Introduction

This Non-Technical Summary ('NTS') forms part of the Supplementary Information ('SI') which accompanies an application by Infinergy on behalf of Bluebell Wind Farm Limited, the joint venture between Infinergy Limited and Loch Luichart Estate ('the Applicant').

The Applicant is proposing a wind energy development, Lochluichart Wind Farm Extension II, north of the village of Lochluichart and approximately 18km north-west of Dingwall in the Highland region of Scotland (refer to Figure 1.0).

As the Revised Development does not exceed 50 MW, the Applicant is submitting the application in accordance with The Town and Country Planning Act (EIA) (Scotland) Regulations 2018.



Figure 1.0: Site Location

Background

The Applicant submitted the planning application for the 9-turbine and associated infrastructure Lochluichart Wind Farm Extension II application ('the Original Scheme') in April 2019. The application was accompanied by an Environmental Impact Assessment Report (hereafter referred to as the 'EIA Report' (Infinergy, April 2019), and associated documents, under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2018.

Following submission of the application, Highland Council ('THC') consulted relevant organisations, as well as the public. Among the concerns raised were the visual impacts of the Original Scheme on the A835, the location of turbines in areas of deep peat and impacts on the radar at Inverness Airport; further details of these responses are contained in Chapter 3 of SI. The Applicant considered the feedback contained in the consultation responses, and conducted further assessment as appropriate to inform potential design changes.



As a result of the responses, the Original Scheme has been redesigned. The 5-turbine scheme Lochluichart Wind Farm Extension II, which is the outcome of this redesign, is known as the 'Revised Development' (refer to Figure 1.1). The changes are as summarised:

- Removal of turbines T2, T3, T9 & T10;
- Removal of 'spur' access track to turbine T4;
- Micro-siting of turbine T4 to an area of shallow peat depth;
- Reduction in size of the substation compound/control building;

The SI documents should be read in conjunction with the EIA Report.

Environmental Impact Assessment

The EIA process identifies the methodologies used to assess the environmental impacts predicted to result as a consequence of the construction, operation and decommissioning of a development. Where appropriate, it also identifies mitigation measures designed to prevent, reduce and, if at all possible, offset potential significant adverse environmental effects. An assessment of residual effects, those expected to remain following implementation of mitigation measures, are also considered along with an assessment of the cumulative effects of a Development in conjunction with other relevant proposed and existing developments (in this case wind farms). The results of the EIA are then presented in an SI and summarised in plain English in an accompanying NTS (this document).

The EIA process has been instrumental in informing the design of the Revised Development. The site layout has undergone a number of iterations to ensure it can be accommodated within the environmental and technical constraints identified through the EIA process.

The Revised Development

The Revised Development has been described in detail in the SI. The following are a summary of changes contained in the SI, in comparison to the Original Scheme in the EIA Report:

- Five turbines, with a maximum tip height of 133m, are now proposed;
- The installed capacity of the proposed wind farm has changed, and based on the candidate turbine (Senvion 114 3.6MW NES) is now up to 18MW;
- Based on a revised installed generation capacity of 18MW, the Revised Development would have the potential to supply the equivalent of the average annual domestic electricity needs of over 13,000 homes;
- Construction, commissioning and site restoration are anticipated to take about 9 months, with potential opportunities for local companies and local workforce to be involved, subject to meeting tender criteria.

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Figure 1.1: Revised Development



REGULATORY CONSULTATION

Following submission of the SI for the Revised Development, THC, on behalf of the Applicant, will again consult all relevant consultees.

Environmental Effects

The following sections provide a brief summary of the main findings of the SI set out in the technical sections (Volume 1: Written Statement). The assessments consider the potential environmental effects during the construction, operation and decommissioning phases of the Revised Development compared to the Original Scheme.

Socio-Economics

The removal of the four turbines and associated infrastructure is likely to result in a minor reduction in the beneficial effects on socio-economics, and a minor reduction of adverse effects on tourism, recreation and land use. The effect of the Revised Development on Socio-economics, Tourism & Recreation, and Land-Use is not significant.

Traffic and Transport

The traffic and transport assessment considers the effects of the Revised Development. The majority of construction vehicles are anticipated to approach the Development from the south, via the A9 and A835. The route for Abnormal Load Vehicles, which will be used for the delivery of wind turbine components, is from the Port of Invergordon via the A9, Cromarty Bridge and A835.

During construction, overall traffic flow levels and levels of HGV flow can be expected to increase on routes approaching the Revised Development. The peak month for traffic flow is expected to be month eight of construction. During month eight overall traffic flow is expected to increase by 2.5% and Heavy Goods Vehicle (HGV) flow by 4.3% on the A835 within the vicinity of the Revised Development, this represents the highest predicted percentage increase on any route in the assessment. The predicted increase in traffic flow on all routes in the assessment is therefore negligible in terms of the EIA Regulations.

As the predicted increase in traffic flow during construction is low and temporary, no significant effects on traffic and transport are expected to occur as a result of the Revised Development.

Traffic associated with operation of the Revised Development is predicted to be minor, amounting to an average of three vans per day. The effect of operational traffic is therefore not significant in terms of the EIA Regulations.

Noise

An assessment of the effects of noise due to the Revised Development has been undertaken. The assessment takes into account changes to the design of the Original Scheme since preparation of the EIA Report and consultation undertaken with the Environment Health Department of The Highland Council (THC). During construction, noise may result from the use of plant and machinery to carry out construction activities. Due to the substantial separation distance between the Revised Development and nearby residential dwellings, no significant effects are anticipated. Notwithstanding this, Best Practice mitigation measures will be adopted to manage noise emissions, including restrictions on working hours during the construction of the Revised Development.

During operation, wind turbines can generate noise from the machinery housed within the turbine and from the movement of blades through the air. Modern turbines are designed to minimise noise and planning conditions are used to ensure compliance with specified noise limits.

The assessment has been undertaken in accordance with the recommendations of ETSU R-97, the method of assessing wind turbine noise recommended by Government guidance, and following the current best practice methods described in the Institute of Acoustics' A Good Practice Guide to the Assessment and Rating of Wind Turbine Noise, as endorsed by the Scottish Government. It has been shown that noise due to the Revised Development would comply with the requirements of both ETSU R-97 and THC at the closest, and therefore all receptor locations.

As agreed with THC, a cumulative assessment has also been undertaken in conjunction with the adjacent Lochluichart, Lochluichart Extension and Corriemoillie Wind Farms. Worst-case operational noise levels are below the identified noise limits, and the impact of operational noise has therefore been demonstrated as acceptable.

Noise produced during decommissioning of the Revised Development is likely to be of a similar nature to that during construction, although the duration of decommissioning will be shorter than that of construction. Any legislation, guidance or best practice relevant at the time of decommissioning would be complied with.

Landscape and Visual

The SI for the LVIA has assessed the landscape and visual effects, including cumulative effects, of the reduction in the number of turbines for the Revised Development. It has found that the changes sought by THC Planning Officer, whilst notably reducing the capacity of the Revised Development in a localised area already influenced by wind farm development, would inevitably reduce some of the magnitude of change ratings and remove some of the significant effects previously assessed for the Original Scheme. The reduced effects would occur in the area to the immediate north of the Revised Development where increased separation distances would reduce the apparent prominence, field of view and apparent height of the Revised Development as experienced from the A835 and nearby hill top summits.

The updated in-conjunction cumulative assessment has considered application stage Kirkan Wind Farm as part of the cumulative context and the addition of the Revised Development to this cumulative context. The finding has been that no additional, significant, in-conjunction, cumulative landscape and visual effects, would arise in respect of the Revised Development and updated cumulative context. the one significant effect that was previously assessed would be reduced such that it would apply to only residents and not road-users. Despite the reduced number of turbines in the Revised Development, the in-combination cumulative effects would remain broadly as previously



assessed owing to the greater extent of wind farm development associated with Kirkan Wind Farm.

Overall, the reduction from nine to five turbines would reduce the extent of landscape and visual effects by keeping the layout more closely located towards and associated with the Operational Wind Farms.

An update to the Revised Development subsequent to the preparation of the SI Chapter and Figures has been made and comprises the movement of T4 by 24m to the northeast and the removal of the access track spur connecting T6 to the Operational Wind Farms. The removal of the track would reduce the overall extent of infrastructure visible on the site and therefore would reduce the effect of the infrastructure.

The wirelines in Figures 6.21 to 6.32 illustrate how incremental this change would be by comparing the position of T4 in the Revised Development with its position when moved 24m to the north-east. This movement is relatively small and is well within the 50m allowance for micro-siting turbines applied during construction. An assessment of the potential effects associated with the movement of T4 concludes that there would be no material difference to the assessment made in the SI.

Cultural Heritage

Following submission of the EIA Report no objections were raised by Historic Environment Scotland in relation to Cultural Heritage.

A revised assessment of effects has been undertaken on valued cultural heritage receptors. The changes incorporated in the Revised Development do no alter the conclusions of the assessment presented within the SI, and no significant effects are predicted on Cultural Heritage.

Ecology

Following submission of the EIA Report, SNH objected to the scheme on a number of grounds which included Ecology. These matters have been dealt with by the submission of SI, and revisions to the design incorporated in the Revised Development.

A revised assessment of effects has been undertaken on valued ecological receptors. The changes incorporated in the Revised Development do no alter the conclusions of the assessment presented within the SI, and the potential for all effects remain not significant in terms of the EIA Regulations on Ecology.

Ornithology

Following the submission of the EIA Report, no objections were raised by consultees to the Revised Development.

A revised assessment of effects has been undertaken on valued Ornithological receptors. The changes incorporated in the Revised Development do no alter the conclusions of the assessment presented within the SI, and the potential for all effects remain not significant in terms of the EIA Regulations on Ornithology.



Hydrology

Chapter 13 of the EIA Report assessed that the Original Scheme as having no significant effects on the hydrological environment.

The removal of access tracks, four turbines and associated hardstanding for the Revised Development will reduce the potential of effects on the hydrological environment and the potential for all effects remain not significant in terms of the EIA Regulations.

Other Study Areas

Following the submission of the EIA Report in respect of Shadow Flicker and Safety and Infrastructure, no objections were raised by consultees to the Original Scheme.

No significant effects were predicted in the EIA Report for the Original Scheme, a revised assessment for the Revised Development does not change this position.

Forestry

Following the submission of the EIA Report in respect of Forestry, SEPA objected to the Original Scheme on the proposed method dealing with forestry waste arising from the scheme. The Applicant has included additional information in response to this concern in the SI

The reduction in size of the Original Scheme, from 9 to 5 turbines and related infrastructure, promoted as the Revised Development will lead to a reduced area of forestry being felled.

The net area of crops to be felled and left unplanted to accommodate the Revised Development is 3.63 hectares. This equates to approximately 0.7% of the existing forestry area.

Conclusion

The Applicant is seeking a planning consent to construct and operate a wind farm at the Loch Luichart Estate, due north of the village of Lochluichart and approximately 18km north-west of the town of Dingwall, in the Highland region of Scotland. The Revised Development will consist of 5 turbines with a maximum tip height of 133m, giving a total installed capacity at the site of 18MW. The operational life of the development will be 25 years.

The EIA carried out to support the Revised Development involved detailed surveys, studies and assessments to determine any potential 'effects' to the natural, physical and manmade environment that would result as a consequence of the construction, operation and decommissioning of the Revised Development. Through careful design, in response to the findings of the EIA as well as the Applicant's commitment to mitigation measures, the results of the EIA on the Revised Development would not have any long-term unacceptable impacts on the surrounding environment.

The Applicant has engaged with the local community throughout the EIA process in order to inform the community about the Revised Development, to explain its components and potential effects, and to obtain feedback and an understanding of any key concerns or issues.



There is an urgent need to change existing energy infrastructure if the established renewable energy targets set by successive EU, UK and Scottish Governments are to be met, in order to help address the Climate Emergency, energy security and energy poverty. The Revised Development is a positive response to the ambitious targets set for renewable electricity generation. At a size of 18MW, the estimated generation of the Revised Development would power the equivalent of approximately 13,000 average UK homes with Renewable Energy, while providing a meaningful contribution to the Scottish and UK Governments' renewable electricity targets, reducing CO² emissions, and ensuring further diversification of the UK energy mix.

Further Information

Further information on the Lochluichart Wind Farm Extension II is contained in the SI, which can be inspected at the following locations:

The Highland Council

Ross House Dingwall IV15 9RY

Garve Village Hall

Station Road Garve IV23 2PP

Printed copies of the SI (Volumes 1, 2, & 3) can be purchased from Infinergy for £750 per copy. All Volumes are available on a CD free of charge. To obtain a copy, please contact:

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