1. Introduction

1.1 The Proposed Development

1.1.1 This Environmental Statement has been prepared on behalf of E.ON UK plc. ("the Applicant") to accompany an application which has been made to Barnsley Metropolitan Borough Council ("the Application") for permission to construct and operate a wind farm within lands located at Crow Edge, Barnsley, South Yorkshire. The proposed site location is shown in Figures 1.1 and 1.2. The installed capacity of the project would be a maximum of 7 megawatts (MW) depending upon the final wind turbine selected, though for the purposes of assessment a more conservative 6MW has been assumed (based on three 2MW machines). The Development Site boundary and wind farm layout is shown in Figure 1.2.

1.1.2 The wind farm proposal is for 3, three-bladed wind turbine generators with a rated output of approximately 2MW each and associated infrastructure, including:

- an anemometry mast;
- an operations control building;
- underground power cables;
- upgraded and new-build access tracks; and
- a temporary construction compound.

A detailed project description is provided in Chapter 4.

1.1.3 The project would also involve the construction of a grid connection (see Figure 4.7). The direct and indirect effects of the grid connection are considered in relevant chapters of this Environmental Statement. The cabling required to connect the site substation to the local distribution network will be entirely underground cable therefore this will not require consent under Section 37 of the Electricity Act 1989.

1.1.4 It is proposed that the wind farm would generate electricity over approximately a 24 year period and that within a 25 year period it would be decommissioned. A future application may be made for further planning permission to extend the duration of operation at the development site. However for the purposes of this Environmental Statement it is assumed that decommissioning will occur at the end of the 25 year lifetime of the wind farm.

1.1.5 Under the terms of the Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 ("the EIA Regulations") an EIA has been carried out to identify and assess the Proposed Development's likely significant environmental effects and appraise inherent and proposed mitigation measures. This Environmental Statement contains the findings of this assessment.

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1.2 Structure of the Environmental Statement

1.2.1 The Environmental Statement reports the findings of the EIA assessments and comprises the following separately bound volumes:

- Environmental Statement, Volume 1 (this report): EIA Assessments – which reports the findings of the EIA assessments for all environmental issues;
- Environmental Statement, Volume 2: Figures and Visualisations – which presents figures and visualisations that accompany the EIA assessments of Volume 1;
- Environmental Statement, Volume 3: Technical Appendices – which contain technical information to accompany the various assessments of Volume 1; and
- Environmental Statement, Non Technical Summary (NTS) – which summarises the key information presented in the Environmental Statement (Volumes 1, 2 and 3) in a non-technical manner.

1.2.2 The Environmental Statement, Volume1: EIA Assessments is structured as follows:

- Chapters 1-5 present background information on the project, EIA methodology and planning policy; and
- Chapters 6-14 address all environmental issues and draws on technical assessments of the potential environmental effects and inherent and proposed mitigation measures during the proposal design to avoid and/or minimise such effects.

1.3 The Applicant

1.3.1 The applicant for the proposed Blackstone Edge Wind Farm is E.ON UK plc, part of the E.ON Group, the world's largest investor owned power and gas company, with nearly 80,000 employees worldwide.

1.3.2 E.ON generates electricity from power plants, including wind farms right across the country, supplying millions of domestic and business customers with electricity and gas. Through Central Networks, E.ON owns and maintains the substations, power lines and cables across central England whilst Energy Services provides customers with all of the services they need to get connected to energy supplies, to heat their homes and to understand their energy usage.

1.3.3 E.ON is the only UK generator to have committed to reduce the carbon intensity of its generation by 10% by 2012, compared with 2005. The company's current portfolio of operational projects consists of onshore and offshore wind farms, hydro-power schemes and biomass-fuelled generation. These include 18 onshore wind farms, the UK's first offshore wind farm at Blyth, Northumberland, and the UK's second large scale (60MW) offshore wind farm at Scroby Sands, Norfolk. E.ON also operates Rheidol Hydro Station, the largest hydro-electric scheme in Wales.

1.3.4 E.ON has recently constructed an 18MW onshore wind farm, Stag's Holt in Cambridgeshire, and the UK's largest dedicated biomass plant at Steven's Croft (44MW), near Lockerbie. Currently under construction is a 180MW offshore wind

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farm, Robin Rigg located in the Solway Firth The company has also been trialling the use of co-firing of biomass fuels in its fleet of conventional power stations.

1.3.5 In South Yorkshire, E.ON already operates (as part of a 50/50 joint venture with Energy Power Resources Limited) the wind farm at Royd Moor which consists of 13 wind turbines.

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