PREFACE

SSE Generation Limited (the applicant) has applied for consent[1] for the proposed Tangy IV Wind Farm, comprising 16 turbines and associated infrastructure, 3 km north of Kilkenzie, Kintyre, Scotland.

The applicant proposes to redevelop the existing Tangy I and Tangy II Wind Farms, replacing the existing 22 turbines with a 16 turbine wind farm with a maximum tip height up to, but not exceeding 149.9 m ('the proposed development').

The applicant has provided an Environmental Impact Assessment Report (EIA Report) to accompany the application. The EIA Report comprises the following sections:

- Volume 1: NTS;
- Volume 2: Main Report;
- Volume 3a: Figures;
- Volume 3b: Visualisations; and
- Volume 4: Technical Appendices.

Additional documentation that will be submitted with the application includes:

- Design and Access Statement;
- Pre-Application Consultation Report; and
- Planning Statement.

The EIA Report and additional documents will be available for viewing on the Scottish Government Energy Consents online portal (http://www.energyconsents.scot/Default.aspx) and also at the following locations:

- Argyll and Bute Council, Customer Service Point, 1A Manse Brae, Lochgilphead, PA31 8RD, Mon – Fri from 9am – 12.30 and 1.30 – 4pm;
- Argyll and Bute Council, Burnett Building, Customer Service Point, St. John Street, Campbeltown, PA28 6BJ, Mon – Fri from 9am – 12.30 and 1.30 – 4pm; and
- Tayinloan Post Office, Tayinloan Store, Tayinloan, Tarbert, PA29 6XG, Monday to Friday: 10am to 1pm.

The EIA report can also be viewed at the Scottish Government Library at Victoria Quay, Edinburgh, EH6 6QQ.

A paper copy of the Non-Technical Summary is available free of charge. A copy of the EIA report is available on DVD at a cost of £10. A printed copy of the EIA Report can be provided upon request (£450). Copies of the documents may be obtained from the applicant by contacting:

Murray West

SSE
1 Waterloo Street
Glasgow
G2 6AY

Or by email at: murray.west@sse.com

Further detail on the project is available on the applicant's website: www.sse.com/tangy-repower.

[1] An application for consent for the proposed development will be made to the Scottish Ministers under section 36 of the Electricity Act 1989, along with a request for a direction that planning permission be deemed to be granted under section 57(2) of the Town and Country Planning (Scotland) Act 1997 as amended

Any representations to the application may be submitted via the Energy Consents Unit website at www.energyconsents.scot/Register.aspx; by email to the Scottish Government, Energy Consents Unit mailbox at representations@gov.scot; or by post to the Scottish Government, Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the proposal and specifying the grounds for representation. Written or emailed representations should be dated, clearly stating the name (in block capitals), full return email and postal address of those making representations. Only representations sent by email to representations@gov.scot will receive acknowledgement.

All representations should be received not later than 26 October 2018, although Ministers may consider representations received after this date.

Any subsequent additional information which is submitted by the applicant will be subject to further public notice in this manner, and representations to such information will be accepted.

1. INTRODUCTION

1.1 Introduction

1.1.1 This Environmental Impact Assessment Report (EIA Report) is submitted by 'the applicant', SSE Generation Ltd (SSEG), holder of a generation licence. The EIA report has been prepared on behalf of the applicant, by SSE Renewables Developments (UK) Limited (SSE Renewables), to accompany an application for consent[2] for the proposed Tangy IV Wind Farm, located on the west coast of the Kintyre Peninsula, Argyll and Bute, Scotland, as shown on Figure 1.1. The applicant proposes a repowering and extension to the existing Tangy I and Tangy II Wind Farms, replacing the existing 22 turbines with a 16 turbine wind farm with a maximum tip height up to, but not exceeding 149.9 m ('the proposed development').

1.1.2 This EIA Report has been prepared in accordance with the requirements of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the 2017 EIA Regulations'), subject to the transitional provisions set out in Part 12 of the 2017 EIA Regulations. This EIA Report presents information on the likely significant environmental effects of the proposed development. The EIA Report also informs the reader of the nature of the proposed development and the measures proposed to protect the environment during site preparation (including decommissioning of the existing turbines), construction, operation and decommissioning.

1.2 Project Background and Need

1.2.1 Tangy I began generating electricity in 2004, and following an extension to include Tangy II, currently comprises 22 turbines, each with 0.85MW capacity, and maximum generation capacity of 18.7 megawatts (MW). The existing consent for the site expires in August 2022. Turbine technology has significantly advanced since Tangy I and Tangy II 'existing Tangy' became operational with early turbine models having been superseded by much more efficient machines. The existing turbines on Tangy are reaching the end of their operational life. The applicant therefore wishes to submit a new application to remove the existing turbines and upgrade the site with new wind turbine generators to realise its greater generating potential.

1.2.2 In November 2014, Tangy III Wind Farm Environmental Statement (ES), 'the ES (2014)', was submitted with a planning application under the Town and Country Planning (Scotland) Act 1997, as amended, to Argyll and Bute Council (ABC) for the construction and operation of a new 16 turbine wind farm with a maximum tip height of 125 m. Following a post-submission variation to remove turbine 8 from the turbine layout, planning permission for 15 turbines was granted in June 2015 and is referred to here as 'the consented development'. Based on the technology available in November 2014, the consented development would have a maximum installed capacity of up to 34.5 MW.

1.2.3 In order to maximise the energy yield of the site and increase the site's contribution to Scottish renewable electricity generation targets, the applicant is now proposing an increased tip height of up to 149.9 m, based on the same 16 turbine layout previously submitted. Based on current technology, this would provide an installed capacity of up to 80 MW. The proposed development is now referred to as the proposed Tangy IV Wind Farm.

1.3 Key Terms

1.3.1 To ensure clarity in the EIA Report, the following terms are used:

- application boundary: the red line application boundary as shown on Figure 1.1.

[2] An application for consent for the proposed development will be made to the Scottish Ministers under section 36 of the Electricity Act 1989, along with a request for a direction that planning permission be deemed to be granted under section 57(2) of the Town and Country Planning (Scotland) Act 1997 as amended.

- the proposed development: the infrastructure of the proposed Tangy IV Wind Farm as described in detail in Chapter 5: Description of the Development, including but not limited to: wind turbines, electrical cabling, access tracks, anemometer masts, substations, operations building, borrow pits, construction compound and construction laydown area.
- site: the area within the application boundary within which the proposed development lies; and
- study area: the area(s) over which desk based or field assessments have been undertaken. The study area varies depending on timing of surveys and the nature of the potential effects within each discipline, as informed by professional guidance and best practice regarding EIA. The study areas are therefore explained within the methodology section of the relevant chapters.

1.3.2 A glossary of terms is also included at the front of this EIA Report.

1.4 Development Context

Site Setting

1.4.1 The site is located approximately 9 km north-west of Campbeltown, Kintyre's largest settlement. The closest villages are Bellochantuy, 2 km north-west of the site, and Kilchenzie, 3 km south of the site. The site is a combination of forestry and agricultural land currently used for commercial forestry, grazing and renewable electricity generation. The highest point within the application boundary is Cnocan Gean, north-east of the existing wind farm at a height of 200 m Above Ordnance Datum (AOD). In general, the elevation of the site ranges from about 90 m to 200 m AOD. The site slopes down to the west, south and north-west.

1.4.2 The site also contains several small watercourses/burns, many of which are connected to Tangy Loch, which is approximately 230m south-east of the site boundary at its closest point.

1.4.3 Access to the site is via an unnamed road running in a north-east-southwest direction past Tangy Farm and Breakachy, joining Tangy Mill Road to the south, which connects to the A83 at Drum Farm. The A83 runs to the west and south of the site providing access to the coast, Campbeltown Harbour and Machrihanish to the south, and to Tarbert and the rest of mainland Scotland to the north.

1.4.4 There are no major roads within the site, although there are forest tracks and approximately 3.7 km of tracks that service the existing wind farm.

Environmental Sensitivities

1.4.5 The site is located on an upland area and comprises coniferous forest to the north and grassland to the south, although other habitats are present. There are a number of small watercourses and burns on site (e.g. Tangy Burn and Allt na Creamn), as shown on Figure 12.1.

1.4.6 Figure 1.2 shows ecological designations within the vicinity of the site.

1.4.7 There is no development proposed within areas designated for ecological protection at international, national or local scale. In the wider area, Tangy Loch, located adjacent to the site to the south-east, is designated as a Site of Special Scientific Interest (SSSI) and is a part of the Kintyre Goose Roosts Special Protection Area (SPA) and Ramsar site due to the presence of nationally important aquatic plant life (Slender naiad *najas flexilis*) and the Greenland White-fronted Goose (*Anser albifrons*). The Kintyre Goose Roosts SPA and Ramsar sites, and Kintyre Goose Lochs SSSI, that cover Tangy Loch also include Lussa Loch, located approximately 1km north-west of the site.

1.4.8 Other designated sites in the wider area that are designated for non-ornithological features are the Machrihanish Dunes SSSI, approximately 3 km to the southwest of the site, which is designated for geomorphological features (sand dunes) and associated biological features (dune habitats and flora); and Bellochantuy and Tangy Gorges SSSI approximately 1 km southwest of the site, designated for quaternary geology and geomorphological features.

1.4.9 Ornithological surveys have indicated the presence, on or around the site, of Greenland white-fronted geese, greylag geese, merlin, peregrine, hen harrier, short-eared owl and herring gull.

1.4.10 The site is not covered by any national landscape policy designations. The North Arran National Scenic Area (NSA) is located approximately 22 km to the north-east, whilst the Knapdale and Jura NSAs are each approximately 40 km distant from the site to the north and north-west respectively.

1.4.11 The West Kintyre (Coast) Area of Panoramic Quality (APQ), designated as such within the Argyll and Bute Local Development Plan (2015), is located approximately 300 m to the west of the site, and covers the A83 road corridor.

1.4.12 There are no Scheduled Monuments (SM) within the site boundary. The Tangy Loch Fortified Dwelling SM sits outside the site to the south-east and Killocraw Cairns SMs are also located approximately 0.5 km to the north-west of the site boundary.

1.5 About the Applicant

1.5.1 SSE is a British energy company, headquartered in Perth, Scotland, with a team of around 21,000 employees. This EIA Report is submitted by the applicant, SSE Generation Ltd, holder of a generation licence. This EIA Report has been prepared, on behalf of the applicant by SSE Renewables Developments (UK) Limited. SSE Renewables is the renewable energy division of SSE and is responsible for the development and construction of the SSE Group's renewable energy projects across Great Britain, Ireland and continental Europe, including offshore and onshore wind farms, hydro, marine, biomass and solar projects.

1.5.2 SSE is maintaining and investing in a diverse portfolio of renewable generation plant. In all, SSE has 3,826 MW of renewable energy generation capacity (onshore wind, offshore wind, hydro, pumped storage and biomass) of which 3,091 is in Great Britain (at March 2017).

1.6 Project Team

1.6.1 The assessment of environmental effects and management of the EIA process has been undertaken by a team of experienced environmental specialists as follows:

- Ramboll Environmental and Health UK Limited (Ramboll) – EIA management and Ecology;
- Montague Evans – Planning;
- Ash Design + Assessment (Ash) – Landscape and Visual;
- MacArthur Green Ltd. – Ornithology;
- SLR – Geology, Soils and Peat;
- WSP – Surface Water;
- AOC Archaeology – Cultural Heritage;
- Hoare Lea Acoustics – Noise;
- Arcus – Traffic and Transport;
- McKay Forestry – Forestry (land use);
- BiGGAR Economics – Socio-economic;
- TNEI – Shadow Flicker; and
- Pager Power – (aviation).

1.6.2 The EIA team has wide experience of the development of proposals for wind farms and the assessment of their likely significant effects. The EIA team has worked closely with the applicant, which has extensive experience of wind farm design, construction and operation.

1.6.3 In accordance with regulation 5(5) of the EIA regulations, by appointing Ramboll the applicant has ensured that the EIA Report has been prepared by 'competent experts'. The EIA Report has been compiled and approved by professional EIA practitioners at Ramboll, holding relevant

undergraduate and post-graduate degrees, full membership of IEMA (MIEMA) and Chartered Environmentalist (CEnv) status with the Society for the Environment. The EIA Report meets the requirements of the Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark scheme. This is a voluntary scheme operated by IEMA that allows organisations to be make a commitment to excellence in EIA and to have this commitment independently reviewed on an annual basis.

1.6.4 Each of the impact assessment chapters provides details of the relevant professional memberships of the authors, code of practice followed, assessment methodology used, including the specific criteria for defining the sensitivity of the baseline environment, quantifying the magnitude of change and for assessing whether the effects are deemed significant or not significant under the terms of the EIA Regulations.

1.7 References

The Electricity Act 1989, c29.

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, No.101.

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000.

Town and Country Planning (Scotland) Act 1997, c8.

Argyll and Bute Council (2015) Adopted Local Development Plan, March 2015.