost-effective contributions we can make to emission reductions in electricity is by replacing coal fired power stations with gas;
- gas produces half the carbon emissions of coal when used for power generation.

4.14 The speech concluded that the way forward includes:

- new gas replacing coal;

- Government should enable, not dictate;
- energy security provides the foundation of our future economic success; it is the top priority.

4.15 EN-2 referring to "nationally significant fossil fuel electricity generating stations" states that the determining authority should act on the basis that "the need for the infrastructure covered by this NPS has been demonstrated" (paragraph 4.9). Recent events have further emphasised this position in which on 16.09.15 the Secretary of State approved a new 1800 MW CCGT station at Sutton Bridge (paragraph 4.11). The decision was also a reminder that NPSs EN-1 and EN-2 are material to the Secretary of State's consideration "on the need for and development of new electricity generating infrastructure and specifically gas fired generating stations" (paragraph 4.11). A month later the DECC/Ofgem Statutory Security of Supply Report (15.10.15) stated that while there are a range of future supply outlooks of the GB gas system it was nevertheless described as being "robust to all but extreme and unlikely combination of events" (paragraph 4.12). Subsequently (18.11.15) the Secretary of State's speech on "a new direction for UK energy policy" is clear as to the importance of gas fired generating plant in contributing to overall need (paragraphs 4.13-14). All of the above endorse the principle behind the Proposed Development, for which need has been established, and which can contribute to the provision of energy infrastructure in accordance with the Secretary of State's announcement on support for the development of new CCGT projects.

Site Selection, CHP, Carbon Capture

4.16 EN-2, 2.2 concerning "factors influencing site selection by developers", refers to the criteria considered by applicants when choosing a site namely a) land use, b) transport infrastructure, c) water resources and d) grid connection. It states that "fossil fuel generating stations have large land footprints and will therefore only be possible where the applicant is able to acquire a suitably-sized site", which will "also need to be big enough to conform to Government policy on CCR and CCS" (EN-1, 4.7 and EN-2, 2.2.1-3).

4.17 From a land use perspective a) the Proposed Development comprises land owned by the Company at Keadby (used since the 1950s for power generation); b) the application in 1992 addressed the Site history of both the eastern and western parcels of land which were considered appropriate for the intended use; c) the 1993 consent imposed a number of conditions on matters to be addressed which are mostly retained in this Application together with additional conditions; d) the 1993 consent is extant and could be developed, e) as in 1993 the Site is

accessible to the necessary infrastructure which underpin the Site's suitability for power generation development. The second matter of transport infrastructure, that any application should incorporate suitable access "leading off from the main highway network", is provided by the Site's permanent access to/from the A18. The third consideration of "water resource availability" is addressed in the ES (see also EN-1, 5.15) in which it states that the Proposed Development will use indirect water cooling abstracting water from the Stainforth and Keadby Canal The ES 2.7.2 explains the main environmental reasons for the choice of indirect water cooling (ES 2.7.2_. The fourth consideration of "grid connection" can be accommodated as described earlier (paragraph 2.17).

4.18 The Government's strategy for CHP states that to be economically viable as a CHP plant, a generating station needs to be located close to industrial or domestic customers with heat demands (EN-1, 4.6.5). EN-2, 2.3.2/3 requires applicants to present evidence in the application that the possibilities for CHP have been fully explored. For non CHP stations, where there is reason to believe that opportunities to supply heat could arise in the future, there may be a requirement for developers to ensure that their stations are CHP ready and are configured to allow CHP at a later date. The Applicant's Combined Heat and Power Assessment (August 2015) refers to a "best case" CHP scenario having been considered in relation to the Proposed Lincolnshire Lakes development, although there is no firm evidence that this will be viable. Nevertheless the Applicant intends that the Proposed Development will be designed so as to be CHP ready.

4.19 The Government's policy criteria for CCR for new combustion generating stations at or over 300MW is set out in EN-1, 4.7 and also in EN-2, 2.3.4/5, from which it is advised that consent should not be given unless the relevant authority is satisfied that the proposed development meets all the criteria and should impose requirements on any consent requiring operators to:

- "retain control over sufficient additional space (whether on or near the site) for the carbon capture equipment;
- retain their ability to build carbon capture equipment on this space (whether on or near the site) in the future"; and
- submit update reports on the technical aspects of its CCR status to the Secretary of State for Energy and Climate change. These reports should be required within three months of the date on which a consented station first begins to supply electricity to the gird and every two years thereafter until the plant moves to retrofit CCS".

A consequence of fulfilling the CCR requirement is that additional land will be required within the extended boundary of the Application Site, which this Application provides.

5.0 PLANNING ASSESSMENT

Background

5.1 Section 5 is accompanied by Table 1 (Topics/Summary Planning Policies) and Planning Appendix, from which this Statement refers to certain main policies representative of the policy framework against which the following topics are addressed: .

5.2 Table 1 lists the respective topics addressed in the ES, alongside which it has identified policies relevant to those topics. The policies and issues in this assessment are derived from the respective National Policy Statements (NPSs) for energy, Overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2) 2011; the National Planning Policy Framework 2012 (NPPF); National Planning Practice Guidance 2014 (NPPG); policies in the Council's development plan comprising the North Lincolnshire Local Plan 2003 (NLLP) and the North Lincolnshire Local Development Framework Core Strategy 2011 (Core Strategy). There is inevitably some overlapping of policies but no significant conflicts have been identified.

5.3 This section considers the main policies and the environmental effects for which regard has been had to the findings of the ES. The conclusion reached is that the Proposed Development accords with the policy framework.

5.4 The ES records its assessment of likely significant effects of the Proposed Development on the environment, including direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects. When addressing mitigation of environmental effects, ES 4.6 refers to schedule 4 of the EIA Regulations which requires that where significant effects are identified, "a description of the measures envisaged to prevent, reduce and where possible, offset any significant adverse effects on the environment" should be included in the ES. Having identified environmental effects which are capable of being mitigated, the requisite measures have been taken, for example, "integration into design; inclusion of management procedures; or through a Code of Construction Practice or equivalent" (ES 4.6). Where appropriate the mitigation measures set out in the ES can be secured by condition, most of which already exist in the Original Consent, and to which some variations are proposed in the Application (Document 8).

5.5 In the ES the following topics have been assigned separate technical Chapters and have been adopted in the same sequence in this Statement, namely: 6 - Land and Water; 7 - Ecology and Nature Conservation; 8 - Noise and Vibration; 9 - Air Quality; 10 - Cultural Heritage; 11 - Traffic

and Transport; 12 - Socio - economic characteristics; 13 - Landscape and Visual; 14 - Cumulative and Indirect Effects. In the respective technical chapters 6-13, the ES considers the construction, operational and decommissioning phases along with mitigation measures, from which, it has drawn conclusions on residual effects; each chapter then concludes with a comparison between the likely significant effects of the 1992/3 Consented Development and the Proposed Development. Chapter 14 (Cumulative and Indirect Effects) determines the effects of the Proposed Development together with other planned changes, assesses the likely significance of any changes and suggests mitigation where practicable. This section, in referring to each of the ES technical chapters; a) refers briefly to the main policy aspects; b) considers the comparison between the likely significant effects of the Consented Development and the Proposed Development; and c) addresses cumulative and indirect effects.

Land and Water

5.6 The ES Chapter 6 addresses a number of issues under soil resources and land quality, water resources and quality and flood risk.

Policy

5.7 The policy framework with Table 1 refers to the areas of climate change, pollution control, flood risk, water quality, water resources and conserving the natural environment. The policies raise a number of the main points including:

a) requiring climate change to be taken into account when developing and consenting infrastructure and the need for new energy infrastructure to be sufficiently resilient to meet energy requirements, otherwise it will not be able to satisfy the energy needs outlined in Part 3 of EN-1 as discussed in this Statement at Section 4. (EN-1, 4.8, EN-2, 2.3);

b) focussing on whether the Proposed Development is an acceptable use of the land and on the impacts of that use, rather than the control of processes, emissions or discharges, and working on the assumption that the relevant regulatory regime will be properly applied and enforced (EN-1, 4.10);

c) in an area at risk of flooding, where new energy infrastructure is exceptionally necessary, the relevant authority should be satisfied that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere while meeting the requirements of the sequential test and the exception test (EN-1, 5.7, NPPG Flood Risk and Coastal Change, NPPF paragraphs 99-104, North Lincolnshire Core Strategy CS19);

d) in the matter of water quality and resources, effects on the water environment should be considered and it should be demonstrated that an adequate supply of water is available and that appropriate measures will be put in place to avoid or minimise impacts of abstraction and discharge of cooling water (EN-1, 5.15, EN-2, 2.2 and NLLP DS15).

Environmental Effects

5.8 ES 6.3 confirms that a sequential test has been applied; there are no reasonably available sites appropriate for the Proposed Development in areas with a lower probability of flooding; the exception test has also been applied and the conclusion reached that it has been passed.

5.9 ES 6.7 states that during the construction phase, potential effects are particularly focussed on preventing the mobilisation of materials that may affect the environment, which can be largely avoided through standard practices outlined in the CEMP. During the operational phase land quality impacts will be of lesser concern. During construction and operation potential effects on the water environment (in particular the field drains of Keadby Common and North Soak Drain) can be avoided/ minimised through appropriate water management plans and designs for flood prevention management measures; demolition effects can similarly be avoided/minimised through standard construction management practices. The Site is in an area protected by flood defences where in the unlikely event of a breach, the residual risk is mitigated through raising site levels to 2.6 metres AOD for critical infrastructure.

5.10 ES 6.8 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that in the context of both the consented development and the Proposed Development, "the land contamination effects for both would be broadly similar and not significant"; discharges to water from the Proposed Development will be in accordance with regulatory requirements and will lead to no significant effects, leading to the conclusion that the effects from water discharges can be considered the same in respect of both the Consented Development and the Proposed Development; similarly it would be reasonable to conclude that the effects associated with abstraction of water from the Stainforth and Keadby Canal and flood risk considerations for both schemes would be "broadly similar and not significant".

5.11 ES chapter 14.2.2 (Summary of Cumulative and Indirect Effects) states that the Proposed Development is not likely to increase flood risk at the Lincolnshire Lakes, which includes substantial flood defence works including mitigation for loss of flood plain storage; furthermore both developments with surface water run-off management systems will be managed/attenuated, avoiding downstream effects, therefore there will be no cumulative effects.

Discussions with the Environment Agency (EA) and the Canal and River Trust to provide additional water via the Stainforth and Keadby Canal indicate adequate availability; abstraction levels will be controlled with a licence agreed with the EA, including consideration of cumulative effects of all abstractions on other users and the environment, accordingly significant cumulative effects are not considered probable.

Ecology and Nature Conservation

5.12 The ES Chapter 7 together with Annex E4 address a number of issues (habitats, species, including protected species, protected areas, direct disturbance effects and wider ranging effects due to emissions to air) which are referred to in Table 1 under the topics of addressing Habitats and Species Regulations requirement; managing impacts from cooling water use; measures to minimise impacts on biodiversity; reuse of land; and mitigation provisions.

Policy

5.13 The policy framework refers to the Habitats and Species Regulations (EN-1, 4.3), biodiversity and geological conservation (EN-1, 5.3) and to water quality and resources (EN-2, 2.10). Section 11 of the NPPF states that the planning system should contribute to and enhance the natural and local environment. Policy CS17 in the Core Strategy refers to the means by which effective stewardship of North Lincolnshire's wildlife will be promoted. Policies in the NLLP set out the approach when considering potential effects on habitats and species. The composite effect of these policies is to raise a number of points including the following.

a) Although the Proposed Development is not located within any areas designated for nature conservation purposes, both statutory (including those protected under international convention and European Directives) and other non-statutory designated sites in the locality, the issue of whether there are any likely significant effects on those habitats should be considered. In particular the policy and legislative framework provides that it should it be ascertained i) whether information should be provided to inform appropriate assessment if required; ii) whether there will be any likely significant effects arising from the Proposed Development; iii) are the proposed mitigation measures considered appropriate; iv) where air quality modelling predicts exceedances of assessment levels, are mitigation measures adequate to compensate for the effects?

b) The Proposed Development should generally seek to avoid or minimise harmful effects on habitats and species and present means of biodiversity enhancement.

Environmental Effects

5.14 ES 7.4.7 (mitigation measures) confirms that a landscape masterplan will be developed to address both landscaping and biodiversity enhancement measures.

5.15 ES 7.5 states that the permanent loss of habitats within the western part of the Site is predicted to have a negligible impact on the habitats and the species that the habitats support. Within the eastern part of the Site there are some portable cabin buildings which have been assessed as being of low potential to support roosting bats. Assuming a worst case, the Keadby Warping Drain local wildlife site (LWS) will experience a temporary impact of a limited area (150M2) due to the installation of a new pipeline by trenching and which will be reinstated. The intensive management of the drains and Canal within and surrounding the Application Site reduces the suitability to support water vole populations, although possible field signs were identified at the Keadby Pumping Drain, Keadby Warping Drain, North Soak Drain and South Soak Drain of which local records indicate that water voles are present in the wider area. Of the above, only Keadby Warping Drain will be subject to trenching, to which appropriate mitigation and best practice techniques will be applied, therefore no potential impacts on water voles are predicted. Impacts on eels during operation are predicted due to potential entrapment associated with the operation of a new pumping station abstracting water from the Stainforth and Keadby Canal, however with implementation of best practice techniques, impacts are predicted to be locally minor at most, and there will be no significant effects on lamprey.

5.16 Significant effects are predicted on 6 no. LWSs and 1 no. SNCI due to short term impacts associated with NOx concentrations and nutrient nitrogen deposition, however by implementing the mitigation strategy involving active management to help maintain the conservation status of these sites, effects are predicted to be not significant. Potential impacts on the Humber Estuary SAC, Ramsar Site and SSSI associated with NOx concentrations and nutrient nitrogen depositions are predicted to be not significant and the Proposed Development will not adversely affect the integrity of any European site.

5.17 ES Annex E provides information to inform Habitats Regulation Assessment and assesses the potential for effects on protected sites due to emissions from the Proposed Development, Keadby I, the proposed White Rose Carbon Capture and Storage project and the North Killingholme Power Project in combination; no in combination effects were predicted for any protected sites.

5.18 ES 7.6 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that the Proposed Development is predicted to result in either no

change, or a reduction in the impacts and the likelihood of significant environmental effects when then compared to the Consented Development; on balance, the Proposed Development, taking into account the proposal to include the development of a Landscape Masterplan, is considered to be less likely to result in significant environmental effects when compared to the Consented Development.

5.19 ES chapter 14.2.3 (Summary of Cumulative and Indirect Effects) states that the Lincolnshire Lakes Development does not have the potential to generate significant effects on the same sensitive ecological receptors as the Proposed Development. The proposed overhead lines will not result in significant effects on ecological receptors and will not have cumulative effects on the same sensitive receptor as the Proposed Development. Reference is made to "potential significant cumulative effects from emissions to atmosphere and cooling water abstraction and discharge" and a report containing information to inform Appropriate Assessment, in respect of sites which could be affected by the Proposed Development. Considered Sites included Thorne Moor Special Area of Conservation; Humber Estuary Special Area of Conservation, Special Protection Area and Ramsar Site; and Thorne and Hatfield Moor Special Protection Area. Chapter 14 notes the potential for short-term nitrogen oxides concentrations in air and nitrogen deposition to soil at some local conservation sites could be exceeded, however active management of those is likely to be the key factor in maintaining the status of sites (as noted in 5.15 above).

Noise and Vibration

5.20 ES Chapter 8 addresses the effects of construction noise (including that from construction traffic) and operational noise, including together with Keadby I operating, which are referred to in Table 1 under the topics of noise assessment/management; measures to reduce noise; and working within predicted noise limits of conditions.

Policy

5.21 The policy framework requires effective noise vibration management of the development, with measurable requirements of noise and mitigation to avoid exceedances and to ensure emissions will not create adverse environmental conditions for nearby areas taking into account the cumulative effects of both Keadby I and the Proposed Development which is already addressed in conditions in the extant consent (EN-1, 5.11, EN-2, 2.7 and NPPF paragraph 123). NLLP policy DS11 sets out the approach to be taken when considering 'polluting activities' including noise. The policies emphasises the need for development to avoid significant adverse impacts on health and quality of life, mitigate and minimise other adverse impacts (engineering, layout,

management etc.) and with regard to gas turbines mitigation by attenuation of exhausts is recommended (EN-2.7).

Environmental Effects

5.22 Chapter 8 advises that during construction daytime work is not likely to give rise to significant noise impacts and that work onsite in the evening or night time will be limited to avoid disturbances, with noise levels monitored to ensure limits are not breached. Mitigation measures will be developed further as the design progresses, with the target of reducing noise levels as far as practicable using best available techniques. Modelling of the Proposed Development has shown that noise levels in the main residential area of Keadby village will not cause significant impacts, nor cumulative levels from both Keadby plants. With regard to the three individual houses nearest the Site; at Vazon Cottage the plant will increase background noise levels, however the noise environment is dominated by train noise such that the predicted increase above background noise is not considered significant; at Red House and Hawthorn House noise increases are predicted but standards will be met as being within the planning condition limits.

5.23 The comparison between the Consented Development and the Proposed Development confirms that conditions relating to limiting construction noise are still relevant and will be met and will be no worse than envisaged in the extant consent. The design of the Proposed Development includes various acoustic attenuation measures including low noise cooling towers, consequently predicted levels are lower than the condition limits and the impact will be no worse than envisaged in 1993.

5.24 The cumulative effects are that Lincolnshire Lakes is located over 2 kilometres from the Proposed Development and will not have noise effects on the same sensitive receptors as the Proposed Development, therefore there will be no cumulative effects. Noise associated with the overhead lines will primarily derive from the temporary construction period and will not have cumulative effects on the same sensitive receptors as the Proposed Development. The cumulative impact of noise from the Proposed Development operating together with Keadby I will lead to noise levels at nearby sensitive receptors that are within the limits set for the Consented Development and will not result in significant effects. ES Chapter 8 also calculates that the operational noise for the Proposed Development "will not lead to significant effects on people at the nearest sensitive receptors."

Air Quality

5.25 ES Chapter 9 addresses the effects of construction activity (dust and traffic emissions) and operational emissions (effects on people and sensitive ecological sites, including identifying where thresholds are exceeded therefore warranting further ecological assessment), which are referred to in Table 1 under the topics assessment of air quality as emissions and predicted impacts on sensitive human receptors and ecological receptors and designed in mitigation.

Policy

5.26 The policy framework addresses issues around air quality and emissions (EN-1, 5.2 and EN-2, 2.5) in which it notes that, as in this Application, substantial weight should be given where a project would lead to a deterioration in air quality in an area, or lead to a new area where air quality breaches any national air quality limits. It further notes that air quality will also be important where substantial changes are expected, however where a project is likely to breach such limits, the development should "work with the relevant authorities to secure appropriate mitigation measures to allow the proposal to proceed." EN-1, 5.6 (dust, odour, artificial light, smoke, steam and insect infestation) will be addressed by reference to the CEMP. The ES highlights the potential for effects on sensitive ecological receptors including sites protected at an international level (SPAs, SACs, Ramsar sites) within 10 kilometres of the Site and nationally and locally recognised conservation areas (SSSIs, NNRs, LNRs, LWS, SNICs and ancient woodland) within 2 kilometres (NPPF paragraph 118). The foregoing raise issues around whether the Proposed Development gives rise to concerns either in respect of human health and/or deposition of nitrogen in relation to sensitive receptors.

Environmental Effects

5.27 The assessment in Chapter 9 concludes that there will be no significant effects on air quality due to traffic emissions and that dust arising from construction activity can be managed in a way that avoids significant effects on the nearest neighbouring land uses.

5.28 ES 9.6 states that in all instances the short and long-term worst case impacts (Keadby I plus Proposed Development either layout option) at any receptor are within the standards designed to protect human health.

5.29 The air quality assessment has indicated the potential for significant effects on some ecological receptors and the need for further ecological assessment (see chapter 7 for conclusions). As noted in 5.16 and 5.17 above the further ecological assessment concluded no significant effects for European protected sites. It is also worth noting that the presence of an operational Keadby I

alone, even without the addition of the Proposed Development, leads to the potential for significant effects on ecological receptors. There is designed-in-mitigation to the Proposed Development, such that current emission limits will be achieved by the plant, and stack height will be selected for optimal dispersion, such that impacts are, in the main, no worse than the Consented Development; on this basis no further mitigation is proposed.

5.30 ES 9.7 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that the Proposed Development is predicted to result in a reduction in the impacts and the likelihood of significant environmental effects when compared to the Consented Development for the large majority of cases. Exceptions are that, predicted impacts are marginally higher for human health in terms of the 1 hour mean NO2 when considering the single-shaft option, however, not in the case of the multi-shaft option. There is an increase in impacts when considering 24 hour NOx at three of the non-statutory ecological receptors but at all other sites and for all other pollutants there is a reduction for both the single and multi-shaft options. On balance, the Proposed Development is considered to be less likely to result in significant environmental effects when compared to the Consented Development.

5.31 ES Chapter 14.2.5 (Summary of Cumulative and Indirect Effects) states that Lincolnshire Lakes will not have effects on the same sensitive receptors and therefore there will be no cumulative effects. Potential cumulative effects on air quality due to construction traffic associated with the Proposed Development and Lincolnshire Lakes have been scoped out.

5.32 In assessing the air quality impacts, it has been assumed that the Proposed Development and Keadby I will be operating continuously, and the assessment concludes that both Keadby I and Keadby II can operate without causing a breach of any air quality standards designed for the protection of human health.

Cultural Heritage

5.33 Chapter 10 assesses potential effects on and mitigation for cultural heritage in terms of possible direct damage to known features of value and potentially present archaeological (including paleo-archaeological) assets, as well as assessing the effects of change in setting introduced by the Proposed Development on the significance of assets, which are referred to in Table 1 under the topics establishing baseline conditions of the historic environment; the significance of heritage assets; and mitigation provisions.

Policy

5.34 EN-1, 5.8 requires the applicant to provide a description of heritage assets affected by the Proposed Development and the contribution of their setting to that significance, for which the level of detail should be proportionate to the importance of the asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the assets. The ES indicates that no significant effects are predicted in respect of archaeological remains in the eastern part of the Site; in the western part of the Site it is recommended that construction activity is preceded by investigative archaeological fieldwork. The NPPF (Conserving and enhancing the historic environment) similarly requires applicants to describe the significance of any heritage assets affected, including any contribution made by their setting, for which the level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact (paragraph 128). The Core Strategy policy CS6 seeks to protect, conserve and enhance North Lincolnshire's historic environment as well as the character and setting of areas of acknowledged importance.

Environmental Effects

5.35 ES 10.6 states that a baseline study has concluded there are unlikely to be archaeologically significant buried remains on the eastern part of the Application Site and whereas there is potential for remains to survive on the western part of the Site, there is no evidence other than peat deposits of possible paleo environmental interest. Mitigation will comprise evaluation fieldwork in advance of construction activity on the western part of the Site and a watching brief should a new water cooling discharge pipeline to the Trent be constructed. The residual effects of the Proposed Development will be not significant or, at most, minor.

5.36 There are relatively few designated heritage assets in the area (Keadby Bridge - listed Grade II; Keadby Lock - scheduled monument; Chapel Lane swing bridge - not designated; Rectory Lodge - listed Grade II) and none will experience more than minor impacts and no adverse impact on their significance.

5.37 ES 10.7 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) restates that in considering direct effects on archaeology and cultural heritage, with mitigation in place the effects will be not significant; the effects on the setting of cultural heritage assets will be very similar for both the Consented Development and Proposed Development. There will be no harm to the significance of designated or non-designated heritage assets. The historic environment will be preserved.

5.38 ES Chapter 14.2.6 (Summary of Cumulative and Indirect Effects) states that Lincolnshire Lakes, located over 2 kilometres from the Proposed Development, will not have effects on the same sensitive receptors (the Site lies outside the Isle of Axholme Area of Special Landscape Interest and does not adversely affect the character, appearance or setting of the historic landscape or any of its features), therefore there will be no cumulative effects. No known features of cultural heritage value will be affected by construction of the overhead lines so there will be no direct cumulative effects. The presence of numerous overhead lines in the area, coupled with the industrial use of the Site and its surroundings including the windfarm, means that the Proposed Development will not result in cumulative effects on the setting of the same cultural heritage assets as the Proposed Development.

Traffic and Transport

5.39 Chapter 11 provides a baseline of traffic flows that includes other committed development on roads the Proposed Development will use, and a traffic assessment of the impacts of the construction and operational traffic. The assessment addresses flows, junction capacity, roadside receptors and assesses issues associated with delivery of abnormal loads. These considerations are also referred to in Table 1 under the topics 'transport assessment', including noise and emissions; and requirement for accessibility by main road to the site and mitigation measures including conditions.

Policy

5.40 Traffic and transport is addressed widely in planning policies in which EN-1, 5.13 refers to the potential for a variety of impacts but also suggests that consideration is given to preparing a transport assessment and a travel plan, provide details of sustainable measures to improve access and consult with relevant bodies on the assessment and mitigation. EN-2, 2.2 on factors influencing site selection emphasises that new fossil fuel generating stations need to be accessible for the delivery/removal of construction materials/equipment, employees etc. and that any application should incorporate suitable access leading off from the main highway network. The NPPF requires applications to be accompanied by a transport assessment however it points out that development "should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe" (paragraph 32). NLLP policies on transportation encourage locational sustainability, accessibility by means of walking and cycling and the use of North Lincolnshire's strategic road network.

Environmental Effects

5.41 ES 11.6 states there is limited opportunity for construction and operational staff to travel by public transport due to shift patterns and the Site distance of the Proposed Development from bus stops and the rail station, although there are some residential areas within walking/cycling distance and dedicated provision for cyclists within the Power Station. Heavy construction traffic will access the site exclusively via a dedicated access road that avoids the village of Keadby. Construction staff traffic will occur outside the network peak hours when there is considerable spare capacity; with impacts predicted to be greatest during construction between 06:00-07:00 and 19:00-20:00. Capacity testing of the access junction shows no issues in relation to queuing; there will be only a minor environmental impact resulting from the staff traffic, for one hour in the morning and evening, as dayshift staff arrive and depart. Through the day, the impact of construction is predicted to be negligible. A moderate adverse environmental impact is predicted on the A18 and A161 during the above hours. Predicted operational staff traffic movements are considered negligible and will not have an impact on the safety/operation of the local highway network. A construction traffic management plan associated with all vehicle movements will be provided once a contractor has been appointed. This may include a proposed reduced speed limit on the A18 in the vicinity of the site entrance and provision for advanced signage.

5.42 Up to 10 abnormal loads are expected throughout the build period carrying gas turbine components to the Site. These will be transported by a specialist heavy-haulage company; abnormal load applications will be submitted at the appropriate time. Swept path analysis indicates that localised road widening may be required in some places. A construction traffic management plan associated with all vehicle movements will be provided once a contractor has been appointed. This may include a proposed reduced speed limit on the A18 in the vicinity of the site entrance and provision for advanced signage.

5.43 ES 11.7 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that construction staff traffic will occur outside the network peak hour when there is considerable spare capacity to accommodate the increase of up to 133 vehicles at the start and end of the day shift. On the matter of construction HGVs the Traffic Assessment concludes that there will be moderate adverse environmental impact on the A18 and A161 for one hour each day, resulting from an increase of greater than 30% in HGV movements, due to a low background flow of HGVs rather than a large absolute increase. A similar conclusion would have been likely from applying the same assessment criteria to the Consented Development; no significant effects on local communities and residents are predicted. Special (or

abnormal) loads were assessed in the EA for the Consented Development and have been assessed for the Proposed Development to establish the feasibility of vehicle routing into the Site; some mitigation will be required. Operational traffic will lead to negligible changes to existing flows.

5.44 ES Chapter 14.2.7 (Summary of Cumulative and Indirect Effects) states that the Transport Assessment (TA) made allowances (in consultation with council officers) that consideration should be given to traffic from the Lincolnshire Lakes project in West Scunthorpe and the Scunthorpe United Football Club relocation as this was considered to be the worst-case baseline scenario and also addressed cumulative impacts. A TA was produced in 2013/14 and a further TA in 2015 in respect of the football ground relocation application. The above TAs considered the junction of the M181 with the A18 at the western side of Scunthorpe as the nearest area to the Proposed Development and generated traffic flows from the western link of the A18 for morning/evening peaks. The TA for the Proposed Development thereby assessed the potential for cumulative effects, allowing the capacity of the road network to be tested, concluding that significant cumulative effects related to congestion and safety were not probable. Construction traffic associated with the overhead lines is unlikely to result in significant cumulative effects with the Proposed Development. There are no significant adverse effects and certainly none that can properly be described as severe.

Socio-economic Characteristics

5.45 Chapter 12 provides a socio-economic baseline and assesses the potential adverse effects on socio-economic characteristics as well as the employment and economic benefits that are predicted to accrue during construction and operation which are referred to in Table 1 under the topics sustainable economic growth; creating local jobs and working within the communities; and support for Keadby power station.

Policy

5.46 EN-1, 5.12 states that the development of energy infrastructure may have socio-economic impacts at local and regional levels, which should be assessed as part of the ES; this may include the creation of jobs and training opportunities, and improvements to local infrastructure. The relevant authority should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the authority considers both relevant and important to its decision (EN-1, 5.12). More generally, the NPPF states that "the Government is committed to creating jobs and prosperity and to ensuring that the planning system does everything it can to support sustainable economic growth…" and "significant weight

should be placed on the need to support economic growth through the planning system" (NPPF paragraphs 18/19). At a local level, the Council's Core Strategy policy CS11 (Provision and distribution of employment land) states that it "will support the continued expansion and improvement of North Lincolnshire's economy in order to create a step change in the area's role regionally and nationally"; also policy CS13 (Lifelong learning and skills) advises that "businesses in North Lincolnshire have identified skills as a key factor in remaining competitive".

Environmental Effects

5.47 ES 12.6 states that the Proposed Development is anticipated to result in direct investment of £500million and generation of 14,000 man months of employment spread over the three year construction period, bringing both economic/employment benefits and secondary benefits from indirect and induced expenditure by suppliers and employees of the Proposed Development; and minor significance beneficial employment during construction. SSE's approach to supporting local suppliers and promoting apprenticeships, training and graduates will contribute to North Lincolnshire's economy; these effects will be managed through tailored plans, following which no significant adverse effects are anticipated in disruption to local communities and amenity. During operation, the Proposed Development will safeguard some existing employment at Keadby I and is expected to generate 18 no. full time jobs, bringing economic benefits through direct/indirect investment in the local, regional and national economy and anticipated to result in some minor beneficial employment and economic effects during operation.

5.48 ES 12.7 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that it is considered that "in their main respects there are no differences between the Proposed Development and the Consented Development in regard to socio-economic impacts".

5.49 ES Chapter 14.2.8 (Summary of Cumulative and Indirect Effects) states that the Lincolnshire Lakes Development has the potential for cumulative impacts with the Proposed Development. Lincolnshire Lakes is anticipated to create 4,000 jobs over the phased construction period, with an estimated 500 jobs during the first phase. Many of the skills will be different to those required for construction of the Proposed Development. Significant effects from the Proposed Development are not anticipated in relation to pressure on local services, accommodation provision or bed space demand, and therefore cumulative effects with Lincolnshire Lakes are not anticipated.

Landscape and Visual

5.50 Chapter 13 provides and assessment of the landscape baseline, including its industrial and infrastructure components, and assesses the effects on it of the Proposed Development, the visual impacts on people with views of the Site (also advising the cultural heritage assessment of change in setting), and proposed mitigation, which are referred to in Table 1 (identified landscape receptors; criteria for good design; and visibility of fossil fuel generating infrastructure).

Policy

5.51 EN-1, 4.5 addresses "criteria for good design for energy infrastructure", in which it advises that while visual appearance is important, the "functionality of an object - be it a building or other type of infrastructure - including fitness for purpose and sustainability is equally important". It acknowledges that "the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area". EN-1, 5.9 (Landscape and visual) states that projects will vary on a case by case basis but that there are features of energy infrastructure which are common to a number of different technologies such as cooling towers and exhaust stacks. It states that "virtually all nationally significant energy infrastructure projects will have effects on the landscape" and that the relevant authority "will have to judge whether the visual effects on sensitive receptors… outweigh the benefits of the project." Separately, EN-2, 2.3 refers to "consideration of "good design" for energy infrastructure". EN-2, 2.6 states that the main structures for a fossil fuel generating station are large and will impact on the surrounding landscape and visual amenity and hence, the relevant authority "needs to be aware of the statutory and technical requirements that inform plant design and may require the incorporation of certain details for example chimney stack height" (EN-2, 2.6). The unique characteristics of power station engineering/design indicate the importance of the above policies in decision making.

Environmental Effects

5.52 ES 13.7 refers to the baseline environment as being "already industrial with a number of "infrastructural" elements in the vicinity of the Proposed Development", including the existing Keady I power station, wind turbines, pylons and transmission lines, railway lines, canal, drainage and road networks. It notes that both single-shaft and multi-shaft technology options were considered for assessment purposes. The key impact is from the main block housing the shaft and turbine; compared with the single-shaft option, the multi-shaft would have slightly reduced effects on landscape and visual amenity as the blocks are spread and will seem part of the existing Keadby power station from a few viewpoint locations, although for most locations there is no

material difference in terms of effect. Residual effects range from not significant to moderate to major and will reduce over time as the Proposed Development is within an industrial LCA and adjacent to the existing power station; with a number of infrastructural elements in its immediate vicinity.

5.53 ES 13.8 (Comparison Between the Likely Significant Effects of the Consented Development and Proposed Development) states that in their main respects there are no material differences between the Consented Development and the Proposed Development in regard to significance of effects on landscape and visual amenity. However, the magnitude of change resulting from the smaller, simpler structures of the Proposed Development (e.g. one stack) is less than that which would result from the Consented Development (e.g. four stacks); the Proposed Development represents a slight improvement.

5.54 ES chapter 14.2.9 refers to the Proposed Development as being unlikely to make any material contribution to overall cumulative effects on landscape and only a small cumulative effect on views from some close viewpoints to the north and south. Considering the location of the Proposed Development and surrounding infrastructure in its vicinity, it is unlikely that the Proposed Development will have significant cumulative visual effects with the Lincolnshire Lakes schemes in terms of them not affecting the same Landscape Character Area, and neither being seen prominently in the same views by receptors. Given the presence of numerous overhead lines in the area, coupled with the industrial use at the site and its surroundings (i.e. the windfarm), the overhead lines will not result in cumulative effects on the same sensitive receptors as the Proposed Development.

6.0 CONCLUSIONS

6.1 The Company will adopt appropriate modern technology when undertaking the Proposed Development, thereby benefitting from the significant advantages in improved efficiencies, lowered atmospheric emissions and reduced water consumption.

6.2 The Site of the Proposed development, located on land that has been previously used for power station development, the current accessibility to gas, electricity and water infrastructure and the fact that the extant consent remains capable of use, makes this location particularly suitable for the construction of a new combined cycle gas fired power station subject to the Secretary of State's approval.

6.3 The Site of the Proposed Development has a dedicated means of access for heavy construction traffic that was provided to meet conditions of the Original Consent and use of which will avoid impacts on the village of Keadby.

6.4 In the main, the environmental effects of the Proposed Development will not be significant when looked at alone and together with Keadby I in operation. Where likely significant effects have been identified these are amenable to mitigation measures that the Company has committed to.

6.5 In some of its aspects (such as visual appearance and emissions to atmosphere) the Proposed Development will have less of an impact than the Consented Development. In no instances do the likely significant effects of the Proposed Development materially differ from those effects as assessed in the Environmental Assessment for the Consented Development.

6.6 There is a need for new energy infrastructure specified in the Government's overarching National Policy Statement for Energy (EN-1) and an emphasis by the Secretary of State in "a new direction for UK energy policy" which emphasises the importance of energy security and that it is imperative to get new gas fired power stations built.

6.7 During the course of the three year Keadby II construction process, employment will peak at approximately 500 jobs. Overall, the Proposed Development is anticipated to generate the equivalent of 104 full time employment opportunities during construction. Following construction an estimated 18 full time jobs will be provided when operational, although it should be noted that this number would be increased if Keadby I permanently ceased operation. In addition it has been calculated that during operation, the multiplier effects associated with additional economic activity are expected to provide an equivalent of 74 jobs (including the 18 operational roles) over the lifetime of the Proposed Development.