APPLICATION NO PA/2016/299

APPLICANT Keadby Developments Limited

Application to **DECC** to vary an existing consent, granted under **DEVELOPMENT**

> Section 36 of the Electricity Act 1989, for the construction of a combined cycle gas turbine (CCGT) generating station with a

generation capacity of up to 820 MW

LOCATION Land to the west of Keadby CCGT Power Station, Trent Side,

Keadby, DN17 3EF

PARISH Keadby with Althorpe

WARD Keadby

CASE OFFICER Joe O'Sullivan

SUMMARY

That the Planning Committee endorses the response RECOMMENDATION appended to this report and any subsequent updates in

order for it to be sent to DECC by 5 May 2016

REASONS FOR REFERENCE TO COMMITTEE

Officer discretion

POLICIES

National policy

Overarching National Policy Statement for Energy (EN-1)

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)

National Planning Policy Framework

National Planning Policy Guidance

Local policy

North Lincolnshire Core Strategy:

CS1 (Spatial Strategy)

CS2 (Delivering More Sustainable Development)

CS3 (Development Limits)

CS5 (High Quality Design)

CS6 (Historic Environment)

CS11 (Provision and Distribution of Employment Land)

CS13 (Lifelong Learning and Skills)

CS16 (North Lincolnshire's Landscape, Greenspace and Waterscape)

CS17 (Biodiversity)

CS18 (Sustainable Resource Use and Climate Change)

CS19 (Flood Risk)

CS20 (Sustainable Waste Management)

CS25 (Promoting Sustainable Transport)

CS27 (Planning Obligations)

North Lincolnshire Local Plan:

DS1 (General Requirements)

DS3 (Planning Out Crime)

DS7 (Contaminated Land)

DS11 (Polluting Activities)

DS12 (Light Pollution)

DS13 (Groundwater Protection and Land Drainage)

DS14 (Foul Sewage and Surface Water Drainage)

DS15 (Water Resources)

DS16 (Flood Risk)

DS17 (Overhead Power Lines and High Powered Electrical Installation)

HE5 (Development affecting Listed Buildings)

HE9 (Archaeological Evaluation)

LC1 (Special Protection Areas, Special Areas of Conservation and Ramsar Site)

LC2 (SSSI and National Nature Reserves)

LC4 (Development Affecting Sites of Local Nature Conservation Importance)

LC5 (Species Protection)

LC6 (Habitat Creation)

LC7 (Landscape Protection)

LC12 (Protection of Trees, Woodland and Hedgerows)

RD5 (Alternative Uses of Industrial and Commercial Sites in the Open Countryside)

T1 (Location of Development)

T2 (Access to Development)

T6 (Pedestrian Routes and Footpaths)

T8 (Cyclists and Development)

T14 (The North Lincolnshire Strategic Road Network (NLSRN))

T19 (Car Parking Provision and Standards)

T24 (Road Freight)

Housing and Employment Land Allocations Development Plan Document

CONSULTATIONS

In accordance with regulation 5 of the 2013 Regulations, Keadby Developments Ltd have consulted the consultees listed in the Schedule of Proposed Consultees submitted as part of the variation application to DECC.

NLC were consulted on the variation application and have consulted internally with regard to the following matters:

- noise and vibration
- air quality
- light pollution
- contaminated land
- · ecology and nature conservation
- traffic and transport
- archaeology and cultural heritage (conservation).

PUBLICITY

In accordance with regulation 5 of the 2013 Regulations, Keadby Developments Ltd have placed one notice of the application in The London Gazette and notices for two consecutive weeks in local newspapers: the Scunthorpe Telegraph and Epworth Bell. The application documents have also been published and made available in electronic form on the applicant's website.

Community engagement

The applicant (SSE) also held local exhibitions in November 2012 (Crowle Community Hub, Crowle, and St Oswalds Church Hall, Keadby) and September 2014 (Ealand Victory Hall, Ealand and St Oswalds Church Hall, Keadby). In January 2016 the applicant (SSE) published and circulated a newsletter providing an update on the current plans, including options for either a single or multi-shaft gas turbine and the proposed revisions to the existing consent.

BACKGROUND

In 1993 Section 36 Consent and deemed planning permission under Section 90 of the 1990 Act was granted for the Construction and Operation of one combined cycle gas turbine generating station of about 710MW consisting of:

- two industrial gas turbines, each with an associated boiler and exhaust stack, and one steam turbine;
- an access road;
- ancillary plant and equipment; and
- the necessary buildings (including administration offices) and civil engineering works.

In 1998 NLC confirmed that a material start had to be made on site to save the deemed planning permission in perpetuity.

On 1 March 2010 a new consenting regime for major energy infrastructure projects came into force in the form of the Planning Act 2008 with such projects known as 'National Significant Infrastructure Projects.' Prior to 2010 such projects were considered under Section 36 of the Electricity Act 1989 and a direction given under Section 90 of the 1990 Act for deemed planning permissions. Since the 2008 Act regime it has not been possible to apply for a Section 36 consent for onshore generating stations, however a number of Section 36 consents had been granted but not implemented or constructed.

Section 20 of the Growth and Infrastructure Act 2013 inserts Section 36C into the 1989 Act to make it possible for generating stations already consented but not yet constructed to be modified without having to apply for a new Development Consent Order under the 2008 Act. The process for such variations is as follows:

- Developer makes application to DECC who decide whether the application can be considered as a Variation under Section 36C of the 1989 Act.
- Once accepted, application advertised by developer for 28 days and sent to agreed consultees.
- DECC writes follow-up letter giving separate deadline of 28 days for responses (2 months for relevant planning authority).
- DECC considers responses and can request further information, if necessary, otherwise make a recommendation to Secretary of State.

Decision by Secretary of State.

This is an application to DECC to vary an existing consent, granted under Section 36 of the Electricity Act 1989, to the construction of a combined cycle gas turbine (CCGT) generating station with a generation capacity of up to 820 MW.

North Lincolnshire Council is the relevant planning authority which effectively acts as a consultee in the same way as a statutory consultee would in a conventional planning application. North Lincolnshire Council does not make the decision on the variation application and DECC have requested a response by 5 May 2016.

ASSESSMENT

Planning policy context

As a variation under Section 36C of the 1989 Act the proposal falls to be considered under policies set out in National Policy Statements (NPS) and in particular in EN-1 Overarching NPS for Energy.

The document is generally supportive of new infrastructure to meet a national need. EN-1 sets out generic assessment principles and impacts for consideration in determining any energy project. The assessment principles include good design, assessment of alternatives and climate change adaptation. Impacts relate to topics such as biodiversity, flood risk, landscape and views.

Although the main framework for assessing the proposals is provided by the NPS, other documents are capable of being a material consideration. Such documents can include the National Planning Policy Framework (NPPF) and relevant development plan policies.

The NPPF sets out the Government's planning policies for England and how they are expected to be applied. It provides a framework that must be taken into account and is a material consideration in planning decisions. The Government considers that sustainable development is a principal aim and should be achieved through the planning system performing a number of roles, namely economic, social and environmental. The NPPF requires the planning system to do everything it can to support sustainable economic growth whilst contributing to conserving and enhancing the natural environment.

Section 38(6) of the Planning and Compulsory Purchase Act 2004 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". The development plan for North Lincolnshire comprises the North Lincolnshire Core Strategy Local Plan (adopted June 2011) and those policies in the North Lincolnshire Local Plan (adopted May 2003) which were saved by the direction of the Secretary of State (September 2007) and which have not been superseded by the Core Strategy and Housing and Employment Land Allocations Development Plan Document.

The project

The proposed development would be located to the west of the existing Keadby I CCGT Power Station, approximately 500 metres north-west and west of Keadby, and south-east of Ealand. The closest residential receptors are approximately 200 metres away.

The major components of the development are:

- gas turbine generator
- waste heat recovery boiler
- condensing steam turbine
- cooling towers
- stack
- · control room and instrumentation system
- water treatment plant
- cooling water abstraction and discharge pipework.

The development site consists of two main areas: the main power island area to the east, and the hybrid cooling towers and area reserved for carbon capture readiness in the western part of the site.

The power island would accommodate the power generating equipment, including gas and steam turbines, boilers, auxiliary structures and administration buildings.

The development also includes land provision for connections to gas transmission infrastructure, connections to the national grid and routes for pipelines to water abstraction and discharge points.

The proposed variations are:

- (i) a total generating capacity of up to 820 MW with either a single-shaft or multi-shaft configuration;
- (ii) either a single bank of 12 cooling towers or back-to-back bank of 16 cooling towers; and
- (ii) an increase in the application site area (the Application Site) to accommodate a temporary contractors' work area, associated infrastructure and possible future carbon capture equipment.

Based on the earliest connection date of 2020, the earliest construction start date is anticipated to be 2018, with construction and commissioning estimated to last for three years, with the later six months for the testing and commissioning of the proposed development.

Impacts: noise and vibration

The information in Chapter 8 of the Environmental Statement indicates that the construction noise is likely to be significantly above background levels so it will be necessary to agree an approved Construction Environmental Management Plan (CEMP) to minimise impact for residents to an acceptable level.

The Environmental Protection Officer has confirmed that the outline CEMP submitted with the application refers to relevant standards and general practices for the control of noise and vibration.

At this stage the Environmental Protection Officer is concerned that:

- there is insufficient detail to assess whether the environmental management commitments in the outline CEMP will adequately protect residents from noise and be precise enough to be provide enforceable control;
- the applicant's assessment criteria are based on overall "average" LAeq for the daytime, night and evening, whereas the assessment criteria would be expected also to consider the noise impact associated with activities that may be very loud over a short period of time even though that noise level may seem reasonable when averaged out over the whole day and the criteria for the assessment of noise impact to include consideration of impact noise (e.g. LAmax criteria).

It must, however, be acknowledged that the submitted CEMP is an outline of the likely environmental management commitments and that the proposed amendments to conditions require a detailed CEMP to be submitted and approved by the relevant planning authority prior to the commencement of development. This is in line with the Environmental Protection Officer's recommendation for such a condition.

Table 8.5 of the Environmental Statement lists some planning limits for noise and indicates that the predicted noise levels for Keadby would exceed those planning limits. It is not clear whether the planning limits are rating levels. The Environmental Protection Officer strongly recommends that any planning limits for operational noise should be clearly stated to be rating levels as defined in British Standard BS4142:2014 so that acoustic characteristics are properly controlled. This is necessary because noise sources with acoustic characteristics that are intrusive (e.g. tonal noise, low frequency noise, intermittent, impact noise) will have a greater impact on amenity than steady, continuous broadband noise.

Section 8.5 includes information concerning the mitigation of operational noise. It is not clear at this stage whether these proposals would reduce the predicted noise levels sufficiently to meet the listed planning limits. The site, however, will be subject to control under the environmental permitting regime that will require Best Available Techniques for the control of noise and vibration during operation.

Impacts: air quality

The effect of the development on air quality is assessed in Chapter 9 of the Environmental Statement. The report notes that the baseline air quality in the Keadby area is below EU objectives.

Operation effects of the currently consented and proposed development (for both single and multi-shaft options) have been assessed and it is concluded that:

The impacts of the Proposed Development multi-shaft design are lower than the Consented Development for human sensitive receptors. Compared to the Proposed Development single-shaft design, the multi-shaft design is predicted to have a slightly lower overall impact. In all instances the short and long-term worst case impacts (Keadby I Power

Station plus Proposed Development either layout option) at any receptor are within the standards designed to protect human health.

From an air quality perspective it is therefore preferable for a multi-shaft design to be utilised.

Regarding an increase in traffic as a result of the development, the report concludes that emissions from this development will not be significant. It is important to note, however, that there are a number of planned developments in the vicinity of the M181 and A18, including Lincolnshire Lakes and a new football stadium that cumulatively will lead to a significant increase in traffic and associated emissions. The council is taking precautionary action to monitor this at an early stage. If an air quality objective is breached, an Air Quality Management Area will need to be declared.

Chapter 15 of the Environmental Statement concerns mitigation and states that control of construction dust will be carried out in accordance with methods recommended by the IAQM, and the environmental management commitments of the outline CEMP.

The Environmental Protection Officer has confirmed that the Outline Construction Environmental Management Plan provided at Annex K of the Environmental Statement provides appropriate control techniques. Therefore, subject to the approval and implementation of a suitable CEMP, based on the commitments of the outline CEMP (referred to above), there is unlikely to be significant adverse environmental impacts with regard to air quality.

Impacts: light pollution

The security lighting of compounds and illumination required for 24-hour working has the potential to be disturbing or a statutory nuisance for local residents, however the Outline Construction Environmental Management Plan (CEMP) provided as Annex K of the Environmental Statement sets out environmental management commitments and with regard to light pollution states that:

'Site lighting during construction shall be positioned and directed so as to minimise nuisance to residents and to minimise distractions or confusion to passing drivers on adjoining public highways. This provision will apply particularly though the winter period when working in darkness and the contractors shall provide appropriate lighting for these sites.

Contractors shall comply with the Institute of Lighting Engineers document Guidance Notes for Reduction of Light Pollution 2000 (revised 05/03).'

The Environmental Protection Officer has confirmed that this is the appropriate guidance to use and therefore subject to the approval and implementation of a suitable CEMP, based on the commitments of the outline CEMP (referred to above), there is unlikely to be significant adverse environmental impacts with regard to light pollution.

Impacts: cultural heritage

The Environmental Statement confirms that extensive ground disturbance is known to have taken place during the construction and demolition of the 1952 coal-fired power station and the construction of the existing Keadby I Power Station. The likelihood of buried remains of

archaeological significance in the eastern part of the site is therefore considered to be low. Buried remains could be present in the western part of the site that has not experienced extensive ground disturbance. The HER Officer has recommended a suitable condition to secure archaeological investigations.

The infrastructure associated with the proposed development is located on the western edge of the existing power station. The listed buildings in the designated study area are all situated on the eastern aspect of the development. To this end the new development sits behind the existing power station as you view the heritage assets from the east looking west. The existing views to the west are a semi-industrial landscape with wharves, warehouses and storage tanks, and the power station.

For the most part there are only limited views of the existing power station from the listed buildings as they are in built-up areas, i.e. the villages of Althorpe, Gunness and Keadby and views are restricted by the built-up nature of the settlements.

The impact on the setting is negated because of the restricted views and the fact that the new infrastructure sits behind a setting already degraded by existing industrial structures.

The two listed buildings with a greater level of impact on their setting is grade II listed Keadby Bridge and the scheduled Keadby Lock, also grade II listed.

Keadby Bridge, Grade II Listed Building - Steel Rail and Road Bridge, Built 1916

The most prominent view affected is when you travel westerly across the bridge where the power station is in clear view. A larger power station will distract observers from experiencing the architectural qualities of the bridge. The impact decreases as you cross the bridge because the view is obstructed by the girders. As you travel easterly across the bridge, there is no impact as a result of the development.

Keadby Lock, Scheduled Ancient Monument and Grade II Listed Building – Built 18th century

The setting as you look westwards towards the lock is dominated on the northern side of the canal by a large warehouse and the power station.

The extension, as viewed from the lock, will sit behind the existing power station. This will negate the impact from here to an extent. What will be visible will be an enlarged industrial setting. There is some degradation of setting from this view. However, this is negated by the fact that the main public view of the lock is from the west looking eastwards with the power station behind you. The lock itself sits on private land.

There is some harm to the significance and setting of the heritage assets surrounding Keadby Power Station and, in accordance with paragraph 134 of the NPPF, it is advised that the harm caused to these assets should be weighed against the public benefits of the proposal.

Impacts: contaminated land

Previous intrusive investigations were carried out in 1991, 1992 and 1998. The geology of the site, based on those previous investigations, has been confirmed as made ground of up to 3 metres thick. This made ground comprises sand and silt, pulverised fuel ash from the

coal-fired power station operations and demolition waste, including slag and furnace clinker. The made ground overlies alluvium.

In addition, the Envirocheck Report identifies an historic landfill on site and two others close by, one within 50 metres of the boundary. The report finds no elevated levels of the landfill gases methane or carbon dioxide during monitoring; a single round of gas monitoring was undertaken from two boreholes on the site of the proposed development in 1998.

Investigations undertaken at that time of soil quality at the site found concentrations of metals typical of those found in agricultural soils and generally within standards relevant to the proposed use of the site. However, standards have changed since 1998, considerable time has passed since the reports were written, guidance for the investigation of potentially contaminated sites has been updated and more is known about land contamination, ground gas generation and monitoring.

The on-site and nearby landfill sites have the potential to impact on the proposed development due to the possibility of the production and ingress of landfill gas and The Local Authority Guide to Ground Gas (2008) identifies Made Ground, Peat and Alluvium as potential sources of ground gas. According to this guidance one round of gas monitoring does not meet the minimum standard for a low risk site.

Taking the above into consideration, it is recommended that further gas monitoring is carried out or that gas protection membranes are utilised in enclosed areas and areas occupied by personnel and that consideration should be given to undertaking up-to-date ground investigations for soil contamination in accordance with current guidance.

Impacts: ecology and nature conservation

The submitted planning statement states that "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."

The Project Officer (Ecologist) has initially queried how the active management mitigation strategy is to be secured and how the management will be reported to NLC.

ES 7.4.7 (mitigation measures) confirms that a landscape masterplan will be developed to address both landscaping and biodiversity enhancement measures. Conditions 20, 32-43 and 52-54 provide environmental restrictions and enhancements. Members will be updated further on this matter at Planning Committee.

Impacts: traffic and transport

Whilst there will be an increase in vehicle movements during the construction phase of the project, the majority of these will fall outside the peak hours on the highway network. The site will be accessed directly from the A18, utilising the windfarm site entrance, which will minimise the impact of construction traffic on local villages. Once the site is operational, there will only be a small increase in staff and again these trips will fall outside the peak hours on the highway network due to the proposed shift pattern.

The Highways Officer has confirmed that at a meeting with SSE on site last year to discuss the proposals, there was a suggestion that further works would be needed to the skewed access on the A18 to accommodate abnormal loads. It is unclear from the Transport Assessment what, if any, works are required. It is recommended that this should be included in the Construction Phase Traffic Management Plan. There is also a proposal to introduce a temporary speed reduction on the A18 in the vicinity of the site entrance and further discussions around this are necessary.

The Highways Officer has suggested conditions with regard to a construction phase traffic management plan showing details of all associated traffic movements, including delivery vehicles and staff/construction movements, any abnormal load movements and associated temporary accommodation works, contractor parking and welfare facilities, storage of materials and temporary traffic management requirements on the adjacent highway.

It must, however, be acknowledged that the submitted CEMP is an outline of the likely environmental management commitments and that the proposed amendments to conditions require a detailed CEMP to be submitted and approved by the relevant planning authority prior to the commencement of development. This is in line with the Highway Officer's recommendation for such a condition.

Conditions of the deemed planning permission

The original deemed planning permission was directed by the Secretary of State to be granted subject to 60 conditions summarised below:

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 Complaints Procedure; (60) Default of Agreement.

The applicant requests the following amendments to the original conditions:

- delete conditions (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: (20) CEMP; (54) archaeology; (62) variations will be limited to immaterial changes to condition; (63) carbon capture storage; (64) use of waste heat.

Conclusion

This is an application to DECC for the variation of an existing consent, granted under Section 36 of the Electricity Act 1989, for the construction of a combined cycle gas turbine (CCGT) generating station with a generation capacity of up to 820 MW at Keadby Power Station. North Lincolnshire Council has been consulted as the relevant planning authority for the proposed development site. The development of the site for Keadby II Power Station is established through the implemented Section 36 consent and deemed planning

permission. Comments and recommendations in terms of noise and vibration, air quality, light pollution, contaminated land, ecology and nature conservation, traffic and transport, and archaeology and cultural heritage (conservation) contained within this report should form the basis of North Lincolnshire's response to DECC on the proposed variation.

RECOMMENDATION

That the Planning Committee endorses the draft response appended to this report and any subsequent updates in order for it to be sent to DECC by 5 May 2016.

Application reference: PA/2016/299

Case officer: Joe O'Sullivan Telephone: 01724 297497

Email: planning@northlincs.gov.uk

5 May 2016

Mr K Welford National Infrastructure Consents Department of Energy and Climate Change 3 Whitehall Place LONDON SW1A 2AW

Dear Mr Welford

Application to vary an existing consent, granted under section 36 of the Electricity Act 1989, for the construction of a combined cycle gas turbine (CCGT) generating station with a generation capacity of up to 820 MW

I refer to the above variation application on which North Lincolnshire Council (NLC) was consulted on 8 March 2016. NLC has the following comments to make:

Having considered the application details, including the submitted Environmental Impact Assessment, NLC would advise that provided a suitable Construction Environmental Management Plan (CEMP) is approved and implemented based on the commitments of the outline CEMP at Annex K of the submitted Environmental Statement, prior to the commencement of development, there is unlikely to be significant adverse environmental impacts with regard to air quality, light pollution and traffic matters.

Similarly, provided a suitable archaeological scheme of investigation and mitigation is approved and implemented, there is unlikely to be significant adverse environmental impacts with regard to archaeological remains.

With regard to noise, contaminated land and cultural heritage, NLC would advise DECC as follows:

Construction noise

At this stage the Environmental Protection Officer is concerned that:

- there is insufficient detail to assess whether the environmental management commitments in the outline CEMP will adequately protect residents from noise and be precise enough to be provide enforceable control;
- the applicant's assessment criteria are based on overall "average" LAeq for the daytime, night and evening, whereas the assessment criteria would be expected also to consider the noise impact associated with activities that may be very loud over a short period of time even though that noise level may seem reasonable when averaged out over the

whole day and the criteria for the assessment of noise impact to include consideration of impact noise (e.g. LAmax criteria).

It must, however, be acknowledged that the submitted CEMP is an outline of the likely environmental management commitments and that the proposed amendments to conditions require a detailed CEMP to be submitted and approved by the relevant planning authority prior to the commencement of development. This is in line with the Environmental Protection Officer's recommendation for such a condition.

Operational noise

The Environmental Protection Officer recommends that any planning limits for operational noise should be clearly stated to be rating levels as defined in British Standard BS4142:2014 so that acoustic characteristics are properly controlled. This is necessary because noise sources with acoustic characteristics that are intrusive (e.g. tonal noise, low frequency noise, intermittent, impact noise) will have a greater impact on amenity than steady, continuous broadband noise.

Cultural heritage

It is considered that there is some harm to the significance and setting of the heritage assets surrounding Keadby Power Station and, in accordance with paragraph 134 of the National Planning Policy Framework, it is advised that the harm caused to these assets should be weighed against the public benefits of the proposal.

Contaminated land

It is recommended that further gas monitoring is carried out or that gas protection membranes are utilised in enclosed areas and areas occupied by personnel and that consideration should be given to undertaking up-to-date ground investigations for soil contamination in accordance with current guidance.

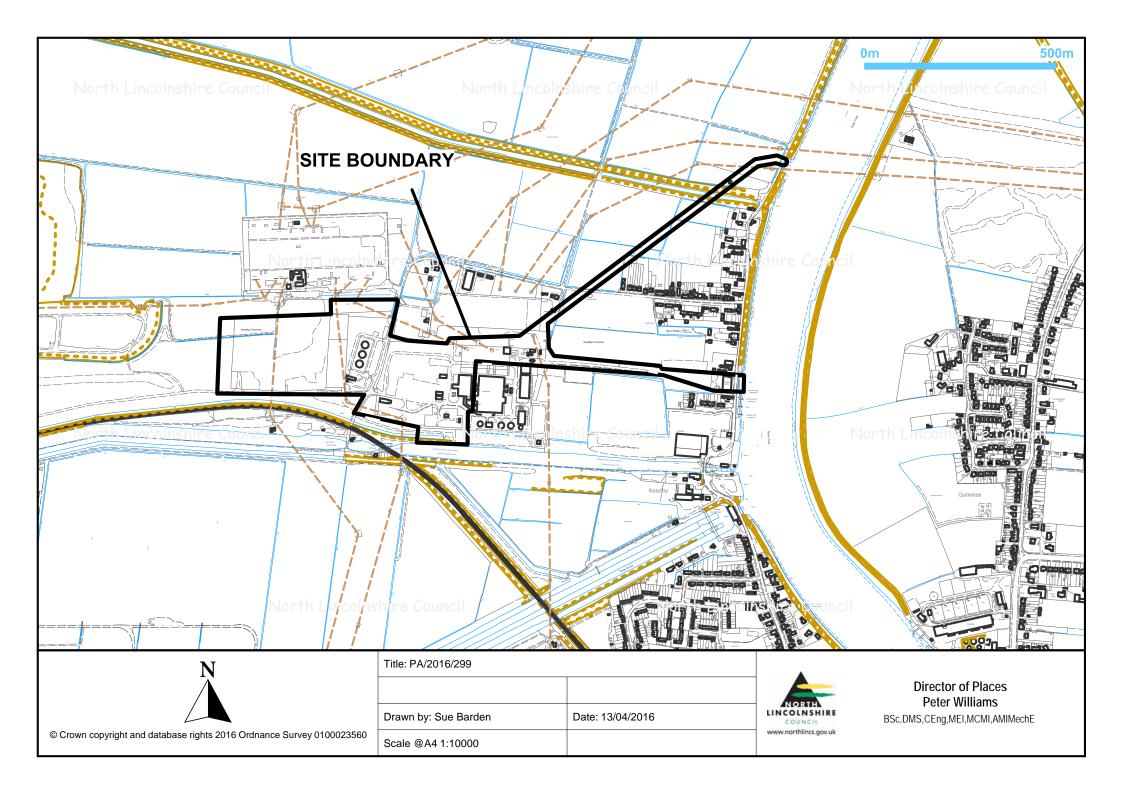
I note that appropriate statutory consultees have also been consulted and I trust that their comments will also be taken into account in the determination of the variation application.

I have appended NLC's planning committee report that should be read in conjunction with the contents of this letter.

I trust that the content of this letter will be taken into account in the determination of the above variation application for Keadby II Power Station.

Yours sincerely

Joe O'Sullivan
Strategic Development Officer



PA/2016/299 Proposed development - Not to scale

