#### WEST DUNBARTONSHIRE COUNCIL

## Report by the Executive Director of Infrastructure and Regeneration

Planning Committee: 27 May 2015

Subject: DC14/210: Erection of a single wind turbine (max hub

height 30m and max blade tip height 43m) and

associated works, including construction of an access track and sub-station at land east of Broomhill Wood.

**Bonhill by Harris Smith.** 

# 1. Purpose

**1.1** To advise the Committee of the submission of further information relating to the above planning application.

#### 2. Recommendations

- 2.1 That the Committee note the content of the additional information and indicate that it is **minded to Grant** planning permission and delegate authority to the Planning & Building Standards Manager to issue the decision subject to the conditions set out in Section 9 of the report contained in Appendix 1 and subject to the conclusion of a legal agreement to ensure that a suitable financial bond is put in place to cover restoration liabilities for the site and the community benefit contribution.
- 2.2 It is also recommended that the community benefit payment go to the nearest school (High Dykes Primary School).

## 3. Background

3.1 A report was submitted to the Planning Committee on 29 April 2015 regarding the above application and there were two outstanding issues relating to community benefit and noise information. Due to the agent being unable to attend the committee meeting and address these issues, the application was continued by the Planning Committee.

#### 4. Main Issues

- 4.1 At the time of the April Planning Committee, the proposed community benefit sum was not known. The agent has now submitted information which proposes to make a payment of £250 per annum once the turbine is operational. It is suggested by the agent that the contribution go to the nearest school (High Dykes Primary) or to other nearby community organisations. The proposed contribution is based on the level of electricity that the wind turbine will produce.
- 4.2 In addition to confirming the community benefit contribution, the tables proposed as part of Condition11 (Section 9 of the report contained in Appendix 1) were left blank. At the time of writing this report, Environmental Health were assessing the information that has been submitted in order to finalise the conditions. Confirmation that Environmental Health are satisfied with the information that has been submitted and details of the final conditions will be reported verbally to the Planning Committee.
- 5. People Implications
- **5.1** None.
- 6. Financial Implications
- **6.1** None.
- 7. Risk Analysis
- **7.1** No risks have been identified.
- 8. Equalities Impact Assessment (EIA)
- **8.1** An equalities impact assessment was not required.
- 9. Consultation
- **9.1** Not required.
- 10. Strategic Assessment
- **10.1** There are no strategic issues.

# Richard Cairns Executive Director of Infrastructure and Regeneration

Date: 21 May 2015

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Appendices:

1. Report (DC14/210) to 29 April 2015 Planning

Committee.

**Background Papers:** None.

Wards Affected: Ward 2 (Leven)

#### WEST DUNBARTONSHIRE COUNCIL

## Report by the Executive Director of Infrastructure and Regeneration

Resubmitted: Planning Committee: 29 April 2015

DC14/210:

Erection of a single wind turbine (max hub height 30m and max blade tip height 43m) and associated works, including construction of an access track and sub-station at land east of Broomhill Wood, Bonhill by Harris Smith.

#### 1. REASON FOR REPORT

1.1 This application relates to a proposal which raises issues of local significance, and under the terms of the approved Scheme of Delegation it requires to be determined by the Planning Committee.

#### 2. RECOMMENDATION

2.1 That the Committee indicate that it is **minded to Grant** planning permission and delegate authority to the Planning & Building Standards Manager to issue the decision subject to the conditions set out in Section 9 and subject to the conclusion of a legal agreement to ensure that a suitable financial bond is put in place to cover restoration liabilities for the site and the community benefit contribution.

#### 3. DEVELOPMENT DETAILS

- 3.1 The application site is located in the countryside north of Dumbarton. The nearest settlement to the site is the Highdykes area of Bonhill, which is approximately 430m to the west, whilst Bellsmyre is just over 1km to the south, though there is intervening woodland between the site and both settlements. The site is immediately to the north of the Murroch Glen (a steep wooded valley containing the Murroch Burn), on land which rises to the north east into the Kilpatrick Hills. It forms part of an area of plantation woodland, bordered by the Murroch Glen and areas of grazing land. The application site boundary is drawn tightly around the proposed turbine and access track and therefore extends to only 0.41 hectares, but is within a much larger area of land controlled by the applicant.
- **3.2** The proposal would involve the following works:
  - Installation of a single wind turbine;
  - Construction of a 560m access track;
  - Construction of an electrical substation and underground cabling;
  - Temporary construction infrastructure (e.g. crane hardstanding area and site compound).

- 3.3 The turbine would be a three-bladed, horizontal axis turbine, with a nominal rated capacity of 250kW. It would have a hub height of 30m and a maximum height to the blade tip of 43m. The turbine would be of the conventional design for such pieces of equipment, featuring a tubular tower and blades finished in a non-reflective pale grey colour consistent with the industry standard used in most UK wind turbines.
- 3.4 The turbine would sit on a concrete base measuring roughly 7.5m x 7.5m, although the exact design of the foundation would depend upon which specific manufacturer's turbine was used (which is not known at this stage). In addition to the foundation, an area of hardstanding would be required adjacent to the turbine as a crane platform for construction and ongoing maintenance. Adjacent to the base of the turbine would be an external substation measuring approximately 7.1m x 3m, and 3m in height. The colour of the substation is currently unspecified but it is anticipated that it would be either green or pale grey to minimise its visual impact. The substation would be connected to the turbine and the local electricity network by way of underground cabling. Such connection may require an application to the Scottish Government under Section 37 of the Electricity Act 1989.
- 3.5 Access to the site would be by way of the existing private lane leading to Highdykes Farm, which is itself accessed from Broomhill Crescent. The farm lane would be upgraded and a new 560m access track would be created between the farm lane and the proposed turbine. The new and upgraded tracks would be 5m wide and surfaced in hardcore, with appropriate passing places and areas to permit the turning of long vehicles. Tracks and hardstanding areas within the site, including the temporary site compound, would be drained in accordance with sustainable urban drainage system principals. No borrow pits are proposed as part of the development and material would be imported to construct the access track.

#### 4. CONSULTATIONS

- 4.1 <u>Scottish Natural Heritage</u> (SNH), <u>Historic Scotland</u>, West Dunbartonshire Council <u>Access Officer</u>, the <u>Royal Society for the Protection of Birds</u> (RSPB), the <u>Ministry of Defence</u>, <u>NATS En Route</u> (NERL, the UK air traffic control service), <u>Glasgow Airport</u>, <u>Inverclyde Council</u> and <u>BT Operate</u> all have no objection to the proposal.
- **4.2** The <u>Scottish Environmental Protection Agency</u> (SEPA) has no objection to the proposal but recommends that their standing advice for small-scale wind energy developments is applied.
- **4.3** West Dunbartonshire Council <u>Environmental Health Service</u> has no objection to the proposal subject to conditions relating to construction noise, hours of construction and deliveries and noise.
- 4.4 The <u>West of Scotland Archaeological Service</u> has no objection to the application subject to a condition requiring implementation of a programme of archaeological works on the site prior to the commencement of development.

- **4.5** West Dunbartonshire Council <u>Roads Service</u> and <u>Transport Scotland</u> have no objections, but each makes various recommendations relating to procedures for abnormal load deliveries during construction.
- 4.6 Loch Lomond and The Trossachs National Park Authority has no objection to the proposal. The turbine would be 4km from the southern boundary of Loch Lomond and Trossachs National Park and whilst it would be visible from some places within the National Park, it would be seen in the context of an urban area, backclothed by the hills and woodland and would not impact on the skyline of the Kilpatrick Hills which forms part of the setting of the National Park. They consider that there would not be any significant adverse visual impacts from this development on the setting, special landscape qualities, landscape character or visual amenity of the National Park. Whilst not objecting to this proposal the Park Authority has commented that there is a risk of a precedent being set which may lead to pressure for larger scale wind energy development in the vicinity and that this could have a greater impact on the setting of the National Park.
- 4.7 The <u>Civil Aviation Authority</u> has no comment on the proposal, but has provided general guidance indicating that any structures of 91.4m (300ft) or more must be recorded on aeronautical charts and that in certain circumstances structures may also require to be lit. (In this case the turbine would be a maximum of 43m in height and is not likely to require illumination).

#### 5. REPRESENTATIONS

- 5.1 In total, 30 representations have been submitted in relation to this application. These comprise 1 expression of support, 28 objections, and 1 representation which do not express a view but requests that various matters are taken into account when determining the application. The objectors include Bonhill residents and the grounds for objection can be summarised as follows:
  - Turbine would spoil the landscape of the immediate area and would also be visible from a significant distance;
  - Turbine would visually dominate its setting of open grassland and trees, and would be an eyesore:
  - Development would adversely impact upon appearance of greenbelt,
     National Park and Kilpatrick Hills Regional Scenic Area;
  - Potential adverse impact on tourism in the National Park;
  - Access track and underground cabling would scar the landscape;
  - Development would have a detrimental impact on wildlife, including danger of blades to birds and bats;
  - Adverse impact upon walking routes;
  - Turbine would cause noise disturbance to nearby residents and lead to sleep disturbance, potentially impacting on health:
  - Turbine will cause shadow-flicker:
  - Construction would create dust in nearby residential areas;

- Construction and maintenance traffic would have to go through a quiet residential area, causing disturbance and danger;
- Turbine may affect local house prices;
- Other sites further from residential areas are more suitable for wind energy developments;
- Developer will be the sole beneficiary of the proposal;
- Benefits of proposal outweighed by negative impacts;
- Wind energy not a reliable energy source as turbines can only operate when there are suitable wind speeds; and
- This turbine would only generate a small amount of electricity and is not required in order for Scotland to meet its renewable energy targets

#### 6. ASSESSMENT AGAINST THE DEVELOPMENT PLAN

## West Dunbartonshire Local Plan (2010)

- 6.1 The site of the proposed turbine is identified as Green Belt. Policy GB1 indicates a general presumption against development within the Green Belt, other than in certain circumstances, including where there is a specific locational requirement and established need for the development and it cannot be accommodated on an alternative site. Development in the Green Belt will not be permitted if it would have an adverse effect on the landscape character of the area.
- 6.2 The site is approximately 200m from the edge of the Kilpatrick Hills Regional Scenic Area (RSA). Policy RSA1 states that the Council will conserve the high quality landscape of the Kilpatrick Hills as an important Scenic Area. There is a general presumption against proposals that would have an adverse impact on the landscape quality, character, visual amenity, or nature conservation value of the area.
- 6.3 Policy DC6 states that renewable energy proposals will be permitted where these would not give rise to unacceptable detriment to the landscape, natural or build heritage, sport or recreation interests or local amenity. Development proposals are to be considered against the following criteria:
  - visual impact and effect on landscape character, including the landscape character of the Kilpatrick Hills RSA;
  - nature conservation interests:
  - historic environment and its setting, including scheduled ancient monuments;
  - local amenity, including noise, traffic and broadcast interference;
  - any cumulative impacts
- 6.4 Policy DC3 states that within the Glasgow Airport Safeguarding Zone, development which adversely affects the operational integrity or safety of the airport will not normally be permitted.
- 6.5 Policy GN1 seeks to promote, protect and improve the Green Network. It states that development which is detrimental to the green network will be considered contrary to the Plan, and that new development should contribute

positively to the protection and improvement of the green network. The Kilpatrick Hills are recognised as an important green network resource in West Dunbartonshire owing to their landscape value, the habitats and species found there and the outdoor recreation opportunities they offer.

- 6.6 Policy SUS1 states that all development should seek to conserve and enhance environmental resources and ensure environmental impact is minimised.
- 6.7 Policy E3A states that the Council will seek to maintain and enhance the environmental resources of the Plan area by protection of habitats, species and natural features which are vulnerable and/or specifically protected, including Local Nature Conservation Sites. It also states that proposals should not have an adverse effect on the integrity or character of Local Nature Conservation Sites and that satisfactory arrangement for habitat creation/site enhancement elsewhere should be made to compensate where development would cause the total or partial loss of a Local Nature Conservation Site. The application is in close proximity to Murroch Burn but is located out with the Local Nature Conservation Site.
- 6.8 The matters relevant to the assessment against the above policies are addressed in detail in Section 7 below. It is concluded that the proposal is in accordance with the local plan.

#### 7. ASSESSMENT AGAINST MATERIAL CONSIDERATIONS

#### West Dunbartonshire Local Development Plan

- 7.1 On 8 April 2015, the Council advertised its intention to adopt the West Dunbartonshire Local Development Plan, incorporating all of the Examination Report recommended modifications (with the exception of those relating to the inclusion of Duntiglennan Fields, Duntocher as a housing development opportunity). On the same date, the Council advised the Scottish Ministers of its intention to adopt the Plan. The policies referred to below therefore incorporate the accepted recommended modifications. However, the Plan will not be formally adopted until the Scottish Ministers have concluded their assessment, and a further notice advertising its adoption is placed.
- **7.2** The emerging LDP identifies the Kilpatrick Hills as a 'Changing Place', where the strategy is to:
  - protect and enhance landscape character
  - protect and enhance habitats and geological features
  - protect and enhannce the Hills as an acceptable recreational resource.

The LDP recognises that the appearance of the Kilpatrick Hills will change over the lifetime of the Plan.

7.3 The site lies within the Green Belt. Policy DS2 restricts development outwith the urban area to certain specified uses, which include infrastructure which has a specific locational need. Any development within the countryside is required to be suitably located, designed and landscaped.

- 7.4 The site lies within the Kilpatrick Hills Local Landscape Area. Policy GN4 states that development proposals shall take into account the local landscape character of the area, and ensure that the integrity of this landscape character is maintained or enhanced, and that development that could affect the Kilpatrick Hills will be required to protect and, where possible, enhance their special qualities. The special qualities are identified in a draft Statement of Importance which is considered below.
- **7.5** Policy DS5 states that renewable energy development will be supported where it:
  - a) avoids significant adverse impact on the green network, particularly:
    - the habitat network and geo-diversity
    - landscape character
    - forestry and woodland
    - the water environment
    - the path network
  - b) avoids significant adverse impact on built heritage, particularly:
    - the Antonine Wall
    - scheduled monuments and other archaeology
    - listed buildings
    - conservation areas
    - gardens and designed landscapes
  - c) avoids adverse impact on aviation and defence interests;
  - d) avoids adverse impact on telecommunications and broadcasting interests
  - e) avoids adverse impact on communities and residential amenity;
  - f) avoids significant adverse impact on the setting of and views to and from the Loch Lomond and the Trossachs National Park and Loch Lomond National Scenic Area;
  - g) Proposals will also be considered in relation to further information and detail on the above to be provided through supplementary guidance.
- 7.6 These matters and other relevant matters referred to in the assessment criteria of Policy DS5 are assessed below. Supplementary Guidance on renewable energy developments has not yet been produced and cannot be considered. Othewrwise, it is concluded that the proposal is consistent with all of the relevant policies contained in the proposed local plan.

# Scottish Planning Policy (SPP)

- 7.7 The SPP emphasises the importance of sustainable development and the need to tackle climate change, and indicates that the Scottish Government's commitment to increase the amount of electricity generated from renewable sources is a vital part of the response to climate change. It is stated that renewable energy generation will contribute to more secure and diverse energy supplies, and will support sustainable economic growth. Onshore wind is recognised as a main source of renewable energy supply.
- **7.8** SPP advises that planning authorities should support wind energy proposals in locations where the technology can operate efficiently and environmental

and cumulative impacts can be satisfactorily addressed. It states that the criteria for assessing wind turbines are likely to include:

- landscape and visual impacts;
- effects on natural heritage and the historic environment;
- contribution towards renewable energy generation targets;
- effect on local and national economy and tourism/recreation interests;
- benefits and disbenefits for communities;
- aviation and telecommunications;
- noise and shadow flicker; and
- cumulative impact
- 7.9 The design and location of wind turbines should reflect the scale and character of the landscape and the location of turbines should be considered carefully to ensure that the landscape and visual impact is minimised. If granting planning permission for renewable energy development, planning authorities should include provision for decommissioning of infrastructure and site restoration. Whilst the SPP recommends that local development plans identify areas of not more than 2km around settlements where wind farms should be discouraged, this guidance relates to wind farms as opposed to individual turbines, and the extent of such areas should be based on local landform and other features which restrict views out from the settlement.
- 7.10 The SPP also offers general policy on landscape and natural heritage issues. It recognises that landscapes and natural heritage are sensitive to inappropriate development and planning authorities should ensure that potential effects are considered when deciding planning applications. It recognises that there may be occasions where the sensitivity of the site or the nature or scale of the proposed development is such that the development should not be permitted. The precautionary principle should be applied where the impacts on nationally or internationally significant landscape or natural heritage resources are uncertain and there is sound evidence for believing that significant irreversible damage would occur. The proposal is assessed against these issues below, and it is concluded that the proposal would accord with the SPP.

# <u>Proposed Kilpatrick Hills Local Landscape Area – Draft Statement of Importance</u>

- 7.11 A draft statement of importance has been prepared by the Council's Planning Service with assistance from Scottish Natural Heritage. The draft statement of importance seeks to justify the identification of the proposed Kilpatrick Hills Local Landscape Area (LLA), and identifies the special qualities of the Kilpatrick Hills as being:
  - Strong sense of remoteness, wildness and open horizons;
  - Distinctive geomorphology and topographical features; and
  - A unique diversity of views.

The impact of the proposed development on these special landscape qualities of the Kilpatrick Hills is assessed below, and it is concluded that the proposal would not significantly detract from the special qualities of the LLA.

# Site Selection and Design

- 7.12 In terms of the operational requirements for wind turbine sites, the application site occupies a location which the applicant has established to have good wind speeds. Further operational advantages for the applicant include its proximity to a grid connection point (minimising the need for new cables or overhead lines), a sufficient site area to accommodate a turbine of viable generating capacity, and the availability of an existing access route reasonably close to the site (minimising the length of new access track required). In terms of impacts on the surrounding area, although the nearest settlement to the site (Bonhill) is located only 430m away, the site is well screened from it by high ground and trees.
- 7.13 The design of the turbine and ancillary structures would follow current wind energy industry practice, and the turbine would be of the type widely used elsewhere. The applicant has indicated that they initially considered erecting three turbines on the site, but reduced this to one turbine in order to minimise the visual impact. The precise location of the proposed turbine has also been selected in order to minimise its prominence. Due to the height of the turbine, some views from sensitive locations such as the National Park and Kilpatrick Hills are unavoidable. It is acknowledged that an effort has been made by the applicant to minimise the impact of the development on the landscape.

### Impact on Landscape Character

- The proposed turbine would be located on the edge of the Kilpatrick Hills which are designated as "Rugged Moorland Hill" Landscape Character Type (LCT). The actual application site is on the boundary of the urban area and the Rugged Moorland Hill LCT of the Kilpatrick Hills. The Kilpatrick Hills have a distinctive upland character created by the combination of elevation, exposure, rugged landform, moorland vegetation and the predominant lack of modern development. These areas share a sense of apparent naturalness and remoteness which contrasts strongly with the farmed and developed lowland areas. The general aim should be to conserve the upland character of the Rugged Moorland Hills and where possible, the visual influence of existing developments should be reduced. New developments which would introduce modern elements or which would undermine the sense of 'wildness' and remoteness should be resisted even though it is accepted that these areas already contain tall structures such as pylons and communications masts. Although this landscape can provide an essential location for this type of infrastructure, the erection of certain structures can lead to disproportionate levels of landscape impact, affecting the remote character of the moorland hills. Additional masts and other tall structures should be discouraged within the hills, with particular concerns relating to wind development. It is therefore vital that developments which could have a significant and adverse effect on the landscape character are resisted.
- 7.15 In general, there is limited capacity to accommodate wind turbines within or adjacent to the Rugged Moorland Hill LCT of the Kilpatrick Hills, particularly in areas which are identified as Green Belt and which form part of the landscape and recreational setting for the settlements which they surround. In this instance however, the sloping ground and established tree coverage would

help to screen the site from surrounding areas. The proposed turbine would be viewed from certain positions in the context of an urban area, backclothed by the hills and woodland and importantly, it would not impact upon the skyline or detract from the remoteness of the Kilpatrick Hills. On this basis, it is considered that the wind turbine would not have a significant impact on the landscape quality or the character of the Kilpatrick Hills and surrounding area.

#### **Designated Landscapes**

**7.16** Regional Scenic Areas (RSAs)/Local Landscape Areas (LLA) are landscapes which have been designated as of local importance by the relevant local planning authority. Such designations seek to preserve a high quality landscape and its natural character. The RSA/LLA most affected by this proposal is the Kilpatrick Hills RSA/LLA, which covers the area of the Kilpatrick Hills located within the West Dunbartonshire Council area. The wind turbine would be located in close proximity to the Kilpatrick Hills RSA but within the LLA. Whilst the site is readily visible from a wide area within the RSA/LLA the turbine would be close to the urban edge where it would be seen against the backdrop of other man-made development. When viewed from out with the RSA/LLA it would normally be seen against a backdrop of rising land and it would not break the skyline. Although it would introduce a large man-made structure into the environment, the turbine would not be visually dominant or would detract from the sense of remoteness and wildness provided by the Kilpatrick Hills. The overall impact upon the RSA/LLA is therefore considered to be acceptable. The turbine would be 4km from the southern boundary of Loch Lomond and Trossachs National Park and whilst it would be visible from some places within the National Park, it would be seen in the context of an urban area, backclothed by the hills and woodland and would not impact on the skyline of the Kilpatrick Hills which forms part of the setting of the National Park. This is also confirmed by the National Park Authority in their consultation response. It is considered that there would not be any significant adverse visual impacts from this development on the setting, special landscape qualities, landscape character or visual amenity of the National Park.

## Visual Impact

7.17 The information accompanying the application demonstrates that the wind turbine would not be visible from most of the closest built up area (Bonhill) because of the intervening high ground, but that it would be visible from much of Dumbarton and from areas further afield such as Port Glasgow, at distances of up to 10km. However, when viewed from distance, it would be difficult to differentiate the turbine from the overall urban context due to the proximity of the turbine to the built up area of Bonhill. Consequently, the visual impact would be less significant from greater distance. Outwith settlements, the wind turbine would be visible from much of the western shore of Loch Lomond, the River Clyde and areas within the Kilpatrick Hills. However, due to the distances involved and the size of the turbine, it will not have a significant impact on the landscape from distance and therefore will have an acceptable visual impact.

- **7.18** The applicant has provided photomontages and wireframe drawings for each of 20 previously agreed viewpoints, in accordance with the national methodology for such visual modeling exercises. These photomontages provide a representation of how the turbine might typically appear in clear weather from representative and sensitive locations, although obviously the appearance would vary according to weather conditions. The majority of the viewpoints demonstrate that the turbine would not be visible or that it would be seen at sufficient distance to have little impact on the landscape. From the viewpoints at Auchiewannie Wood and Cardross Road, the turbine would be visible to the rear/side of the settlement of Bonhill. Further viewpoints at Auchenreoch Muir and the core path at Highdykes Farm show the turbine appearing more dominant in views looking south/south west. It is accepted that turbine development cannot take place on this site without being visible from a large area, however the size of turbine proposed is suitable for the location and will minimise any visual impacts beyond 5km and the proposal is therefore acceptable.
- 7.19 The landform behind the turbine provides a backdrop setting which would ensure that from most viewpoints, the turbine would not breach the skyline of the Kilpatrick Hills. Although the turbine is 43 m in height, it is smaller than other turbines which are available and which can exceed 100m in height. The location, size and setting of the turbine are such that it will not have a detrimental visual impact on the Kilpatrick Hills regional scenic area or significantly alter the local landscape.

# **Residential Amenity**

7.20 Whilst the SPP suggests buffer zones of up to 2km around settlements, that advice relates to multi-turbine wind farms and the 2km figure is a maximum which is intended to be varied according to local landform. In this case the proposed turbine would be located only 430m from the edge of Bonhill, but its impact would be minimal as between the proposed turbine and the settlement is an area of plantation woodland and a further area of woodland adjacent to the houses which would provide adequate separation in terms of both amenity and visual impact, ensuring that the turbine would be adequately screened from the nearest residential properties. Whilst the wind turbine may be visible from some urban areas further from the site, such as Dumbarton and parts of Alexandria, it would be sufficiently distant to avoid being visually dominant and therefore it would have an acceptable impact.

## Noise & Air Quality

7.21 Turbines produce two distinct types of noise – the mechanical noise produced by the machine and the aerodynamic noise produced by the passage of the blades through the air. The "Assessment and Rating of Noise from Wind Farms" (Final Report, Sept 1996, DTI), (ETSU-R-97) provides a UK framework for the measurement of wind turbine noise, including indicative noise levels deemed to be appropriate. Subsequent UK government reports have concluded that there is no evidence of health affects arising from infrasound or low frequency noise generated by turbines.

7.22 The supporting information predicts that the operation of the wind turbine is capable of meeting ETSU-R-97 standards at the nearest properties, the closest of which is 430m from the proposed turbine location. Hours of work could be limited by condition to avoid disturbance during the construction phase. The Council's Environmental Health Service has no objection to the proposal on noise grounds subject to appropriate conditions. No issues have been raised in terms of air quality.

## Road Traffic Impact

7.23 Once operational wind turbines generate negligible traffic, but the size of the turbine components is such that delivery of the turbine to the site can cause disruption due to oversized loads. Deliveries would be via the A82, then Stirling Road before finally accessing the site from Murroch Crescent and Broomhill Crescent. In order to use this route, temporary alterations to the road may be required. It is anticipated that construction would take place over a 4 month period. Traffic mitigation measures identified during the construction period would include the preparation of a Traffic Management Plan in consultation with the Council's Roads Service. This would address escorted deliveries, appropriate signage and traffic control, temporary removal of street furniture, specified programming and timing of deliveries and restrictions on access routes for construction vehicles. Both Transport Scotland and the Council's Roads Service have no objection to the proposal subject to conditions regarding the aforementioned issues. It is not ideal for HGVs or abnormal loads to travel through a residential area, however the construction activity would be for a relatively short period of time, and with suitable traffic management it should be possible to avoid any congestion or conflicts with pedestrians. This is proposed to be controlled through the imposition of a condition which would require additional information to be submitted including details of the number of delivery vehicles and the time of deliveries.

#### **Cumulative Impacts**

7.24 The proposal would be the first significant wind turbine to be located within the West Dunbartonshire area, so there would be no localised cumulative impacts. The proposed wind turbine is well separated from other wind turbine development in neighbouring Council areas.

# <u>Natural Heritage – Designated Sites/Peat and Soils/Habitats/Protected Species/Ornithology</u>

7.25 There are no site-specific statutory nature conservation designations within the site and it is not considered that the proposal would have any detrimental impact on any other designated sites. A Stage 1 Ecology Survey was undertaken and a report submitted in support of the application. No protected species were identified on the site. Due to the use of the land and the distance from water courses, it is unlikely that the development would result in the loss of any significant areas of habitat. It is not considered that the proposed development would have any significant impact upon ornithological interests, and the RSPB have no objection to the proposal. The impacts of the development upon designated sites, peat and soils, habitats, protected species and ornithology are all considered to be acceptable.

## Hydrological & Hydrogeological Impact

7.26 The application site has no water courses within it, and it is not anticipated that the development would impact significantly upon any water course or local groundwater.

## **Historic Environment Impacts**

7.27 No historic buildings or monuments are located within the site. There are a number of monuments in the vicinity of the site, although there would be no direct impact on these from construction or operation of the wind turbine. Historic Scotland have no objection to the application, however a programme of archaeological works on site would be required prior to the commencement of any development.

# Renewable Energy Targets

- 7.28 Renewable energy currently provides around 40% of Scotland's national energy supply, but the Scottish Government's target is to generate the equivalent of 100% of energy demand from renewable sources by 2020. To meet this target, onshore wind energy generation would need to continue to grow. The Scottish Government's Specific Advice Sheet on Onshore Wind Farms indicates that there is a need for more wind turbine sites in order to satisfy national energy planning requirements, and across Scotland planning authorities are now having to consider applications for turbines in lower-lying and more populated areas, where design elements and cumulative impacts need to be managed.
- 7.29 A number of objectors have questioned the efficiency of wind turbines and the extent to which they contribute towards reducing carbon emissions. Such concerns are beyond what an individual planning authority can reasonably be expected to consider. The Scottish Government has access to high level expert advice on the effectiveness of wind energy, and planning authorities are obliged to give consideration to the resultant national energy policies, which support wind energy. The proposed turbine would be capable of contributing an output of approximately 250kW in support of Scotland's renewable energy commitment.

#### **Economic Impact**

7.30 The proposed development would have minimal impact on the potential use of the surrounding land for grazing or forestry whilst the construction of the wind turbine would provide some short-term employment during construction. In the longer term, once completed and operational, there would be a requirement for site maintenance by two people every three to six months. It is not considered that the proposed wind turbine would have any significant impact on tourism within West Dunbartonshire or neighbouring areas. It is therefore considered that the impact of the completed development upon the local economy would be positive, albeit not particularly significant.

#### **Aviation Safety**

**7.31** The Ministry of Defence (MOD), Civil Aviation Authority, NATS En Route plc (NERL) and Glasgow Airport have all been consulted in relation to any

potential impacts on aviation. No objections have been raised in terms of airport safeguarding, and red obstacle lighting is unlikely to be required due to the height and location of the turbine.

## Electro-Magnetic Interference to Communications Systems

7.32 Telecommunications operators have been consulted to determine whether their systems would be affected by electro-magnetic radiation associated with electricity generation. Scottish Planning Policy highlights telecommunications interference as a material consideration in considering the acceptability of wind turbines. No impact on television reception is anticipated, as the shift from analogue to digital TV transmission has greatly reduced the risk of signal interference from turbines.

# Shadow Flicker

7.33 Government guidance advises that if adequate separation is provided between turbines and dwellings/roads "shadow flicker" should not be a problem. The closest dwellings in this case are 430m away and there are no nearby roads, so shadow flicker should not arise due to the distance and relationship between the wind turbine and closest residential area. The Council's Environmental Health Service have raised no objection in this regard, although they nonetheless recommend a condition requiring the site operator to investigate any complaints and instigate appropriate mitigation measures in the event of shadow flicker occurring.

## Decommissioning

7.34 There is a requirement for decommissioning and site restoration and a legal agreement to ensure that a suitable financial bond is put in place to cover restoration liabilities for the site will be required. Site restoration would be triggered by either the expiry of the permission or if the project ceases to operate for a specific period of time.

#### **Community Benefits**

7.35 The applicant has indicated that he is willing to make a payment per megawatt of installed capacity to a local community organisation once the turbine is operational and this would be agreed with the Council through a legal agreement. Scottish Planning Policy states that a range of benefits are often voluntarily provided by developers to communities in the vicinity of renewable energy developments and can include community trust funds. However, the prospect of financial benefit to a community is not a material consideration in the determination of planning applications.

#### 8. CONCLUSION

8.1 The proposed wind turbine complies with both the adopted and emerging local plans as well as relevant government guidance. The sloping landscape and urban character in the vicinity of the site mitigates against the visual impact of the turbine on the Kilpatrick Hills or Loch Lomond and the Trossachs National Park and there would be no adverse cumulative impacts. The distance from the nearest residential property and intervening tree coverage is sufficient to

ensure that there would be no unacceptable impact on residential properties. The legal agreement will ensure that a suitable financial bond is put in place to cover future restoration liabilities for the site and to address the community benefit contribution.

#### 9. CONDITIONS

- 1. The permission hereby granted is for a temporary period only and shall expire 25 years from the date of the permission.
- 2. That on the earlier of the expiry of 25 years from the date of the permission, or the turbine ceasing to generate electricity for a period of 6 months, the turbine and ancillary equipment shall be removed from the site along with its associated hardstandings and the site restored to its original condition within 6 months.
- 3. All external colours of the turbine and associated equipment cabinet shall be agreed with the Planning Authority prior to the commencement of works and shall be implemented as approved.
- 4. That prior to works commencing on site a traffic management plan indicating the proposals for the construction and delivery of the turbine shall be submitted to the Planning Authority for their written approval, and shall thereafter be implemented. The statement shall include the following information:
  - a) The intended turbine transportation route including swept path analysis, timings and methodology.
  - b) All temporary works including relocation of signs, guardrails, bollards, street furniture and all temporary measures.
  - c) Any alteration to the public road network.
  - d) Details of the construction compound including staff car parking.
  - e) Details of proposed signage during the delivery and construction period.
  - f) Any necessary mitigation.
  - g) Details of the type, weight, and number of delivery and construction vehicles.
  - h) Details of wheel washing facilities.
  - i) A condition report based on a joint survey of the proposed route to ensure that all temporary alterations and any damage to the road network are made good.
- 5. No development shall take place within the development site until the developer has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted by the applicant, agreed by the West of Scotland Archaeology Service and approved by the Planning Authority. Thereafter the developer shall ensure that the programme of archaeological works is fully implemented and that all recording and recovery of archaeological resources within the

- development site is undertaken to the satisfaction of the Planning Authority in agreement with the West of Scotland Archaeology Service.
- 6. Prior to the commencement of development full details of the surface water drainage system shall be submitted for the written approval of the Planning Authority and shall be implemented as approved prior to the occupation of the building. The drainage system shall incorporate the principles of Sustainable Urban Drainage Systems within its design, and shall thereafter be implemented as approved.
- 7. During the period of construction no delivery or removal of material from the site shall take place outwith the hours of 8am to 6pm Mondays to Fridays and 8am to 1pm on Saturdays, and not at all on Sundays or Public Holidays unless otherwise approved in writing by the Planning Authority.
- 8. During the period of construction, all works and ancillary operations which are audible at the site boundary, or at such other places that may be agreed with by the Planning Authority shall be carried out between 8am and 6pm Monday to Friday, 8am to 1pm on Saturdays and not at all on Sundays or Public Holidays unless otherwise agreed with the Planning Authority.
- 9. No development shall commence on site until such time as a noise control method statement for the construction period has been submitted to and approved in writing by the Planning Authority. This statement shall identify likely sources of noise (including specific noisy operations and items of plant/machinery), the anticipated duration of any particularly noisy phases of the construction works, and details of the proposed means of limiting the impact of these noise sources upon nearby residential properties and other noise sensitive properties. The construction works shall thereafter be carried out in accordance with the approved method statement unless otherwise approved in writing by the Planning Authority.
- 10. Prior to any plant or machinery being used on site, it shall be enclosed with sound insulating materials in accordance with a scheme which shall be submitted for the written approval of the Planning Authority. Thereafter, the sound insulation measures shall be implemented as approved.
- 11. The level of noise emissions from the effects of the wind turbine (including the application of any tonal penalty) when calculated in accordance with a procedure agreed with the Planning Authority, shall not exceed the values set out in Table 1 and Table 2. Noise limits for dwellings which lawfully exist or have planning

permission for construction at the date of this consent but are not listed in the tables below shall be those of the physically closest location listed in the tables unless otherwise agreed by the Planning Authority.

Table 1 –  $LA_{90,10min}$  dB Wind Turbine Noise Level between 23:00 and 07:00 hours:

Location	Standardised wind speed (m/s) at 10m height within the site averaged over 10 minute periods									
	4	5	6	7	8	9	10	11	12	

Table 2 – LA<sub>90,10min</sub> dB Wind Turbine Noise Level between 07:00 and 23:00 hours:

Location	Standardised wind speed (m/s) at 10m height within the site averaged over 10 minute periods								
	4	5	6	7	8	9	10	11	12

(Information to follow in order to complete tables and will be reported to Committee orally.)

- 12. Prior to the installation of the turbine, the developer shall submit a report for approval by the Planning Authority which demonstrates compliance with the noise limits in Condition 12 above. The report shall be prepared in accordance with reference to the Institute of Acoustics Good Practice Guide to the Application of ETSU-R-97 and associated supplementary guidance notes.
- 13. Prior to the installation of the turbine, the applicant shall provide written confirmation to the Planning Authority that the noise from turbine operation will be broad-band with no discernible tonal characteristics.
- 14. Within 21 days from the receipt of a written request from the Planning Authority or following a complaint to the Planning Authority from the occupant of a dwelling, the wind turbine operator shall, at the wind turbine operator's expense, employ an

independent consultant approved by the Planning Authority to assess the level of noise emissions from the wind turbine at the complainant's property following procedures to be agreed with the Planning Authority.

- 15. The wind turbine operator shall provide to the Planning Authority the independent consultant's assessment and conclusions regarding the said noise complaint, including all calculations, audio recordings and the raw data upon which those assessments and conclusions are based. Such information shall be provided within 2 months of the date of the written request of the Planning Authority unless otherwise extended in writing by the Planning Authority. The wind turbine operator shall take such remedial action as required by the Planning Authority.
- 16. Wind speed, wind direction and power generation data shall be continuously logged and provided to the Planning Authority in a format to be agreed at its request and within 28 days of such a request. Such data shall be retained by the operator for a period of not less than 12 months.
- 17. No development shall commence until details of a nominated person have been submitted in writing to the Planning Authority for the development who will act as a point of contact for local residents (in connection with conditions 12 17), together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated representative shall have responsibility for liaison with the Planning Authority in connection with any noise complaints made during the construction, operation and decommissioning of the wind turbines.

Richard Cairns
Executive Director of Infrastructure and Regeneration
Date: 29 April 2015

**Person to Contact:** 

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Appendix: None.

**Background Papers:** 1. Application forms, plans and supporting

documents;

2. Representations;

3. West Dunbartonshire Local Plan 2010;

4. West Dunbartonshire LDP - Proposed Plan;

5. Scottish Planning Policy; and

6. Consultation Responses

Wards affected: Ward 2 (Leven)