



Heckington Fen Wind Park

Variation of Consent

May 2018

Variation of Consent

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Ornithological Survey Methods And

l Wind Park and Bird Survey Areas Result

Result

Result

CHAPTER 1: INTRODUCTION

BACKGROUND

- 1.1 This Variation of Consent (2018) Environmental Statement (VoC 2018 ES) has been prepared by Ecotricity to accompany an application to vary a consent which has been granted under section 36 of the Electricity Act 1989 for the construction or extension, and operation, of electricity generating stations ("section 36 consents") and deemed permission under section 90 of the Town & Country Planning Act 1990.
- Ecotricity submitted an application under section 36 of the Electricity Act 1989 on 15 December 2009. 1.2 The application was acknowledged as valid by the Department of Energy and Climate Change on the 23 December 2009.
- 1.3 Under Regulation 6 of the Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2000, as amended, where an application is made under s36 of the Electricity Act 1989, the Secretary of State is required to determine if the development as submitted is EIA development. The outcome of that determination was contained in the letter from DECC to Ecotricity dated the 23 December 2009 which confirmed that, in the opinion of the Secretary of State, the proposal is EIA development.
- 1.4 Ecotricity submitted environmental information to the Secretary of State on 20 July 2011. Further environmental information was submitted on 9 December 2011.
- Following an objection to the application by the relevant planning authority, North Kesteven District 1.5 Council (NKDC), the Secretary of State was obliged to hold a public inquiry into the application, under Schedule 8 to the Electricity Act 1989. The public inquiry was held at Boston West Golf Club between 31 July 2012 and 9 August 2012. The Secretary of State appointed Mr. Philip Major as Inspector to preside over the public inquiry. The Inspector submitted his report of the public inquiry to the Secretary of State on 1 November 2012. A copy of the Inspector's Report is provided at Appendix 1.1: Inspector's Report.
- The Inspector concluded in 'The Overall Balance' (paragraph 334) of his Report: 1.6

"The considerations which support the proposal, dealing with the imperative of addressing climate change and the need to achieve a secure and reliable supply of electricity are compelling. They clearly outweigh the moderate levels of harm to the landscape and visual amenity which I have identified. There are no other matters which have been raised by any party which would alter the balance of these conclusions."

1.7 The Inspector recommended that:

> "For the reasons given above I recommend that Consent be granted subject to the conditions in the attached annex, and that planning permission be deemed to be granted."

In a letter dated 8 February 2013, the Secretary of State accepted the full content of the Inspector's 1.8 Report, including his findings on matters of fact, conclusions and recommendation (including the reasons given for that recommendation).

- 1.9 Consent was granted under section 36 of the Electricity Act 1989 and deemed permission under section 90 of the Town & Country Planning Act 1990 on the following basis:
 - 1. Pursuant to section 36 of the Electricity Act 1989, the Secretary of State for Energy and Climate Change ("the Secretary of State") hereby consents to the construction, on the area of land delineated by a solid red line on the drawing number 4038 A0085 03, attached hereto, of a wind turbine generating station on land at Six Hundred Farm, Six Hundred Drove, East Heckington, Lincolnshire ("the Development") and to the operation of that generating station. This consent is granted to Ecotricity (Next Generation) Limited ("the Company"), its assigns and successors.
 - 2. Subject to paragraph 3, the Development shall be over 50MW rated capacity and up to 66MW rated capacity and comprise:

(a) up to 22 wind turbine generators each with a height of no greater than 125 metres to the tip of the blades when the turbine is in the vertical position as measured from natural ground conditions immediately adjacent to the turbine base;

(b) access tracks;

(c) an electricity substation building and underground electrical cabling connections within the site;

(d) enabling works for the delivery of turbine components and for the erection of turbines, namely crane pads adjacent to each turbine position and a temporary construction compound to house machinery and materials;

(e) an amended vehicular access to the site from the A17.

1.10 A copy of the original consent and conditions is provided as Appendix 1.2: Original Consent & Conditions.

VARIATION OF CONSENT ENVIRONMENTAL STATEMENT

- Following this Introduction chapter, the Variation of Consent Environmental Statement is set out as 1.11 follows:
 - Chapter 2: Legislative & Policy Context: this section provides an overview of the variation of consent under section 36C of the Electricity Act 1989 and updates National and Development Plan policy, as well as new energy policy.
 - Chapter 3: Details of the Variation: this section sets out the amendment sought to the section 36 Consent and deemed planning permission under section 90 of the Town & Country Planning Act. The chapter explains why the amendment is sought, and provides an update [to the ES] where relevant.
 - Chapter 4: Consultation & Scope: this Chapter provides a summary of the pre-application • consultation and advice received, and how this is considered in the amended site layout. Finally, the EIA process used for the technical assessments is reviewed and set out.
 - Chapter 5: Updated Technical Assessments: the following updated and/or additional assessments have been provided as Appendices as part of the Variation of Consent **Environmental Statement:**
 - Landscape and Visual Impact 0
 - **Cultural Heritage** 0
 - Ecology 0
 - Ornithology 0
 - Noise 0
 - Hydrology 0
 - Transport & Access 0
 - Miscellaneous: including Climate Change, Population & Health and Accidents & Disasters. 0

A brief summary of each updated assessment is provided in this Chapter.

Chapter 6: Conclusions (including Non-Technical Summary): in accordance with regulations 7(6)(a) of the Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013, this chapter sets out the main respects in which the applicant considers the likely significant effects on the environment of the proposed development would differ from those described in the original Environmental Statement prepared in connection with the original section 36 consent.

CHAPTER 2: LEGISLATIVE & POLICY CONTEXT

INTRODUCTION

- 2.1 A variation of consent can be granted under section 36C of the Electricity Act 1989 where it is considered appropriate by the Secretary of State to do so. This chapter outlines the legislative context for applying for a variation of consent.
- 2.2 The policy context for the variation of consent reviews the relevant planning and energy policies that has been published, amended or revoked since the consent and deemed permission was granted (February 2013).

LEGISLATIVE CONTEXT

Section 36 consents

- 2.3 Section 36 of the Electricity Act 1989 ("the 1989 Act") applies to proposals for the construction, extension or operation of an onshore electricity generating station whose capacity exceeds (or, when extended, will exceed) 50 Megawatts electrical (MW).
- On 1 March 2010, a new regime for consenting major energy infrastructure projects in England and 2.4 Wales came into force in the form of the Planning Act 2008 ("the 2008 Act"). Projects which would previously have been the subject of section 36 consents and section 90 directions, before that date now need development consent under the 2008 Act, which is granted by means of a development consent order.
- 2.5 Since the 2008 Act regime came into force, it has not been possible or necessary to apply for section 36 consent in respect of an onshore generating station in England and Wales. However, as at 1 March 2010 significant numbers of section 36 consent applications either remained to be determined by the Secretary of State; had been granted but not yet implemented; or had been implemented and remained part of the regulatory framework governing operating generating stations.
- 2.6 The Heckington Fen Wind Park proposal falls into the second of the three categories described above, namely a section 36 consent application that has been granted but not yet implemented.

Varying section 36 consents

2.7 The Department of Energy and Climate Change (the DECC) provides guidance on varying consents granted under section 36 of the Electricity Act 1989. At paragraph 12 of the guidance it states:

> "Generating station development 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. This means that when a developer comes to construct a generating station, it will sometimes be uneconomic or have more detrimental effects on the environment to do so according to all of the details specified in the consent. In practice, this means changes to the original

proposals to make the project feasible. The changes concerned may not be very great, but they may nevertheless involve work which would not be consistent with the terms of the existing consent, for example installing more efficient technology generating more power without radically changing the physical dimensions of the buildings and/or structures."

2.8 The 2008 Act recognised this potential problem and provided a mechanism for developers to apply to have changes to the development consent order. However, the 1989 Act made no such provision. Accordingly, if a developer found that what it wanted to construct was not consistent with the terms of the section 36 consent, the only option (prior to legislation on varying section 36 consents) was generally to apply to the DECC for a new s.36 consent or, since the 2008 Act came into force, to the Planning Inspectorate for a development consent order for the revised scheme - a process which the Government considers disproportionate for minor changes to an already consented proposal.

The Growth and Infrastructure Act 2013

- 2.9 The Growth and Infrastructure Act 2013 ("the 2013 Act") received Royal Assent on 25 April 2013, and provides amongst other things:
 - "for the Secretary of State or the MMO, where they consider it appropriate, to be able to vary section 36 consents which they have granted (section 20, inserting a new section 36C into the 1989 Act); and
 - for the Secretary of State, when granting such a variation, to be able to make or vary a section 90 direction under the 1990 Act that planning permission be deemed to be granted (section 21, amending section 90 of the 1990 Act)"¹
- 2.10 The main aim of new section 36C of the 1989 Act is to make it possible for generating stations, already consented but not constructed or completed, to be modified in ways which the relevant section 36 consents would not otherwise permit and without the developer having to apply for a development consent order under the 2008 Act.
- 2.11 The purpose of the amendment to section 90 of the 1990 Act is to make it possible for those who are granted variations to their existing section 36 consents under section 36C of the 1989 Act, to obtain any necessary changes to planning permission from the Secretary of State in a "one-stop shop" process.

Appropriateness Test

- The variation process is designed to apply to projects that have been consented under section 36. 2.12 where the operator wishes to carry out development that is inconsistent with the existing section 36 consent.
- Section 36C of the 1989 Act confers on the Secretary of State a power to make "such variations to 2.13 the consent as appear to the authority to be appropriate" to a section 36 consent, following an application from the person for the time being entitled to the benefit of that consent.
- 2.14 Determining that any given proposed variation is "appropriate" requires the Secretary of State to exercise judgment on whether the change proposed to the consented generating station concerned

¹ Varying consents granted under section 36 of the Electricity Act 1989 for generating stations in England and Wales', Department of Energy & Climate Change (July 2013)

is of a kind that it would be reasonable to authorize by means of the variation procedure. Only if the answer to this is positive, should the proposals then be examined from a planning and energy policy point of view to determine whether the variation sought should in fact be made.

- 2.15 The key point to note from DECC's guidance is that "the variation procedure is not intended as a way of authorising any change in a developer's plans that would result in development that would be fundamentally different in character or scale from what is authorised by the existing consent."²
- 2.16 The appropriateness or otherwise of granting a variation has to be considered by reference to what has been consented already. Chapter 3: Details of the Variation provides specific detail on the nature of the amendment sought and the appropriateness of the section 36C variation procedure to the Heckington Fen Wind Park scheme.
- The DECC guidance provides four broad assumptions as regards what is and what is not appropriate 2.17 to authorise under the section 36C variation procedure. Table 2.1 evaluates these four broad assumptions in relation the amendments proposed in this Variation of Consent application.

Table 2.1: DECC's broad assumptions on 'appropriateness'

DECC assumption	Consideration against Heckington Fen scheme
Changes in the plant's main fuel or other power source are unlikely to be considered suitable subject-matter for a variation.	Up to 22 wind turbines is consented. There will be no change to the plant's main fuel (wind turbines).
Some less significant changes to the particular type and/or operation of technology used may, however, be suitable for consideration under the variation procedure.	There will be no change to the technology.
Changes in the design of generating stations which have been 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 maximum number of wind turbines (22) remains unchanged.
It should generally be possible to consider authorising changes which only affect the operation of an existing station (and do not involve construction of a new generating station or extension of an existing one) under the section 36 consent variation procedure.	Not applicable as the generating station is consented but not yet operational.

Alternatives

- 2.18 Existing section 36 consents cover a number of different kinds of generating station projects. As noted above, the variation power conferred by section 36C of the 1989 Act was conceived primarily as a way of dealing with issues arising in relation to a project that had been granted section 36 consent, but had not yet been constructed or completed.
- 2.19 Alternatives available to a variation of a section 36 consent will depend on the type of project concerned and other relevant factors. Whilst in some cases the proposed changes may go further than the Secretary of State would consider to be appropriate for a section 36 variation, in other cases it may be possible to carry out works that are different from those envisaged at the time the existing section 36 consent was applied for without obtaining a variation or applying for development consent under the 2008 Act.
- 2.20 Table 2.2 provides the DECC guidance on points to consider for onshore projects, not yet constructed (permission sought to construct along different lines), and considers them in relation to the Heckington Fen scheme:

Table 2.2: Alternatives for onshore projects yet to be constructed

Points to consider before applying for section 36	Consideration again
Is change consistent with existing consent?	There will be no change dimensions of the con to timescale for implea consistent with Condit of the deemed s.90 pe
Would "variation" of the existing deemed planning permission under section 73 of the 1990 Act suffice?	No, because the times in the s36 permission
Possibilities to consider if section 36 variation inappropriate	Consideration again
Application for development consent under the 2008 Act	Following the broad as is proposed that a sec the plant's main fuel h turbines, maximum tip an application under t

st Heckington Fen scheme

nge to the approved plans or any physical nsented development. However, the change ementation from 5 years to 10 years is not ition 4 of the s.36 Consent, nor Condition 8(2) ermission.

escales for implementation are also referred to (Condition 4).

st Heckington Fen scheme

assumptions set out by DECC in **Table 2.1**, it ction 36 variation would be appropriate. Given has not changed, nor have the number of ip height or their locations; it is proposed that the 2008 Act would be disproportionate.

² Varying consents granted under section 36 of the Electricity Act 1989 for generating stations in England and Wales', Department of Energy & Climate Change (July 2013)

POLICY CONTEXT

National Policy Statement

- 2.21 Although the original consent was granted under section 36 of the Electricity Act 1989; had it been submitted after the Planning Act 2008 came into force, the development would have been considered to be 'nationally significant'. Although wind farms are now no longer considered 'nationally significant', the Overarching National Policy Statement for Energy (EN-1), and National Planning Statement for Renewable Energy Infrastructure (EN-3)) should still be taken into consideration.
- As EN-1 and EN-3 were both in force at the time of the inquiry, and were considered in detail by the 2.22 Inspector in his report to the DECC (as then was), only a brief overview is provided below:
- Paragraph 3.3.10 of EN-1 states: 2.23

"As part of the UK's need to diversify and decarbonise electricity generation, the Government is committed to increasing dramatically the amount of renewable generation capacity In the short to medium term, much of this new capacity is likely to be onshore and offshore wind "

2.24 Paragraph 3.3.15 continues:

> "In order to secure energy supplies that enable us to meet our obligations for 2050, there is an urgent need for new (and particularly low carbon) energy NSIPs to be brought forward as soon as possible, and certainly in the next 10 to 15 years, given the crucial role of electricity as the UK decarbonises its energy sector"

2.25 Paragraph 4.1.2 of EN-1 also states that given this level of urgency, there should be:

"...a presumption in favour of granting consent to applications for energy NSIPs.

That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused"

2.26 Paragraph 4.1.4 advises that, when considering a proposed development, the decision maker should:

> ...take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels."

Paragraph 3.2.3 also recognises that: 2.27

> "...it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts."

2.28 EN-3 provides detail on technology specific considerations. Onshore wind is considered in section 2.7, with guidance provided on noise, landscape, cultural heritage and other considerations when determining such applications.

National Planning Policy Framework (NPPF)

2.29 The NPPF was published in March 2012, prior to the public inquiry for the section 36 application, and was considered by all parties and included in the Inspector's report to the DECC.

2.30 Paragraph 14 of the NPPF states:

> "At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

For decision-taking this means:

- approving development proposals that accord with the development plan without delay; and,
- granting permission unless:
 - development should be restricted"
- The NPPF (at footnote 17) confirms reliance upon NPS EN-1 and EN-3 as the primary sources 2.31 of guidance to planning decision makers addressing wind energy proposals:

"In assessing the likely impacts of potential wind energy development when identifying suitable areas, and in determining planning applications for such development, planning authorities should follow the approach set out in the National Policy Statement for Renewable Energy Infrastructure (read with the relevant sections of the Overarching National Policy Statement for Energy Infrastructure...)"

The Development Plan

- 2.32 The primacy of the development plan, pursuant to section 38(6) of the Planning and Compulsory Purchase Act 2004 does not apply when the application is made under section 36 of the Electricity Act 1989. This same principle will apply when the application to vary the consent and deemed permission is made under section 36C of the 1989 Act. The policies of the development plan are however a material consideration in the determination of the application.
- 2.33 Since the Heckington Fen s.36 consent was granted, the Regional Spatial Strategy for the East Midlands has been revoked by the Regional Strategy for the East Midlands (Revocation) Order 2013 (which came into force on 12 April 2013). The development plan for the area is therefore now the Central Lincolnshire Local Plan 2012-2036, adopted 24 April 2017. It replaces the North Kesteven Local Plan 2007.

Other Material Considerations

Online Planning Practice Guidance for Renewable and Low Carbon Energy (the PPG)

- In July 2013, the Planning Practice Guidance for Renewable and Low Carbon Energy was issued by 2.34 the Coalition Government. This PPG was later replaced by the Online Planning Practice Guidance for Renewable and Low Carbon Energy.
- 2.35 This PPG replaced the Companion Guide to PPS22.

where the development plan is absent, silent or relevant policies are out-of-date,

o any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or specific policies in this Framework indicate

- 2.36 Paragraphs 14 - 24 of the PPG set out particular planning considerations for onshore wind developments including, for instance, landscape, noise, cultural heritage and residential amenity.
- 2.37 On 18 June 2015, the Government issued a Written Statement on wind energy developments (HCWS42). The provisions regarding planning applications made after 18 June 2015 were included in an update to the PPG on Renewable and Low Carbon Energy. They are also reflected in Policy LP19: Renewable Energy Proposals of the Local Plan.
- 2.38 For those planning applications submitted before 18 June 2015, transitional provisions apply.

Draft National Planning Policy Framework (Draft NPPF)

- 2.39 The Government issued the Draft NPPF for consultation on 5 Match 2018, with consultation closing on 10 May 2018. The intention is to publish a final version NPPF before the Summer 2018, subject to consultation responses.
- 2.40 The proposed changes reflect policy proposals that the Government has already consulted on, plus addition proposals to be consulted on. Notwithstanding, much remains as previous, with the presumption in favour of sustainable development remaining at the heart of the framework.
- Chapter 14 of the Draft NPPF ("Meeting the challenge of Climate Change, Flooding and Coastal 2.41 Change") incorporates the Written Ministerial Statement of 18 June 2018 (see above) in draft footnote 40.

Energy Policy

- Since the original Heckington Fen application the UK has published various updating documents 2.42 including the UK Renewable Energy Roadmap, July 2011, which set out a comprehensive action plan on the acceleration of the UK's deployment and use of renewable energy in order to meet the EU's legally binding target of 15% of all energy from renewable sources by 2020. The Roadmap was updated in 2012 and 2013. The 2013 Update described the good progress being made by the UK against the 15% target, and reconfirmed the UK's "strong ambitions for renewable deployment to 2020 and beyond".
- The UK Progress Report (June 2017), issued by the Committee on Climate Change, described 2.43 progress on meeting the Carbon budgets set out in the Climate Change Act 2008. The 2017 Progress Report confirmed that, although there was a reduction in emissions of 6% in the last year, more needs to be done to meet the 5th carbon budget (which requires emissions to be cut by at least 57% from 1990 to 2030 (being 26% from 2016-2030)), and identified a lack of Government Policy on renewable energy.
- The Clean Growth Strategy 2017 (October 2017) sets out how the current Governments intends to 2.44 grow the economy whilst cutting greenhouse gas emissions and ensuring an affordable energy

supply. The strategy recognizes the falling costs of onshore wind power since 2009, making it, and solar, increasingly cost competitive with coal and gas (in many countries).³

- 2.45 In the Inspector's Report (November 2012) to the DECC it stated at paragraph 65 the following:
 - "The proposed development would make a direct contribution to achieving renewable energy generation targets in the UK (such as the Renewable Energy Strategy objective of 30% of electricity from renewable sources by 2020) and would support Government policy to encourage more electricity generation from renewable sources. These targets have been confirmed by the Renewable Energy Roadmap of 2011. The Carbon Plan also confirms the commitment to decarbonisation of electricity generation and the security of supply. The proposal would be consistent with these objectives of Government policy." 4
- The original Heckington Fen scheme considered a 3MW candidate turbine with maximum dimensions 2.46 of 80m to hub and 125m to blade tip and a rated capacity of up to 3.0MW. For the purpose of this Variation Application the same candidate turbines remain valid. Therefore, calculations of the potential energy generation were, and remain, based on a 90m rotor diameter and assume an average UK wind farm performance. It is estimated that the scheme would generate approximately 131 GWh per annum; enough to meet the annual electricity needs of approximately 33,500 typical UK households⁵ and preventing the emission of 46,054 tonnes of CO₂ each year. ⁶

³ Pa 24: Clean Growth Strateav 2017:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correctionapril-2018.pdf

⁴ Report to the Secretary of State for Energy and Climate Change (DPI/R2520/12/8), Philip Major (1 November 2012) (https://www.og.decc.gov.uk/EIP/pages/projects/EastHeckingtonInspectorsReport.pdf)

⁵ This figure is based on DECC's figure for the GB's Average domestic consumption per household (kWh). Available at: https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics (Ref.1 DECC Stats Extract Lookup)

⁶ This figure is derived using Greenhouse Gas Reporting: Conversion Factors 2017 figures (August 2017) of 0.35156kgCO2e per kwh. Available at: <u>https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017</u>. It should be noted that future changes in the power generating mix and fuel costs in the UK over the life of the wind park means this figure may change over time. In this case, due to the increase of electricity generated from renewable energy sources the CO2 emissions factor is lower than in 2011.

CHAPTER 3: DETAILS OF THE VARIATION

THE APPLICATION

In 2011 Ecotricity submitted an application, under section 36 of the Electricity Act 1989 to install and 3.1 operate an electricity generating station with a capacity of over 50MW (together with deemed consent pursuant to s.90 of the Town and Country Planning Act 1990 (the TCPA)). Following an Environmental Impact Assessment the development was defined more specifically as:

> A wind energy development comprising the erection of up to twenty two wind turbines, each with a maximum overall height of up to 125m together with access tracks, crane pad areas, electricity sub-station, temporary construction compound, amended vehicular access on agricultural land at Heckington Fen, near East Heckington.

- 3.2 This application seeks to vary the consent granted in February 2013 under section 36 of the Electricity Act (and deemed planning permission under s. 90 of the TCPA). The amendments sought to the Development are:
 - Amend the wording of Condition 4 of the s.36 Consent to extend the date before which the development shall be commenced from 5 years to 10 years;
 - Amend the wording of Condition 8(2) of the deemed planning permission under s.90 of the TCPA to extend the date before which the development shall be commenced from 5 years to 10 years.
- 3.3 The proposed variations set out above are necessary for two reasons:
 - The implementation of the original consent is conditional (Condition 5) on a Radar Mitigation Scheme (RMS) being agreed with the Ministry of Defence (MOD). To date, despite best endeavours, the Applicant has not yet been able to agree an RMS with the MOD and therefore has been unable to commence the development. However, progress is being made with a view to agreeing an ongoing mitigation strategy which is aiming to deliver a solution within a 3-5 year timeframe.
 - A decision on the 2015 Variation of Consent Application, submitted 6th February 2015, has not been forthcoming. The 2015 Variation of Consent Application proposed that the wording on Condition 5 was amended to allow for an RMS to be agreed prior to the installation of the turbines, as opposed to prior to commencement of the development, thereby allowing development to commence while discussions continued with the MOD. As a decision has not yet been made on the 2015 Variation of Consent Application, the Applicant is currently unable to commence development within the specified timescales set out under Condition 4 of the s.36 Consent.

SITE DESCRIPTION AND CONTEXT

The Site

3.4 The proposed application site is located on agricultural land within a 604ha land holding which comprises of mainly arable crops with some limited grazing. The land holdings are bound to the south by the A17, to the east by Holland Dike, to the North by Head Dike and to the east by Sidebar lane. The development area lies between 0m - 3m AOD.

- 3.5 The main access point will be provided from the A17, 340m west of East Heckington Village, where a new access track will be constructed to facilitate onsite access. There is one public right of way within the site boundary. There will be no direct impact on this right of way.
- 3.6 The application site does not lie within any Areas of Landscape Importance and there is no Site of Special Scientific Interest (SSSI) or other ecology designations within the development site boundary.
- The application site falls within an area designated by a 1 in 100 year flood zone as identified by the 3.7 Environment Agency flood map.

The Surrounding Area

- 3.8 In general the area surrounding the application site is flat, being generally between 0 - 5m AOD, and is comprised of agricultural land and drainage ditches, dikes, and scattered settlements.
- 3.9 The village of East Heckington is located 1km south from the nearest proposed wind turbine while the town of Swineshead is 5km to the south east, Heckington 5.2km to the west and South Kyme 4km to the north. An 11/33kV overhead power line runs across the landholdings roughly following the southern boundary parallel to the A17 and another on the northern boundary running northeast / southwest. The closest residential properties are Mill Green Farm to the north, College Farm and Catlins farm to the east, Glebe Farm and properties along sidebar lane to the West and an assortment of farms and residential properties to the south. The nearest property is Home Farm to the south at approximately 998m from the nearest turbine.

WIND SPEED

3.10 The predicted Annual Energy Production (AEP) of the site has been calculated using a number of data sources. The average mean wind speed of the site is calculated at 7.5 metres per second at 80m height, based on the actual wind speeds collated from the temporary meteorological mast present on the site between December 2009 and August 2011.

THE WIND TURBINES

The candidate wind turbines provided in the original ES are all still relevant as part of this Variation 3.11 of Consent application.

TECHNICAL DETAILS

The technical details provided in the original ES are all still relevant as part of this Variation of Consent 3.12 application.

Overall change in land take

3.13 The proposed amendments would not result in any change in the permanent loss of arable habitat of 99,035m².

On-site access tracks

It is proposed that the location of onsite access tracks will not change. 3.14

Ditch crossings

There will be no change to the number and location of dry ditches and wet ditches. 3.15

Crane Pads and substation

The area of land required for permanent crane pad will remain the same as the original layout. 3.16

Temporary infrastructure

The area for temporary infrastructure will not increase. 3.17

Overall change in land take

There will be no change to land take. 3.18

CONSTRUCTION

- 3.19 As detailed in the original ES, the construction process is based on a rolling timetable i.e. each turbine foundation is constructed in turn and turbine installation commences as soon as a foundation is prepared. This can be classified into four stages:
 - Site enabling works and access
 - Foundation construction .
 - Grid connection .
 - **Turbine installation** •
- 3.20 It is anticipated that these construction stages may overlap, so there may be two or more phases in operation at any time.

DECOMMISSIONING

All details presented in the original ES in Chapter 4: Project Description remain relevant to 3.21 decommissioning in this Variation of Consent application.

CHAPTER 4: CONSULTATION AND SCOPE

INTRODUCTION

4.1 This chapter provides details on the consultation carried out for the amendments proposed as part of this Variation of Consent application. It also considers the scope of the additional assessment that follows this chapter, including those assessments scoped out of this ES and the approach to those assessments included within the ES.

CONSULTATION

- 4.2 Consultation is a key aspect of the EIA process as it helps to inform the nature and scope of potential impacts and therefore the various technical studies that are required in order to allow these potential impacts to be assessed.
- The consultation process for this Variation of Consent application differs from the approach taken 4.3 with the original application. There is no requirement to consult with statutory consultees prior to making an application.
- Following discussions with the BEIS (previously DECC), detailed below, Ecotricity determined that, 4.4 given that no changes to the development are proposed under this variation application, there would be no necessity to seek the views of statutory consultees prior to submission.

Department of Energy and Climate Change

- 4.5 A meeting was held between representatives of Ecotricity and the BEIS on 8 March 2018 in relation to the Variation of Consent process and proposed application under section 36C of the Electricity Act 1989. This meeting followed the Variation of Consent Application (dated 1 February 2018) and BEIS' subsequent letter of 23 February 2018 which concluded that the variation application did not meet the requirements of regulation 4 [of the Electricity Generating Stations (Variation of Consents)(England and Wales) Regulations 2013].
- 4.6 The following relevant points were discussed:
 - o Ecotricity confirmed their intention to submit Additional Information in the form of an ES Addendum to the existing S36 consent under section 36C of the Electricity Act 1989.
 - o It was agreed that in providing Additional Information, Ecotricity would have regard to The Electricity Works (Environmental Impact Assessment)(England and Wales) Regulations 2017 ("the 2017 EIA Regulations")
 - o It was agreed that the baseline data from the 2011 ES and 2015 Variation ES could be considered as relevant to this Variation of Consent Application (2018).
 - o It was discussed that an update to the two previous ES, including a statement on the relevant expert competencies and an assessment of any new matters that the 2017 EIA Regulations refer to, would likely be appropriate.

ASSESSMENT METHODOLOGY

Identification of Issues

4.7 Following consultation with BEIS, and with reference to the more recent requirements established by the Electricity Works (EIA) (England and Wales) Regulations 2017 (in particular Regulation 17 and Schedule 4), a review has been undertaken of the original ES assessments that formed part of the application for the original consent, to determine if any updates or new assessments are required for this Variation of Consent ES. The review is set out in Table 4.1.

Table 4.1: Review of Environmental Report Requirements

Regulatory Requirement	Existing Assessment Provided?	Update Required?
Sch 4 EIA Regs 2017:		
 A description of the development, including in particular: 	ES 2011: Chapter 4 Project Description	
a. a description of the location of the development;		
 a description of the physical characteristics of the whole development, including where relevant, requisite demolition works and the land use requirements during the construction and operational phases; 	ES 2011: Chapter 4 Project Description	
c. a description of the main characteristics of the operational phase of the development (in particular, any production process), for example, energy demand and energy used, the nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;	ES 2011: Chapter 4 Project Description and Chapter 1	
d. an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operational phases	ES 2011: Chapter 4 Project Description	
 A description of the reasonable alternatives (for example, in terms of development design, technology, location, size and scale) studied by the developer that are relevant to the development and its specific characteristics and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects. 	ES 2011: Chapter 3 Site Selection	
3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution of the environment without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	 2011 Baseline updated in 2015 as follows: LVIA updated due to GLVIA3 and updated photographs from 6 selected VPs. Para 5.24 	 LVIA - review baseline and any subsequent change of effects (see Appendix 1).

	1		i de la companya de l	1	
	confirmed that the baseline has not changed materially from that in 2011.		(c) Land, soil, water, air and climate	LVIA, Hydrology, Project Description – as above	
	 Cultural Heritage – no update to baseline. 	• Cultural Heritage - review baseline and any change of effects (see Appendix 2).	(d) Material assets, cultural heritage, landscape	Cultural Heritage and Landscape and Visual – as above	
	 Ornithology – pre- construction surveys in 2014. Not yet assessed 	 Ornithology – review baseline and any 	(e) Interaction of the above(f) Major accidents/disasters and impacts on the	As above	
	 against original scheme. Noise – GPG update assessed original 	change of effects (See Appendix 4).	above	-	Consider impacts of major accidents/disasters on the environment (see Appendix 8).
	assessed original assessment and found to be in compliance. No change to baseline in 2015.	 Noise - review baseline and any change of effects (see 	 (1) A description of the likely significant effects of the development on the environment resulting from, amongst other things- 	as above re (a) – (e)	
	 Hydrology – no change to baseline in 2015. 	Appendix 5).	 The construction and existence of the development, including where relevant, demolition works; 		
	 Transport and Access – relevant guidance updated and updated traffic counts (2013 DfT). 	• Hydrology - review baseline and any change of effects (see Appendix 6).	 b. The use of natural resources, in particular, land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; 		
	 Aviation – no change Shadow flicker – no change 	 Transport - review baseline and any change of effects (see Appendix 7) 	c. The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisance and the disposal and recovery of waste;		
		 Ecology - provide Phase 1 survey update (see Appendix 3). 	d. The risks to human health, cultural heritage or the environment (for example, due to accidents and disasters);		
		All above subjects to be checked to ensure no update to relevant guidance on assessment of impacts (see relevant	e. The cumulation of effects with other existing and approved developments, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected and the sue of natural resources;		
		appendices above).	f. The impact of the development on climate (for example, the nature and magnitude of	-	Updated GHG emission calculation to show
 4. A description of the factors set out in regulation 7(2) likely to be significantly affected by the development. Relevant factors: (a) Population and human health 	Noise, transport, shadow flicker: 2011 ES – assessed above and any updates required due to changed baseline from 2015 or after.		greenhouse gas emissions) and the vulnerability of the development to climate change;		impact of development on climate; and assess vulnerability of development to climate change (flooding etc) (see Chapter 2 and Appendix 8) respectively
(b) Biodiversity	Ecology and ornithology – as above		g. The technologies and the substance used.	ES 2011: Chapter 4 Project Description	

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(2) The description of the likely significant effects on the factors set out in regulation 7(2) must cover the direct effects and any indirect, secondary, cumulative, transboundary, short- term, medium-term and long-term, permanent and temporary, positive and negative effects of the development, taking account of the environmental protection objectives established at European Union or domestic level that are relevant to the development, including in particular those established under the Habitats Directive or the Wild Birds Directive.	as above re 2011 ES and 2015 (where appropriate)	
(3) A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example, technical difficulties or lack of knowledge) encountered in compiling the required information and the main uncertainties involved.	ES 2011 and 2015 (where appropriate)	Any new regulations/ evidence to be included (see relevant Appendices)
(4) A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangement (for example, the preparation of a post- development analysis).	Existing mitigation in ES 2011 and 2015 (where appropriate)	Any new mitigation as a result of updates following changes to baseline or regulations (see relevant Appendices)
(5) (1) A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and disasters that are relevant to the development.	-	Relevant disasters and major accidents and impacts (see Appendix 8)
(6) A Non-technical summary of the information provided under paragraphs 1 to 8.	-	To be provided (see Chapter 6)
(7) A reference list detailing the sources used for the descriptions and assessments included in the EIA Report.	-	Update provided (provided by each expert in each relevant Appendix)
Reg 17: EIA Regs 2017		
 1 (e) the main respects in which the developer thinks that the likely significant effects on the environment of the development, as varied, will differ from those set out in (i) Any EIA report or ES prepared in connection with the application for the section 36 consent that it is proposed be varied; and 	-	To be provided (see each Appendix for conclusions of assessments)
 (ii) If the section 36 consent has previously been varied by a section 36 variation, any EIA report or environmental statement 		

		prepared in connection with the application for that variation.				
	(5) stat	(5) statement of expert competence.				
	4.8	In the absence of a formal scoping process for has also been used to 'scope out' those env potential to be affected by the proposed amen	vironment			
	Asses	sments Scoped Out				
d	4.9 Given the nature of the proposed amendments presen number of environmental topics that were included in Variation of Consent ES. These environmental topics we chapter of the original ES. Justifications for scoping considered below.					
а	Public	safety				
6	4.10	There are no additional effects likely to occur t application.	o public s			
d	4.11	Whilst new guidance exists through the NPPI any additional implications for public safety.	⁼ and Na			
ix	4.12	The original ES concluded that there would be	insignific			
	4.13	Overall it is considered that there will be no Variation of Consent application. It is therefore				
	Air qu	ality				
ert	4.14	There are no additional effects likely to occur application.	to air qu			
	4.15	Whilst new guidance exists through the NPPI any additional implications for air quality.	⁼ and Na			
	4.16	There is no change to the movements of ve change likely to air quality as a result.	hicles du			
	4.17	The original ES concluded that there would change in air quality during operation.	be insig			
	4.18	There will be no additional impact on air quality is therefore scoped out of this ES and is not di				

To be provided (provided by each expert in each relevant Appendix)

riation of section 36 consents, a similar process ental issues that are considered as having no s.

ented as part of the Variation of Consent ES, a in the original ES have been scoped out of the were all those considered in the 'Miscellaneous' ing out these assessments from this ES are

ic safety as a result of this Variation of Consent

National Policy Statements, these do not have

ificant change to public safety.

onal impact on public safety as a result of this ed out of this ES and is not discussed further.

quality as a result of this Variation of Consent

National Policy Statements, these do not have

during construction, and therefore there is no

significant change during construction and no

result of this Variation of Consent application. It ed further.

Communications

- There are no additional effects likely to occur to communications as a result of this Variation of 4.19 Consent application.
- Whilst new national guidance refers to the potential for wind turbines to interfere with communication 4.20 links, the guidance used to assess the impact still remains as Bacon's (2002) 'Fixed-link wind-turbine exclusion zone method'.
- Given the turbine locations and overall tip height have not changed, and that there are no 4.21 communication fixed links in the vicinity of the proposed development, no further consultation has been carried out with individual communication operators.
- In the original application, the Joint Radio Company (JRC) did identify a single link path that crossed 4.22 the developable area from east to west. A detailed link assessment was completed with a mitigation solution identified by JRC to be completed prior to construction starting on site. Further consultation with JRC has confirmed that this single link path is no longer in operation and that a mitigation solution is therefore no longer required.
- The original ES concluded that there would be insignificant effect subject to redirecting the single 4.23 affected link path as agreed with JRC.
- 4.24 Overall it is considered that there will be no additional impact on communications as a result of this Variation of Consent application. It is therefore scoped out of this ES and is not discussed further.

TV and radio reception

- There are no additional effects likely to occur to TV and radio reception as a result of this Variation 4.25 of Consent application.
- 4.26 Whilst new guidance exists through the NPPF and National Policy Statements, these do not have any additional implications for TV and radio reception.
- The turbine locations and overall tip height have not changed, and the nearest third party property 4.27 remains nearly 1km away from the nearest wind turbine. OFCOM guidance¹ suggests that any wind turbine is placed at least 500m away from the viewer in order to reduce the likelihood and severity of any interference from reflection. Furthermore, since the switch over to digital transmission in 2011, the potential for interference is further reduced. OFCOM guidance suggests that digital TV reception is usually much more resistant to the effects of reflection.
- The original ES concluded that subject to a mitigation programme to investigate and alleviate any 4.28 potential occurrence of interference, there would be insignificant effect during operation. Condition 20 of the original consent remains in place.
- Overall it is considered that there will be no additional impact on TV and radio reception as a result 4.29 of this Variation of Consent application. It is therefore scoped out of this ES and is not discussed further.

Agriculture

- There are no additional effects likely to occur to agriculture as a result of this Variation of Consent 4.30 application.
- 4.31 Whilst new guidance exists through the NPPF and National Policy Statements, these do not have any additional implications for agriculture in relation to the consented development.
- It is considered that there will be no additional impact on agriculture as a result of this Variation of 4.32 Consent application. It is therefore scoped out of this ES and is not discussed further.

Tourism

- 4.33 There are no additional effects likely to occur to tourism as a result of this Variation of Consent application.
- 4.34 Whilst new guidance exists through the NPPF and National Policy Statements, these do not have any additional implications for tourism in relation to the consented development.
- The original ES concluded that for those tourist and recreational receptors close to the site the 4.35 significance was considered negligible.
- 4.36 It is considered that there will be no additional impact on tourism as a result of this Variation of Consent application. It is therefore scoped out of this ES and is not discussed further.

Aviation

- 4.37 There are no additional effects likely to occur to aviation as a result of this Variation of Consent application.
- 4.38 This Variation of Consent application does not seek to amend the existing conditions on aviation set out in the existing consent.
- 4.39 It is considered that there will be no additional impact on aviation as a result of this Variation of Consents Application. It is therefore scoped out of this ES and is not discussed further.

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¹ Ofcom, (2009) Tall structures and their impact on broadcast and other wireless services. http://www.ofcom.org.uk/radiocomms/ifi/licensing/classes/fixed/Windfarms/tall_structures/tall_structures.pdf

Environmental Impact Assessment

- 4.40 Environmental Impact Assessment (EIA) is a process that is intended to ensure that planning permission for developments, which may have significant effects on the environment, should be considered only after prior assessment of the likely significant environmental effects of those projects has been carried out.
- The legislative context for the EIA process comes from the European Council and is transposed by 4.41 Member States. In England and Wales and with regards to the nature of the Heckington Fen Wind Farm scheme this takes the form of The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017.

Methodology and guidance

Where the specific assessment methodology and/or guidance relating to the specific environmental 4.42 topic being assessed has changed or is amended from the original ES assessment, this is noted in each assessment chapter.

Baseline conditions

- Where the existing environmental character of the site may have changed since the time the original 4.43 ES baseline was considered, this is noted in each specific assessment chapter. For instance, Chapter 5: Landscape and Visual Statement considers any new operational or proposed wind turbines/farms (or those no longer being progressed) within the assessment.
- Should the sensitivity of any identified receptors have changed as a result of a change in the baseline 4.44 conditions or new guidance this is identified within the baseline section of each specific assessment.

Assessment of effects

- The assessment of significance that follows the identification of the sensitivity of the receptor and the 4.45 predicted magnitude of change on that receptor follows the same process as set out in Chapter 2: Environmental Impact Assessment of the original ES.
- 4.46 For reference, Table 2.1 of the original ES demonstrating the matrix for establishing significance is reproduced below in Table 4.2. Each of the technical assessments contained within this Variation of Consent ES uses this matrix as a basis for technical assessments; unless adapted for the specific requirements of an assessment, in which case this is stated appropriately.

Table 4.2: Matrix for Establishing Significance

		Sensitivity of Receptor			
		Low	Medium	High - Very High	
act	No change	Insignificant	Insignificant	Insignificant	
of Impact	Minimal change	Negligible -Minor	Minor	Minor - Moderate	
	Very Low - Low	Minor	Minor - Moderate	Moderate	
itud	Medium	Minor - Moderate	Moderate	Moderate - Major	
Magnitude	High - Very High	Moderate	Moderate - Major	Major	Extreme

Extreme:	These effects, if adverse, represent key are generally, but not exclusively ass importance and resources/features whi replaced or relocated.
Major:	These effects are likely to be important but, if adverse, are potential concerns importance attached to the issue during
Moderate:	These effects, if adverse, while importa decision making issues. Nevertheless, the to an increase in the overall effects on a
Minor:	These effects may be raised as local iss decision making process. Nevertheless, the project.
Negligible:	Effects which are beneath levels of per- within the margin of forecasting error.

Insignificant: No effect identified.

4.47 Each technical assessment within this Environmental Statement sets out the techniques used to predict impacts and assess effects where these may have changed from the original 2011 assessments. In many cases the assessment techniques will be supplemented by professional judgment in assessing the significance of effect, where this is the case, this is highlighted accordingly.

factors in the decision making process. They sociated with sites and features of national hich are unique and which, if lost, cannot be

considerations at a regional or district scale, to the project, depending upon the relative the decision making process.

tant at a local scale, are not likely to be key the cumulative effect of such issues may lead particular area or a particular resource.

sues but are unlikely to be of importance in the they are of relevance in the detailed design of

rception, within normal bounds of variation or

CHAPTER 5: SUMMARY OF TECHNICAL ASSESSMENTS

INTRODUCTION

- 5.1 As identified in Chapter 4, and specifically Table 4.1, technical assessments have been undertaken by independent, gualified experts, in relation to the 2011 ES where updates are required or in order to comply with the 2017 Regulations.
- Each assessment is included as a separate appendix to this ES as follows: 5.2
 - Appendix 1 Landscape and Visual Impact Assessment (including Annexures and Figures)
 - Appendix 2 Cultural Heritage (including Figures)
 - Appendix 3 Ecology (including Annexure and Figures)
 - Appendix 4 Ornithology (including Annexure and Figures)
 - Appendix 5 Noise (including Annexure)
 - Appendix 6 Hydrology
 - Appendix 7 Transport and Access
 - Appendix 8 Miscellaneous
- 5.3 A summary of each assessment is provided further below.

Landscape and Visual Impact (Appendix 1)

- A review of the 2011 LVIA (and 2015 LVIA where appropriate) has been undertaken as against the 5.4 current baseline, policy and in consideration of the proposed variation.
- An updated methodology has been provided in order to be in accordance with GLVIA3 (see Annex 5.5 1).
- In terms of baseline, save for small scale farm building constructions and minor growth of trees and 5.6 hedges locally, there has been no significant change to the landscape baseline of the Site and Study Area since 2011 (see new Figure 6: Updated Baseline Photographs).
- Following a review of the landscape character and value, and the visual environment, no relevant 5.7 material change to the baseline data presented in 2011 LVIA has been identified.
- 5.8 The updated evaluation of landscape and visual sensitivity and capacity remains unchanged. It remains as medium to low for the host landscape 'The Fens – Fenland (13)'. The capacity of the host landscape to accommodate the consented development also remains unchanged as medium to high.
- The updated assessment on landscape and visual effects is as in 2011; the development is 5.9 considered to have negligible to minor adverse effects on the site landscape and features.

- 5.10 The landscape character effects remain unchanged as **minor to moderate** adverse.
- 5.11 Due to negligible change to landscape and visual baseline and no change to receptor sensitivity, the level of significant and not significant effects with respect to users of recreational trails, PRoW, places of interest/landmarks, land with public access, public highways and navigable waterways remains unchanged.
- 5.12 An update of the cumulative landscape was also undertaken. A review of the relevant wind energy projects is set out in Table 5.3 of Appendix 1; four projects identified in the 2011 assessment have since been withdrawn. Notwithstanding the fewer number of CAS in planning, the updated assessment confirms the 2011 conclusions.

Cultural Heritage (Appendix 2)

- 5.13 A review of the 2011 Environmental Statement has been undertaken (and 2015 as appropriate), as against the current baseline, policy and in consideration of the proposed variation.
- A review of policy identifies the update provided in the 2015 ES is still appropriate. Since that time, 5.14 Historic England have issued the Historic Environment Good Practice in Planning Note 3: The Setting of Heritage Assets Second Edition.
- 5.15 On review of the baseline, it remains unchanged with respect to undesignated archaeological assets. With respect to the settings of heritage assets, five further buildings have been listed within a distance of 10km from the centre of the development, one of which is within 5km of the boundary. In all other respects, the baseline in relation to the setting of heritage assets remains unchanged.
- 5.16 Following a thorough assessment, including a field evaluation of the site, the significance of effects with respect to undesignated archeological assets remains unchanged.
- 5.17 Although new guidance has been issued by Historic England, the methodology used in 2011 (and 2015) is fit for purpose. Although several buildings have been listed since 2011, they lie either at a considerable distance and/or are located within the build development of local settlements. None of the assets would be affected by the development and so the significance of effects laid out in 2011 remains unchanged.

Ecology (Appendix 3)

- 5.18 A review of the 2011 Environmental Statement has been undertaken as against the current baseline, policy and in consideration of the proposed variation. The review has concentrated on the potential changes in effects due to changes in habitats on the site or changes in species present or using the site.
- 5.19 Both a desk study and field survey (an updated phase 1 survey) and DNA sampling for Great Crested Newts have been carried out (see Annex 1).
- 5.20 The updated assessment has concluded that an unmitigated development strategy is unlikely to have a significant negative impact on habitats present on site. This also reflects the conclusions for protected species present on site although there is a potential risk of disturbance to one outlying badger set during construction. A precautionary approach is therefore suggested to ensure no disturbance to badger during construction.

Chapter 5: Summary of Technical Assessments

5.21 Following analysis of available survey work and background data searches, it is considered that there is no evidence to suggest that the proposed development would lead to a significant impact on any known protected species or ecological features of value at national, county or local level provided appropriate safeguards are set in place.

Ornithology (Appendix 4)

- A review of the 2011 Environmental Statement has been undertaken as against the current baseline 5.22 and in consideration of the proposed variation.
- A 12 month baseline ornithological survey was initiated in 2014 in order to survey all bird species 5.23 within an area extending to at least 500m beyond the locations of the proposed turbines and site infrastructure and all bird species utilizing the above area during the non-breeding period.
- The baseline survey results confirm that the numbers and range of species of birds using the site in 5.24 2014-15 was very similar to that in 2007/2008. Any differences identified are not considered significant and any minor variation in number or species is likely due to the smaller survey area, national declines in certain species and possibly differences in particular crops in different years.
- 5.25 Consequently, the detailed assessment submitted in 2011, which concluded that "no effects of the development on birds are considered to be significant under the terms of the EIA regulations" remains valid.

Noise (Appendix 5)

- A review of the 2011 Environmental Statement (and 2015 where relevant) has been undertaken as 5.26 against the current baseline, policy and in consideration of the proposed variation.
- ETSU-R-97 remains the relevant methodology, as recommended in national planning policy. The 5.27 2015 ES reviewed the 2011 assessment in light of the IOA Good Practice Guidance and concluded it was consistent with that guidance.
- In terms of the baseline, although a number of new dwellings have been identified, the assessment 5.28 locations previously considered remain representative of the properties in the area neighbouring the Development. There has also been no significant change to the road and general infrastructure in the vicinity of the development such that there would be a significant change to the noise environment.
- Given traffic levels on the roads neighbouring the development are likely to have increased since 5.29 2011, the previous measurements are likely to represent a conservative representation of the noise environment at these locations.
- As the baseline remains representative of the area, the assessment of impacts remains as in 2011. 5.30

Hydrology (Appendix 6)

- A review of the 2011 Environmental Statement has been undertaken as against the current baseline, 5.31 policy and in consideration of the proposed variation.
- Since 2011, the National Planning Policy Framework and Planning Practice Guidance have been 5.32 published. Neither have any significant implications for hydrology that are not assessed in the 2011

ES. However, the Environment Agency has updated the guidance on climate change in 2016 and 2017.

- 5.33 The updated climate change guidance will alter the allowances in which the scheme would need to consider.
- 5.34 The River Basin Management Plan, first published in 2009, was updated in December 2015. The Plan identified key issues and measures. The development will not prevent these measures from being delivered.
- 5.35 There have been some minor changes to the baseline as a result of recent updates on policy and guidelines.
- 5.36 The original FRA complies with the requirements of the NPPF.
- 5.37 The assessment of effects presented in the 2011 ES has not changed discernibly as a result of the updated guidance and baseline conditions for the site. The original assessment of effects therefore still apply.

Transport and Access (Appendix 7)

- 5.38 A review of the 2011 Environmental Statement (and 2015 where relevant) has been undertaken as against the current baseline, policy and in consideration of the proposed variation.
- 5.39 The policy context has changed since 2011 but this was predominantly reflected in the 2015 assessment. As the proposals are not predicted to generate significant volumes of movement, in terms of current policy requirements (NPPF), a Transport Assessment is not required.
- 5.40 The baseline conditions have been reviewed and updated following up to date traffic flow counts.
- 5.41 The magnitude of the impact of the construction traffic is minor, and not significant, and so there is no change to the conclusions in the 2011 ES.

Miscellaneous (Appendix 8)

- As a result of the 2017 EIA Regulations coming into force, there is a requirement to assess the likely 5.42 significant effects on human health and climate, and the risks to the environment as a result of accidents and disasters.
- 5.43 The risks from climate change and adaptation mainly come from flood risk, due to the change in surface watercourse flow, change in peak rainfall intensities and/or change in the probability of extreme rainfall events.
- 5.44 On a review of the flood risk assessment from 2011 and the update forming this ES, the development is not likely to result in a significant reduction in flood plain storage nor likely to result in an increase in flood risk on or off site.
- 5.45 With regard to other impacts of climate change, these are not considered to be significant over the proposed development's 25 year operational lifetime.
- The main potential impact on climate change from the development is greenhouse gas (GHG) 5.46 emissions. These emissions must however be set against the emissions from other electricity

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generation sources that are displaced by it. The net effect on climate change due to GHG emissions from the proposed development is therefore predicted to be beneficial (a reduction) compared to the 'business as usual' baseline for electricity generation.

- In considering impacts on human health, assessments of potential effects were separated into 5.47 two phases; construction/decommissioning stages; and the operational phase. Potential activities that could influence health include noise, air quality, transport, shadow flicker, EMF, socio-economic and agricultural matters and visual impacts. The assessments conclude that there is not expected to be any significant effects on human health from these activities.
- 5.48 In relation to accidents and disasters, consideration has been given to flooding, abnormal loads and construction traffic, public safety and ice throw. Again, due to site design and/or mitigation measures, these matters do not raise likely significant effects.

Chapter 5: Summary of Technical Assessments

CHAPTER 6: CONCLUSIONS (INCLUDING NON-TECHNICAL SUMMARY)

INTRODUCTION

- This Non-Technical Summary has been produced to accompany the Variation of Consent 6.1 Environmental Statement (Voc ES) for Heckington Fen Wind Park in accordance with the Electricity Generating Stations (Variation of Consents) (England and Wales) Regulations 2013 and the Electricity Works (Environmental Impact Assessment)(England and Wales) Regulations 2017, as amended.
- The Non-Technical Summary provides a summary of the assessments contained within the VoC ES 6.2 and presents the information in a non-technical manner avoiding, wherever possible, the use of technical terminology.
- The VoC ES has been compiled and project managed by **Ecotricity**, with some individual chapters 6.3 being prepared, and contributions into other chapters being undertaken, by leading independent experts in the relevant field. The key contributions have been:
 - Landscape & Visual by Gavin David;
 - Cultural Heritage by RPS; 0
 - Ecology by Ecotricity Ecologists
 - o Ornithology by Kevin Shepherd
 - Noise by Hoare Lea Acoustics
 - Hydrology by WSP 0
 - Transport & Access by RPS; and 0
 - Miscellaneous by RPS
- 6.4 The Environmental Impact Assessment Project Team has extensive experience in both Environmental Impact Assessment and in the development of wind energy proposals across England and the wider UK.

Public consultation

- 6.5 Copies of this Non Technical Summary will be made available to the public on request at no cost. A hard copy of the VoC ES and accompanying documents can be viewed during the statutory consultation period at the following location:
 - North Kesteven District Council, Kesteven Street, Sleaford, Lincolnshire, NG34 7EF.
- This Non Technical Summary and the Variation of Consent Environmental Statement is available to 6.6 download free of charge from www.ecotricity.co.uk/heckington-fen.

VARIATION OF CONSENT

- In 2011, Ecotricity submitted an application, under section 36 of the Electricity Act 1989, to install and 6.7 operate an onshore wind farm of up to 22 wind turbines on land to the north of East Heckington, Lincolnshire. The application included a request for a direction under s.90 of the Town and Country Planning Act 1990 for deemed planning permission.
- 6.8 This application seeks to vary the consent that was granted by the Secretary of State in February 2013.

Legislative Context

- 6.9 Section 36 of the Electricity Act applies to proposals for the construction, extension or operation of an onshore electricity generating station whose capacity exceeds 50 MW.
- 6.10 Since the Planning Act 2008 came into force, it has not been possible or necessary to apply for section 36 consent in respect of an onshore generating station in England and Wales.
- 6.11 In 2013, the Growth and Infrastructure Act 2013 inserted a new section (36C) into the Electricity Act 1989.
- 6.12 The main aim of new section 36C of the 1989 Act is to make it possible for the designs of generating stations, already consented but not constructed or completed, to be modified in ways which the relevant section 36 consents would not otherwise permit and without the developer having to apply for a development consent order under the 2008 Act.
- In addition, a new Section 90(2ZA) was inserted into the Town and Country Planning Act 1990 to 6.13 allow for the variation of an existing deemed permission.
- This process is referred to as a Variation of Consent granted under section 36 of the Electricity Act. 6.14

Policy Context

- 6.15 Although the original consent was granted under section 36 of the Electricity Act 1989; had it been submitted after the Planning Act 2008 came into force, the development would have been considered to be 'nationally significant'. Although wind farms are now no longer considered 'nationally significant', the Overarching National Policy Statement for Energy (EN-1), and National Planning Statement for Renewable Energy Infrastructure (EN-3)) should be taken into consideration.
- The National Planning Policy Framework is also relevant to this application, as is the (online) Planning 6.16 Practice Guidance on Renewable and Low Carbon Energy.
- Since the Heckington Fen s.36 consent was granted, the Regional Spatial Strategy for the East 6.17 Midlands has been revoked by the Regional Strategy for the East Midlands (Revocation) Order 2013 (which came into force on 12 April 2013). The development plan for the area is therefore now only the Central Lincolnshire Local Plan (adopted April 2017).

Chapter 6: Conclusions (including Non-Technical Summary)

Energy policy has continued to develop, however the main framework for the UK's current renewable 6.18 energy and low carbon targets are derived from the Climate Change Act 2008 which was in force at the time of the original application and ES.

PROPOSED AMENDMENTS

- 6.19 In brief, the amendments sought to the consented scheme are:
 - Amend the wording of Condition 4 of the s.36 Consent to extend the date before which the development shall be commenced from 5 years to 10 years;
 - Amend the wording of Condition 8(2) of the deemed planning permission under s.90 of the TCPA to extend the date before which the development shall be commenced from 5 years to 10 years.

Reasons for the amendments

- 6.20 The proposed variations set out above are necessary for two reasons:
 - The implementation of the original consent is conditional (Condition 5) on a Radar Mitigation Scheme (RMS) being agreed with the Ministry of Defence (MOD). To date, despite best endeavours, the Applicant has not yet been able to agree an RMS with the MOD and therefore has been unable to commence the development. However, progress is being made with a view to agreeing an ongoing mitigation strategy which is aiming to deliver a solution within a 3-5 year timeframe.
 - A decision on the 2015 Variation of Consent Application, submitted 6th February 2015, has not been forthcoming. The 2015 Variation of Consent Application proposed that the wording on Condition 5 was amended to allow for an RMS to be agreed prior to the installation of the turbines, as opposed to prior to commencement of the development, thereby allowing development to commence while discussions continued with the MOD. As a decision has not yet been made on the 2015 Variation of Consent Application, the Applicant is currently unable to commence development within the specified timescales set out under Condition 4 of the s.36 Consent.

ENVINONMENTAL IMPACT ASSESSMENT (EIA)

- Environmental Impact Assessment (EIA) is a process that is intended to ensure that planning 6.21 permission for developments, which may have significant effects on the environment, should be considered only after prior assessment of the likely significant environmental effects of those projects has been carried out.
- The EIA is presented in an Environmental Statement (ES). 6.22
- The VoC ES follows the same EIA process as it did with the 2011 ES. The legislation which covers 6.23 the EIA process in England and Wales was amended in 2017 and now takes the form of The Electricity Works (Environmental Impact Assessment) (England and Wales) Regulations 2017.

SCOPING AND CONSULTATION

- 6.24 Consultation is a key aspect of the EIA process as it helps to inform the nature and scope of potential impacts and therefore the various technical studies that are required in order to allow these potential impacts to be assessed.
- The consultation process for this Variation of Consent application differs from the approach taken 6.25 with the original application. There is no requirement to consult with the public or statutory consultees prior to making an application.
- Discussions have taken place with the department of Business, Energy and Industrial Strategy (BEIS) 6.26 prior to this Variation of Consent application.
- 6.27 Following consultation with BEIS, and with reference to the scope of the original ES assessments that formed part of the application for the original consent, a number of assessments were identified as relevant to this Variation of Consent ES. The likely effects on the environment as a result of the proposed amendments are presented in the proceeding section of this Non-Technical Summary.
- 6.28 A number of environmental topics considered in the original ES have been scoped out of the VoC ES on the basis that they are considered as having no potential to be affected by the proposed amendments. These include:
- Public safety
- Air quality
- Communications
- TV and radio reception
- Agriculture
- Tourism
- Aviation
- 6.29 Chapter 4 of the VoC ES provides more details on the identification of issues and those assessments scoped out.

ENVIRONMENTAL EFFECTS

- 6.30 On the basis of the consultation and scoping exercise described above, and the professional judgement of the EIA team, the following technical assessments have been undertaken and are reported in the VoC ES:
- Landscape and Visual Impact (Appendix 1)
- Cultural Heritage (Appendix 2)
- Ecology (Appendix 3)
- Ornithology (Appendix 4)
- Noise (Appendix 5)
- Hydrology (Appendix 6)

- Transport and Access (Appendix 7)
- Miscellaneous (Appendix 8).

THE ENVIRONMENTAL STATEMENT

Landscape and Visual (Appendix 1)

- Since the submission of the original ES, the 'Guidelines for Landscape and Visual Impact 6.31 Assessment' have been updated from the 2nd Edition (GLVIA 2) to the 3rd edition (GLVIA 3). It is worth noting, however, that the LVIA for the original ES was carried out using principles and practice largely in line with the subsequent GLVIA 3 guidance.
- As the overall character of the baseline has not changed since the original ES, and the nature of the 6.32 development is the same as that originally assessed, the sensitivity of the landscape and visual receptors is as presented in Chapter 5: Landscape and Visual of the original ES.
- Considering the nature of the proposed amendments, the overall level of physical landscape effects 6.33 is considered to be as reported in the original ES.
- 6.34 Taking account of the large scale of the existing fenland landscape, its man-made context and the nature of the changes proposed to the consented development, it is considered that the level of effect on the character of the host landscape would remain as reported in the ES.
- In the original ES significant effects (Major, Major-Moderate and Moderate-Major) were judged to be 6.35 likely for the following receptors/features:
- Certain residential properties situated within 2.5km;
- Landscape character up to 1.5km;
- The public footpath crossing and adjacent to the site;
- Footpaths and Rights of Way between 1-2km; and,
- Main roads adjacent to the site (within 1km).
- These likely significant effects have not changed when account is taken of the proposed amendments 6.36 assessed in the VoC ES.
- The proposed development would not cause any significant additional cumulative landscape or visual 6.37 effects in the study area.

Cultural Heritage (Appendix 2)

- The methodology used to carry out the Cultural Heritage addendum is the same as that detailed in 6.38 the original ES Cultural Heritage chapter.
- 6.39 Although new guidance has been issued by Historic England, the methodology used in 2011 (and 2015) is fit for purpose. Although several buildings have been listed since 2011, they lie either at a considerable distance and/or are located within the build development of local settlements. None of the assets would be affected by the development and so the significance of effects laid out in 2011 remains unchanged

- 6.40 A review of the 2011 Environmental Statement has been undertaken as against the current baseline, policy and in consideration of the proposed variation. The review has concentrated on the potential changes in effects due to changes in habitats on the site or changes in species present or using the site.
- 6.41 Both a desk study and field survey (an updated phase 1 survey) and DNA sampling for Great Crested Newts have been carried out (see Annex 1).
- 6.42 The updated assessment has concluded that an unmitigated development strategy is unlikely to have a significant negative impact on habitats present on site. This also reflects the conclusions for protected species present on site although there is a potential risk of disturbance to one outlying badger set during construction. A precautionary approach is therefore suggested to ensure no disturbance to badger during construction.
- 6.43 Following analysis of available survey work and background data searches, it is considered that there is no evidence to suggest that the proposed development would lead to a significant impact on any known protected species or ecological features of value at national, county or local level provided appropriate safeguards are set in place.

Ornithology (Appendix 4)

- 6.44 A review of the 2011 Environmental Statement has been undertaken as against the current baseline and in consideration of the proposed variation.
- A 12 month baseline ornithological survey was initiated in 2014 in order to survey all bird species 6.45 within an area extending to at least 500m beyond the locations of the proposed turbines and site infrastructure and all bird species utilizing the above area during the non-breeding period.
- 6.46 The baseline survey results confirm that the numbers and range of species of birds using the site in 2014-15 was very similar to that in 2007/2008. Any differences identified are not considered significant and any minor variation in number or species is likely due to the smaller survey area, national declines in certain species and possibly differences in particular crops in different years.
- 6.47 Consequently, the detailed assessment submitted in 2011, which concluded that "no effects of the development on birds are considered to be significant under the terms of the EIA regulations" remains valid.

Noise (Appendix 5)

- 6.48 A review of the 2011 Environmental Statement (and 2015 where relevant) has been undertaken as against the current baseline, policy and in consideration of the proposed variation.
- ETSU-R-97 remains the relevant methodology, as recommended in national planning policy. The 6.49 2015 ES reviewed the 2011 assessment in light of the IOA Good Practice Guidance and concluded it was consistent with that guidance.
- 6.50 In terms of the baseline, although a number of new dwellings have been identified, the assessment locations previously considered remain representative of the properties in the area neighbouring the Development. There has also been no significant change to the road and general infrastructure in the vicinity of the development such that there would be a significant change to the noise environment.

Chapter 6: Conclusions (including Non-Technical Summary)

- Given traffic levels on the roads neighbouring the development are likely to have increased since 6.51 2011, the previous measurements are likely to represent a conservative representation of the noise environment at these locations.
- 6.52 As the baseline remains representative of the area, the assessment of impacts remains as in 2011.

Hydrology (Appendix 6)

- A review of the 2011 Environmental Statement has been undertaken as against the current baseline, 6.53 policy and in consideration of the proposed variation.
- Since 2011, the National Planning Policy Framework and Planning Practice Guidance have been 6.54 published. Neither have any significant implications for hydrology that are not assessed in the 2011 ES. However, the Environment Agency has updated the guidance on climate change in 2016 and 2017.
- The updated climate change guidance will alter the allowances in which the scheme would need to 6.55 consider.
- 6.56 The River Basin Management Plan, first published in 2009, was updated in December 2015. The Plan identified key issues and measures. The development will not prevent these measures from being delivered.
- There have been some minor changes to the baseline as a result of recent updates on policy and 6.57 guidelines.
- The original FRA complies with the requirements of the NPPF. 6.58
- The assessment of effects presented in the 2011 ES has not changed discernibly as a result of the 6.59 updated guidance and baseline conditions for the site. The original assessment of effects therefore still apply.

Transport and Access (Appendix 7)

- 6.60 A review of the 2011 Environmental Statement (and 2015 where relevant) has been undertaken as against the current baseline, policy and in consideration of the proposed variation.
- The policy context has changed since 2011 but this was predominantly reflected in the 2015 6.61 assessment. As the proposals are not predicted to generate significant volumes of movement, in terms of current policy requirements (NPPF), a Transport Assessment is not required.
- 6.62 The baseline conditions have been reviewed and updated following up to date traffic flow counts.
- The magnitude of the impact of the construction traffic is minor, and not significant, and so there is 6.63 no change to the conclusions in the 2011 ES.

Miscellaneous (Appendix 8)

6.64 As a result of the 2017 EIA Regulations coming into force, there is a requirement to assess the likely significant effects on human health and climate, and the risks to the environment as a result of accidents and disasters.

- The risks from climate change and adaptation mainly come from flood risk, due to the change in 6.65 surface watercourse flow, change in peak rainfall intensities and/or change in the probability of extreme rainfall events.
- 6.66 On a review of the flood risk assessment from 2011 and the update forming this ES, the development is not likely to result in a significant reduction in flood plain storage nor likely to result in an increase in flood risk on or off site.
- 6.67 With regard to other impacts of climate change, these are not considered to be significant over the proposed development's 25 year operational lifetime.
- 6.68 The main potential impact on climate change from the development is greenhouse gas (GHG) emissions. These emissions must however be set against the emissions from other electricity generation sources that are displaced by it. The net effect on climate change due to GHG emissions from the proposed development is therefore predicted to be beneficial (a reduction) compared to the 'business as usual' baseline for electricity generation.
- 6.69 In considering impacts on human health, assessments of potential effects were separated into two phases; construction/decommissioning stages; and the operational phase. Potential activities that could influence health include noise, air quality, transport, shadow flicker, EMF, socio-economic and agricultural matters and visual impacts. The assessments conclude that there is not expected to be any significant effects on human health from these activities.
- 6.70 In relation to accidents and disasters, consideration has been given to flooding, abnormal loads and construction traffic, public safety and ice throw. Again, due to site design and/or mitigation measures, these matters do not raise likely significant effects.

FURTHER INFORMATION

- 6.71 This Non-Technical Summary and the Variation of Consent Environmental Statement is available to download free of charge from www.ecotricity.co.uk/heckington-fen.
- 6.72 Hard copies and CD copies of the Variation of Consent Environmental Statement (including Figures, Appendices and the NTS) can be obtained by contacting Ecotricity at the address below at a cost of £250 per hard copy and £10 on CD.

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