

CONTENTS OF REPORT

Page No

4	Summary of Report
12	Main Report
13	The Proposal
15	The Site
16	History
16	Advertisement
16	Observations
16	Context for decision
19	Visual Impact
27	Compatibility with Tourism and Recreational Facilities
29	Noise Impact
32	Impact on Wildlife and Ecology
35	Electromagnetic Interference including Television Reception and Air Traffic Safeguarding
37	Conclusion and recommendation
39	Appendix 1 History and location of other wind farms in and near Moray
43	Appendix 2 List of Structure and Local Plan Policies
55	Appendix 3 A Brief Description of the Environmental Statement and its review by the Institute of Environmental Management and Assessment
65	Appendix 4 Summary of applicant's supporting planning statements
69	Appendix 5 Summary of other supporting information from the applicant
75	Appendix 6 Summary of objections/representations with comments
76	Appendix 6A List of parties making objections/representations against original proposal, summary of issues raised with planning officer comment.
113	Appendix 6B Applicants response to original objections/representations
135	Appendix 6C List of parties making objections/representations against amended proposals, summary of issues raised with planning officer comment
146	Appendix 6D Applicants response to objections/representations on amended proposals
152	Appendix 6E Summary of letters in support of proposal
156	Appendix 7 Summary of Consultations

SUMMARY OF REPORT

1.0 Introduction

1.1 The purpose of this summary is to bring together the conclusions on the major planning issues described in the observations section of the main report along with the final conclusions and recommendation.

1.2 The main report describes the proposal, the site, site history, advertisement of the application with an observations section covering: -

- Context for decision
- Visual Impact
- Compatibility with Tourism and Recreational Facilities
- Noise Impact
- Impact on Wildlife and Ecology
- Electromagnetic Interference including Television Reception and Air Traffic Safeguarding
- Conclusions and recommendation

1.3 There are also appendices on: -

- History and location of other wind farms in and near Moray
- List of Structure and Local Plan policies
- A brief description of Environmental Statement and its review by the Institute of Environmental Management and Assessment
- Summary of applicant's supporting planning statements
- Summary of other supporting information from applicant
- Summary of objections/representations with comments
- Summary of Consultations

2.0 Context for Decision

2.1 This section of the report starts off by setting out the basis upon which decisions on planning applications must be taken to ensure that they are in accordance with the development plan unless material considerations indicate otherwise.

2.2 It goes on to outline the commitment in national guidance to renewable energy and wind energy which is balanced by the need to safeguard other environmental assets including the landscape.

2.3 The relationship of Development Plan policy to national guidance is described along with the Councils Wind Energy Policy Guidance.

2.4 The guidance has two underlying principles – (a) to positively promote renewable energy developments and (b) to safeguard Moray's very high quality environment from inappropriate developments. The guidance has a map showing preferred search areas (areas free of certain constraints) and the site is within one of these areas. These are areas where there is the potential to investigate further the feasibility of a wind farm. The guidance makes it clear that a preferred search area does not imply a presumption

in favour of granting planning consent. Detailed landscape issues did not form part of the mapping exercise as they are dealt with in Environmental Assessments.

- 2.5 It is also pointed out that many of the objections challenge national guidance on renewable energy but it is not the Council's role to review the adequacy of national planning guidance. It is certainly not the role of individual planning applications. This is a matter for Government. The guidance as it stands is a material consideration.
- 2.6 Many of the objections also challenge whether or not wind energy is an efficient or effective means of producing power and state that energy from the wind farm will be exported elsewhere. Once again these not matters for the Council to determine. For instance the planning authority would not determine a planning application for an industrial premises on the basis of the efficiency of the process being applied for. Furthermore the destination of the product is not, in itself, a basis for deciding the application.
- 2.7 The financial arrangements behind the operation of wind farms have also been questioned. Once again this is not a basis for determining the application any more than the financial arrangements, or incentives, behind any other development.
- 2.8 The determination of the planning application needs to focus on whether or not the impact of the development is acceptable on the basis of development plan policies and material considerations.
- 2.9 Having set the context for the decision the observations section of the report then goes on to look at the major issues mentioned above. Each issue is approached in the same way. Development Plan Policy, National Guidance and conclusions from the Environmental Statement relevant to each issue are set out before the conclusions for each issue. It is also important to note that the objections summarised and commented on in appendix no. 6 relate to the issues dealt with.
- 2.10 The conclusions drawn in the report are as follows.

3.0 Visual Impact – Conclusions

- 3.1 Although there is a clear commitment to renewable energy (including wind energy) in national guidance, PAN 45 recognises that turbines in wind farms are likely to be highly visible with the significant characteristic of movement and there are no landscapes into which a wind farm will not introduce a new and distinctive feature. Both NPPG 6 and PAN 45 accept that there are landscapes of scenic value where it may be difficult to accommodate wind turbines without damaging natural heritage interests. NPPG 6 and PAN 45 highlight a cautious approach in national and international designations. However, in relation to local communities, NPPG 6 also states that development should not be permitted which would have a significant long term detrimental impact on the amenity of people living nearby if the impact cannot be mitigated satisfactorily. Therefore, national guidance recognises that wind turbines can have a landscape impact that is unacceptable in certain circumstances.

- 3.2 Development plan policies and the Council's Wind Energy Policy Guidance reflect this approach. In particular, policy L/ED10 (Renewable Energy Proposals) states that proposals for renewable energy will be considered favourably where they do not have an unacceptable impact in terms of visual intrusion or cumulative impact.
- 3.3 The site itself is not within a local, national or international landscape designation although there is an AGLV approximately 4 km – 7 km to the west and south of the site. It is set within an attractive predominantly rural area but the 25 km study area in the ES includes AGLV's. Although the setting is predominantly rural there are a number of towns nearby (e.g. Keith Aberlour, Dufftown) as well as a number of smaller rural settlements (e.g. Drummuir, Towiemore, Aultmore, Maggieknockater, Mulben) and individual farms and dwellings. There are a number of transport routes in the vicinity and the surrounding landscape is also used for a range of recreational and work activities. Therefore, in terms of national guidance, the development will impact on the amenity of a number people living, working nearby and visiting the area.
- 3.4 The turbines will be located around and between the relatively prominent hilltops of Knockan (372 m) and Hill of Towie (339 m). For comparison nearby Ben Aigan is 471 m and Knockmore is 356 m. The height of the existing communications mast on Knockmore is 107m to the top of the structure.
- 3.5 The applicant's ES accepts that within 7 km of the site the majority of the land area will have visibility of parts of one or more turbines. The area affected stretch as far as Keith and Dufftown. It also includes stretches of the A96 (Aberdeen/Inverness Trunk Road), the A95 (Keith/Aberlour Trunk Road) and the B9014 (Keith/Dufftown Road) as well as a number of other minor roads.
- 3.6 Within this area the Zone of Visual Influence (ZVI) map for visibility of blade tips shows the majority of the area exposed to between 16 to 21 turbines. There are a number of locations where the impact will be severe. This is shown in the visualizations for viewpoints 1 (minor road through the site), 6 (Drummuir/Newburgh on B9115), 9 (road between Loanhead and Bush Farms), 10 (A95 near Knockan) and 15 (B9014 at the junction with the road to Lochpark outdoor centre).
- 3.7 Although some elements of the development will be screened by topography, trees, buildings, etc there will be a significant visual impact upon the landscape, settlements and dwellings in and around Drummuir, Towiemore, Maggieknockater, the south eastern slopes of Ben Aigan/Knockmore, Keith and to a lesser extent Dufftown. The ES shows that in Aberlour and Dufftown, bands of 1-5, 6-10, and 11-15 turbines will be visible. In Elgin, bands of 1-5, 6-10, 11-15 and 16-21 turbines will be visible although at a greater distance.
- 3.8 Although the ES says that significant effects are confined to 6 viewpoints (the 5 referred to above and Ben Aigan - see below) this is not, in itself, a basis for accepting the visual impact of the development.
- 3.9 It needs to be borne in mind that the viewpoints are examples of impact at specific locations. Within the 7 km radius from the site, there are other locations comparable to these viewpoints where the impact will also be severe e.g. the south east slopes of Ben Aigan in the area of Balnacoul, Coldhome, Tanie. Viewpoints cannot be produced for

every location affected and are therefore examples. It also needs to be borne in mind that inevitably, visualizations cannot convey the full impact because, by their very nature, they reduce the landscape to a much smaller size.

- 3.10 The ES looks at the cumulative impact of the development along with the approved wind farms at Pauls Hill, Cairn Uish and Glens of Foudland (Aberdeenshire).
- 3.11 A significant cumulative effect is only identified from the viewpoint at Ben Aigan. However the cumulative ZVI map for blade tips shows a considerable amount of land within 25km of the site affected by the visual impact of one or more of these wind farms. It shows that the majority of the northern part of Moray will be exposed to views of wind turbines, subject to the screening effects at individual locations of trees, buildings, topography etc. Although the distances to individual wind farms within cumulative views are often long an impression will be created of significant areas of landscape being affected by wind farms. This will be exacerbated when the wind farms are seen sequentially – i.e. moving from one area to another as can happen when traveling along the A96 and from the A96 onto the A95.
- 3.12 The ES also looks at the impact of the development on a number of landscape character types based on the Moray and Nairn Landscape Character Assessment carried out by SNH. The site is identified in the assessment as being within an upland moor character area with agricultural foothills around the upland moor. Within these areas the impact will be significant and this is consistent with the viewpoint analysis.
- 3.13 The site is identified in the SNH Landscape Character Assessment itself as being within the upland farmland landscape character area. The SNH Assessment states that “masts should be located away from prominent locations, such as open hilltops and should, where possible, be set against a backdrop of hill and or forests, which would reduce their visual impact.” However, the landscape character assessment recognises that, in visual terms, there is scope for accommodating a limited amount of wind farm development in this area due to the simple character of the landscape elements such as landform, vegetation patterns and settlements which would help reduce any feeling of clutter.
- 3.14 **Overall the impact on the appearance and character of the landscape is considered to be intrusive and unacceptable. Whilst the amendment to the layout has changed the arrangement of the turbines it is not considered that it alters the fundamental impact of the development. In terms of national guidance, it is considered that the effect on the landscape will be a long-term detrimental impact that cannot be mitigated other than by recommending the development for refusal. As a result, the proposal would also not comply with development plan policies.**

4.0 Tourism – Conclusions

- 4.1 Policy S/ED1 promotes tourism and L/ED10 requires renewable energy developments to be compatible with tourism and recreational facilities. The site itself does not impact directly on any existing tourism or recreational facility as such. The applicants

have indicated a willingness to link with existing footpath networks and enhance the opportunities for equestrian activity.

- 4.2 NPPG 6 and PAN 45 recognise a link between the quality of the landscape and tourism. However, NPPG 6 states that this does not mean that renewable energy developments are incompatible with tourism and recreation interests. It points out that sensitive siting can minimise adverse impacts, particularly visual impacts, but it is unrealistic to expect such developments to have no effect at all.
- 4.3 The application is being recommended for refusal because of its impact on the landscape, including a cumulative impact with other approved wind farms.
- 4.4 The applicant's point to the potential for the wind farm to be a tourist attraction in its own right. However, NPPG 6 states that opinions are divided as to whether renewable energy developments such as wind farms may be of interest to tourists and the extent to which they can be compatible with recreational pursuits such as hill walking.
- 4.5 The applicants and objectors take different positions from surveys which have been carried out. In particular, a number of objectors refer to an investigation prepared for Visit Scotland about the potential impact of wind farms on tourism in Scotland. The report concluded that the research had highlighted a mix of different messages and conditions related to wind farm development which makes a general, all-encompassing tourism policy fairly impractical. Most respondents, both on the trade and consumer sides, felt that each case should be judged on its own merits rather than attempting to define an overall policy which suggested that Visit Scotland was either 'for' or 'against' wind farm development. Therefore, the report recommended that Visit Scotland should devise a policy that was set within the overall context of recognising the importance of sustainability and renewable energies but which would allow judgement on individual proposals.
- 4.6 **Overall, it is considered uncertain that a direct link can be made between the effect of this proposal and evidence that would support a reason for refusal on grounds related to policies on tourism.**

5.0 Noise – Conclusions

- 5.1 Environmental Health has not objected to the proposal in terms of noise. A number of conditions have been recommended which the applicant has agreed to. On this basis the proposal is considered acceptable in relation to the assessment of noise impact.

6.0 Wildlife and Ecology Conclusions

- 6.1 There are no wildlife or nature designations affecting the site. A range of consultees on this issue have not objected to the proposal (Scottish Natural Heritage, Scottish Wildlife Trust, Royal Society for Protection of Birds Scotland, North East Local Biodiversity Co-ordinator, Scottish Executive Environment Group). However, a number of conditions have been recommended. On this basis the proposal is considered acceptable in relation to the assessment of wildlife and ecological issues.

7.0 Electromagnetic Interference including Television Reception and Air Traffic Safeguarding – Conclusions

7.1 A range of consultees on this issue have not objected to the proposal (MOD Defence Estates - Air Safeguarding, CAA Safety Regulation Group - Aerodrome Standards, National Air Traffic Systems - Navigation Spectrum and Surveillance, Independent Television Commission, Radiocommunications Agency). However, the ITC has concluded there is a risk that some viewers reception may be adversely affected. It encourages the Council to enter into a binding agreement with the developer under S 75 of the Act to ensure that any disruption to local viewers' television reception is remedied/restored. The applicants have confirmed that they would enter an agreement and have similar agreements in place elsewhere. On this basis, the proposal is considered acceptable in relation to the assessment of electromagnetic, television and air safeguarding issues.

8.0 Conclusion and Recommendation

8.1 Earlier in the report (context for decision) it was pointed out that decisions on planning applications must be made on the basis of development plan policies unless material considerations indicate otherwise. It is for the decision-maker to assess both the weight to be attached to each material consideration and whether, individually or together, they are sufficient to outweigh the provisions of the development plan.

8.2 It is considered that the proposal is not in accordance with the development plan because of its impact on the appearance and character of the area. Consideration needs to be given to whether or not there are material considerations to justify an approval.

8.3 There is clear national guidance in support of renewable energy including wind farms although it is tempered by the need to ensure that the environmental impact is acceptable. The impact of this proposal is considered to be unacceptable.

8.4 The environmental and economic benefits of renewable energy developments are identified in NPPG 6 as a significant consideration particularly where the impact on the local environment can be satisfactorily mitigated. In this case it is not considered that the impact can be mitigated other than by a recommendation for refusal.

8.5 The applicants have described the contribution which they see the development making to electricity supplies and wider policy on renewable energy and climate change. They have described the employment that would be generated directly by the proposal along with a number of other benefits.

8.6 Of all the benefits referred to it is considered that the contribution in support of national renewable energy policy is the most compelling although, as mentioned previously, this is contested in many of the objections.

8.7 This leaves the difficult task of deciding how much weight to give to the contribution of the development as a material consideration to outweigh its impact. There is no

single or prescribed way of doing this and SPP 1 states that it is for the decision maker to make this assessment. Ultimately it is a matter of judgement.

- 8.8 Although the contribution of the development to national policy is contested by the objectors, as is national policy itself, the output from the wind farm is supported by national policy.
- 8.9 However it can be noted that the overall generating capacity from this wind farm will be less than those already approved in Moray at Pauls Hill and Cairn Uish. In addition there are a large number of proposals coming forward for wind farms and it is possible that, on their merits, other sites could be acceptable. Although equally they could be unacceptable depending on the circumstances of each case.
- 8.10 On balance, it is considered that the impact of the development merits a recommendation for refusal and that there are not material considerations to outweigh this.

MAIN REPORT

9.0 The Proposal

- 9.1 Two planning applications have been submitted, one for the wind farm and the other for three borrow pits (to provide material for the tracks between the turbines). Because the proposals are inextricably linked and the borrow pits are an ancillary part of the development the applications are being dealt with together in this report and recommendation.
- 9.2 The proposal involves a wind farm of 21 turbines, each with a tubular tower and three blades. The overall height to the tip of the blade will not exceed 100 m – 60 m to the hub with 40 m blades. The turbines will be painted with a semi-matt finish, in a colour to be agreed. The Environmental Impact Statement (ES) anticipates a pale grey colour, as the turbines will be seen from most locations against the sky.
- 9.3 The turbine foundations will typically comprise 180-200 m³ of concrete in a tapered octagonal block of approximately 14 - 18 m diameter and 1.5 - 3.5 m depth. The foundation surface will lie up to 1m below the normal ground surface. All rock and most spoil that is excavated will be put back on top of the foundations and reinstated.
- 9.4 The development also includes associated electricity transformers, access tracks, a control building, a substation compound and two wind monitoring masts.
- 9.5 All electrical cabling between the turbines and the sub-station on the site will be underground. The wind farm will be connected into the existing 132 kV line which passes approximately 2km to the South East of the site and is carried overhead on steel towers. This latter connection will be the subject of a separate application for consent under Section 37 of the Electricity Act 1989.
- 9.6 The delivery route for the development will use the A96(T) from Aberdeen to Keith, with some assemblies diverting through Inverurie via the B9001 and A920. Beyond Keith the A95 would be followed to Glentauchers Distillery and then onto the existing minor road to Drummuir which bisects the site.
- 9.7 A new network of tracks will be built at the site to provide access to each turbine. The access tracks will have a width of 5.0 m - 7.0 m with some reduced to 3.5 m following an amendment of the proposal (see below).
- 9.8 Three borrow pits are proposed within the site as sources of road stone for the on-site access tracks.
- 9.9 A temporary construction compound, approximately 40m by 40m, will be located within the site. The compound will include three temporary ‘portacabin’ type structures, storage areas, car parking and a receiving area for incoming vehicles.
- 9.10 The expected operational life of the wind farm is twenty five years from the date of commissioning. At the end of this period the applicants have indicated that a decision will be made as to whether to refurbish, remove, or replace the turbines.
- 9.11 If a decision were taken to decommission the wind farm this would involve the removal of all the turbine components, transformers, substation and associated

buildings. Access tracks will either be left on site for the landowner or reinstated to their original landcover. The exposed concrete plinths of the turbine foundations would be removed and the concrete foundations will be left in place and graded over with soil and replanted. The applicants state that the wind farm can be decommissioned easily and rapidly dismantled and the land restored.

9.12 The plans submitted originally were amended following the initial consultation response from Scottish Natural Heritage. The site boundary is the same and the main effect of the amendment is a revised layout to reduce the clustering of turbines and avoid isolated turbines. The tracks connecting the turbines have also been re-routed. The width of some of the tracks has also been reduced from 5.0 m to approximately 3.5 m. The location of the borrow pits, wind monitoring masts and construction compound have also slightly changed. The total length of the amended access track layout is just less than 9.8 km that translates to an estimated landtake of just over 5.85 ha. Approximately 200 m of the access track will be floated over areas of peat land.

9.13 The applicant's state that the contribution of the development to electricity supplies and CO₂ reductions would be as follows (claims that are contested in the objections, see Appendix 6): -

- (i) annual production will be sufficient to meet the electricity demand of 21,600 average homes - this equates to 60% of the homes in Moray
- (ii) together with the wind farms at Cairn Uish and Paul's Hill in the west of Moray, should they be built, the combined annual energy output from the three wind farms would equate to Moray's entire annual electrical demand from all sources, domestic, commercial, public and industrial
- (iii) the CO₂ annually displaced from the Drummuir wind farm would be equivalent to 94,600 tonnes - put in perspective, and using average Scottish per-capita figures, this equates to 6.2% of CO₂ emissions from all sources in Moray (heating, transport, power, agriculture etc)
- (iv) at the time of writing (the original ES), across the UK 74 wind projects had been commissioned, comprising 950 turbines with a combined rating of 499 MW. This capacity can meet the annual energy demand of 325,000 average homes.

9.14 The applicants also state that at Drummuir, a temporary workforce varying between 10 and 30 and averaging 20 would be created during the 9-month construction stage. It is anticipated that 80% of these construction jobs would be sourced locally. The wind farm would also create 1 part-time job in operation and maintenance.

9.15 In addition, the applicants have identified a number of other benefits that they see the proposal having, namely: -

- (i) The establishment of a community fund of at least £1m over the life of the development

- (ii) Wind farms are a new form of rural diversification – host estates derive income from them which allow investment that spins off into the local economy
- (iii) Wind farms are subject to local business rates of 47.8p in the pound, and attract a rateable value of £5,000 per MW of installed capacity, which means that the Drummuir wind farm would contribute approximately £100,000 per annum to the funding of local government services.
- (iv) RES are committed to awarding civil engineering construction work to a contractor from the north/northeast of Scotland
- (v) RES has entered into an exclusive arrangement with turbine supplier DeWind which has opened a UK production line and will generate 50 jobs in Loughborough and the blades will be sourced from Kirkcaldy and Lewis, thereby creating security for existing jobs, creating new skilled jobs and consolidating newly created posts. The turbines for Drummuir will have the highest UK content, largely Scottish.
- (vi) RES is aware that the local organisation ‘Drummuir 21’ has been developing and promoting a network of paths in the Drummuir area. RES plan to have discussions with that group and with the landowner to identify whether the wind farm tracks can be used to promote opportunities for a wider network of public-access tracks.
- (vii) Scottish and Southern Energy are being requested to look at the feasibility of a grid connection along the Dufftown- Keith railway to ensure way leave payments go back into developing this visitor attraction
- (viii) Given the likelihood of substantial local and visitor interest in the wind farm, RES is agreeable to the provision of a range of appropriately sited visitor information boards.
- (ix) The wind farm would represent a useful educational resource for the area with most schools and colleges now having energy and the environment on the curriculum.
- (x) The application was submitted with an ES and supporting planning statements (see Appendices 3 and 4 respectively).

10.0 The Site

- 10.1 The site is approximately 6.5 km to the South West of Keith and approximately 2 km north of Drummuir. The A95 passes to the north and west and the B9014 passes to the south east. A minor road bisects the site and is accessible from both the A95 to the north and the B9014 to the south at Drummuir.
- 10.2 The site extends to approximately 5.6 km². It spans the Hill of Towie to the east, Knockan hill to the south west and Machattie’s Cairn to the north west. The Hill of Towie is 339 m above Ordnance Datum (AOD), Machattie’s Cairn is 360 m AOD and

Knockan is 372 m AOD (maximum site altitude). The altitudes of the proposed turbine bases vary.

- 10.3 The site is part of an estate and is currently used for hill grazing with forestry on the higher slopes of Hill of Towie and Machattie's Cairn.

11.0 History

- 11.1 **99/00727/FUL** - Install one 40 m and one 10 m anemometer mast for 2 years at Machattie's Cairn/Hill Of Towie North Of Drummuir - approved 26 June 1997 subject to temporary consent expiring 27 June 1999.
- 11.2 **01/00014/FUL** - Erect one temporary 50 metre meteorological mast (guyed) for period of two years at Knockan Hill Drummuir Estate Drummuir – approved 31 January 2001 subject to temporary consent expiring 1 February 2003.
- 11.3 **02/02198/FUL** - Renewal of temporary consent to erect a 50 metre high meteorological mast at Knockan Hill Drummuir Estate Drummuir – approved 22 January 2003 subject to temporary consent expiring 31 January 2005.

12.0 Advertisement

- 12.1 The application has been advertised as a departure from the Development Plan and in accordance with the Environmental Impact Assessment Regulations as well as a section 34 development.

13.0 Observations

Context for Decision

- 13.1 **Scottish Planning Policy 1 – The Planning System (SPP 1)** - This states that Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act, 1997 require planning decisions to be made in accordance with the development plan unless material considerations indicate otherwise.
- 13.2 SPP 1 states that there are two main tests in deciding whether a consideration is material: -
- (a) it should serve or be related to the purpose of planning and should therefore relate to the development and use of land; and
 - (b) it should fairly and reasonably relate to the particular application.
- 13.3 It is for the decision-maker to assess both the weight to be attached to each material consideration and whether individually or together, they are sufficient to outweigh the provisions of the development plan. Although it is initially for the decision-maker to

consider whether a consideration is material, it is ultimately a matter for the courts to decide.

- 13.4 SPP 1 states that examples of possible material considerations include: -
- National Planning Policy Guidelines and Planning Advice Notes;
 - the environmental impact of the proposal;
 - the design of the proposed development and its relationship to its surroundings;
 - access, provision of infrastructure and planning history of the site;
 - views of statutory and other consultees; and
 - legitimate public concern or support expressed on relevant planning matters.
- 13.5 **National Guidance on Renewable Energy** – The government has produced national guidance about renewable energy: -
- National Planning Policy Guidance 6 - Renewable Energy Developments (NPPG6)
 - Planning Advice Note 45 Renewable Energy Technologies (PAN 45) –
- 13.6 These are important material considerations especially as they cover many of the issues referred to above and raised in the objections to the proposal (see Appendix 6).
- 13.7 There are also other NPPG's and PAN's of relevance and they are referred to elsewhere in the report.
- 13.8 NPPG 6 clearly sets out the commitment of national planning policy to renewable energy as an integral part of the UK Government's energy policy. It sees renewable energy as having a key role to play in the government's commitment to addressing the causes of climate change. This commitment includes the UK acceptance (at Kyoto in 1997) of a legally binding target to reduce emissions of greenhouse gases. The NPPG states that the Scottish Executive is committed to Scotland making a full contribution to these goals.
- 13.9 The NPPG states that Scotland possesses a large part of the UK potential for producing energy from wind, hydro, and biomass sources. Wave power and offshore wind power are identified as possible further sources of renewable energy.
- 13.10 The NPPG expects much of the new renewable capacity to come from wind farms, particularly in the initial period because of their competitive position. It states that Scotland has one of the best wind regimes in Europe which represents a very significant, albeit under-utilised, renewable energy resource.
- 13.11 The wider environmental and economic benefits of renewable energy developments are identified in the NPPG as a significant consideration, particularly where the impact on the local environment can be satisfactorily mitigated.
- 13.12 Both NPPG 6 and PAN 45 also contain advice about the location and impact of wind farms which is referred to in the report in relation to the main planning issues.
- 13.13 **The Moray Development Plan** - The Council's development plan policies reflect national guidance. The plan recognises that Moray offers the potential for various

forms of renewable energy but the greatest may be through wind farms. Because of this, the plan identified a requirement for a survey to identify search areas within which the principle of establishing wind farms is likely to be acceptable, in principle, subject to detailed environmental criteria as set out in the local plan.

- 13.14 The Moray Structure Plan policy S/ED4A (Renewable Energy) states that the Council will review areas of greatest potential for wind farms.
- 13.15 The review resulted in the Council's Wind Energy Policy Guidance document (WEPG) which was the subject of public consultation and is also a material consideration. The guidance has two underlying principles –
- a) to positively promote renewable energy developments, and
 - b) to safeguard Moray's very high quality environment from inappropriate developments.
- 13.16 The guidance has a map showing preferred search areas (i.e. areas free of certain constraints) and the proposed wind farm site is located within one of these areas where there is the potential to investigate further the feasibility of a wind farm. The WEPG document makes it clear that a location within a preferred search area does not imply a presumption in favour of granting planning consent. Detailed landscape issues did not form part of the mapping exercise as they are to be dealt with in an Environmental Assessment (i.e. an ES), to be submitted along with the planning application for the proposed development.
- 13.17 The Moray Local Plan 2000 policy L/ED10 (Renewable Energy Proposals) allows for renewable energy proposals where they meet various criteria, including being compatible with policies in the plan to safeguard and enhance the natural and built environment.
- 13.18 **Main Issues** - Many of the objections challenge national guidance on renewable energy (see Appendix 6). It is not the Council's role to review the adequacy of national planning guidance. It is certainly not the role of individual planning applications. This is a matter for Government. The guidance as it stands is a material consideration.
- 13.19 Many of the objections also challenge whether or not wind energy is an efficient or effective means of producing power and state that energy from the wind farm will be exported elsewhere. Once again, these are not matters for the Council to determine. For instance, the planning authority would not determine a planning application for an industrial premises on the basis of the efficiency of the process being applied for. Furthermore, the destination of the product is not, in itself, a basis for deciding the application.
- 13.20 The financial arrangements behind the operation of wind farms have also been questioned. Once again, this is not a basis for determining the application any more than the financial arrangements, or incentives, behind any development.

- 13.21 The determination of the planning application must focus on whether or not the impact of the development is acceptable on the basis of development plan policies and material considerations.
- 13.22 PAN 58 (Environmental Impact Assessment) states that experience shows that there will usually be a small number of major issues, perhaps only one, on which the acceptability of a development hinges. It states that these issues should be highlighted in the report on an application, drawing on the ES.
- 13.23 The major planning issues to be considered are as follows: -

14.0 Visual Impact – Departure from Policy (Structure Plan Strategy, S/ED1, L/ED10, L/ED15, S/ENV1, S/IMP1, L/IMP2, L/IMP3)

- 14.1 The proposal was advertised as a departure from these policies because of its visual impact. This is arguably the major planning issue to be resolved. It is a major issue in the objections (see Appendix 6)
- 14.2 Whilst the plan recognises renewable energy in the context of national guidance it also contains a range of policy requirements aimed at safeguarding and enhancing the natural and built environment.
- 14.3 The compatibility of a development with policies to safeguard and enhance the natural and built environment is the first criteria to be met to satisfy policy L/ED10 (Renewable Energy Proposals). High standards of siting and design are also sought by part (i) of the policy. In addition, parts (v) and (vi) of L/ED10 state that renewable energy developments must not have an unacceptable impact in terms of visual intrusion or cumulative impact.
- 14.4 L/ED15 (Rural Business Operations) requires strict control to be exercised over the siting, design and visual impact of new development.
- 14.5 S/ENV1 (Approach to the Environment) seeks to conserve and enhance Moray's environmental assets and requires new development to be sensitively sited, located and designed.
- 14.6 S/IMP1 (Development Siting, Layout and Design) states that new development should be of a scale, density and character appropriate to the surrounding area and successfully integrate into the surrounding landscape.
- 14.7 L/IMP2 (Development in Rural Areas) seeks to ensure that development in the rural area is compatible in terms of character, amenity and design and integrates sensitively into the environment. This policy also requires special attention to be paid to landscape impact, siting and scale.
- 14.8 L/IMP3 (New Building Design) requires all building development to be appropriately located in the landscape, of an appropriate size and form in relation to sky line and landform with high quality solutions expected where the development will have a high impact.

- 14.9 NPPG 6 on Renewable Energy Developments contains advice about the visual impact of renewable energy developments, including wind energy. It states that the aim of the Scottish Executive is to ensure that the commitment to renewable energy is satisfied and supported through development plan policies and development control decisions unless, at the site level, there are serious adverse impacts that can not be mitigated. These could include international heritage designations, national designations, designated built and cultural heritage sites. The NPPG also states that in relation to local communities, development should not be permitted which would have a significant long term detrimental impact on the amenity of people living nearby where the impact cannot be mitigated satisfactorily.
- 14.10 NPPG 6 also states that most landscapes in Scotland have been subject to incremental change over many years. Many of these landscapes should be able to accommodate renewable energy developments if they are in appropriate locations and of an appropriate scale and type. The size and scale of the development and its relationship to the characteristics of the locality and landform in which it is to be built will be a relevant consideration. NPPG 6 acknowledges that the visibility of a wind farm may, in some circumstances, raise concerns although distance as well as landscape and topography will affect its prominence. Additionally, the cumulative impact of neighbouring wind developments may, in some circumstances, be relevant.
- 14.11 PAN 45 on Renewable Energy Technology contains further advice on landscape/visual impact issues and makes the following points: -
- (i) There are no landscapes into which a wind farm will not introduce a new and distinctive feature. Given the Scottish Ministers commitment to addressing the important issue of climate change and the contribution expected from renewable energy developments, particularly wind farms, it is important for society at large to accept them as a feature of many areas of Scotland for the foreseeable future. This is not to suggest that areas valued for their international or national landscape and nature conservation interest will have to be sacrificed, nor that elsewhere attempts to lessen the impacts by integrating the development into the surrounding landscape would not be worthwhile.
 - (ii) The capacity of the landscape to accommodate wind farm development depends on two considerations :-
 - the degree of impact the development will have on the existing character of the landscape; and
 - the extent to which this impact can be modified and reduced by design.
 - (iii) A cautious approach is necessary in relation to particular landscapes which are rare or valued, such as National Scenic Areas and proposed National Parks and their wider settings. Here, it may be difficult to accommodate wind turbines without detriment to natural heritage interests. In a regional context care should also be exercised within Areas of Great Landscape Value (AGLV) and Regional Parks.

- (iv) Turbines in wind farms are likely to be tall, frequently located in open land, and therefore likely to be highly visible. The visual effect will be dependent on the distance over which a wind farm may be viewed, whether the turbines can be viewed adjacent to other features, different weather conditions, the character of the development and the landscape and nature of the visibility.
- (v) The following is a general guide to the effect which distance has on the perception of the development in an open landscape :-
 - Up to 2 km – Likely to be a prominent feature
 - 2 - 5 km – Relatively prominent
 - 5 - 15 km – Only prominent in clear visibility – seen as part of the wider landscape.
 - 15 - 30 km – Only seen in very clear visibility – a minor element in the landscape.
- (vi) In comparison with other, well-established, forms of development in the countryside, wind turbines are relatively unfamiliar, prominently vertical and have the significant characteristic of movement. Individually, or in groups, they will be distinctive features in the landscape. The visual impact of wind turbines must be assessed with these characteristics clearly in mind.
- (vii) The cumulative impact of a number of neighbouring developments may also be a relevant consideration. A number of factors have influenced the current geographic distribution of wind farm proposals in Scotland, for example, the distribution of the viable wind resource, technical and economic constraints to the viability of exploiting different wind speeds, electricity grid access constraints, protected areas and planning policy. These have tended to focus developments in a relatively limited number of areas. However, there have been few instances where cumulative effect has had to be addressed but with more proposals coming forward this could change.
- (viii) In assessing cumulative effects, it is unreasonable to expect this to extend beyond schemes in the vicinity that have been built, those which have permissions and those that are currently the subject of undetermined applications.

14.12 NPPG 15 (Rural Development) – states that the protection and, where appropriate, the enhancement of the countryside is a key principle for rural development. It goes on to state that Scotland has a rich diversity of rural landscapes of quality and rarity which contribute to regional identity and the overall quality of life for their inhabitants. Such areas have proved an attraction to new residents, to businesses and to a large number of tourists. They also contain the many small towns and settlements which provide economic and community focus. Diversity and quality are major assets that should not be diminished by inappropriate development and planning policies must be tailored to reflect and support these important characteristics.

- 14.13 NPPG 14 (Natural Heritage) – points out that one of the objectives for Scotland’s national heritage is to conserve, safeguard and, where possible, enhance the natural beauty and amenity of the countryside. NPPG 14 states that the varied landscapes of Scotland are an essential and much valued component of our natural heritage and the government's objectives in relation to their protection and enhancement should be reflected in development plans and planning decisions. The scale, siting and design of new development should take full account of the character of the landscape and the potential impact on the local environment. Particular care is needed in considering proposals for new development at the edge of settlements or in open countryside.
- 14.14 The ES submitted with the application addresses the visual impact of the development. This needs to be considered in the analysis of the impact of the development in relation to policy.
- 14.15 The ES evaluates the effect of the development on landscape character areas and a range of viewpoints using a methodology to identify the landscape/visual sensitivity to change, the effect on receptors and the magnitude of change. The level of impact is described as either Major, Major/Moderate, Moderate/Minor, Minor/None or None. Maps showing the Zone of Visual Influence (ZVI) of the development along with photomontages and wireline diagrams are provided to illustrate the landscape/visual impacts. Maps showing zones of cumulative impact for the Drummuir wind farm along with the approved wind farms at Pauls Hill, Cairn Uish and Glens of Foudland (Aberdeenshire) have also been produced.
- 14.16 The conclusions drawn by the applicant’s ES about the landscape/visual impacts are as follows: -
- (i) The landscape and visual assessment has established that the proposed wind farm development at Drummuir will change the landscape and visual baseline conditions during its construction and operational phases. The proposed wind farm will introduce a group of 21 turbines, each 100 m in height to the blade tips, into the Upland Moor landscape character type in the Moray and Nairn Region.
 - (ii) The construction phase of the proposed wind farm is relatively short, lasting approximately 8 months, and will have only temporary, minor effects on landscape and visual amenity in the study area.
 - (iii) The direct effects to the landscape within the application site boundary will be minimal and are not considered to cause any significant effects. Changes to the fabric of the landscape around the wind turbines, buildings and access tracks caused during construction will be reinstated on commissioning of the wind farm.
 - (iv) The layout of the turbines and access tracks has been through further visual optimization, following the consultation response from SNH. A more cohesive layout, avoiding clustering of turbines and isolated turbines has been produced in order to address SNH's concern that a more consistent layout would be more acceptable on the landscape and visual amenity of the area.

- (v) The site tracks connecting turbines at the site have been re-routed in order to minimize landscape and visual effects. As a further mitigation measure, the width of these site tracks connecting turbine 3, turbine 7, turbine 9, turbine 11 and the stretch between turbine 13 and the borrow pit will be reduced from 5 m to approximately 3.5 m (i.e. farm track width) after construction of the wind farm.
- (vi) The application site at Drummuir is included in a 'Preferred Search Area for Wind Farm Development' in the WEPG published by Moray Council. There are no national statutory landscape designations within the 25 km radius study area. The application site is not subject to any statutory or local planning designations for reasons of landscape or nature conservation interest.
- (vii) There are four Areas of Great Landscape Value (AGLV), a local non-statutory planning designation, within the 25 km radius study area. The assessment has found that there will be no significant landscape and visual effects resulting from the proposed wind farm within these AGLVs.
- (viii) The landscape character assessment of the 25 km radius study area around the proposed wind farm at Drummuir has found that out of the 8 landscape character types which are identified, significant landscape effects will be confined to approximately a 5 km radius around the development within the upland moor and agricultural foothills landscape types.
- (ix) The ZVI analysis of the proposed Drummuir wind farm has identified that the majority of the land area within 7 km of the site has visibility of parts of one or more turbines.
- (x) Between 7 km and 25 km from the application site, there is a greater land area with no visibility of the proposed wind farm than all the areas of visibility.
- (xi) The main settlements that may experience visibility of the proposed wind farm are Charlestown of Aberlour, Dufftown, Elgin and Keith.
- (xii) The main roads that may experience visibility of the proposed wind farm on parts of the routes through the study area are the A95, A96 (T) and the A941.
- (xiii) The ZVI has also shown that parts of the Aberdeen to Inverness railway line and parts of the Speyside Way long distance walk will experience some visibility of the proposed wind farm.
- (xiv) The viewpoint assessment of the proposed wind farm has identified that out of the viewpoints included in the assessment, significant visual effects will be confined to 6 viewpoints.
- (xv) Significant effects on visual amenity are therefore focused around the viewpoints closest to, and with 5 km of the site. Significant cumulative effects on visual amenity occur at one viewpoint, Ben Aigan, which has visibility of the proposed Drummuir wind farm and proposed wind farm developments at Cairn Uish and Paul's Hill.

- (xvi) A cumulative assessment of Glens of Foudland wind farm, together with the ES cumulative sites (Drummuir, Cairn Uish and Pauls Hill) has been carried out. On the whole, the inclusion of Glens of Foudland in the cumulative viewpoint assessment does not change the original assessment of cumulative effects as stated in the ES. There will be significant cumulative effects at viewpoint C1 – Ben Aigan. However, at the other viewpoints the cumulative effect is not considered to be significant.
- (xvii) The areas likely to be affected by cumulative visibility of Drummuir and Glens of Foudland are generally situated between the two sites, often from the most elevated parts of the landscape which offer wider panoramic views of the region, but do not contain residential development or major transport routes. In all areas of cumulative visibility, the distances to the furthest wind farm are long, often over 20km, and as such the cumulative visual impacts of Drummuir and Glens of Foudland are minor, and considered acceptable.
- (xviii) The areas likely to be affected by cumulative visibility of Drummuir, Glens of Foudland and Cairn Uish in succession are very limited in extent and offer long distance visibility of at least two wind farms in the view. As such, the wind farms will occupy a small angle in the overall panorama view from these hill tops. The cumulative visual impacts of Drummuir, Glens of Foudland and Cairn Uish in succession are minor, and considered acceptable.
- (xix) There is a small area on the cumulative ZVI where Drummuir, Glens of Foudland, Cairn Uish and Pauls Hill 25 km study areas overlap to the south of Drummuir near the Scalp. Although the four 25 km study areas overlap, the ZVI shows there is no visibility of all 4 wind farms within this area.
- (xx) A cumulative assessment has been carried out at four additional viewpoints in Aberdeenshire and for one of the original Drummuir only viewpoints (Viewpoint 12 – A96 near Newtack). In all cases, the cumulative effects of Drummuir, Cairn Uish, Pauls Hill and Glens of Foudland are moderate/minor, minor or negligible. Given the distances involved and the small portion of view occupied by wind farms the cumulative effects are considered to be acceptable at these locations.
- (xxi) Any new wind farm development may result in potentially significant effects on the landscape quality and visual amenity of the locality. In the case of the Drummuir development, a 25km radius study area has been assessed and significant effects identified in a relatively small area, in close proximity to the application site.
- (xxii) It should be noted that significant effects are not necessarily unacceptable. Surveys carried out in Wales, Cumbria and recently Scotland, indicate that the majority of people who live nearby, look favourably on the wind farms after they are constructed. The consistency of these surveys is notable. Significant effects of wind farm developments are also reversible. The expected operational life of the wind farm is 25 years. If, at the end of this period, a

decision is made to decommission the wind farm, it can rapidly be dismantled and the site restored.

- (xxiii) The proposed wind farm at Drummuir will introduce a group of man made elements into the open Upland Moor landscape. Whilst the introduction of these large-scale man made elements into the landscape will provide a noticeable feature, the wind farm is considered to be well designed and sited with due consideration to landscape and visual effects.

14.17 Visual Impact – Conclusions

- 14.18 Although there is a clear commitment to renewable energy (including wind energy) in national guidance, PAN 45 recognises that turbines in wind farms are likely to be highly visible with the significant characteristic of movement and there are no landscapes into which a wind farm will not introduce a new and distinctive feature. Both NPPG 6 and PAN 45 accept that there are landscapes of scenic value where it may be difficult to accommodate wind turbines without damaging natural heritage interests. NPPG 6 and PAN 45 highlight a cautious approach in national and international designations. However, in relation to local communities, NPPG 6 also states that development should not be permitted which would have a significant long term detrimental impact on the amenity of people living nearby if the impact cannot be mitigated satisfactorily. Therefore, national guidance recognises that wind turbines can have a landscape impact that is unacceptable in certain circumstances.
- 14.19 Development plan policies and the Council's Wind Energy Policy Guidance reflect this approach. In particular, policy L/ED10 (Renewable Energy Proposals) states that proposals for renewable energy will be considered favourably where they do not have an unacceptable impact in terms of visual intrusion or cumulative impact.
- 14.20 The site itself is not within a local, national or international landscape designation although there is an AGLV approximately 4 km – 7 km to the west and south of the site. It is set within an attractive predominantly rural area but the 25 km study area in the ES includes AGLV's. Although the setting is predominantly rural there are a number of towns nearby (e.g. Keith Aberlour, Dufftown) as well as a number of smaller rural settlements (e.g. Drummuir, Towiemore, Aultmore, Maggieknockater, Mulben) and individual farms and dwellings. There are a number of transport routes in the vicinity and the surrounding landscape is also used for a range of recreational and work activities. Therefore, in terms of national guidance, the development will impact on the amenity of a number of people living, working nearby and visiting the area.
- 14.21 The turbines will be located around and between the relatively prominent hilltops of Knockan (372m) and Hill of Towie (339m). For comparison nearby Ben Aigan is 471 m and Knockmore is 356m. The height of the existing communications mast on Knockmore is 107m to the top of the structure.
- 14.22 The applicant's ES accepts that within 7 km of the site the majority of the land area will have visibility of parts of one or more turbines. The area affected stretch as far as Keith and Dufftown. It also includes stretches of the A96 (Aberdeen/Inverness Trunk Road), the A95 (Keith/Aberlour Trunk Road) and the B9014 (Keith/Dufftown Road) as well as a number of other minor roads.

- 14.23 Within this area the Zone of Visual Influence (ZVI) map for visibility of blade tips shows the majority of the area exposed to between 16 to 21 turbines. There are a number of locations where the impact will be severe. This is shown in the visualizations for viewpoints 1 (minor road through the site), 6 (Drummuir/Newburgh on B9115), 9 (road between Loanhead and Bush Farms), 10 (A95 near Knockan) and 15 (B9014 at the junction with the road to Lochpark outdoor centre).
- 14.24 Although some elements of the development will be screened by topography, trees, buildings, etc there will be a significant visual impact upon the landscape, settlements and dwellings in and around Drummuir, Towiemore, Maggieknockater, the south eastern slopes of Ben Aigan/Knockmore, Keith and to a lesser extent Dufftown. The ES shows that in Aberlour and Dufftown, bands of 1-5, 6-10, and 11-15 turbines will be visible. In Elgin, bands of 1-5, 6-10, 11-15 and 16-21 turbines will be visible although at a greater distance.
- 14.25 Although the ES says that significant effects are confined to 6 viewpoints (the 5 referred to above and Ben Aigan - see below) this is not, in itself, a basis for accepting the visual impact of the development.
- 14.26 It needs to be borne in mind that the viewpoints are examples of impact at specific locations. Within the 7 km radius from the site, there are other locations comparable to these viewpoints where the impact will also be severe e.g. the south east slopes of Ben Aigan in the area of Balnacoul, Coldhome, Tanzie. Viewpoints cannot be produced for every location affected and are therefore examples. It also needs to be borne in mind that inevitably, visualizations cannot convey the full impact because, by their very nature, they reduce the landscape to a much smaller size.
- 14.27 The ES looks at the cumulative impact of the development along with the approved wind farms at Pauls Hill, Cairn Uish and Glens of Foudland (Aberdeenshire).
- 14.28 A significant cumulative effect is only identified from the viewpoint at Ben Aigan. However the cumulative ZVI map for blade tips shows a considerable amount of land within 25km of the site affected by the visual impact of one or more of these wind farms. It shows that the majority of the northern part of Moray will be exposed to views of wind turbines, subject to the screening effects at individual locations of trees, buildings, topography etc. Although the distances to individual wind farms within cumulative views are often long an impression will be created of significant areas of landscape being affected by wind farms. This will be exacerbated when the wind farms are seen sequentially – i.e. moving from one area to another as can happen when traveling along the A96 and from the A96 onto the A95.
- 14.29 The ES also looks at the impact of the development on a number of landscape character types based on the Moray and Nairn Landscape Character Assessment carried out by SNH. The site is identified in the assessment as being within an upland moor character area with agricultural foothills around the upland moor. Within these areas the impact will be significant and this is consistent with the viewpoint analysis.
- 14.30 The site is identified in the SNH Landscape Character Assessment itself as being within the upland farmland landscape character area. The SNH Assessment states that

“masts should be located away from prominent locations, such as open hilltops and should, where possible, be set against a backdrop of hill and or forests, which would reduce their visual impact.” However, the landscape character assessment recognises that, in visual terms, there is scope for accommodating a limited amount of wind farm development in this area due to the simple character of the landscape elements such as landform, vegetation patterns and settlements which would help reduce any feeling of clutter.

- 14.31 Overall the impact on the appearance and character of the landscape is considered to be intrusive and unacceptable. Whilst the amendment to the layout has changed the arrangement of the turbines it is not considered that it alters the fundamental impact of the development. In terms of national guidance, it is considered that the effect on the landscape will be a long-term detrimental impact that cannot be mitigated other than by recommending the development for refusal. As a result, the proposal would also not comply with development plan policies.

15.0 Compatibility with Tourism and Recreational Facilities (S/ED1, L/ED10)

- 15.1 Policy S/ED1 (Approach to Economic Development) promotes tourism. L/ED10 (Renewable Energy Proposals) requires renewable energy developments to be compatible with tourism/recreational facilities.
- 15.2 NPPG 6 (Renewable Energy) states that in many areas of Scotland, tourism and recreation support local economies and to varying degrees such activities depend on the quality of the environment, in particular the landscape. This does not mean that renewable energy developments are incompatible with tourism and recreation interests. Sensitive siting can successfully minimise adverse impacts, particularly visual impacts, but it is unrealistic to expect such developments to have no effect at all. Opinions are divided as to whether some renewable energy developments, such as wind farms or hydro schemes, may themselves be of interest to tourists and the extent to which their existence can be compatible with recreational pursuits such as hill walking.
- 15.3 PAN45 (Renewable Energy) recognises that tourism is a well-established and valuable contributor to the rural economy and to the prosperity of many towns and villages in rural Scotland. It is mainly associated with Scotland’s natural and scenic and cultural heritage. It is therefore important that the role of tourism in the rural economy and the assets on which it is based should be reconciled with the need to promote renewable energy generation.
- 15.4 NPPG 15 (Rural Development) also recognises that tourism makes a major contribution to the rural economy and to the prosperity of many towns and villages in rural Scotland. It is mainly associated with Scotland's unique natural and scenic quality and cultural heritage.
- 15.5 NPPG 14 (Natural Heritage) points out that the natural heritage is enjoyed both for its intrinsic value and as a setting for open air recreational and educational activities which depend on its qualities. Many of the direct benefits which accrue to rural communities from the natural heritage come from economic activities dependent on day-trip visitors or tourism.

15.6 The ES makes the following points in relation to impact on tourism: -

- (i) Local tourism has seen no negative effect due to the wind farms operating in the UK. Indeed the evidence from wind farms operated by RES, and others, suggests that the general public is often interested in visiting wind farms particularly in a holiday area. Where provision is made, wind farms can prove to be tourist attractions that can bring positive financial benefits to local businesses.
- (ii) The Delabole Wind Farm Visitor Centre in Cornwall has proved to be a very successful tourist attraction. In April 1999 a visitor facility, the EcoTech Centre, opened in Swaffam, Norfolk and in August 1999 a 1.5MW wind turbine (262 ft / 80 m tall) was built next to the EcoTech Centre.
- (iii) Independent public attitude surveys carried out among residents living near to the Taff Ely wind farm, Mid Glamorgan and near to the Novar Estate wind farm, near Alness found that in terms of people visiting the area, 62% said the Novar Estate wind farm has had no effect. 16% said visitor numbers had increased whilst no-one thought visitor numbers had decreased as a result of the Novar Estate wind farm. At Taff Ely, 68% said the wind farm had had no effect on the number of people visiting the area. 15% said visitor numbers had increased whilst 1% thought visitor numbers had decreased as a result.
- (iv) RES does not intend developing the Drummuir site as a tourist facility. However, interpretation boards would undoubtedly assist the casual visitor. The wind farm will be an added attraction for the established tourism industry.

15.7 Tourism – Conclusions

- 15.8 Policy S/ED1 promotes tourism and L/ED10 requires renewable energy developments to be compatible with tourism and recreational facilities. The site itself does not impact directly on any existing tourism or recreational facility as such. The applicants have indicated a willingness to link with existing footpath networks and enhance the opportunities for equestrian activity.
- 15.9 NPPG 6 and PAN 45 recognise a link between the quality of the landscape and tourism. However, NPPG 6 states that this does not mean that renewable energy developments are incompatible with tourism and recreation interests. It points out that sensitive siting can minimise adverse impacts, particularly visual impacts, but it is unrealistic to expect such developments to have no effect at all.
- 15.10 The application is being recommended for refusal because of its impact on the landscape, including a cumulative impact with other approved wind farms.
- 15.11 The applicant's point to the potential for the wind farm to be a tourist attraction in its own right. However, NPPG 6 states that opinions are divided as to whether renewable energy developments such as wind farms may be of interest to tourists and the extent to which they can be compatible with recreational pursuits such as hill walking.

- 15.12 The applicants and objectors take different positions from surveys which have been carried out. In particular, a number of objectors refer to an investigation prepared for Visit Scotland about the potential impact of wind farms on tourism in Scotland. The report concluded that the research had highlighted a mix of different messages and conditions related to wind farm development which makes a general, all-encompassing tourism policy fairly impractical. Most respondents, both on the trade and consumer sides, felt that each case should be judged on its own merits rather than attempting to define an overall policy which suggested that Visit Scotland was either ‘for’ or ‘against’ wind farm development. Therefore, the report recommended that Visit Scotland should devise a policy that was set within the overall context of recognising the importance of sustainability and renewable energies but which would allow judgement on individual proposals.
- 15.13 Overall, it is considered uncertain that a direct link can be made between the effect of this proposal and evidence that would support a reason for refusal on grounds related to policies on tourism.

16.0 Noise Impact (L/ED10, L/ED15, L/IMP2)

- 16.1 Policy L/ED10 (Renewable Energy Proposals) states that there must not be an unacceptable noise impact from development. L/ED15 (Rural Business Operations) states that new development will be subject to strict control over emissions and where noise or other emissions result in a development being a bad neighbour, the presumption is for refusal. L/IMP2 (Development in Rural Areas) requires all development in rural areas to be compatible in terms of amenity and integrate sensitively into the environment.
- 16.2 NPPG 6 identifies noise as an issue which requires to be addressed and points out that it is covered in more detail in PAN 45.
- 16.3 PAN 45 includes the following information about noise in relation to wind energy: -
- (i) Well-designed wind turbines are generally quiet in operation. The table below gives an indication of the noise generated by wind turbines compared with other everyday activities : -

Source / Activity	Indicative noise level dB (A)
Threshold of pain	140
Jet aircraft at 250m	105
Pneumatic drill at 7m	95
Truck at 30mph at 100m	65
Busy general office	60
Car at 40mph at 100m	55
Wind farm at 350m	35-45
Quiet bedroom	35
Rural night-time background	20-40
Threshold of hearing	0

- (ii) There are two quite distinct types of noise sources within a wind turbine. The mechanical noise produced by the gearbox, generator and other parts of the drive train; and the aerodynamic noise produced by the passage of the blades through the air. Since the early 1990s there has been significant reduction in the mechanical noise generated by wind turbines and it is now usually less than, or now of a similar level to, the aerodynamic noise. Aerodynamic noise from wind turbines is generally unobtrusive, it is broad band in nature and in this respect similar to, for example, the noise of wind in trees.
- (iii) The Report – *‘The Assessment and Rating of Noise from Wind Farms’* - describes a framework for the measurement of wind farm noise and gives indicative noise levels thought to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development or adding unduly to the costs and administrative burdens on wind farm developers or planning authorities. The report presents a series of recommendations that can be regarded as relevant guidance on good practice :-
- (iv) The current practice on controlling wind farm noise by the application of noise limits at the nearest noise-sensitive properties is the most appropriate approach;
- (v) Noise limits should be applied to external locations and should apply only to those areas frequently used for relaxation or activities for which a quiet environment is highly desirable;
- (vi) Noise limits set relative to the background noise are more appropriate in the majority of cases;
- (vii) Generally, the noise limits should be set relative to the existing background noise at the nearest noise-sensitive properties and that the limits should reflect the variation in both turbine source noise and background noise with wind speed;
- (viii) It is not necessary to use a margin above background noise levels in particularly quiet areas. This would unduly restrict developments that are recognised as having wider national and global benefits. Such low limits are, in any event, not necessary in order to offer a reasonable degree of protection to wind farm neighbours.
- (ix) Separate noise limits should apply for day-time and for night-time as during the night the protection of external amenity becomes less important and the emphasis should be on preventing sleep disturbance.
- (x) Absolute noise limits and margins above background should relate to the cumulative effect of all wind turbines in the area contributing to the noise received at the properties in question. Any existing turbines should not be considered as part of the prevailing background noise.
- (xi) Noise from the wind farm should be limited to 5dB(A) above background for both day- and night-time, remembering that the background level of each period may be different.

- (xii) A fixed limit of 43dB(A) is recommended for night-time. This is based on a sleep disturbance criteria of 35dB(A) with an allowance of 10dB(A) for attenuation through an open window (free field to internal) and 2dB(A) subtracted to account for the use of $L_{A90, 10min}$ rather than $L_{Aeq, 10min}$.
- (xiii) Both day- and night-time lower fixed limits can be increased to 45dB(A) to increase the permissible margin above background where the occupier of the property has some financial interest in the wind farm.
- (xiv) In low noise environments the day-time level of the $L_{A90, 10min}$ of the wind farm noise should be limited to an absolute level within the range of 35-40dB(A). The actual value chosen within this range should depend upon the number of dwellings in the neighbourhood of the wind farm, the effect of noise limits on the number of kWh generated and the duration of the level of exposure.
- (xv) For single turbines or wind farms with very large separation distances between the turbines and the nearest properties, a simplified noise condition may be suitable. If the noise is limited to an $L_{A90, 10min}$ of 35dB(A) up to wind speeds of 10m/s at 10m height, then this condition alone would offer sufficient protection of amenity, and background noise surveys would be unnecessary.

16.4 The ES contains details of a noise assessment. The conclusions reached are as follows:-

- (i) The acoustic impact for the amended layout on the local environment has been assessed in accordance with the latest guidance on wind farm noise assessment as issued in the DTI publication - The Assessment and Rating of Noise from Wind Farms.
- (ii) An assessment has been made of the noise impact of the proposed wind farm at Drummuir. Noise levels were predicted at 12 properties. At all of these properties the predicted noise levels was 35.8 dB (A) or below at all investigated wind speeds.
- (iii) Background noise measurements were made at Gateside, Easterton and Knockan. The measured background noise levels were used to determine required noise limits, as specified by the DTI's Noise Working Group (ETSU/DTI, 1996).
- (iv) DTI Guidelines recommend that the allowable wind farm noise limit be set to 5dB(A) above the measured background noise level, except where the background noise level falls below 30dB(A) to 35dB(A) in which case the limit should be fixed at an absolute level of between 35dB(A) and 40dB(A). Which limit is actually selected depends on a number of factors including the number of dwellings in the neighbourhood of the wind farm, the effect of the noise limits on the number of kWh generated and the duration and level of exposure. A higher noise level is permissible during night-time hours than during day-time hours, as it is assumed that residents would be indoors.

- (v) Noise levels at all houses are comfortably within the day-time limit and night-time noise limits at all wind speeds. At reference wind speed, 8 ms⁻¹, noise levels are at between 2.8 and 20.8 dB (A) below the daytime noise limit. At the highest considered wind speed, 10 ms⁻¹, the noise levels are between 8.1 and 26.8 dB (A) below the required daytime limits. Night-time margins are at least 7.6 dB (A) at all dwellings and at all investigated wind speeds.
- (vi) The assessment indicates that the increase in noise levels resulting from the operation of the proposed wind farm would be low at neighbouring dwellings in all wind speeds. The proposed wind farm would result in the recommended noise limits of the NWG being satisfied at all locations. The effect of the wind farm on the amenity of the local properties would therefore be minor.

16.5 Noise – Conclusions

- 16.6 Environmental Health has not objected to the proposal in terms of noise. A number of conditions have been recommended which the applicant has agreed to. On this basis the proposal is considered acceptable in relation to the assessment of noise impact.

17.0 Impact on Wildlife and Ecology (L/ED10, L/ED15, L/ENV2, S/IMP1, L/IMP2,)

- 17.1 Policy L/ED10 (Renewable Energy Proposals) states that new development must not have an unacceptable impact on local ecology. L/ED15 (Rural Business Operations) requires new business development to be subject to environmental considerations including the impact on natural heritage. L/ENV2 (Non Statutory Nature Conservation Sites) points out that development which conflicts with Local Biodiversity Action Plans will only be accepted if they incorporate measures to minimise impact and conserve a site's ecological value. S/IMP1 (Development Siting Layout and Design) states that new development should not have an adverse impact on nature conservation resources. L/IMP2 (Development in Rural Areas) requires special attention to be paid to the loss of biodiverse land.
- 17.2 NPPG 6 points out that the importance of complying with international and national conservation obligations must be recognised e.g. the potential impact on bird populations at proposed sites near roosting and feeding areas and on migration pathways requires careful assessment.
- 17.3 PAN45 includes the following comments about birds and habitat: -
- (i) Experience indicates that many bird species and their habitats are unaffected by wind turbine developments and the impact of an appropriately designed and located wind farm on the local bird life should, in many cases, be minimal.
 - (ii) To date, the most common concern has been the risk of bird strike i.e. birds flying through the area swept by the blades and being hit, causing injury or death. This will depend on a number of considerations such as the particular species and numbers, the nature of the bird flight and any relevant seasonal patterns. Most birds in flight can be expected to take action to avoid obstacles but different species will vary in their reaction.

- (iii) As indicated in NPPG 6, the importance of complying with international and national conservation obligations must be recognised and wind farms should not adversely affect the integrity of designated sites.
- (iv) Protected species, such as eagles and hen harriers occupy many areas outwith designated sites and are protected across Scotland. These factors have to be considered against the positioning and size of turbines, including the size of the area swept by the blades in relation to the air space used by the birds in the vicinity of the development.
- (v) In addition, under the EC Habitats Directive, other species or habitats of special interest may be present. For example, montane and bog habitats can be adversely affected by track construction unless attention is paid to minimising impact on the hydrology of the site. They may also be affected by any changes in land management which may be brought about as a consequence of improved access.

17.4 NPPG 14 contains guidance about the protection of species and habitats. It states that planning authorities should seek to safeguard and enhance the wider natural heritage beyond the confines of nationally designated areas. The effect of a development proposal on the natural heritage can be a material consideration whether or not a designated area is likely to be affected, though the level of protection afforded to natural heritage interests outwith designated areas will not normally be as high as that afforded to sites of national or international importance.

17.5 The ES sets out details of the ornithological and habitat surveys which were carried out. The results included the following information: -

- (i) The original ES pointed out that out of a total of 34 species of bird that were recorded as breeding within the overall study area, 30 were found within the main wind farm study area. Overall bird densities were low and there were no notable concentrations of birds in any particular habitat or part of the site. The revised layout did not alter the bird numbers substantively.
- (ii) Two notable species were seen during the flight observations/surveys but showed no evidence of breeding within the study area, hen harrier and merlin. Consultations indicated three further species of conservation importance occur in the general area: black grouse, peregrine and goshawk. There are no records of these breeding within the study area. They use the site mainly for hunting in winter.
- (iii) No species was found breeding in the study area during the survey in nationally or regionally important numbers. None were recorded breeding that are listed on Annex 1 of the EU Birds Directive or Schedule 1 of the 1981 Wildlife and Countryside Act.
- (iv) If a pair of merlin did breed on the site in the future (as they have done in the past), these would be regionally important. This species is protected from disturbance during the breeding season under Schedule 1 of the 1981 Wildlife

and Countryside Act. The amended layout has increased the separation distance between a breeding site that this species has used and the nearest turbines (from just over 100 m to over 300 m). Therefore, the likelihood of any impact on this species, should it return to breed at this site, would be further reduced and hence clearly would not be significant.

- (v) The overall conservation value of the breeding bird community, as measured from the survey data, is well below the threshold for national and below that for regional importance for this habitat - upland moorland/grassland without water bodies.
- (vi) Overall the revised layout did not alter the bird numbers in the potential disturbance zone (within 300 m of turbines) substantively. Two additional species were found in the revised zone, mallard and carrion crow, though neither of these have any specific conservation importance. Two species in the ES zone (woodpigeon and song thrush) were not found in the revised zone. Overall numbers were also very similar and of the two most abundant species, skylark and meadow pipit, there were 3 additional pairs of the former and 7 less pairs of the latter.
- (vii) Direct loss of habitat through track and turbine construction would be an effect of minor magnitude, with only a very small area taken up by the turbine bases and access tracks. Careful selection of routes for the access tracks and turbine locations has ensured that such effects would be, at most, of low significance.
- (viii) There have been a number of wind farms that have caused bird mortalities through collision with turbines but their characteristics are very different to those at the proposed Drummuir site. Most notably, at Altamont Pass in California and Tarifa in southern Spain, large numbers of raptors have been killed. Such problems have occurred where large numbers of sensitive species occur in close proximity to very large numbers (hundreds/thousands) of turbines, and usually also where the wind farm area provides a particularly attractive feeding resource. In upland wind farm sites in the UK, collision rates have generally been very low.
- (ix) Loss of habitat through disturbance could potentially affect a rather greater area than direct habitat loss. The maximum distance that wind turbines have been shown to affect breeding birds is 300m. Disturbance is likely to be particularly great during construction. Experience from existing UK upland wind farms have shown that many species are tolerant of the presence of wind turbines and not unduly disturbed by them. Some short-term displacement may occur following construction on species such as curlew but populations have subsequently re-established themselves. Red grouse and most other upland species that have been studied have not been significantly affected. All species listed on Schedule 1 of the 1981 Wildlife and Countryside Act are protected from disturbance during the breeding season. It would be important therefore to ensure that construction activity in particular did not disturb any of these species.

- (x) No plant species were found that are rare or scarce at the national scale. One species was determined to be regionally important and several locally important species were noted.
- (xi) Most of the vegetation communities found in the study area are common and widespread both within the region and across Scotland as a whole.
- (xii) The only community with a more restricted distribution was the dry dwarf shrub heath, which is found mostly within the east central Highlands of Scotland and hence should be considered locally important. The blanket bog is locally important both in its own right and for the species that it supports. It has also been identified by the European Union in the Habitats Directive (EU 1992) as a priority habitat requiring special conservation measures. Therefore, it should be ensured that its take by the development is minimised. However, in a regional context, it is common and widespread.
- (xiii) The main hydrological interest in the study area is the extensive peatland that covers most of the site.
- (xiv) Any effects on the active blanket bog habitat have been minimised, as it has priority status under the EU Habitats Directive (giving it medium sensitivity), even though it is only locally important, as much less than 1% of the regional resource is found within the study area. This habitat has been avoided as much as possible by the turbines and the access tracks, particularly where artificial drainage has not occurred and where the peat is deeper. As a result, the loss of blanket bog would be very small, at most low magnitude, so the significance of the impact would be low and hence not significant under the Environmental Impact Assessment Regulations.
- (xv) RES have agreed to implement a peatland enhancement plan, the aim of which will be to mitigate the small loss of peatland habitat by rewetting bog areas that have been damaged by drainage.
- (xvi) Signs of badger activity within the study area were searched for. No setts were found but badger tracks were seen on the forest edge.

17.6 Wildlife and Ecology Conclusions

- 17.7 There are no wildlife or nature designations affecting the site. A range of consultees on this issue have not objected to the proposal (Scottish Natural Heritage, Scottish Wildlife Trust, Royal Society for Protection of Birds Scotland, North East Local Biodiversity Co-ordinator, Scottish Executive Environment Group). However, a number of conditions have been recommended. On this basis the proposal is considered acceptable in relation to the assessment of wildlife and ecological issues.

18.0 Electromagnetic Interference including Television Reception and Air Traffic Safeguarding (L/ED10)

- 18.1 Policy L/ED10 (Renewable Energy Proposals) states that renewable energy developments must not have an unacceptable impact in terms of electromagnetic disturbance or interfere with aircraft activity.
- 18.2 NPPG 6 (Renewable Energy) recognises that because of the height of turbines and the electro-magnetic fields generated, consideration must be given to impacts on airfield flight paths, military aircraft flying areas, telecommunications and television reception.
- 18.3 PAN 45 (Renewable Energy) includes the following information: -
- (i) Wind turbines (in common with all electrical equipment, including those used in the home) do produce electro-magnetic radiation and this can interfere with broadcast communications and signals. Since a large number of bodies use communication systems (some commercially sensitive or of strategic or military importance), it is impossible to obtain a definitive picture of all the transmission routes across a potential site. The PAN identifies the Radiocommunications Agency (RA), which holds a central register of all civil radio communications installations in the UK, as a central point of contact to establish radio installations in the neighbourhood of a wind farm site.
 - (ii) The siting of wind turbines may have implications for the flight paths of aircraft, airport radar and communications systems and military low flying areas. Consultation with the relevant civil and military authorities is required.
 - (iii) There may be a particular concern that turbines will interfere with television reception. Considerable experience has shown that when this occurs it is of a predictable nature and can generally be alleviated by the installation or modification of a local repeater station or some cable connection. The interference effects can also be reduced by local site plan changes and this possibility should be discussed with the transmitter operators.
- 18.4 The EA includes the following information: -
- (i) The Independent Television Commission (ITC) and National Transcommunications Limited (NTL) have a watching brief to comment upon the possible effects upon UHF television of development proposals in the general area around the proposed Drummuir wind farm. NTL (the private transmission company which acts for ITC) states that the proposed development could cause some interference to television reception in the area. RES agrees with this and is of the opinion that the greatest potential for interference lies within a few kilometres to the south-east of the site where there is already poor reception because of local topography, a fact confirmed by the presence of an unusually high concentration of satellite dishes.
 - (ii) If the wind farm gains planning permission, RES will commission NTL to carry out a site survey and to take measurements in the area around the wind farm site prior to construction starting. This provides firstly, an assessment of the existing reception quality and secondly, a baseline reference point against which future measurements can be made once the wind farm is constructed.

The results of the survey would also be used to plan and design solutions to any reception problems that might occur.

- (iii) NTL also suggest that in view of potential interference arising, it would suggest that the planning authority enter an agreement with RES for them to meet the cost of investigating and rectifying any problems that may arise. NTL suggest this be made under Section 75 of the Town and Country Planning Act (Scotland), 1997 or some other similar legally binding agreement. RES have similar agreements in place at existing facilities.
- (iv) Both the Civil Aviation Authority and National Air Traffic Services have confirmed that they have no concerns with the proposed Drummuir wind farm site. The Ministry of Defence (MoD) has also indicated that it has no objections to the wind farm proposal.

18.5 Electromagnetic Interference including Television Reception and Air Traffic Safeguarding – Conclusions

- 18.6 A range of consultees on this issue have not objected to the proposal (MOD Defence Estates - Air Safeguarding, CAA Safety Regulation Group - Aerodrome Standards, National Air Traffic Systems - Navigation Spectrum and Surveillance, Independent Television Commission, Radiocommunications Agency). However, the ITC has concluded there is a risk that some viewers reception may be adversely affected. It encourages the Council to enter into a binding agreement with the developer under S 75 of the Act to ensure that any disruption to local viewers' television reception is remedied/restored. The applicants have confirmed that they would enter an agreement and have similar agreements in place elsewhere. On this basis, the proposal is considered acceptable in relation to the assessment of electromagnetic, television and air safeguarding issues.

19.0 Conclusion and Recommendation

- 19.1 Earlier in the report (context for decision) it was pointed out that decisions on planning applications must be made on the basis of development plan policies unless material considerations indicate otherwise. It is for the decision-maker to assess both the weight to be attached to each material consideration and whether, individually or together, they are sufficient to outweigh the provisions of the development plan.
- 19.2 It is considered that the proposal is not in accordance with the development plan because of its impact on the appearance and character of the area. Consideration needs to be given to whether or not there are material considerations to justify an approval.
- 19.3 There is clear national guidance in support of renewable energy including wind farms although it is tempered by the need to ensure that the environmental impact is acceptable. The impact of this proposal is considered to be unacceptable.
- 19.4 The environmental and economic benefits of renewable energy developments are identified in NPPG 6 as a significant consideration particularly where the impact on the

