AGENDA ITEM NO 7

REPORT NO 382/14

ANGUS COUNCIL

DEVELOPMENT STANDARDS COMMITTEE – 16 SEPTEMBER 2014

PLANNING APPLICATION – LAND 605M NORTH WEST OF THE WELTON, KINGOLDRUM

Grid Ref: 330480 756168

REPORT BY THE HEAD OF PLANNING AND PLACE

Abstract:

This report deals with planning application No. 14/00276/FULL for a wind turbine development comprising two 225kw wind turbines of 47.05 metres to blade tip and Associated Infrastructure on land 605m north west of The Welton, Kingoldrum. This application is recommended for conditional approval. (Plan)

1. RECOMMENDATION

It is recommended that this application be approved for the reasons and subject to the condition(s) detailed at Section 10 of this report.

2. ALIGNMENT TO THE ANGUS COMMUNITY PLAN/SINGLE OUTCOME AGREEMENT/ COPORATE PLAN

This report contributes to the following local outcome(s) contained within the Angus Community Plan and Single Outcome Agreement 2013-2016:

- Our communities are developed in a sustainable manner
- Our natural and built environment is protected and enjoyed

3. INTRODUCTION

3.1 Planning permission is sought by Carrach Wind Farm LLP for a wind turbine development comprising two 225kw wind turbines of 47.05 metres to blade tip and associated infrastructure for a 25 year period on land north west of The Welton, Kingoldrum.

3.2 The application site measures some 2.3 hectares and comprises an area of land extending from the north west of The Welton for approximately 600m onto land currently used for agriculture. The site is surrounded by the tops of Brankam Hill (313m) to the south west, Strone Hill to the north west (335m) and The Carrach (384m), Mile Hill (409m) and Kinclune Hill (387m) to the north east. The site sits to the north of B951 public road between Kirriemuir and Glen Isla and is located some 8km west of Kirriemuir, between the villages of Kingoldrum and Lintrathen.

3.3 The proposal involves the installation of two wind turbines and associated infrastructure including a section of new access track extending north from The Welton, an area of hardstanding at each turbine and a small control building. The proposed turbines would measure 30.5m to hub, 47.05m to maximum tip height. The turbines would have a rotor diameter of 33.1m. The turbines would be semi-matt and pale grey in colour and the transformers would be located inside of the turbine structure.

3.4 The application has not been varied.

3.5 The application has been advertised and the relevant time period for third party comment has expired.

3.6 The application requires to be determined by the Development Standards Committee due to its recommendation for approval whilst being subject to more than 5 objections and a community council objection.

4. RELEVANT PLANNING HISTORY

4.1 An application was submitted in 2008 for the formation of a wind turbine development comprising 5 turbines on Mile Hill, to the north east of the application site (application 08/00426/FUL refers). That application proposed five 100m high turbines but was withdrawn prior to being decided.

4.2 Planning application 11/00554/FULL for the installation of 9, 84m wind turbines with associated foundations, crane pad and control buildings on land at The Carrach, Welton/Kinclunie Farms, Kingoldrum was refused planning permission by the Development Standards Committee on 7 August 2012 for the following reasons:-

(1) The development would result in unacceptable adverse landscape impacts having regard to landscape character and setting within the immediate and wider landscape and, as such, is contrary to policy 6 of TAYplan and policies ER5 and ER34 (criterion b) of the Angus Local Plan Review (2009); and

(2) The development would have an unacceptable visual impact on the occupants of residential properties and the wider landscape and, as such, is contrary to policy 6 of TAYplan and policies S1 criterion (b), S6 criterion (b), ER34 criterion (a) and policy ER35 criterion (c) of the Angus Local Plan Review (2009).

4.3 The proposal was subject of an appeal to the DPEA (ref: PPA-120-2022) and the appeal was dismissed and planning permission refused. The Reporter indicated that the proposal would result in unacceptable landscape impact in the locality; a detrimental effect on residential amenity; and an undesirable effect on the efforts to restore Balintore Castle (Category A listed building) due to harmful changes to the building's wider setting.

5. APPLICANT'S CASE

5.1 The applicant has submitted the following documents to support the application:-

- Environmental Report including viewpoints and wirelines of the turbines; and
- Additional information relating to the impact on Balintore Castle; additional photomontage and wirelines; and an analysis of the impact on the Cat Law path.

5.2 The Environmental Report (ER) assesses the local environmental impacts of the proposed turbines. The ER includes chapters on (1) project summary; (2) the proposed development; (3) planning and environmental policy context; (4) project design considerations; (5) landscape and visual impact; (6) noise; (7) cultural heritage/archaeology; (8) surface and groundwater hydrology; and appendices on (i) landscape and visual impact viewpoint analysis; (ii) ecological assessment; and (iii) hydrological context of site.

The ER indicates that the proposal has been revised following a consideration of the reasons for refusal of the earlier 9 turbine development. It indicates that the turbines are significantly smaller than previously proposed and would be located at a lower altitude than the previous proposal and their visual impacts would therefore be much reduced.

In respect of landscape and visual impacts, the ER concludes that '*typically the two proposed turbines at the Carrach would form a linear balanced layout which is well screened from views within the local area and would relate well to both the scale of the landscape and the form of the topography. Assessed significant effects are isolated, only occurring within ~600m of the turbines. These relates to the visual impact at one of the assessed viewpoints, the nearby summit of Brankam Hill. Effects outside this distance quickly diminish, which indicates localised impacts that are not widespread. Consideration has been given to the comments made by the Reporter regarding the previous windfarm application as well as the recently published Strategic Landscape Capacity Study for Wind Energy in Angus and the Implementation Guide for Renewable Energy in Angus as having the most potential for a development of this scale. The development of two turbines at this site will have a limited impact on both the local landscape and the wider region*.

5.3 The additional information relating to the impact on Balintore Castle; additional photomontage and wirelines; and an analysis of the impact on the Cat Law path indicates that:-

– The setting of Balintore Castle was considered in detail during the design process. A wireline model was submitted with the transparency switched on which allows the topography to become see through. This was intended to show how little of the proposed turbines would be visible from the castle and that the vast majority would be directly behind the topography. The resizing of the turbines and relocation away from the summits onto lower ground reduces the impact on the castle to negligible, as shown in the photomontage. Views from the viewing platform have been considered using computer software which elevates the height of the wireline to ~20m above ground level and this shows that views from the platform would remain limited to blade tips occupying a negligible extent of horizontal and vertical visibility.

– An additional viewpoint along the B952 directly to the south of the development was supplied to show the worst case scenario for road users travelling along the B952 past the site. This view would occur for approximately 1km and shows that the turbines appear in keeping with the surrounding landscape and do not form a dominant feature in that view.

– A series of wirelines were submitted to assess the impact on the path to and from Cat Law from Balintore. Impacts would be greatest for walkers descending Cat Law towards Balintore. The wirelines show a relative lack of visibility of the turbines due to screening from intervening topography (not taking account of the impact of vegetation including the shelterbelt woodland around the summit of Carrach). The turbines cover a negligible extent of horizontal and vertical views and do not disrupt views over Strathmore because they are backclothed by the landscape. Impacts on this route are considered to be minimal.

– Every effort has been made to site the turbines in a location that is sensitive to the comments received from the Reporter in regards to the much larger windfarm as well as the local guidance available in the Capacity Study and Implementation Guide for Renewables in Angus. The capacity study indicates that current consented development remains well within capacity. The sensitive landscape area around Loch of Lintrathen would have next to no visibility of the turbines with woodland and the intervening landscape significantly limiting any potential impacts on this area. Ascreavie would have no visibility and the impacts on Balintore Castle would be negligible. The development has been significantly reduced both in terms of overall scale and turbine numbers to mitigate the potential impacts on the setting of the castle, as well as potential views from within it.

6. CONSULTATIONS

6.1 **Kirriemuir Landward West Community Council** objects to the proposal for the following reasons: (1) there is objection from local residents evidenced by a survey conducted for the 2011 application; (2) the development will create unacceptable landscape and visual impact and has previously been refused by Angus Council and the Scottish Government. The turbines will be visible above the ridge line to the north of the site and the grounds for refusal of the previous scheme are equally pertinent to this site; (3) the turbines are located at 304m and 322m above sea level, with blade tips at 351m and 369m, very close to the summit of The Carrach at 384m and about 1km from Mile Hill at 409m; (4) the proposal is contrary to the guidelines set out in the Strategic Landscape Capacity Assessment for Wind Energy in Angus in particular because it is within the triangle formed by Balintore Castle, Ascreavie and Loch of Lintrathen, because the turbines are located near to the summit of Mile Hill and because the turbines are located on higher ground at the upper end of the medium scale classification and the study suggests that they should be sited on lower ground towards Strathmore.

6.2 **Angus Council - Roads** - The site is located on the north side of B951 Kirriemuir –Glenisla Road at The Welton Farm. The submitted Environmental report envisages the turbines will be landed at the Port of Dundee and transported via the A90, the A926 to Kirriemuir and the B951 to the site. The application has been considered in terms of the traffic likely to be generated by it, and its impact on the public road network. As a result, no objection is offered to the application subject to conditions requiring a construction traffic management plan.

6.3 **Scottish Water** - There was no response from this consultee at the time of report preparation.

6.4 **Angus Council Environmental Health** – has indicated no objection to the proposal subject to planning conditions being attached to any permission.

In respect of turbine noise, they note that noise emission predictions have been undertaken in accordance with the relevant guidance and that the findings indicate that noise from the proposed turbines would not exceed the recognised noise limit for this type of development. In order to safeguard levels of amenity afforded to nearby properties conditions are proposed which set an absolute noise limit at all noise sensitive properties, control the make and model of turbine and place obligations on the wind farm operator in terms of recording information and the investigating of complaints if requested to do so. In respect of construction noise, in order to ensure that nearby amenity is adequately protected conditions are proposed controlling the hours of construction activities and maximum noise levels be attached to any permission granted.

In respect of shadow flicker, the Environmental Report considers properties within 330m of one of the turbines, this distance being based on ten times the rotor diameter which is the criteria generally used in government guidance documentation. Therefore whilst shadow flicker is unlikely to be an issue affecting any sensitive properties in this case, a condition is proposed which requires the applicant to address any issues should they arise.

In respect of private water supplies, the Environmental Report has identified a single spring used as a source of drinking water within 1km of the proposed turbine positions. Whilst the report findings indicate that any adverse risk is negligible if best practice management and control procedures are adopted this is proposed to be controlled by way of a condition covering the operators' obligations in the event of any interruption to drinking water supplies.

6.5 **Angus Council - Flood Prevention** – The development is unlikely to be at risk of flooding.

6.6 **Aberdeenshire Council Archaeology Service** – It is noted that within the submitted documentation cognisance is taken of the reduction in visual impact upon the historic environment now that this application is for two smaller wind turbines compared with the previous application for nine larger turbines. Taking that reduction into account, it is acknowledged that the direct impact on the known archaeology has been removed. Appropriate mitigation for potentially unknown archaeological remains which is unearthed during construction works should be secured in the form of an Archaeological Watching-Brief Condition.

6.7 **The Environment Service Perth & Kinross Council** - No objection to the proposal. However, PKC raise some concerns regarding cumulative impact with several windfarm proposals in the surrounding area along the Highland Boundary Fault Line. PKC make reference to windfarms currently at appeal at Bamff and Tullymurdoch and in scoping at Saddlehill.

6.8 **Historic Scotland -** acknowledge that there will be an impact upon the setting of a scheduled monument (Brankam Hill SAM) if this development is to gain planning permission. Historic Scotland is content, however, that the impact would not be so severe as to raise issues of national importance and on that basis Historic Scotland offers no objection to this development.

6.9 **Scottish Natural Heritage** - There was no response from this consultee at the time of report preparation.

6.10 **Civil Aviation Authority** - Offers no objection to the proposal.

6.11 **Dundee Airport Ltd** - At the given position and height, this development would not infringe the safeguarding surfaces for Dundee Airport.

6.12 **Ministry Of Defence** - No objection.

6.13 **NERL Safeguarding** - The proposed development has been examined from a technical safeguarding aspect and does not conflict with safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.

6.14 **Spectrum** - No objection.

6.15 **Police Scotland** - There was no response from this consultee at the time of report preparation.

6.16 **Joint Radio Co Ltd** - JRC does not foresee any potential problems based on known interference scenarios.

6.17 **Scottish Environment Protection Agency** - No objections to proposal.

6.18 **RSPB Scotland** - There was no response from this consultee at the time of report preparation.

6.19 **Atkins** - No objection in respect of microwave links operated by Scottish Water.

7. LETTERS OF REPRESENTATION

Seventy four (74) letters of representation have been received in connection with the proposal. Sixty seven (67) letters raise objections, 6 letters offer support and 1 offers neither objection nor support. The issues raised relate to the following points (in summarised terms):

Points in objection (67 no. objections)

- adverse landscape and visual impacts
- cumulative impact with other Windfarms
- noise & shadow flicker
- impacts on cultural heritage including Balintore Castle Category A listed building
- impacts from residential property
- adverse impacts on natural heritage and wildlife including birds
- impact on road safety of visual distraction caused by wind farms
- impact of construction traffic on local road network
- proposal contrary to council local plan
- proposal contrary to Strategic Landscape Capacity Study for Wind Energy in Angus
- impact on aviation
- impact on recreation
- impacts resulting from construction activities
- fears over precedent
- planning permission refused by Council and Reporter previously
- light pollution from turbines

The above matters are discussed under Planning Considerations below.

- **Turbines are inefficient** - the effectiveness or efficiency of wind turbines or the appropriateness of Government targets/policy is not a matter for Council to consider in the assessing this proposal. However, an evaluation of the environmental impact of the development balanced against the environmental benefit of renewable energy generation is provided under Planning Considerations below.

- **Safety issues -** In respect of turbines and safety, the Scottish Government's Specific Advice Sheet on Onshore Wind indicates the following:-

  Equipment Safety: Companies supplying products and services to the wind energy industry operate to a series of international, European and British Standards. The build-up of ice on turbine blades is unlikely to present problems on the majority of sites. When icing occurs the turbines' own vibration sensors are likely to detect the imbalance and inhibit the operation of the machines. Site operators also tend to have rigorous and computer aided maintenance regimes and control rooms can detect icing of blades. Danger to human or animal life from falling parts or ice is rare. Similarly, lightning protection measures are incorporated in wind turbines to ensure that lightning is conducted harmlessly past the sensitive parts of the nacelle and down into the earth.

- **This is an area of outstanding natural beauty -** The site is not subject of any statutory or non statutory designation relating to its natural beauty.

- **Adverse health consequences (depression and headaches)** - the Scottish Government's Specific Advice Sheet on Onshore Wind indicates that a recent report prepared for the Department of Energy and Climate Change concluded that there is no evidence of health effects arising from infrasound or low frequency noise generated by

wind turbines. I do not consider that the proposal should give rise to any other significant health issues provided it is capable of complying with relevant conditions in relation to matters such as noise levels and shadow flicker.

- **Lack of consultation/notification and time to comment** – the application has been subject to all required publicity and consultation as required by legislation.

- **Impact on tourism –** In commenting on impacts on tourism, the Reporter for the earlier proposal on this site indicated that while he could understand the concerns of those who value the qualities of the appeal locale for tourism purposes, it is difficult to ascertain the potential effects of wind farms on tourism. I have no evidence to suggest that the proposed development would reduce visitor numbers or participation in recreational activities to an extent that it would impact on the economy of the area. I have discussed this matter with colleagues at Perth & Kinross Council specifically in relation to Drumderg. They have indicated that they are not aware of any evidence that Drumderg has had any significant impact on tourism within the area.

- **Devaluation of property** – this is not a material planning consideration

Points in support

- proposal would not impact on adjacent B&B business
- Contribution to CO2 reduction targets
- assist energy needs of the country
- income would help sustain farm activities
- this small scale proposal would not alter enjoyment of landscape

Comment – The substantive issue in this case is not whether wind power is ethically correct but is whether the proposed development subject of this application is appropriate on the application site.

8. PLANNING CONSIDERATIONS

8.1 Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise.

8.2 In this case the development plan comprises: -

- TAYplan (Approved 2012)
- Angus Local Plan Review (Adopted 2009)

The relevant policies of the development plan are reproduced at **Appendix 1**.

8.3 Section 59 of the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 requires that in considering whether to grant planning permission for development which affects a listed building or its setting special regard shall be paid to the desirability of preserving the building or its setting.

8.4 In addition to the development plan a number of matters are also relevant to the consideration of the application and these include: -

- National Planning Framework for Scotland 3 (NPF3);
- Scottish Planning Policy (SPP);
- Scottish Government 'Specific Advice Sheet' on Onshore Wind Turbines;
- Tayside Landscape Character Assessment;
- Angus Council Implementation Guide for Renewable Energy Proposals (2012);
- Strategic Landscape Capacity Assessment for Wind Energy in Angus (Ironside Farrar – 2013);
- Angus Wind farms Landscape Capacity and Cumulative Impacts Study (Ironside Farrar, 2008);
- Siting and Designing Wind Farms in the Landscape (SNH, Version 2 May 2014)

- Siting and Design of Small Scale Wind Turbines of Between 15 and 50 metres in height (SNH, March 2012);
- 'Assessing The Cumulative Impact of Onshore Wind Energy Developments' (SNH, March 2012)
- Planning Advice Note 1/2011: Planning and Noise
- Environmental information submitted in respect of this application by the applicant, third parties and consultees
- The planning history of the site, in particular the planning appeal relating to the previous proposal for a wind turbine development at this location.

8.5 **NPF3** states that the Government is committed to a Low Carbon Scotland and through the priorities identified in the spatial strategy set a clear direction to tackling climate change through national planning policy. Renewable energy technologies, including onshore wind, are identified as key aspects to realising this aim whilst recognising that a planned approach to development is required to find the correct balance between safeguarding assets which are irreplaceable while facilitating change in a sustainable way.

8.6 The **Scottish Planning Policy** (SPP, June 2014) represents a statement of government policy on land use planning. In relation to onshore wind, the SPP states that 'planning authorities should set out in the development plan a spatial framework identifying areas that are likely to be most appropriate for onshore wind farms… The spatial framework is complemented by a more detailed and exacting development management process where the merits of an individual proposal will be carefully considered against the full range of environmental, community and cumulative impacts… Proposals for onshore wind should continue to be determined while spatial frameworks and local policies are being prepared and updated'. Proposals for energy infrastructure developments should always take account of spatial frameworks for wind farms and heat maps where these are relevant. Considerations will vary relative to the scale of the proposal and area characteristics but are likely to include:

- net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities;
- the scale of contribution to renewable energy generation targets;
- effect on greenhouse gas emissions;
- cumulative impacts – planning authorities should be clear about likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of existing and consented energy development may limit the capacity for further development;
- impacts on communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker;
- landscape and visual impacts, including effects on wild land;
- effects on the natural heritage, including birds;
- impacts on carbon rich soils, using the carbon calculator;
- public access, including impact on long distance walking and cycling routes and scenic routes identified in the NPF;
- impacts on the historic environment, including scheduled monuments, listed buildings and their settings;
- impacts on tourism and recreation;
- impacts on aviation and defence interests and seismological recording;
- impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;
- impacts on road traffic;
- impacts on adjacent trunk roads;
- effects on hydrology, the water environment and flood risk;
- the need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration;
- opportunities for energy storage; and
- the need for a robust planning obligation to ensure that operators achieve site restoration.

8.7 The Scottish Government's Planning Advice Notes relating to renewable energy have been replaced by Specific Advice Sheets (SAS). The '**Onshore Wind Turbines SAS**' identifies typical planning considerations in determining planning applications for onshore wind

turbines. The considerations identified in the SAS are similar to those identified by policies ER34 and ER35 of the ALPR and the SPP as detailed above.

8.8 Angus Council has produced an **Implementation Guide for Renewable Energy Proposals**. It provides guidance for development proposals ranging from small single turbines to major windfarms. It indicates that wind developments are the primary area of renewable energy proposals in Angus and the planning considerations are strongly influenced by the scale and location of the proposal including landscape and visual impact, potential adverse effects on designated natural and built heritage sites, protected species, residential amenity, soils, water bodies and access.

8.9 Scottish Natural Heritage in conjunction with Angus and Aberdeenshire Councils commissioned Ironside Farrar to review current landscape sensitivity and capacity guidance in relation to wind energy development. The **Strategic Landscape Capacity Assessment for Wind Energy in Angus** (November 2013) provides updated information on landscape capacity for wind energy development and the potential cumulative impact of proposals in the context of operational and consented developments.

8.10 Proposals for wind turbine developments and associated infrastructure are primarily assessed against policies ER34 and ER35 of the local plan although other policies within the plan are also relevant. The policy position provides a presumption in favour of renewable energy developments recognising the contribution wind energy can make in generating renewable energy in Scotland. These policies also require consideration of impacts on ecology including birds; cultural heritage including listed buildings, scheduled monuments, designed landscapes and archaeology; aviation; amenity in the context of shadow flicker, noise and reflected light; landscape and visual impact including cumulative impacts; future site restoration; transmitting or receiving systems; any associated works including transmissions lines, road and traffic access/safety and the environmental impact of this. These policy tests overlap matters contained in other policies and therefore these matters are discussed on a topic by topic basis.

Environmental and Economic Benefits

8.11 Policy 6 of TAYplan indicates that one of its aims for the city region is to deliver a low/zero carbon future and contribute to meeting Scottish Government energy and waste targets. The local plan indicates that Angus Council supports the principle of developing sources of renewable energy in appropriate locations. The SPP sets out a "commitment to increase the amount of electricity generated from renewable sources" and includes a target for the equivalent of 100% of Scotland's electricity demand to be generated from renewable sources by 2020 along with a target of 30% of overall energy demand from renewable sources by 2020. Paragraph 154 of the SPP indicates that planning authorities should help to reduce emissions and energy use in new buildings and from new infrastructure by enabling development at appropriate locations that contributes to electricity and heat from renewable sources.

8.12 The applicants Environmental Report (ER) indicates that the main aims of the proposed development are to offset the electricity usage of the farm business, while also providing an income to improve the farm and associated landholding through works to drainage, fencing, field restoration, farm building improvements, improve and restore stone dykes, hedging and wooded areas, improving the residential building stock, investment in the main farmhouse at Welton or replacement as it comes to the end of its life. The ER indicates that the proposed development would provide a means of farm diversification which would help to secure the farm as a viable business into the future. The ER also suggests that the construction of the turbines would take approximately 3 to 4 months of onsite activity from construction of new tracks through to construction of the turbines. It indicates that local trades and contractors would continue to be utilised for works at the site.

8.13 The applicant has indicated that the proposed wind turbines would offset the emissions of approximately 490 tonnes of CO2 annually and could supply electricity equivalent to the yearly demands of around 250 households. I accept that the proposed turbines could make a contribution towards renewable energy generation, would assist in securing the viability of the farm operation and would potentially provide some local economic benefits through the construction period. As such the proposals attract in principle support from the development plan. I have had regard to that contribution in undertaking my assessment of the proposal.

Landscape impact

8.14 Policy 6 of TAYplan indicates that in determining proposals for energy development consideration should be given to landscape sensitivity. Local plan Policy ER5 (Conservation of Landscape Character) requires development proposals to take account of the guidance provided by the Tayside Landscape Character Assessment (TLCA), prepared for Scottish Natural Heritage (SNH) in 1999, and indicates that, where appropriate, sites selected should be capable of absorbing the proposed development to ensure that it fits into the landscape. Policy ER34 of the local plan indicates that proposals for renewable energy development will be assessed on the basis of no unacceptable adverse landscape and visual impacts having regard to landscape character, setting within the immediate and wider landscape, and sensitive viewpoints.

8.15 The application site lies within an area identified in the Tayside Landscape Character Assessment as 'Highland Foothills' Landscape Character Type (LCT) which is described as along the Highland Boundary Fault, at the foot of the Mounth Highlands, a series of foothills marks the transition to the lowlands of Strathmore. This landscape type is said to run eastwards from Dunkeld to Edzell and is split between landscape units including the Alyth Foothills (within Perth and Kinross), the Kirriemuir Foothills, Menmuir Foothills and Edzell Foothills (within Angus). The complex geology of this area is said to lead to a landscape of steep whale-backed hills with intervening valleys, generally oriented on an east west axis. In this LCT, the hills in the east are most distinct and in the west between Dunkeld and Blairgowrie they are less well defined. In respect of tall structures, the TLCA indicates that the Highland Foothills LCT is comparatively free from tall structures with the exception of the high voltage overhead electricity line which climbs in the foothills near Airlie before running north east through the hills. The line of pylons is described as being a substantial feature in the landscape, conflicting with the otherwise rural character.

8.16 In respect of wind turbines, the TLCA indicates that wind turbine development in this LCT could avoid the need to locate turbines in even more sensitive upland areas or in less sensitive but more populated areas closer to settlements. It would also mean that, from a distance, turbines would be viewed against a backdrop of higher ground. That said, the TLCA also acknowledges that the insensitive development of wind turbines in this area would conflict with the small scale, historic and deeply rural character of the landscape, weakening and confusing the areas role as providing a transition between unsettled uplands to fertile and settled lowland.

8.17 The **Angus Windfarms Landscape Capacity and Cumulative Impacts Study**, September 2008, prepared for the council by Ironside Farrar (IFR) also provides further information on the characteristics of the Highland Foothills LCT, its landscape capacity and the likely effect of wind development in this LCT. In terms of landscape capacity in this area, the study describes the area as having medium to high landscape sensitivity and varied visual sensitivity due to the degree of screening enclosure offered by the varied landform to the north but with a highly visible position when seen from the lowlands, settlements and transport routes to the south. The areas are of medium visual sensitivity and overall medium to high landscape sensitivity. The study indicates that these areas are of a high recreational value and have a high concentration of historic, archaeological and scenic locations, indicating a medium to high landscape value. The study suggests that the overall capacity for windfarm development is low, with limited opportunity for a small or small-medium scale of windfarm to be located in carefully selected locations with topographic screening.

8.18 The Council's **Implementation Guide for Renewable Energy Proposals (June 2012)** provides the following narrative on wind turbines in this LCT and states:-

The Highland Foothills provide a dramatic transition between highland and lowland. The contrast between the rolling topography of Strathmore (LT 10) and the foothills is important in defining the character of both LT 10 & 5. Whilst the Foothills appear big next to Strathmore, they are relatively low lying hills. In order to avoid the risk of turbines adversely affecting perceived scale, it is considered that there is scope for turbines less than circa 80m tall located on lower ground only, where they do not adversely affect the setting of landscape features and monuments such as Airlie Monument and the White & Brown Caterthuns.

8.19 The implementation guide (IG) indicates that the existing windfarm character of the Highland Foothills LCT is a 'landscape with views of windfarms'. It identifies four 'landscape units' within the Highland Foothills which are closely associated with Angus including the Alyth,

Kirriemuir, Menmuir and Edzell Foothills. The IG indicates that an acceptable future windfarm character for this LCT would be a 'landscape with occasional windfarms' – that is a landscape whereby visual receptor would 'experience occasional close-quarters views of a windfarm or turbines and more frequent background views of windfarms or turbines. Some turbines may or may not be perceived as being located in the landscape character area.' This type of windfarm character would lead to 'no overall perception of windfarms being a defining feature of the landscape'. The site falls within the Kirriemuir Foothills landscape character area of the Highland Foothills LCT where turbines of up to around 80m may be acceptable on lower ground only.

8.20 The **Strategic Landscape Capacity Assessment for Wind Energy in Angus** provides guidance on the Highland Foothills LCT and more detailed guidance on the Kirriemuir Foothills Landscape Character Area (LCA). The guidance on the wider Highland Foothills LCT indicates that turbines should be located on enclosed farmland or the lower slopes of the hills, avoiding skylines and reducing intervisibility between turbine groups. Turbines should relate to the scale of the landscape with particular regard to the vertical scale of the hills. It states that the Kirriemuir Foothills LCA has low underlying capacity for medium sized turbines (defined as 30<50m) and medium capacity for small/medium turbines (15<30m). It indicates that the remaining landscape capacity is the same as underlying capacity. The study indicates that this area is 'only suitable for turbines below 50m, with medium sized turbines sited on lower ground towards Strathmore'. It indicates that 'turbines should not be located in the more sensitive settings such as Balintore Castle, Ascreavie and Loch of Lintrathen. Turbines should not be located near the summit of Mile Hill due to its wider prominence'.

8.21 The site of the two turbines is an area of ground which is (to an extent) enclosed by hill summits to the north east (The Carrach and Mile Hill), east (Kinclune Hill and Baron's Hill), south west (Brankam Hill) and west (Strone Hill). The site offers little by way of enclosure to the south. The proposed turbines measure 30.5m to hub and 47.05m to blade tip (highest point). They would be located on land approximately 305m AOD (turbine 1 (T1)) and 320m AOD (turbine 2 (T2)) resulting in the highest hub height located at approximately 350m AOD (for T2) and a maximum tip height of 367m AOD. The surrounding hill summits include Mile Hill (410m AOD), which lies approximately 900m north east of T2 (the easterly most turbine); Baron's Hill (310m AOD), which lies approximately 1.5km east of T2; Brankam Hill (313m AOD), which lies approximately 600m south west of T1 (westerly most turbine); Strone Hill (335m AOD), which lies approximately 900m north west of T1; Kinclune Hill (387m AOD), which lies approximately 950m east of T2; and The Carrach (384m AOD), which lies approximately 350m north east of T2.

8.22 The applicant's ER indicates that the proposal has been redesigned since the previously refused scheme (for 9x84m turbines) to take account of the Council's reasons for refusal and the findings of the Reporter who dismissed the subsequent appeal. It suggests that the redesign also reflects the findings of the Strategic Landscape Capacity Assessment for Wind Energy in Angus. The ER indicates that Ascreavie would now experience no effects, while the impact on Balintore and other areas including Kingoldrum and Lintrathen has been significantly reduced. The turbines are described as being moved away from the more sensitive locations including Mile Hill, which has significantly reduced overall visibility of the development. The turbines are said to appear predominantly as back dropped by foothills, allowing the development to be absorbed slightly by the landscape and reducing their visual prominence in it. The ER indicates that the turbines have been moved down the hill to an area of lower lying topography towards Strathmore and reduced in size which has reduced the ratio of the size of the development to the perceived size of the landscape. The ER indicates that the current design ranges from 1:4 to 1:9 in some of the more distant views, with a horizontal scale reduced from 9 turbines to 2.

8.23 The ER assesses the landscape effects of the proposal on the Kirriemuir Foothills, wider Highland Foothills and other landscape character types by considering landscape sensitivity against the magnitude of change resulting from the proposal. These factors are used in a matrix to establish the level of effect. The level of effect on landscape fabric is assessed as being medium and not significant on the basis that the turbines would lead to the loss of only a small section of moorland. No key landscape features which characterise the area would be lost and the hummocky nature of the local landscape around Mile Hill would remain intact. The ER indicates that the effects on the landscape character of the Highland Foothills (and the transitional role they play between the lowlands of Strathmore and the Glens) would be moderate/minor and not significant. It indicates that the landscape value of the foothills is medium (with no landscape designations) and suggests that the magnitude of change affects

an area particularly to the south. It suggests that views are contained to the north and north east due to the hummocky nature of the hilltops. Indirect effects on neighbouring landscape character areas are assessed as low, indirect, negative and reversible. The ER suggests that the development has been specifically designed away from prominent summits such as Mile Hill and Cat Law, and as such views would be restricted to the immediate landscape and to the valley areas to the south to the development.

8.24 The proposed turbines would be located within the Kirriemuir Foothills area of the Highland Foothills LCT. They are an area of complex topography including hills, small glens and small settlements. A key feature is Mile Hill. The hills provide a setting for Balintore Castle, Ascreavie Designed Landscape and Loch of Lintrathen. This landscape is generally of medium scale with arable and improved pasture on the lower slopes and rough pasture on the higher ground. The hills follow the Highland Boundary Fault and form an important transitional role marking the change between lowland and upland. They are perceived as higher than they actually are and are therefore considered to be vulnerable to dwarfing by tall structures on or close to them. Capacity for wind development is variable, with the Implementation Guide suggesting turbines up to around 80m may be acceptable on lower ground, and the Strategic Landscape Capacity Assessment indicating that the greatest capacity for medium turbines (30-50m) would be on lower ground within the LCT, avoiding prominent hill-tops, with small/medium turbines (15-30m) being more suitable closer to the Mid Highland Glens. The proposed turbines would be 47.05m and located within a multi-summited hill complex of Mile Hill (409m), The Carrach (370m) Kinclune Hill (987m), Brankam Hill (313m) and Strone Hill (335m). The turbines would be located at around 305m to 320m on a lull in the hill range between The Carrach and Brankam Hill.

8.25 The Kirriemuir Foothills area encompasses land ranging from an elevation of approximately 150m (to the north of Kirriemuir) up to 410m (Mile Hill). The turbines would be in the medium size category at 47.05m to tip and would be sited on land elevated at approximately 305m to 320m. As such, the turbines would not be located on lower ground within the Kirriemuir Foothills, but would be sited on higher ground. However, the siting of the turbines takes advantage of the surrounding landform of the hummocky hill complex that backcloths the site and the vertical scale of the turbines relates reasonably well to the underlying landform while occupying a relatively small horizontal extent in relation to the wider hill complex.

8.26 The Strategic Landscape Capacity Study for Wind Energy in Angus represents the Council's most recent guidance on landscape capacity. The applicant's ER indicates that the proposal would have little to no impact on the setting of Balintore Castle, Ascreavie and Loch of Lintrathen. This is supported by the ZTV diagrams which shows that Ascreavie has no visibility of the turbines and Balintore Castle (ground level) has visibility of the blades of turbines only. While Loch of Lintrathen has theoretical visibility of both turbines, the intervening landform which surrounds the loch provides a substantial buffer between the loch and the site and the distance between the two is approximately 2km. Turbine size is also limited in relation to surrounding landform and on that basis, I do not consider the turbines to adversely affect its setting to any significant degree. The turbines would be as close as 900m to Mile Hill, a key feature of this LCT due to its wide prominence. The Carrach and Kinclune Hill provides a degree of buffering between the site and Mile Hill and I do not consider the 47.05m turbines would undermine the perceived scale of Mile Hill to a significant degree. I also do not consider that the development would result in the landscape capacity limit of *Highland Foothills with Occasional Wind Turbines* being breached.

8.27 Given the elevated nature of the site, the capacity for medium turbines is reduced and the landscape effects of the proposed turbines would be locally significant (within 5km) due to the introduction of new vertical man made elements in the landscape. This effect would be greatest to the south and west as demonstrated by the viewpoints and photomontages submitted (from the south: revised VP11 – B951 to south of site; and VP13 – road between Kingoldrum and Meikle Kenny; and from the west VP01 – Brankam Hill; VP09 East of Pitmudie; and VP10 – B954 between Dykend and Fornethy). To the north and east and beyond 5km, the significance of effects is greatly reduced.

8.28 I consider that while there would be some locally significant effects on the landscape, the proposal has generally been well designed to take advantage of a lull in the landform which provides some backdrop to the proposed turbines. While the both the Implementation Guide and Strategic Landscape Capacity Study for Wind Energy in Angus suggest that turbines should be located on lower ground towards Strathmore (which this site is not), I consider the design has been reasonably well considered within the confines of the applicants landholding

and achieves the other aims of the study to not undermine the perceived scale of the Highland Foothills and not unacceptably impact on the settings of Loch of Lintrathen, Balintore Castle and Ascreavie.

Visual Impacts

8.29 Policy S6 of the Angus Local Plan Review requires that proposals should not give rise to unacceptable visual impacts. Policy ER34 of the Local Plan also indicates that renewable energy development will be assessed on the basis of no unacceptable adverse landscape and visual impacts having regard to landscape character, setting within the immediate and wider landscape, and sensitive viewpoints. In assessing visual impact I consider that it is appropriate to have regard to recent appeal decisions within Angus where this issue has been considered in order to secure a degree of consistency in the decision making process.

8.30 Planning appeal decisions have generally accepted that residents should be treated as of high sensitivity in assessing the significance of visual impact. The magnitude of change (and, thus, the significance of the impact they will experience) will vary with the context of the house that they occupy: its distance from the proposed wind farm and orientation in relation to it; the presence of intervening screening from vegetation and other buildings; and the presence of other significant visual features. However it is not only the views from principal rooms that are of importance as residents also use the space around their house and the impact on occupiers and visitors approaching or leaving the properties must also be considered.

8.31 The application is supported by Zone of Theoretical Visibility (ZTV) diagrams which are based on a bare earth analysis and as such do not take account of trees, planting and buildings, and as such present a worst case scenario. The ZTVs show visibility at both hub height (30.5m) and maximum blade tip height (47.05m). The blade tip based ZTV shows visibility of the turbines within 5km in areas including Balintore (north), Cat Law (north), Knowhead of Auldallan (north), Kirkton of Kingoldrum (east), Meikle Kenny (south), land to the north and south of Bridgend of Lintrathen (south west), Pitmudie (west), Middle Coull (west). The hub height ZTV shows significantly reduced visibility of the turbines within 5km, indicating that the hub would not be visible from Balintore, Knowhead of Auldallan and Kirkton of Kingoldrum. In these locations to the north and east the ZTV suggests that only blades or blade tips would be visible.

8.32 Beyond 5km, the turbines would not be visible in Glen Isla, or the majority of an area in an arc (between 5km and 10km) from Glen Isla to the north of Kirriemuir. From distances of 15-20km the hubs are predicted to be visible from the summits of popular recreational hills at Glen Doll (Mayar and Dreish in particular). From the south-east, through south to south-west, the two turbines are generally visible, particularly in the 0-10km distance. From the minor road towards Meikle Kenny and Lintrathen (VP13), both turbines would be typically visible, sometimes with partial screening of one turbine by a minor hilltop but with the other protruding above the ridgeline. The additional wireline from near Meikle Kenny shows the variation in how the turbines would be seen locally and from this location both turbines would be visible above the skyline.

8.33 The application is also supported by viewpoints using wirelines and/or photomontages of the proposal from locations surrounding the site between 600m to 11.8km to the nearest turbine. Of the 13 viewpoints assessed in the ER, only 1 (Brankam Hill) is assessed as experiencing a high level of impact and this viewpoint is closest to the proposed development (at approximately 600m) and elevated above it. Of the remaining 12 viewpoints, the ER suggests that two are assessed as being a medium impact (Alyth & B951 1.1km to the south of the site) with 10 being assessed as low or no impact (including Balintore Castle, Kirkton of Kingoldrum, Kirriemuir Hill, Glamis, Pitmudie, B954, Cat Law track, and the minor road between Kingoldrum and Meikle Kenny).

8.34 The ER includes a residential amenity assessment focussing on properties within a 2km radius of the proposed turbines. It focusses on properties which were identified in the previous Environmental Statement to experience a medium to high magnitude of change. It suggests that as a consequence of the decrease in number and height of the turbines from the earlier scheme, a significant number of properties (particularly to the north or north east) now experience no views of the proposed development. It is noted that no houses would be within 475m of the proposed development (10 times turbine height) and the ER predicts no significant effects on any house within 2km of the proposed turbines. The closest houses to the proposed development would be property at The Welton (approximately 600m distance)

where one turbine would be visible (according to the assessment). Falls of Holm (1.1km) and Roadside Cottage (1.1km) are attributed a moderate level of effect, with primary views from these properties oriented away from the turbines. All of these properties would experience effects from the property curtilage itself or on approaches to those properties, but would be a reasonable distance from the proposed turbines and benefit from some topographic screening.

8.35 One of the reasons for refusal of the previous scheme was visual impact, particularly on residential receptors. Compared with the previous application, impacts upon nearby houses are much reduced, particularly from the north, where visibility from the small glen at Auldallan would no-longer be possible due to topographic screening and with houses on higher ground to the west of Auldallan predicted to see blade tips only. Wardend (1.5km) and Greenmyre (1.58km) are assessed as not experiencing significant effects. Greenmyre is screened by trees and is therefore unlikely to experience significant effects except perhaps from its approaches. Wardend however would have views of both turbines to the north and would experience views of at least medium magnitude (approximately 1.5km to turbines). Overall, I do not consider impacts on residential receptors within 2km to be unacceptable and the revised scheme has significantly reduced the likely impacts on residential receptors identified in the previous scheme.

8.36 The ER also assesses settlements beyond 2km and within the 20km ZTV. This assessment indicates that Balintore would experience low effects due to blades only being visible; no views would be possible from Lintrathen; a medium level of effect is predicted for Kirkton of Kingoldrum with views limited to the blades of one turbine across most of the settlement; and a negligible level of effect is predicted for Kirriemuir and Forfar.

8.37 In terms of transport and tourist routes, the B951 Kirriemuir to Dykend is assessed as experiencing a low level of effect on the overall route with visibility limited to blades for the majority of the route; with a higher level of effect where the road passes close to the site The A94 from Coupar Angus to Forfar would have theoretical visibility for much of the route, but the turbines would appear against the larger scale landscape and the route is assessed as experiencing a negligible overall effect. The Cateran Trail is assessed as experiencing a low level of effect due to the presence of landform to backcloth the turbines. The Cat Law to Balintore walking route is assessed as experiencing a medium level of effect (high sensitivity and low magnitude of change).

8.38 The landform to the north of the site means that the full height of the turbines would not be visible from the path to Cat Law. Two hubs would only be visible at the upper reaches of the path and at least one hub for the remainder of the path. The wirelines submitted by the applicant in respect of the path are helpful and the relatively close proximity and the likelihood that any back-dropping would be substantially distant (provided by the Sidlaws or Strathmore Valley), it is likely that the two turbines would be at least obvious from the higher parts of the path but may not be noticed by casual viewers from the lower parts of the path. Given the high sensitivity of Cat Law, this would lead to significant effects (moderate or above) from Cat Law, with the most significant being from the highest parts of the path.

8.39 There are no viewpoints from 15-20km, but the distance involved coupled with the limited turbine size makes these effects likely to be less of a concern. Balintore Castle (VP3) is predicted to see blades and from the viewpoint would not experience significant effects. The additional information submitted in support of the application indicates that views from the viewing platform of Balintore Castle have been considered and only blades would be visible.

8.40 Bring these matters together, I consider that the visual impact of the turbines would not be so great as to justify refusal of planning permission. Impacts on residential receptors would be greatest for properties to the south of the site but those impacts would be experienced at a distance which exceeds 10 times turbine height with some intervening topographical features which reduces the significance of effects; additionally the orientation of houses is generally to the south. A small section of the B951 and parts of the path to Cat Law would also experience significant effects but these effects are not considered unacceptable.

Cumulative Landscape and Visual Impact

8.41 An assessment of cumulative landscape and cumulative visual effects is also required by local and national policy. SNH Guidance on 'Assessing The Cumulative Impact of Onshore Wind Energy Developments' (March 2012) indicates that cumulative landscape effects can

include effects on the physical aspects of the landscape and effects on landscape character. Cumulative visual effects can be caused by combined visibility and/or sequential effects. Combined visibility may be *in combination* i.e. where several windfarms are in the observers arc of vision or *in succession* where the observer has to turn to see various windfarms. *Sequential* effects occur when the observer has to move to another viewpoint to see different developments.

8.42 The ER shows the location of operational, consented, in planning and in scoping within a 50km radius of the proposed site. The ER describes wind turbine development as fairly minimal noting operational developments to the south and west at Ark Hill and Drumderg within 20km. It suggests that consented development is limited to Welton of Creuchies, Govals and Frawney which are similarly located 15-20km from the site. It suggests that within 10km, developments are limited to smaller scale turbines measuring up to 50m in height at Wester Coull, Wester Derry, Lindertis, Reddie Farm and Easter Craig. Cumulative ZTVs are illustrated in the ER. The projects at Saddlehill and Macritch Hill which are in scoping (pre application) are also assessed along with the projects at Bamff and Tullymurdock within Perth and Kinross which are currently at appeal. The ER suggests that significant cumulative impacts are limited, primarily due to the distance between developments in the area as well as the heavily screened nature of the Carrach development in a number of views.

8.43 Cumulative effects on major tourist routes and transport routes are mainly assessed by the applicant as low or negligible taking account of all operational, consented, in planning, scoping and small scale schemes. A medium magnitude of change is predicated for the A94 Coupar Angus to Forfar when all operational, consented, in planning, scoping and small scale turbines are added to the proposal. The ER indicates that the scale of the proposed turbines means that cumulative effects are limited with the majority of large scale developments located over 10km from the proposed Carrach turbines and views where the Carrach interacts with other developments limited.

8.44 I consider that the most significant cumulative effect upon landscape character is likely in the context of other large wind turbine development which are obvious or prominent within the Highland Foothills, Summits and Plateau around the Mid Highland Glen areas of Glen Isla. Other proposals (particularly Saddlehill & Macritch which are in scoping; but also Bamff & Tullymurdoch which are at appeal following refusal), would further contribute to the cumulative impact upon this area. Smaller single or pairs of turbines on lower ground typically have more localised impacts upon character. The elevated location of the proposed turbines would create levels of inter-visibility which would increase the impact upon landscape character than would be the case if the turbines were proposed on lower ground.

8.45 The proposed turbines would commonly be viewed in-sequence with the turbines at Drumderg (from the area between Kilry and Kingoldrum). This would similarly be the case in respect of the proposed wind farms at Saddlehill, Macritch Hill, Bamff and Tullymurdoch should these proposals become consented. There would similarly be in-sequence and sequential views with other smaller turbines assessed within the ER.

8.46 I do not consider the cumulative impact of the proposal turbines would be unacceptable when considered with other operational or consented turbines. Clearly, if all of the 'in scoping' or at appeal/in planning proposals became operational, the cumulative effects of turbines in the area around the Angus/Perth & Kinross would be significant. However, this is a small scale scheme with some separation from that area of pressure and I accept the findings of the ER that the scale and location of the proposed turbines means that cumulative effects would be limited with the majority of large scale developments located over 10km from the site. The cumulative landscape character of the Kirriemuir Foothills would remain a *Landscape with Occasional Wind Turbines* which is within the acceptable cumulative limits defined by the Strategic Landscape Capacity for Wind Energy in Angus.

Amenity (Noise/Shadow Flicker/Reflected Light)

8.47 Criterion (a) of ALPR policy ER34 requires the siting and appearance of renewable energy apparatus to be chosen to minimise its impact on amenity, while respecting operational efficiency. Criterion (c) of ALPR policy ER35 indicates wind energy developments must have no unacceptable detrimental effect on residential amenity, existing land uses or road safety by reason of shadow flicker, noise or reflected light. Criterion (a) of Schedule 1 of Policy S6 indicates that the amenity of proposed and existing properties should not be affected by unreasonable restriction of sunlight, daylight or privacy; by smells or fumes; noise levels and

vibration; emissions including smoke, soot, ash, dust, grit, or any other environmental pollution; or disturbance by vehicular or pedestrian traffic. Policy ER11 deals specifically with noise pollution.

8.48 PAN 1/2011: Planning and Noise indicates there are two sources of noise from wind turbines - the mechanical noise from the turbines and the aerodynamic noise from the blades. Mechanical noise is related to engineering design. Aerodynamic noise varies with rotor design and wind speed, and is generally greatest at low speeds. Good acoustical design and siting of turbines is essential to minimise the potential to generate noise. The Scottish Governments Specific Advice Sheet for onshore wind turbines confirms that proposals should be considered against 'The Assessment and Rating of Noise from Wind Farms' (ETSU-R-97).

8.49 The ER contains a noise assessment which has been reviewed by the Council's Environmental Health Service who are satisfied that it has been undertaken in accordance with the relevant guidance and that the findings indicate that operational noise from the proposed turbines would not exceed recognised noise limits for this type of development. Conditions are proposed to set an absolute noise limit at all noise sensitive property and require the wind farm operator to record data and investigate any noise complaints. Construction noise is proposed to be regulated by controlling the hours that construction activities can take place. On that basis, I am satisfied that the proposal should not result in an unacceptable level of noise.

8.50 Government guidance indicates that shadow flicker should not be a problem where sufficient separation distances are provided between turbines and nearby dwellings (as a general rule 10 rotor diameters). In this case the proposal would comply with the required separation distances. The Environmental Health Service has indicated that shadow flicker is unlikely to be an issue, but a condition is proposed placing obligations on the operator should a justified complaint be received.

8.51 In terms of private water supplies, the ER identifies a single spring used as a source of drinking water within 1km of the site. It suggests that any risk of adverse effects is negligible if best practice management and control procedures are adopted. The Environmental Health Service has requested a condition covering private water supplies to ensure that mitigation measures are carried out in the event of any interruption to drinking water supplies. The Environmental Health Service has raised no concern in relation to the issue of reflected light.

8.52 Criterion (a) of policy ER34 requires the siting and appearance of renewable energy apparatus to be chosen to minimise its impact on amenity, while respecting operational efficiency. As discussed under visual impact above, I am satisfied that the proposal has been sufficiently well designed and sited as to not result in unacceptable visual impacts on residential amenity. While some properties to the south would experience some significant effects, the turbines would be sufficiently distant from the affected properties for those effects be acceptable, noting the turbines would occupy a relatively contained vertical and horizontal extent.

8.53 Overall, I find that the development would not result in an unacceptable effect on residential amenity.

Impact on Natural Heritage

8.54 The development plan framework contains a number of policies that seek to protect important species and sites designated for their natural heritage interest and to ensure that proposals that may affect them are properly assessed. It also indicates that the Local Biodiversity Action Plans will constitute material considerations in determining development proposals. Policy ER35 specifically requires that proposals should demonstrate that there is no unacceptable interference to birds. Policy ER4 requires safeguarding of habitats protected under British and European law or other valuable habitats and species.

8.55 The ER contains an ecological assessment which is based on the findings of the Environmental Statement for the earlier 9 turbine proposal. This assessment included a Phase 1 Habitat Survey of the site alongside a National Vegetation Classification Survey of any semi natural habitats encountered in the site; a mammal survey to record the distribution of protected species; a survey for Wild Cat field signs; otter and water vole surveys; a bat survey looking for bat roosts and monitoring bat activity; and vantage point surveys for birds. The species surveys undertaken indicate that the proposed development would be unlikely to

impact on great crested newts, badgers, water vole, otter and wildcats. Bat surveys were undertaken but noted no bat roost exists within the site.

8.56 SNH and RSPB have been consulted on the application and neither has commented. Issues in relation to natural heritage/ecological impact were not considered unacceptable in relation to the larger scale proposal that was refused by Committee and refused at appeal. From the information available to me, I have no reason to consider that the two turbines would cause unacceptable impacts on natural heritage.

Cultural Heritage

8.57 The development plan provides a number of policies that seek to safeguard cultural heritage. These include policies ER16, ER18 and ER19 of the Angus Local Plan Review. Policy ER34 requires proposals for renewable energy development to have no unacceptable detrimental effect on any sites designated for natural heritage, scientific, historic or archaeological reasons. Impacts on cultural heritage can include impacts on Schedule Ancient Monuments (SAM's), Historic Gardens and Designed Landscapes (HGDL's), listed buildings, conservation areas and undesignated archaeology. The development could potentially have direct impacts on cultural heritage features or indirect effects such as impacts on setting.

8.58 The ER indicates that an archaeological survey was undertaken for the previous application to survey and assess the extent of archaeological remains on the site. It indicates that this has been used to inform the current layout in order to avoid any direct impacts on known features. Indirect impacts on features outside of the site have also been assessed and four Scheduled Ancient Monuments (SAM) are located within 5km of the site, albeit only two of these fall within the ZTV (Brankam Hill and Strone Hill).

8.59 The ER indicates that the proposal would result in no direct effects on any known features of cultural heritage interest. The ER suggests that the proposal would result in a significant impact on Brankam Hill SAM which is immediately adjacent to the west of the site (~200m) and noted for *houses, barrows cairns and stone circle*. Historic Scotland has considered the proposal and commented *that the presence of a turbine close to the scheduled monument… will have an impact upon its setting. There will be a change in the immediate landscape through the addition of modern vertical industrial structures. The setting of the monument will be altered*. Historic Scotland has indicated that it is content that this impact would not be so severe as to raise issues of national importance. Strone Hill is attributed a moderate significance of effect within the ER and lies further west.

8.60 Balintore Castle is a Baronial mansion and category A listed building located approximately 3km north west of the proposed turbines. Its setting is contributed to by its elevated position above the Quharity Glen from where it commands extensive views to the south and east along the glen. The property is currently undergoing renovation and the Reporter for the earlier proposal indicated concerns that the 9x84m wind turbine scheme within this site may undermine the prospects for successful completion of the castle restoration works and the continuing viable use of the renovated building. The ER and additional supporting information indicate that two blades would be visible from the castle, its upper floors and viewing platform and photomontages are provided from 1.5m above ground level and from the equivalent height of the viewing platform to show this impact. Objections to the application raise concern regarding the impact of the turbines on the setting of the castle. I have considered those concerns, the findings of the ER and the comments made by the Reporter of the previous proposal and I consider the significant reduction in turbine numbers and overall height results is much reduced visibility of the turbines in terms of both horizontal and vertical extent to the degree that, from Balintore, they would not be a dominant feature in the landscape nor on the setting of the castle. No significant impacts are anticipated on any other listed buildings.

8.61 Impacts on Historic Gardens and Designed Landscapes (HGDL) as well as Conservation Areas must also be assessed. The closest HGDL lies around 2km east of the site at Ascreavie but the submitted ZTV suggests that there would be no visibility of the turbines from this area. The nearest conservation areas to the site are located at Kirriemuir (8km east) and Glamis (11km south east). At that distance, no impact on the setting of these conservation areas is anticipated.

8.62 In respect of unscheduled archaeology, the Council's archaeologist has indicated that the application would have no direct impact on known archaeology but has requested that a

watching brief condition is attached to any planning permission so that any unknown archaeology could be recorded if discovered during the construction process.

8.63 Overall I am satisfied that the proposal does not give rise to unacceptable impacts in terms of scheduled monuments, unscheduled archaeology, historic gardens and designed landscapes, conservation areas and listed buildings.

Remaining Issues / Other Development Plan Considerations

8.64 Policy ER35 of the Angus Local Plan Review indicates that wind farm development should not interfere with authorised aircraft activity. I have no reason to consider that the proposal would interfere with aircraft activity and note that no aviation related objection has been received from MOD, CAA, Dundee Airport or NATS. No requirement for the turbines to be lit has been identified by consultees, which was a concern raised in the objections received.

8.65 The applicant has indicated that it is anticipated that the development be connected into the existing Lunanhead/Maryton buried 33kV circuit requiring no new overhead lines. Accordingly, associated environmental impact would be limited. The ER envisages the turbines would be landed at the Port of Dundee and transported via the A90, the A926 to Kirriemuir and the B951 to the site. The Roads Service has reviewed this information and has offered no objection subject to the submission of a Construction Traffic Management Plan which would require, amongst other things, submission of measures to ensure that any impacts of construction traffic on the road network are mitigated.

8.66 No objections have been received from technical consultees regarding the impact of the development on any existing transmitting or receiving systems. The Roads Service has raised no objection to the proposal on the grounds of flood risk. I consider that a planning condition could be used to secure the restoration of the site and the provision of a restoration bond.

8.67 I note the concerns raised by third parties regarding the potential impact of the development on the tourist industry. Whilst there have been a number of surveys undertaken to assess the impact of wind farm development on the tourist industry there does not appear to be definitive information on the impact of existing developments. Although I cannot discount the possibility that some visitors might be deterred from making return visits to holiday accommodation in the vicinity of the site because of the presence of the wind farm, I find no persuasive evidence to suggest that it would have an overall adverse effect on tourism in this part of Angus.

Reporter's findings from planning appeal (PPA-120-2022)

8.68 While this application must be considered on its own merits, the findings of the appeal Reporter on the refused proposal for 9 x 84m turbines (PPA-120-2022) represents a consideration which is material to the assessment of this application. The Reporter indicated that the proposal would (1) result in unacceptable landscape impact in the locality; (2) a detrimental effect on residential amenity; and (3) an undesirable effect on the efforts to restore Balintore Castle (Category A listed building) due to harmful changes to the building's wider setting.

8.69 In landscape terms the impact of the proposed development is significantly reduced in comparison to the scheme previously refused at appeal. The height of the turbines has been significantly reduced as has the number of turbines. Accordingly the ratio of turbine height to visual elevation gain is reduced and the horizontal extent of view occupied by two turbines rather than 9 turbines is also significantly reduced. The revised proposal would be more appropriate in terms of scale and would be a less significant feature in the landscape.

8.70 Visual impact on residential amenity is also significantly reduced. Many of the properties to the north, north east and north west which were previously predicted to experience significant effects would now experience either no effects from the property curtilage or a low level of effect. Views are largely restricted to blades. Some property to the south would continue to experience significant impacts but the orientation of property, distance from the turbines and the degree of horizontal and vertical extent occupied by the turbines would not be as significant as the earlier proposal.

8.71 The Reporter was concerned about the impact of the earlier scheme on Balintore Castle, particularly the impact of the proposal on its setting, noting that it commands views to the

south and east over a large area. The Reporter considered that it would be likely to have an undesirable effect on the proposals for the continuing efforts to restore the castle. The proposal is supported by information which demonstrates that only blades would be visible from the castle and I am satisfied that the proposal would not have a significant impact on views from the castle, including the viewing platform visited by the Reporter. A number of objections raise concerns regarding this issue and the transparent wireline drawing submitted in the ER appears to have generated a level of confusion. The transparent wireline is used to demonstrate how the turbines would sit in relation to surrounding landform and VP03 is intended to show that the hub height of both turbines would sit below the ridge/landform to the north of the proposed turbines, rather than be visible in front of it. I consider the revised proposal has taken cognisance of the issues raised by the Reporter and do not consider the impact on the setting of the castle unacceptable.

Other Material Considerations

8.72 Scottish Government policy supports the provision of renewable energy development including wind farms. The SPP confirms that planning authorities should support the development of wind farms in locations where amongst other matters the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. The SPP also indicates that areas identified for wind farms should be suitable for use in perpetuity. Consents may be time-limited but wind farms should nevertheless be sited and designed to ensure impacts are minimised and to protect an acceptable level of amenity for adjacent communities.

8.73 In this case I accept that the wind turbine would contribute to meeting government targets and in this regard attracts some support from national policy and from the development plan. The proposal is not considered to give rise to any unacceptable environmental or amenity impacts.

Conclusion

8.74 The matters raised both in support and objection to the application are noted. However, there are no matters that would lead to a conclusion that the application should be refused. As indicated above the environmental and amenity impacts associated with this proposal are not considered unacceptable. Government and Council policy give support to wind turbines in appropriate locations. The effectiveness or efficiency of wind turbines or the appropriateness of Government targets/ policy is not a matter for Council to consider in the determination of this application.

8.75 Regard has been had to the environmental information provided in relation to the application and comments received from consultees. Account has also been taken of all relevant representations made both in support and in opposition to these proposals and to the recent appeal decision relating to site. As discussed above the impacts associated with this development are not considered unacceptable subject to appropriate mitigation. Consultees have advised that potential adverse impacts can be mitigated and that amenity impacts arising from matters such as noise can be controlled by condition.

8.76 The development would contribute towards meeting government energy targets and government guidance confirms that schemes should be supported where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. In this case the technology would appear to have potential to operate efficiently and available evidence suggests that environmental impacts can be satisfactorily addressed.

8.77 In this case, the proposal will give rise to some significant landscape and visual impacts, however having regard to the Council's published guidance and my assessment of the proposal, I do not find those impacts unacceptable. I find that the proposal accords with the development plan subject to appropriate planning conditions. There are no material considerations that justify refusal of the application.

9. OTHER MATTERS

HUMAN RIGHTS IMPLICATIONS

The recommendation in this report for grant of planning permission, subject to conditions, has potential implications for neighbours in terms of alleged interference with privacy, home or family life (Article 8) and peaceful enjoyment of their possessions (First Protocol, Article 1).

For the reasons referred to elsewhere in this report justifying this recommendation in planning terms, it is considered that any actual or apprehended infringement of such Convention Rights, is justified. The conditions constitute a justified and proportional control of the use of the property in accordance with the general interest and have regard to the necessary balance of the applicant's freedom to enjoy his property against the public interest and the freedom of others to enjoy neighbouring property/home life/privacy without undue interference.

EQUALITIES IMPLICATIONS

The issues contained in this report fall within an approved category that has been confirmed as exempt from an equalities perspective.

10. CONCLUSION

It is recommended that application be approved for the following reasons and subject to the following planning conditions:

Reasons for Approval:

That the development will provide a source of renewable energy generation in a manner that complies with relevant policies of the development plan. There are no material considerations which justify refusal of planning permission.

Conditions:

1. That the wind turbines hereby approved shall be removed from the site no later than 26 years after the date when it is erected unless otherwise approved by the Planning Authority through the grant of a further planning permission following submission of an application. Written confirmation of the date of erection of the turbines shall be provided to the Planning Authority within one month of that date.
   Reason: In order to limit the permission to the expected operational lifetime of the wind turbine development and to allow for restoration of the site.

2. That prior to the commencement of development, the applicant shall provide the Ministry of Defence (Defence Estates – Safeguarding) with the following information, a copy of which shall also be submitted to the Planning Authority;

   - Proposed date of commencement of construction;
   - Estimated date of completion of construction;
   - Height above ground level of the tallest structure;
   - Maximum extension height of any construction equipment;
   - Latitude and Longitude of the proposed turbine.

   Reason: In the interests of aviation safety.

3. That should any wind turbine no longer be required or should it cease to generate electricity for a period of six months it shall be removed and the site restored to its previous condition in accordance with the details approved under condition 4(iii) of this permission. The restoration works shall be completed no later than twelve months following the date that the turbine has ceased to generate electricity or as otherwise agreed in writing with the Planning Authority.
   Reason: In order to ensure that the turbines are removed and the land restored to its previous condition in the event that the turbines are no longer required in the interests of the visual amenity of the area.

4. That prior to the commencement of the development hereby approved the following information shall be submitted to and approved in writing by the Planning Authority: -

   (i) The precise route and details of the transmission cables from the turbine. Thereafter the transmission cables shall be provided only in accordance with the approved details;

   (ii) Details of the colour of the wind turbines which shall be Agate Grey (RAL 7038) unless otherwise agreed with the Planning Authority. Thereafter the turbines shall be finished in accordance with the approved details;

(iii) A scheme for the decommissioning and restoration of the site including aftercare measures. The scheme shall set out the means of reinstating the site to agricultural land following the removal of the components of the development. The developer shall obtain written confirmation from the Planning Authority that all decommissioning has been completed in accordance with the approved plan and (unless otherwise agreed in writing by the Planning Authority) works for removal of site apparatus shall be completed within 12 months of the final date electricity is generated at the site;

(iii) A survey of existing television signal reception to establish a baseline against which to assess the impact of the wind turbines. Thereafter, within six weeks of the wind turbine coming into operation, and subsequently at the reasonable request of the Planning Authority following receipt of a complaint, a report assessing the effect of the wind turbines on local television signal reception ('the report') shall be submitted to the Planning Authority. If any impact on TV reception signal takes place, the report shall include detailed measures to overcome reception interference. In the event that interference with TV signals occur, the operation of the turbines shall cease until measures to mitigate any such interference are implemented. Should such measures fail to address the TV interference the operation of the turbines shall cease until otherwise approved in writing by the Planning Authority.

(iv) The developer shall secure the implementation of an archaeological watching brief, to be carried out by an archaeological organisation acceptable to the Aberdeenshire Council Archaeology Service on behalf of the planning authority, during any ground breaking and development work. The retained archaeological organisation shall be afforded access at all reasonable times and allowed to record and recover items of interest and finds. Terms of Reference for the watching brief will be supplied by the Aberdeenshire Council Archaeology Service. The name of the archaeological organisation retained by the developer shall be given to the planning authority and to the Aberdeenshire Council Archaeology Service in writing not less than 14 days before development commences.
Reason: In order that the Planning Authority may verify the acceptability of the transmission lines, access route and turbine colour in the interests of visual amenity; in order to ensure appropriate site restoration; and in order to mitigate any impacts on television reception and in order to record items of archaeological interest.

5. At least one month prior to commencement of development, the developer shall provide to the planning authority written details of the bond or other financial provision which it proposes to put in place to cover all decommissioning and site restoration costs on the expiry of the consent/permission period in accordance with the requirements of condition 4(iii). No development shall start on site until the developer has provided documentary evidence that the proposed bond or other financial provision is in place and written confirmation has been given by the planning authority that the proposed bond or other financial provision is satisfactory. The developer shall ensure that the approved bond or other financial provision is maintained throughout the duration of this consent/permission. The adequacy of the approved bond or other financial provision shall be subject to a review at five yearly intervals from commencement of development, to be paid for by the developer and conducted by a competent independent professional who has relevant experience within the wind energy sector. The findings of such reviews shall be submitted in writing to the planning authority within 2-months of the anniversary of the commencement of development.
Reason: To ensure that there are sufficient funds available for the full costs of site restoration.

6. That the turbines hereby approved shall: -

- have no symbols, signs, logos or other lettering by way of advertisement displayed on any part of the wind turbine;
- be designed such that the blades of both turbines rotate in the same direction, that is, all clockwise or anticlockwise;
- not be lit other than for the purposes of aviation safety.

Reason: In the interests of the visual amenity of the area.

7. That, prior to the commencement of development, a Construction Traffic Management and Routing Plan shall be submitted to and approved in writing by the Planning Authority. The details of the plan should consider arrangements for the following:

   (i) agreement with the Roads Authority on the routing for abnormal loads;

   (ii) the type and volume of vehicles to be utilised in the delivery of construction materials;

   (iii) assessment of the suitability of the proposed routes, including bridge capacities, to accommodate the type and volume of traffic to be generated by the development. The assessment shall include details of swept path analyses and include DVD video route surveys;

   (iv) mitigating measures on public roads, including, carriageway widening, junction alterations, associated drainage works, protection to public utilities, temporary or permanent traffic management signing, and temporary relocation or removal of other items of street furniture;

   (v) the restriction of delivery traffic to agreed routes;

   (vi) the timing of construction traffic to minimise impacts on local communities, particularly at school start and finish times, during refuse collection, at weekends and during community events;

   (vii) a code of conduct for HGV drivers to allow for queuing traffic to pass;

   (viii) liaison with the roads authority regarding winter maintenance;

   (ix) contingency procedures, including names and telephone numbers of persons responsible, for dealing with vehicle breakdowns;

   (x) a dust and dirt management strategy, including sheeting and wheel cleaning prior to departure from the site;

   (xi) the location, design, erection and maintenance of warning/information signs for the duration of the works, at site accesses and crossovers on private haul roads or tracks used by construction traffic and pedestrians, cyclists or equestrians;

   (xii) contingencies for unobstructed access for emergency services;

   (xiii) co-ordination with other major commercial users of the public roads on the agreed routes in the vicinity of the site;

   (xiv) traffic management, in the vicinity of temporary construction compounds;

   (xv) the provision of data from traffic counters, installed at locations and at intervals to be agreed with the Roads Authority, at the applicant's expense;

   (xvi) arrangements for the monitoring, reviewing and reporting on the implementation of the approved plan; and

   (xvii) procedures for dealing with non-compliance with the approved plan.

   The development shall be undertaken in accordance with the approved Construction Traffic Management and Routing Plan.
   Reason: To ensure the free flow of traffic, in the interests of road safety and for the convenience of road users.

8. The rating level of noise emmissions from the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed at any property lawfully existing at the date of this planning permission, L_{A90} 35dB (A) 10 min at wind speeds up to 10 m/s at 10m height.
   Reason: In order to safeguard the residential amenity of adjacent property.

9. Prior to the commencement of development the make and model of the turbine selected for use in the development shall be submitted to and approved in writing by the Planning Authority. In the event that any turbine other than the candidate turbine is to be installed, a detailed noise assessment, including where necessary a cumulative assessment taking into account any other approved wind turbine development, demonstrating that the noise limits specified by this permission shall not be exceeded shall be submitted for the written approval of the Planning Authority. Only the make and model of turbine approved by this condition shall be erected.
Reason: In order that the planning authority can verify the model of turbine to be used and to ensure that noise limits can be met.

10. In the event that noise emissions from any wind turbine exceeds the levels set by this permission, operation of the turbine/s shall cease until measures to reduce noise levels to comply with this permission are implemented. Should such measures fail to achieve compliance with the noise levels set by this permission the operation of the turbine/s shall cease until otherwise approved in writing by the planning authority.
Reason: In order to safeguard the residential amenity of adjacent property.

11. The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). This data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Planning Authority on its request, within 14 days of receipt in writing of such a request.
Reason: In order to safeguard the residential amenity of adjacent property.

12. No electricity shall be exported until the wind farm operator has submitted to the Planning Authority for written approval a list of proposed independent consultants who may undertake noise compliance measurements in accordance with this permission. Amendments to the list of approved consultants shall be made only with the prior written approval of the Planning Authority.
Reason: In order to safeguard the residential amenity of adjacent property.

13. Within 21 days of receipt of a written request from the Planning Authority, following a complaint to it from an occupant of a sensitive property alleging noise disturbance at that property, the wind farm operator shall, at its expense, employ a consultant approved by the Planning Authority to assess the level of noise emissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component. For the avoidance of doubt sensitive receptors includes all residential properties, hospitals, schools and office buildings.
Reason: In order to safeguard the residential amenity of adjacent property.

14. The assessment of the rating level of noise emissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise emissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request by the Planning Authority to investigate a complaint, and such others as the independent consultant considers likely to result in a breach of the noise limits.
Reason: In order to safeguard the residential amenity of adjacent property.

15. The wind farm operator shall provide to the Planning Authority the independent consultant's assessment of the rating level of noise emissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Planning Authority for compliance measurements to be undertaken, unless the time limit is extended in writing by the Planning Authority. The assessment shall include all data

collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Planning Authority with the independent consultant's assessment of the rating level of noise emissions.
Reason: In order to safeguard the residential amenity of adjacent property.

16. Where a further assessment of the rating level of noise emissions from the wind farm is required pursuant to Guidance Note 4(c), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to condition 7 above unless the time limit has been extended in writing by the Planning Authority.
Reason: In order to safeguard the residential amenity of adjacent property.

17. Within 2 months of receipt of a written request from the Planning Authority following a complaint to it from an occupant of a sensitive property, the wind farm operator shall, at its expense, undertake a shadow flicker assessment in accordance with a methodology approved in writing by the Planning Authority and submit it for the written approval of the Planning Authority. The aforementioned assessment shall consider any sensitive receptors a minimum of 1km from any turbine. Where under worst case conditions any property is predicted to be affected by shadow flicker for more than 30 minutes per day or more than 30 days per year then a scheme of mitigation shall be submitted for the written approval of the Planning Authority. Operation of the wind turbines shall cease in those conditions where shadow flicker is predicted to occur or until the approved mitigation scheme is implemented. For the avoidance of doubt sensitive receptors includes all residential properties, hospitals, schools and office buildings.
Reason: In order to safeguard the residential amenity of adjacent property.

18. That in the event of a pollution incident or interruption to supply, caused by the wind farm development, affecting or likely to affect any private water supply, the wind farm operator shall provide an immediate temporary supply to those affected until permanent mitigation can be effected to the satisfaction of the Planning Authority. Any replacement supply shall be of a quality to meet the private water supplies (Scotland) Regulations 1992 or any other appropriate Regulation in force at the time. In any case a permanent replacement supply or mitigation measures shall be provided no later than one month after the supply is first affected.
Reason: In order to safeguard the residential amenity of adjacent property.

19. Noise associated with construction operations including the movement of materials, plant and equipment shall not exceed the noise limits shown in table A below for the times shown. At all other times noise associated with construction operations shall be inaudible at any sensitive receptor. For the avoidance of doubt sensitive receptors includes all residential properties, hospitals, schools and office buildings.
Reason: In order to safeguard the residential amenity of adjacent property.

Table A: Construction Noise limits

Day	Time	Average Period (t)	Noise Limit
Monday-Friday	0700-0800	1 hour	55 dBA Leq
Monday-Friday	0800-1800	10 hour	65 dBA Leq
Monday-Friday	1800-1900	1 hour	55 dBA Leq
Saturday	0700-0800	1 hour	55 dBA Leq
Saturday	0800-1800	10 hour	65 dBA Leq
Saturday	1800-1900	1 hour	55 dBA Leq
Sunday	0800-1800	10 hour	55 dBA Leq

Guidance Notes for Noise Conditions
These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with

Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled “The Assessment and Rating of Noise from Wind Farms” (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

(a) Values of the LA90,10 minute noise statistic should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2 – 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The LA90,10 minute measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be ‘standardised’ to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres . It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10- minute increments thereafter.

(e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise emissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 (b)

(b) Valid data points are those measured in the conditions specified in the agreed written assessment protocol, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1. In specifying such conditions the Local Planning Authority shall have

regard to those conditions which prevailed during times when the complainant alleges there was disturbance due to noise or which are considered likely to result in a breach of the limits.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the LA90,10 minute noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

Guidance Note 3

(a) Where, in accordance with the approved assessment protocol, noise emissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

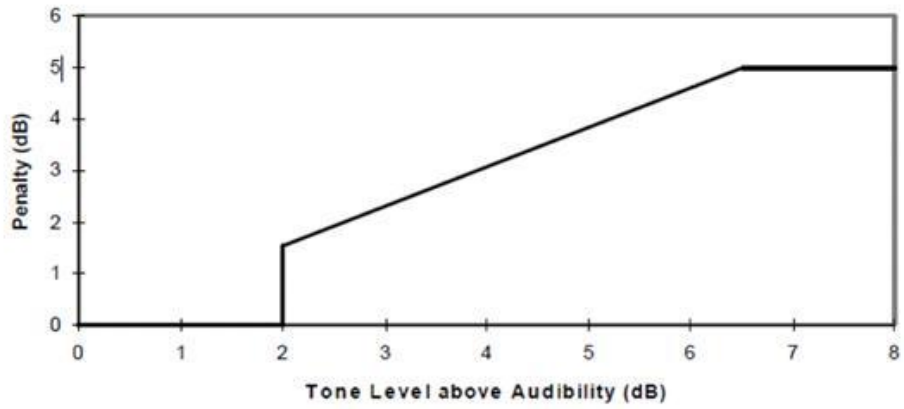
(b) For each 10 minute interval for which LA90,10 minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise emissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(c) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97.

(d) The tone level above audibility shall be plotted against wind speed for each of the 2 minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be used.

(e) A least squares "best fit" linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



Guidance Note 4

(a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Guidance Note 2 and the penalty for tonal

noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the agreed written assessment protocol.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:

(e). Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range requested by the Local Planning Authority in its written request and the approved protocol.

(f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log\left[10^{L_2/10} - 10^{L_3/10}\right]$$

(g) The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.

(h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note 3 above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling then the development fails to comply with the conditions.

NOTE

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973, (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

P&P/IM/ET/IAL

E-Mail : PLANNING@angus.gov.uk

Date: 29 August 2014

APPENDIX 1

DEVELOPMENT PLAN POLICIES AGAINST WHICH THE PROPOSAL HAS BEEN ASSESSED

TAYplan

Policy 3: Managing TAYplan's Assets

Understanding and respecting the regional distinctiveness and scenic value of the TAYplan area through:-

- ensuring development likely to have a significant effect on a designated or proposed Natura 2000 sites (either alone or in combination with other sites or projects), will be subject to an appropriate assessment. Appropriate mitigation requires to be identified where necessary to ensure there will be no adverse effect on the integrity of Natura 2000 sites in accordance with Scottish Planning Policy;

- safeguarding habitats, sensitive green spaces, forestry, watercourses, wetlands, floodplains (in-line with the water framework directive), carbon sinks, species and wildlife corridors, geo-diversity, landscapes, parks, townscapes, archaeology, historic buildings and monuments and allow development where it does not adversely impact upon or preferably enhances these assets; and,

- identifying and safeguarding parts of the undeveloped coastline along the River Tay Estuary and in Angus and North Fife, that are unsuitable for development and set out policies for their management; identifying areas at risk from flooding and sea level rise and develop policies to manage retreat and realignment, as appropriate.

Policy 6: Energy and Waste/Resource Management Infrastructure

Local Development Plans should identify areas that are suitable for different forms of renewable heat and electricity infrastructure and for waste/resource management infrastructure or criteria to support this; including, where appropriate, land for process industries (e.g. the co-location/proximity of surplus heat producers with heat users).

Local Development Plans and development proposals should ensure that all areas of search, allocated sites, routes and decisions on development proposals for energy and waste/resource management infrastructure have been justified, at a minimum, on the basis of these considerations:-

- The specific land take requirements associated with the infrastructure technology and associated statutory safety exclusion zones where appropriate;

- Waste/resource management proposals are justified against the Scottish Government's Zero Waste Plan and support the delivery of the waste/resource management hierarchy;

- Proximity of resources (e.g. woodland, wind or waste material); and to users/customers, grid connections and distribution networks for the heat, power or physical materials and waste products, where appropriate;

- Anticipated effects of construction and operation on air quality, emissions, noise, odour, surface and ground water pollution, drainage, waste disposal, radar installations and flight paths, and, of nuisance impacts on of-site properties;

- Sensitivity of landscapes (informed by landscape character assessments and other work), the water environment, biodiversity, geo-diversity, habitats, tourism, recreational access and listed/scheduled buildings and structures;

- Impacts of associated new grid connections and distribution or access infrastructure;

- Cumulative impacts of the scale and massing of multiple developments, including existing infrastructure;

- Impacts upon neighbouring planning authorities (both within and outwith TAYplan); and,

- Consistency with the National Planning Framework and its Action Programme.

Policy S1: Development Boundaries

(a) Within development boundaries proposals for new development on sites not allocated on Proposals Maps will generally be supported where they are in accordance with the relevant policies of the Local Plan.

(b) Development proposals on sites outwith development boundaries (i.e. in the countryside) will generally be supported where they are of a scale and nature appropriate to the location and where they are in accordance with the relevant policies of the Local Plan.

(c) Development proposals on sites contiguous with a development boundary will only be acceptable where there is a proven public interest and social, economic or environmental considerations confirm there is an overriding need for the development which cannot be met within the development boundary.

Policy S3: Design Quality

A high quality of design is encouraged in all development proposals. In considering proposals the following factors will be taken into account:

- site location and how the development fits with the local landscape character and pattern of development;
- proposed site layout and the scale, massing, height, proportions and density of the development including consideration of the relationship with the existing character of the surrounding area and neighbouring buildings;
- use of materials, textures and colours that are sensitive to the surrounding area; and
- the incorporation of key views into and out of the development.

Innovative and experimental designs will be encouraged in appropriate locations.

Policy S6: Development Principles

Proposals for development should where appropriate have regard to the relevant principles set out in Schedule 1 which includes reference to amenity considerations; roads and parking; landscaping, open space and biodiversity; drainage and flood risk, and supporting information.

Policy ER4 : Wider Natural Heritage and Biodiversity

The Council will not normally grant planning permission for development that would have a significant adverse impact on species or habitats protected under British or European Law, identified as a priority in UK or Local Biodiversity Action Plans or on other valuable habitats or species.

Development proposals that affect such species or habitats will be required to include evidence that an assessment of nature conservation interest has been taken into account. Where development is permitted, the retention and enhancement of natural heritage and biodiversity will be secured through appropriate planning conditions or the use of Section 75 Agreements as necessary.

Policy ER5: Conservation of Landscape Character

Development proposals should take account of the guidance provided by the Tayside Landscape Character Assessment and where appropriate will be considered against the following criteria:

(a) sites selected should be capable of absorbing the proposed development to ensure that it fits into the landscape;
(b) where required, landscape mitigation measures should be in character with, or enhance, the existing landscape setting;
(c) new buildings/structures should respect the pattern, scale, siting, form, design, colour and density of existing development;
(d) priority should be given to locating new development in towns, villages or building groups in preference to isolated development.

Policy ER11: Noise Pollution

Development which adversely affects health, the natural or built environment or general amenity as a result of an unacceptable increase in noise levels will not be permitted unless there is an overriding need which cannot be accommodated elsewhere.

Proposals for development generating unacceptable noise levels will not generally be permitted adjacent to existing or proposed noise-sensitive land uses. Proposals for new noise-sensitive development which would be subject to unacceptable levels of noise from an existing noise source or from a proposed use will not be permitted.

Policy ER16: Development Affecting the Setting of a Listed Building

Development proposals will only be permitted where they do not adversely affect the setting of a listed building. New development should avoid building in front of important elevations, felling mature trees and breaching boundary walls.

Policy ER18: Archaeological Sites of National Importance

Priority will be given to preserving Scheduled Ancient Monuments in situ. Developments affecting Scheduled Ancient Monuments and other nationally significant archaeological sites and historic landscapes and their settings will only be permitted where it can be adequately demonstrated that either:

(a) the proposed development will not result in damage to the scheduled monument or site of national archaeological interest or the integrity of its setting; or
(b) there is overriding and proven public interest to be gained from the proposed development that outweighs the national significance attached to the preservation of the monument or archaeological importance of the site. In the case of Scheduled Ancient Monuments, the development must be in the national interest in order to outweigh the national importance attached to their preservation; and
(c) the need for the development cannot reasonably be met in other less archaeologically damaging locations or by reasonable alternative means; and
(d) the proposal has been sited and designed to minimise damage to the archaeological remains.

Where development is considered acceptable and preservation of the site in its original location is not possible, the excavation and recording of the site will be required in advance of development, at the developer's expense.

Policy ER19: Archaeological Sites of Local Importance

Where development proposals affect unscheduled sites of known or suspected archaeological interest, Angus Council will require the prospective developer to arrange for an archaeological evaluation to determine the importance of the site, its sensitivity to development and the most appropriate means for preserving or recording any archaeological information. The evaluation will be taken into account when determining whether planning permission should be granted with or without conditions or refused.

Where development is generally acceptable and preservation of archaeological features in situ is not feasible Angus Council will require through appropriate conditions attached to planning consents or through a Section 75 Agreement, that provision is made at the developer's expense for the excavation and recording of threatened features prior to development commencing.

Policy ER20: Historic Gardens and Designed Landscapes

Sites included in the "Inventory of Gardens and Designed Landscapes in Scotland", and any others that may be identified during the plan period, will be protected from development that adversely affects their character, amenity value and historic importance. Development proposals will only be permitted where it can be demonstrated that:

(a) the proposal will not significantly damage the essential characteristics of the garden and designed landscape or its setting; or
(b) there is a proven public interest, in allowing the development, which cannot be met in other less damaging locations or by reasonable alternative means.

Protection will also be given to non-inventory historic gardens, surviving features of designed landscapes, and parks of regional or local importance, including their setting.

Policy ER30: Agricultural Land

Proposals for development that would result in the permanent loss of prime quality agricultural land and/or have a detrimental effect on the viability of farming units will only normally be permitted where the land is allocated by this Local Plan or considered essential for implementation of the Local Plan strategy.

Policy ER34: Renewable Energy Developments

Proposals for all forms of renewable energy developments will be supported in principle and will be assessed against the following criteria:

(a) the siting and appearance of apparatus have been chosen to minimise the impact on amenity, while respecting operational efficiency;
(b) there will be no unacceptable adverse landscape and visual impacts having regard to landscape character, setting within the immediate and wider landscape, and sensitive viewpoints;
(c) the development will have no unacceptable detrimental effect on any sites designated for natural heritage, scientific, historic or archaeological reasons;
(d) no unacceptable environmental effects of transmission lines, within and beyond the site; and
(e) access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable permanent change to the environment and landscape, and
(f) that there will be no unacceptable impacts on the quantity or quality of groundwater or surface water resources during construction, operation and decommissioning of the energy plant.

Policy ER35 : Wind Energy Developments

Wind energy developments must meet the requirements of Policy ER34 and also demonstrate:

(a) the reasons for site selection;
(b) that no wind turbines will cause unacceptable interference to birds, especially those that have statutory protection and are susceptible to disturbance, displacement or collision;
(c) there is no unacceptable detrimental effect on residential amenity, existing land uses or road safety by reason of shadow flicker, noise or reflected light;
(d) that no wind turbines will interfere with authorised aircraft activity;
(e) that no electromagnetic disturbance is likely to be caused by the proposal to any existing transmitting or receiving system, or (where such disturbances may be caused) that measures will be taken to minimise or remedy any such interference;
(f) that the proposal must be capable of co-existing with other existing or permitted wind energy developments in terms of cumulative impact particularly on visual amenity and landscape, including impacts from development in neighbouring local authority areas;
(g) a realistic means of achieving the removal of any apparatus when redundant and the restoration of the site are proposed.