

Cynulliad Cenedlaethol Cymru

The National Assembly for Wales

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Plymouth	Ein cyf / Our ref: APP127-98-004
Devon PL1 3AE	Dvddiad/Date: 13 September 2001

Dear Sir

TOWN AND COUNTRY PLANNING ACT 1990: SECTION 78

APPEAL BY NATIONAL WINDPOWER LTD FOR PROPOSED DEVELOPMENT OF A

WINDFARM COMPRISING 17 WIND TURBINE GENERATORS, ACCESS TRACKS,

SUBSTATION AND ANCILLARY EQUIPMENT ON LAND AT JORDANSTON 4 km SOUTH

- WEST OF FISHGUARD, NORTH PEMBROKESHIRE

1. Consideration has been given to the report of the Inspector, Mr David Sheers BA DipTP

MRTPI, who held a public local inquiry into your client's appeal under Section 78 of the Town and Country Planning Act 1990 against the decision of Pembrokeshire County Council to refuse planning permission for a windfarm comprising 17 wind turbine generators, access tracks, substation and ancillary equipment on land at Jordanston 4km south - west of

Fishguard, North Pembrokeshire.

2. On 28 October 1999 a direction was issued by the Planning Inspectorate that the appeal should be determined by the National Assembly rather than by a planning Inspector. On 17 July 2001 the National Assembly resolved that a committee to be known as Planning

Decision Committee 2001/5 be established in accordance with Assembly Standing Order 35 to discharge the functions of the Assembly under Section 79 of the Town and Country

Planning Act 1990 in respect of the above appeal. Accordingly, the Planning Decision

Committee has considered the appeal and as required by Standing Order 35.16 the Chair of the Committee has signed this letter which the Committee has resolved to adopt.

3. The Inspector's conclusions are set out in paragraphs 156 to175 of his report, a copy of which is enclosed, and those conclusions are reproduced as an Annex to this letter. The Inspector recommended that the appeal be dismissed. Subject to the comments below the Planning Decision Committee agree with his conclusions and accept his recommendation.

4. The development plan for the area for the purposes of Section 54A of the Town and Country Planning Act 1990 includes the adopted North Pembrokeshire Local Plan. The Planning Decision Committee agree with the Inspector, for the reasons given by him, that the proposed development would not meet criterion A of policy EV16 of the adopted Local Plan in that it would unacceptably dominate the landscape in close and distant views. The Committee consider that this clear conflict with the adopted Local Plan represents a compelling reason for refusal of the appeal in the absence of other material considerations indicating that the decision should be taken otherwise than in accordance with the development plan. They agree with the Inspector that the proposed windfarm would cause serious harm to the landscape and visual amenities of the extensive area around the appeal site and that the necessity to develop a renewable source of energy in this location is insufficient to outweigh the resultant breach of the provisions of the development plan.

5. The Planning Decision Committee accept the Inspector's finding that the construction of a windfarm at this location would be likely to cause interference and disturbance to badgers and their setts and regard this as a further material factor which weighs against the proposed development. In view, however, of the lack of detailed evidence as to the scale of such disturbance, the extent to which it could be mitigated, and the nature of any long term effects once construction was completed, the Committee are not in a position to conclude that this factor would in itself be sufficient to justify its rejection.

6. As regards the possible impact of the proposed development on tourism the Planning Decision Committee agree with the Inspector that it is difficult to come to a conclusive view on this matter. The Committee consider that the evidence submitted in relation to this issue is insufficient for them to reach a conclusion on the question of whether or not the proposed development would have an impact (whether negative or positive) on tourism in the area. In these circumstances they have not given any weight to this consideration in reaching their decision on this appeal.

7. Subject to the above comments, the Planning Decision Committee agree with the Inspector's conclusions and accept his recommendation. Therefore, the Planning Decision Committee hereby refuse your client's appeal under Section 78 of the Town and Country Planning Act 1990.

8. A copy of this letter has been sent to the Director of Planning, Pembrokeshire County Council and to those persons and organisations who appeared at the inquiry.

Yours faithfully

Sue Essex AM

Chair, Planning Decision Committee 2001/5

ANNEX TO NATIONAL ASSEMBLY FOR WALES LETTER OF 13 SEPTEMBER 2000

10. Conclusions

[The references in brackets are to source paragraphs and documents]

Planning policy context

10.1 The planning policy framework applicable to the consideration of a windfarm such as that proposed is set out in Planning Guidance (Wales) at paragraph 13.1. This reaffirms the Government's policy to stimulate the exploitation and development of renewable energy sources. Successive statements by the Government, in response to concerns about climate change, provide positive encouragement to the development of UK renewable energy programmes and set out 5 % and 10% targets for the provision of electricity from renewable sources by 2003 and 2010. Indeed in relation to prospects for renewable energy in the 21st Century, it is stated that *The planning system has an important role to help to deliver the Government's targets and goals for renewable energy and climate change, which are central to achieving sustainable development.* [11,13]

10.2 Thus the need for and desirability of power from renewable sources, including on-shore wind power, cannot be questioned. However such support is not unqualified. It is recognised that the planning system, in having an important role in helping to deliver renewable energy targets, also has

the important role of continuing to protect the countryside. Planning Guidance (Wales) states that the development of renewable energy resources should be stimulated wherever they have the prospect of being economically attractive and environmentally acceptable. The economic viability of this scheme and its contribution to the overall supply of electricity from renewable sources is already established by the fact that it is the subject of a NFFO 3 contract. The question of environmental acceptability is taken up in TAN 8 on renewable energy which, at paragraph A44 in relation to commercial wind farms, sets out the balancing exercise that is usually necessary in cases such as this: that is local planning authorities must always weigh the desirability of exploiting a clean renewable energy resource against the visual impact on the landscape of wind turbines. [28]

10.3 The development plan for North Pembrokeshire consists of the 1990 Dyfed Structure Plan and the 1998 North Pembrokeshire Local Plan. The former pre-dates the development of large wind power schemes but at policy EN 18, encourages such developments where they have regard to the character of the area among other factors. Policy EV16 of the Local Plan specifically addresses larger wind farm development. Under this policy such schemes will only be permitted if they meet certain criteria in full. There was general agreement that criterion A was of particular relevance and much discussion at the inquiry revolved around its terms: *The size, siting, design, layout and materials used in the construction of the windfarm should conform to and not unacceptably dominate the landscape in either close or distant views.* [15,16, 69]

10.4 In the light of the above points, the main considerations in this case are the landscape and visual impact of the proposed development, whether it would unacceptably dominate near and distant views, including those to and from the Pembrokeshire Coast National Park, and its impact on residential amenities in the locality. Additional considerations relate to possible impacts on tourism and badgers.

Landscape and visual impact

10.5 The proposed WTGs would be among the largest currently built in Wales in terms of height (60m to blade tip) and blade swept area $(1,521m^2)$. The latter factor is important as it relates to the visual impact of the moving parts of a WTG. Movement is one of the distinctive features of WTGs, as noted in TAN 8, and this tends to draw far greater attention to them, as modern structures in a usually open and exposed location, than would be the case than if they were static objects in the landscape. The land coverage of the windfarm as a whole is also significant. While individually the WTGs take up comparatively little land area, some 1 % of the appeal site, the height, layout and number of proposed WTGs, at 17 in 2 clusters about 900m apart, is such that their visual impact would extend over a very wide area.[9,54,112]

10.6 A detailed analysis of the extent to which the proposed development would be visible, not taking into account local screening features, has been undertaken. The Zone of Visual Influence (ZVI) shows that about 80% of the area within 5km of the centre of the appeal site, including part of the National Park, would potentially have views of all or some of the windfarm. Over a significant proportion of this area over 13 WTGs, in whole or at least the blades, would be seen at any one time. It was agreed that at distances of up to about 2km the WTGs would be of such a scale as to dominate close and local views. This would be due to their proximity, large scale, in terms of height and blade swept area, movement and number seen at any one time. At distances of between 21n and about

5km from the proposed windfarm, the WTGs would have the potential and capability, in my opinion, to dominate the landscape. This is supported by the evidence of the CPRW which is based on a large number of observations. Over a distance of 5/6km and up to about l0km WTGs of the size and type proposed would be remain clearly visible and, depending upon the circumstances, could be intrusive. Within this zone the ZVI for the proposed development includes the higher parts of the North Pembrokeshire plateau, west facing slopes of the Preseli Hills (partly within the National Park), parts of the coastal section of the National Park to the west and north-west including 6km of coastal path, and the higher ground to the south at Treffgarne. [50-52, 66, 91, 92, 112, document 3.28]

10.7 It is axiomatic that merely because an object is visible or dominating it does not necessarily follow that it becomes unacceptable in environmental terms. The assessment approach followed by those submitting evidence in this case included an appreciation of such factors as the magnitude of change in the view and landscape as a result of the proposed development, the sensitivity of the visual receptors and the sensitivity of the surrounding and intervening landscapes. For the appellants it was confirmed that receptors of high sensitivity included residents, those at scenic vantage points, users of national linear routes and users of signed scenic routes. [53, 94, 95]

10.8 An important tool used in the assessment of visual impact is the photographic depiction of landscapes upon which photomontages and computer generated wireframes of the proposed development can be based. These can be useful in providing a general indication of possible visual effects but they do have significant limitations and cannot replicate professional judgements in the field. Notably photographic material tends to underrate the true scale of vertical features in the landscape and, most crucially, it does not incorporate the effects of movement, which is an integral characteristic of WTGs. The movement of WTGs, as viewed at other windfarms, is such that, especially at relatively close quarters within about lam, it has a discordant effect on the eye. The rotation of the blades of WTGs in a cluster, while in the same direction, is not synchronised and gives a constant restless quality to the overall experience of a landscape. Especially when several overlapping WTGs are in view at one time, this has a highly distracting and discordant effect that detracts from any sense of tranquillity that an area may have. [114]

10.9 With the above points in mind it is important to note the particular characteristics of the area within which the windfarm is proposed. It is located in an area of scattered properties and settlements, some of which come to within 600m of the WTGs. Within the 2km zone of potential visual dominance there are some 314 properties and a school, with 58 properties within Ilan of the WTGs. While localised topography and vegetation may screen some~of these, a large proportion lie within the ZVI and would have a view of the proposed development. The somewhat wider zone of up to Skm from the WTGs includes parts of the National Park with about 2km of the coastal path and, at about S.Skm distant, the popular Gars Fawr scenic point, several settlements, notably Mathry, Scleddau and Letterston, Priskilly golf course and a very dense pattern of national and scenic routes. These cover all forms of transport - car, cycle and walking - and include the A40 (T), used by local travellers, visitors and travellers to and from Ireland alike, the A487 to St Davids, a network of promoted scenic and cultural routes including the Saints and Stones Trail through the middle of the appeal site, and the nationally renowned coastal path. [52, 81, 96, 115,130 doc 3.33]

10.10 The characteristics of the locality are such that, to my mind, it is highly sensitive to the visual and landscape impact of the proposed development It is not a sparsely populated area and there are a

number of properties within relatively close proximity, within 0.5 to Ilan of the site. The landscape is relatively open and treeless on a gently rolling plateau with higher ground in most directions within the 6 to Man zone. This area is also within the relatively close field of view between two sections of the National Park, which at this point are only some 8 to 13km apart, and forms an integral part of its landscape context. The WTGs are also laid out in 2 clusters at between 86m AOD and 131m AOD, some 18m to 20m above the general level of the surrounding land. At 60m tall, the WTGs would therefore reach a height of 146m AOD to 191 m AOD; making them much higher than any other features in the landscape and comparable to some of the highest natural features 4 to 6km away, such as Mathry (143m AOD) and Garn Fawr (213 AOD). [74, 91,129]

10.11 In this context I consider that the proposed development would have a highly significant impact on the landscape and visual amenities of the area within 5 to 6km of the site. This, as already stated, is a locality that is very sensitive to change, parts of it are within the National Park, it is well settled and enjoyed by visitors to the many nationally and locally promoted attractions and linear routes. Particularly noteworthy would be the impact of this proposal on that part of the National Park around Garn Fawr, including an elevated section of the coastal path n warby to the south-west From Garn Fawr the proposed windfarm would be in direct line of sight between this vantage point and the prominent rocky outcrops on the skyline at Treffgarne south of the site; which are viewpoints approached by well signed paths off the A40(T). In effect the proposed windfarm would be in the middle of a significant and extensive panorama from and across highly attractive, historic and spectacular landscapes and the WTGs would partly break the skyline directly between these two well used natural scenic points. [75, 76, 90]

10.12 With regard to closer viewpoints, it is agreed that the proposed development would have a significant effect on the landscape and visual amenities in views from the village of Mathry. From this attractive hilltop settlement the WTGs, at about 4.Skm away, would be clearly seen on the middle horizon against the backdrop of the Preseli Hills in the National Park. Even closer, such as from Priskilly golf course between 2 and 4km away to the south-west, the proposed WTGs would be spread out along much of the near horizon, breaking the skyline and dominating the view. A similar situation would apply from the lanes, school, bridleway and properties on the higher ground between the railway line and the A40(T) about 1 to 2km east of the 2 Clusters. [54, 55, documents 1.51(5b) and 2.19C]

10.13 In the immediate locality, within about Ilan of the appeal site, the WTGs would have a profound influence on the landscape and visual amenities of the area and on the day-to-day lives of a significant number of people. The roads through the middle of the appeal site serve a number of properties as well as one being part of a signed and promoted. historic and cultural tourist route and a school bus route. From nearby, especially from those properties very near to the site such as Gwelfor, Llan-yr-Esgob, Llangwarren, Jordanston Bridge and Greengmil Farm, these large WTGs would appear as intimidating and dominating structures, especially when moving, the effect of which it would be impossible to ignore as local residents go about their daily lives. [75, 76, 90, document 3.33]

10.14 It is accepted that in certain landscapes, wind turbines may be seen as striking, even elegant, modern symbols of a desirable and clean form of energy production. However in this particular location the characteristics and sensitivity of the area are such that turbines of this scale would appear intimidating and would dominate to an unacceptable extent both local and intermediate

views. This would have an undesirable impact on local residents, visitors and tourists to the area and would prejudice the statutory purposes of the National Park to conserve and enhance its natural beauty in respect of those parts within about 6km of the WTGs. As a consequence the proposed wmdfarm would not meet criterion A of policy EV16 of the adopted Local Plan in that it would unacceptably dominate the landscape in close and distant views. [73]

Other material considerations

10.15 In the light of the above the development would conflict with the provisions of the development plan. It is therefore necessary to examine other material considerations. The possible effect on tourism was raised during the inquiry. It is difficult to come to a conclusive view on this matter as much rests on intangible perceptions and assumptions as to the reactions of visitors to the area. Undoubtedly the major attraction of North Pembrokeshire for tourists lies in the quality of its coastal and countryside scenery and historic and cultural associations. The natural assets of the County and National Park are heavily promoted and there is a high proportion of return visits. [82]

10.16 It is argued that the situation in other scenically attractive areas such as Cornwall, Anglesey and Cumbria where wmdfarms are located is similar and that they have had little impact on visitor numbers. I accept that in some circumstances a windfarm may be an attraction in its own right and that people generally support the principle of the development of renewable energy sources. However much will depend upon the characteristics of the area surrounding a windfarm. Also such developments are becoming less novel as they increasingly proliferate throughout the western parts of Britain and especially in Wales where 43% of all WTGs are located. The proposed windfarm would impact on some of the most popular tourist routes in the County and over a wide area of the landscape of North Pembrokeshire; the very attribute that draws visitors to it. Whether the presence of a large windfarm would lead to an overall reduction in visitors can only be a matter of conjecture. It is possible that the attractions of the spectacular coastline may outweigh any negative impact that the proposed development would have on tourist perceptions but this is a risk that has to be weighed in the balance. [42, 43, 45, 84, 110, 143]

10.17 In respect of the effect of this proposal on the ecology of the site itself, most of it would be left undisturbed. While there may be a diversity of bird life in the general area, the literature suggests that there would be no problems of disturbance effects on any species, other that in those specific cases of inappropriately sited and designed windfarms as in Spain and California. There has been no suggestion that that may be the case in this instance. [58, 140, doc 1.48]

10.18 There is no dispute that there is a thriving and dense population of badgers on and around the site. The many main and outlier setts are almost invariably located within the dry, well-drained hedgebanks of the field boundaries. Most of the proposed WTGS are also positioned close to the field boundaries. In such circumstances the construction of the windfarm and associated works is likely to interfere with and cause disturbance to the badgers and their setts. While it is maintained that adjustments could be made to the siting of the WTGs, the location of these would also need to take account of other technical and siting constraints and it is likely that an appropriate licence would need to be applied for. Although the effectiveness of the licensing regime and other protection measures is doubted by the local expert group, the purpose of the legislation is to avoid or minimise any disturbance and it is not appropriate to call into question the statutory regime that has been put into place. It would seem to me that the significant presence of badgers and their setts on

the appeal site acts as an additional constraint on the development of a windfarm at this location. [22, 59, 61, 145, 146,151]

10.19 The Government's policy on the development of renewable sources of energy is evidently highly material in this case, to which considerable weight should be given. As already stated, renewables are an essential ingredient of the climate change programme and the 5 % target of the UK's electricity production from renewables by 2003 includes on-shore wind power as a key component. However national policy requires the stimulation of clean, renewable energy resources subject to the test of environmental acceptability and to balance it against the visual impact on the landscape of wind turbines. In this case it is proposed to locate an extensive, prominent and large scale windfarm in a particularly sensitive landscape that is well settled, positively promoted for its natural qualities and historic and cultural associations and between two sections of the National Park. In such circumstances it would cause serious harm to the landscape and visual amenities of an extensive area around it and it would damage views from parts of the National Park. As such I do not regard this proposal as environmentally acceptable and therefore I do not consider that the necessity to develop a renewable source of energy in this location is sufficient to outweigh the resultant breach of the provisions of the development plan. [25, 68]

10.20 Should it be considered that the need for and benefits of the proposed windfarm are sufficient to outweigh the provisions of the development plan, appropriate planning conditions were the subject of discussion and agreement during the inquiry. I consider that these, as set out in the agreed document, provide the necessary and reasonable controls over such matters as noise, access and other technical considerations. [64, document CD181

11. Recommendation

11.1 I recommend that the appeal be dismissed.

Inspector

The Planning Inspectorate, Crown Buildings, Cathays Park, Cardiff CF10 3NQ

Tel: 029 2082 3889 Fax: 029 2082 5150

Report

by David Sheers BA DipTP MRTPI

Date: 14/03/2000

TOWN AND COUNTRY PLANNING ACT 1991

SECTION 78

PEMBROKESHIRE VOUNTY COUNCIL

APPEAL

By

NATIONAL WIND POWER LTD

File Ref: APP N6845/A/98/512221

Site address:land at Jordanston, Fishguard, Pembrokeshire

- The appeal is made under section 78 of the Town and Country Planning Act 1990.
- The appeal is made by National Wind Power Ltd against the decision of Pembrokeshire County Council.
- The application (ref:97/520/PA) dated 29 September 1997 was refused by notice dated 12 February 1998.
- The development proposed is a windfarm comprising 17 wind turbine generators, access tracks, substation and ancillary equipment.

Summary of Recommendation: that the appeal be dismissed.

1. Procedural Matters

1.1 A pre-inquiry meeting was held on 8 August 2000 to discuss procedural and timetabling arrangements and the production of statements of agreed matters (documents AS1-6). The notes of this meeting are at document (v). The inquiry was held between 31 October 2000 and 15 November 2000 with an accompanied visit to the site and its immediate surroundings taking place on 14 November 2000. Further unaccompanied visits to the site and surrounding areas were made before, during and after the inquiry. In addition visits were made to other windfarms mentioned during the inquiry notably those at Rheidol/Ystumtuen (south of the A44(T)) and, consisting of WTGs of a roughly similar scale to those proposed, at Mynydd Gorddu north-east of Aberystwyth and at Askam in Cumbria (known as Far Old Park Farm). The latter consists of 7 turbines of an overall height of 63.5m set in rolling farmed landscape on the slopes of a rounded hill near the coast.

1.2 The application was accompanied by an Environmental Statement (ES) dated September 1997 (document CD 10) consisting of a non-technical summary, written statement, figures and a confidential ecology report relating, in part, to badgers. The ES was amended in December 1997 (document CD 11) following the amendment of the application by the reduction of the hub heights of the wind turbine generators (WTGs) from 45m to 38m Additional environmental information was provided in December 1998 and June 1999 following requests from the then Welsh Office (document CD 12). On the basis of the ES, this further information and the environmental information provided at the inquiry I am satisfied that the statutory requirements under the Town

and Country Planning (Assessment of Environmental Effects) Regulations 1988 have been complied with.

1.3 This report includes a description of the appeal site and the surrounding area, the gist of the representations and submissions made at the inquiry, my conclusions and recommendation.

2. The Site and the Surrounding Area

2.1 A description of the appeal site and its immediate surroundings is provided in the agreed statement (document AS4) and illustrated on maps at figures 1.1, 4.1 and 7.1 of the ES (document CD 10) and on the plan in document 3.7. Briefly the overall appeal site, which is located about Skm south-west of Fishguard, extends to about 200ha covering two low, rounded hills. The northern hill rises to 132m AOD and the other, about lkm to the south, rises to just over 100m AOD. It is set in a rolling, mainly treeless, open, agricultural landscape of regular shaped fields separated by traditional Pembrokeshire hedgebanks topped by scrubby vegetation. The landscape of the site is illustrated in the photographs of existing views at document 2.19, views C, D, E and F. The valleys of the Mon Cleddau and the Western Cleddau lie to the east and south-west respectively while the Pembrokeshire Coast National Park (PCNP) boundary lies about 2km away to the north-west at its nearest.

2.2 From the site the high rocky outcrops on the Pen Caer peninsula within the PCNP, especially Garn Fawr about 51m away, are visible on the skyline to the north-west. To the north the harbour at Goodwick is visible while further away, to the north-east and east are the hills of Dinas Head on the coast and the Preseli, both within the PCNP. To the south-west and south views extend over North Pembrokeshire to the villages of Mathry and Letterston on higher ground and down the St Davids peninsula and to the rocky outcrops at Treffgarne on the skyline about 7.5km away.

2.3 The general settlement pattern of the area is one of scattered farms and houses, with three properties within the appeal site at Trecoed Farm, a vacant farm bungalow just to the north of this and Pantycoch at the northern end of the site. The owners of these properties have an interest in the site. Other landowner properties near the site are at Jordanston Hall, Hendreganol and Hendrefach. There are a number of properties within 500m to 600m of the site, notably at Jordanston Hill to the east, Llangwaren to the south, Jordanston Bridge to the west and several on the A487 road between Fishguard and St Davids to the north-west.

2.4 The site is located within a triangle formed by the A487, the A40(T) to Fishguard between lkm and 2km to the east and the B4331 to the south running between Letterston on the A40 and the A487 near the prominent hill-top village of Mathry about 4.5km to the west of the site. The site itself is crossed by two minor roads, the one running east-west between the A478 and the A40(T) and the other running roughly south-north between the A40 and Llangwarren to join the A487 just west of the small settlement of Panteg. The main line railway to Fishguard runs through the Mon Cleddau valley. Within or adjoining the site are two ancient monuments; a tumulus which is just visible near the cross roads in the centre of the site and, to the north, the prominent banks of an iron age hillfort Castell Hendre-wen. A bridleway, of which there are no signs on the ground, extends from the road near the hillfort northwards to the A487. There is also a short length of footpath from Jordanston

Hall to the lane east of Jordanston Bridge. There are bridleways and footpaths around the site, notably to the east and north-west of the site as shown on the definitive map at document 2.2. A 33kV electricity line crosses the southern part of the site. The area shows evidence of extensive badger activity.

3. The Proposed Development

3.1 A description of the proposed development is set out in the agreed document AS 1, but is also provided in detail in the ES (document CD10), as amended by a reduction in tower heights (document CD11) and the exchange of correspondence with the Highway Authority (document AS5). The layout of the proposed windfarm and associated constructional details are contained in the ES at figures 4.2 to 4.7, again subject to highway and access amendments agreed by letter of 9 January 1998 (document AS5). The proposals are also described in detail in document 1.50(ii).

3.2 In essence the proposed windfarm of 17 WTGs would take the form of two separate clusters of 10 and 7 turbines about 900m apart on the two rounded high points on the site. The former cluster is located at the northern end of the site on both sides of the lane running northwards to the A487.(T) and also adjoining the access tracks to the properties to the east. The other cluster of 7 WTGs is at the southern end between Trecoed and Langwarren with two on the west side of the lane to Jordanston. It is proposed to use horizontal axis turbines with 3 bladed rotors with a diameter of 44m mounted on a 38m tower giving an overall height to blade tip of 60m. The rated output would be 600 kW. The WTGs would be between 120m and 220m apart or 3 - 5 rotor diameters. All cabling would be underground and the substation would be sited next to the 33kV line. Two 38m high anemometry masts would be included in the development, one in each cluster. 3.5m wide site tracks and field entrances would serve the WTGs.

3.3 The development would occur in 3 phases; construction, operation and decommissioning. Construction would take place over 8 months and involve up to 400 heavy goods vehicle movements, a temporary 5000m² construction compound adjacent to the cross-roads in the centre of the site, 3 borrow pits to supply construction materials, and a maximum of 40 personnel. Construction traffic will not use the north-south lane through the site but would access the site from the Mathry (A487) to Scleddau (A40) road. Temporary fencing would be used around all excavations to confine activities to designated areas which would be reinstated by the end of this phase. The windfarm will operate for 25 years and provide employment for two engineers/fitters. The access tracks would be reduced to 3.5m wide, a grass cover would be established over the concrete foundations and all the land around the WTGs would remain undisturbed and in agricultural use. All above ground structures would be removed during the decommissioning phase.

4. National and Local Planning Policy Context

National Guidance

4.1 The principal sources of guidance on policy in Wales on renewable energy and, more particularly wind energy, are in Planning Guidance (Wales) Planning Policy 1999 (PGW) and the associated Technical Advice Note TAN 8. Extracts from these are in document AS2. The National Assembly has a duty under the Government of Wales Act 1998 to promote sustainable development. In respect of energy, paragraph 13.1 of PGW states that the Government's policy *is to stimulate the exploitation and development of renewable energy sources wherever they have prospects of being economically attractive and environmentally acceptable.* With regard to the countryside, this *should be protected for the sake of its landscape*, among other factors (para 5.1.1) and *the quality of the countryside outside statutorily designated areas should be maintained or, where possible, enhanced while allowing for appropriate development to be accommodated (para 5.3.5).* National Park Authorities, other public bodies and other relevant authorities have a statutory duty to have regard to National Park purposes (Environment Act 1995). These purposes are *to conserve and enhance their natural beauty, wildlife and cultural heritage, and to promote opportunities for public understanding and enjoyment of their special qualities* (para 5.3.6).

4.2 TAN 8 on renewable energy advises that modern wind turbines have distinctive features which must be taken into account in planning and development control, notably the need to site the machines in open, exposed locations often in rural areas which may also be in attractive landscapes, the nature of noise emissions from the turbines, the movement of the blades and considerations of safety and electro-magnetic interference. It is advised that *Local Planning Authorities must always* weigh the desirability of exploiting a clean, renewable energy resource against the visual impact on the landscape of wind turbines(para A44) and that in terms of visual impact wind turbine generators must be assessed with their particular and unusual characteristics in mind. The acceptability of wind turbine generators will be determined to a considerable extent by the form and pattern of the landscape within and adjoining a particular site (para A48).

4.3 A review of the development of UK national policy on renewable energy is set out in a number of documents, summarised in documents AS2 and 1.1(iii), at 1.2 to 1.9 and 1.42. As stated in the Government's conclusions in response to public consultation on New and Renewable Energy, Prospects for the 21st Century [DTI February 2000] (document 1.7), *Use of renewable energy sources is an essential element of the Government's climate change programme and renewable energy is set to make an increasingly important contribution to the provision of secure, diverse, competitive and sustainable energy supplies.* To this end the Government proposes that 5% of UK electricity requirements should be met from renewables by the end of the year 2003 and 10% by 2010. In respect of planning it is stated that *The planning system has an important role in helping to deliver the Government's targets and goals for renewable energy and climate change, which are central to achieving sustainable development, while continuing to protect the countryside.*

4.4 The above targets are reiterated in a document published later in 2000 on The Renewables Obligation by the DTI (document 1.42). This states, in addition, that *It is likely that the 5% target for 2003 will be met mostly from existing capacity and that contracted under the various NFFO arrangements. The Renewables Obligation will be the main mechanism through which progress will be made from 5% towards the 10% target.*

The Development Plan

4.5 The development plan for the area, for the purposes of S.54A of the Act, consists of the 1990

approved Dyfed Structure Plan (DSP) and the 1998 adopted North Pembrokeshire Local Plan (NPLP). The relevant provisions are set out in document AS2. The Structure Plan, at policy EN13, requires that all development should take full account of the urban or rural setting in terms of a range of criteria including scale, siting and design. Policy EN18 is specific to renewable energy and encourages such developments where they have regard to the character of the area among other factors. The Local Plan at policy EV14 is generally supportive of renewable energy proposals but refers specifically to policy EV16 in relation to larger windfarm developments (over 3 WTGs).

4.6 Under this policy these will only be permitted if they meet certain criteria in full. These include, of particular relevance in this case, criteria (A) *The size, siting, design, layout and materials used in the construction of the windfarm should conform to and not unacceptably dominate the landscape in either close or distant views* and (H) *There is no significant detrimental impact on the environment.* The written statement to this policy acknowledges the contribution of wind energy to the reduction in the dependence on non renewable energy sources and that it offers great potential as a clean source of energy. It also states that a balance must be struck between such development and the protection of the special character and generally fragile landscapes of the area.

Other Policy Guidance

4.7 The Pembrokeshire County Council's supplementary planning guidance on windfarm development of 1997 (documents CD6 and AS2) elaborates on the terms of NPLP policy EV16. It contains a list of sites where it would not be expected that a windfarm would be permitted, largely those with an amenity or conservation designation and states that account will be taken of impact on the National Park. It suggests that the lack of distinctive features within the Plan area's landscape make it vulnerable to domination by large scale structures and that open landscapes have less ability to absorb the visual impact of a windfarm. The criteria set out in policy EV16 are expanded upon.

4.8 The provisions of the Pembrokeshire Coast National Park (PCNP) Local Plan (document CD 13), adopted in April 1999, provides a context for the response of the PCNP Authority, to the proposed development. Policy NPI seeks to ensure that all development is compatible with the statutory purposes of the NP. Policy LTNP10 supports proposals for renewable energy generation provided it is done in an environmentally acceptable way and does not create conflict with the NP objectives. Policy UNPI I states that wind energy development should not have a significant adverse effect on the NP's special designation or purposes and provided a range of criteria are met in full.

5. The Case for National Wind Power Ltd

The material points are:

Introduction

5.1 The determination of this appeal is concerned with the balance to be struck between the benefits

at a national and local level of renewable energy development and of this proposal and such adverse environmental effects of the proposed development as may be found and considered significant. The core elements of Government policy on the benefits of wind energy as a renewable resource have been consistent since 1988. However the importance to which the Government attaches to these has increased markedly especially since February 2000. The February 2000 publication on new and renewable energy prospects (document 1.7) represents a clear and unambiguous confirmation of a Government commitment to the deployment of renewable energy. This is echoed in a debate on the subject in the National Assembly for Wales (document 1.10).

5.2 The pre-inquiry meeting identified the main issue of the inquiry (document v) as the impact of the proposed windfarm on the landscape of the area with particular reference to the landscape of the immediate area and the visual amenities of nearby communities, the effect on the landscape and character of the National Park and the effect on the tourist industry. The submitted evidence notes that this scheme will give rise to locally significant landscape and visual effects. Of themselves these are not a seriously negative finding against the proposal. It is impossible to envisage any scheme for the generation of electricity which would not give rise to locally, and perhaps further afield, significant effects on one or more receptors within the environment. The view is taken that the locally significant effects of this proposal are purely related to landscape and visual effects which must be weighed in the balance with the policies on renewable energy.

Wind Energy Development in the UK and the Proposed Development

5.3 Background information on the appellant Company, the wind industry in the UK, the way in which energy is produced from the wind and the appeal proposal is set out in documents 1.1(i) and (ii). In brief, National Wind Power (NWP) has built up a considerable portfolio of wind power projects in the UK and overseas, including the largest in terms of power output in the UK at Carno, Powys. The appeal proposal has to be seen in the context of a rapid growth in renewable resources in Europe and evolving technology which has seen the use of progressively larger machines. The current installed total wind capacity in the UK is only 379 MW compared with Germany, with a lower available wind resource, of 4,636 MW. The wind resource in the UK is the best in Europe with wind speeds highest on the coast and upland areas. The earliest machines have a total rated power output of 300 kW with a height to blade tip of 42m while the latest NWP scheme has 1.3 MW machines with a height of 74m.

5.4 In the case of the appeal proposal the installed capacity of the machines would be 600 kW each which would operate at about 32% of the rated capacity. The wind farm would produce, on this basis, 28,622 MWh/year; the equivalent of the domestic electricity needs of some 7,938 households. Although this is an intermittent source of electricity it would displace units produced much further afield by more centralised methods which involve transmission losses. A detailed description of the proposed development is provided at documents AS1, 1.1(ii), 1.50(ii) and in the ES (documents CD 10 and 11). These have been summarised in Section 3 above. There is scope to change the precise siting of the WTGs by up to about 20m as their location on the application plan is shown by circles about 35m across. The micrositing of the WTGS would need to be established following ground surveys, especially in relation to badger setts, provided they were not moved closer to properties.

5.5 The benefits of the development in energy terms are set out in document 1.1(iv). In essence the benefits of using wind energy for the generation of electricity is that it is renewable, safe and does

not release any gaseous emissions. It also provides for diversity and security of supply. Renewable sources dependant on the weather operate only when the resource is actually available when all the electricity generated is taken into the grid and displaces units from conventional, usually fossil fuel, systems. On this basis and using a capacity factor of 32%, the proposed windfarm would produce annual savings of 27,019 tonnes of CO_2 , 321 tonnes of SO_2 and 122 tonnes of NO_x . The payback period in terms of energy needed to create the WTGs in the first place can be as little as 3 months. In addition renewable energy is consumed locally and in this case would supply the domestic power needs of around 7,938 households. There are also the potential benefits of the construction work, about £8m, which would as far as possible be sourced locally as well as rental payments to the landowners. The scheme would be an element in the Government strategy of securing 5% of the national demand from renewables by 2003.

Policy Framework for Renewable Energy Sources

5.6 A detailed examination of the international background and national policy framework for renewable energy sources is provided at document 1.1(iii) with extracts from the relevant publications at documents 1.2 to 1.16 and 1.42 and 1.43. Briefly, international, European and UK policies have over the last 12 years become more focussed on the concerns about global warming. The use of renewables as an increasing proportion of total energy consumption is seen as a key part of the ultimate sustainable solution alongside energy efficiency and conservation. The UK is a signatory to the Rio and Kyoto Earth Summits and the EU have set their own more ambitious targets. It is noted that Europe is now the world leader in wind energy with more than half the installed capacity coming into operation in the last 5 years.

5.7 Successive UK Governments have responded with a positive programme of measures to encourage the development of a UK renewable energy industry including price support through the Non-Fossil Fuel Obligation (NFFO). Since 1997 the Government is even more committed to the concept and has made significant steps towards setting ambitious new targets. The publication of New and Renewable Energy: prospects for the 21st Century (documents 1.7 and 1.42) makes it clear that onshore wind remains a key component of the overall provision of energy from renewable sources. The change of direction away from the NFFO system towards the imposition of a renewables obligation on the electricity suppliers is noted. A news release of June 2000 (document 1.9) sets out the Government's latest position on a range of measures to cut greenhouse gas emissions in a response to the Royal Commission Report on Energy - The Changing Climate, including the target of 10% of electricity to be provided from renewable sources by 2010.

5.8 The National Assembly for Wales has contributed to the debate on renewable energy. A motion was carried (document 1.10) that recognised the major opportunities in Wales for a dynamic renewable energy industry and called upon statutory bodies to co-operate positively in the advancement of the industry.

5.9 The proposed development has a contract under the 3rd NFFO Order announced in December 1994 (document 1.11). These contracts are awarded for the supply of electricity from a wide range of renewable sources under a system of subsidies of different prices for different technologies and lengths of time. A plan showing the position in Wales is at document 1.11. This shows that operational projects account for 705MW(dcn) out of a total of 3271MW(dcn) identified in the contracts. Up to NFF03 only 17 out of the 55 schemes have been achieved with 27% of the capacity

commissioned. This highlights the point that far more needs to be done to achieve the level of implementation required to meet the targets that have been set and the difficulties in getting the schemes through the planning system. Each of NFF04 and 5 are more than double the total in NFF03. This shows that the failure of a number of wind schemes to achieve planning permission has not caused the Government to deviate from their approach and that the planning system is the biggest hurdle these schemes have to face.

5.10 The relevant provisions of national planning policy and advice on renewable energy are set out in document 1.1 (v) and documents 1.13 to 1.16. Planning Guidance (Wales) and TAN8 parallel PPG22 for England in setting out a range of comments on the key issues that have to be addressed in dealing with proposals for renewable energy sources (see also section 4 above). This gives the framework under which local planning authorities have to prepare development plans. The Government's response to the Welsh Affairs Committee's Report on Wind Energy (1994, document 1.15) rejects the suggestion that there should be presumption as a matter of policy against windfarms in or visible from designated areas such as National Parks. Both the Countryside Commission and Countryside Council for Wales (CCV) have produced guidance on wind energy which places landscape protection above all other considerations, advocates that all designated landscapes should be free of WTGs and proposes that lower wind speed areas should be used instead.

Findings of Planning Appeal Decisions

5.11 A review of a number of appeal decisions relating to windfarms in England and Wales is provided at document 1.1(vi) and documents 1.17 to 1.28. Recent decisions provide an indication of the way in which the balance is being struck between the need to use sources of renewable energy and the impact they would have on the local environment and properties. The first decision on the matter, regarding Mynydd-y-Cemmaes in 1991, remains instructive. It was noted that it was not appropriate to test government energy policy through a public inquiry and it was concluded that, although near a National Park, any harm to the landscape was outweighed by the need for renewable energy. Succeeding decisions have produced differing results depending on the landscape involved and issues of noise and domination of property. One general finding of the 9 most recent decisions is that rural, treeless and elevated locations are bound to be the most favoured even if they are often likely to attract landscape designations of some level. The need for the development as part of national policy is a feature in every decision as is the recognition that even modest contributions to electricity generation and reductions in emissions are relevant. They show that landscape visual impact is a subjective one although various tools and the ZVI (zone of visual influence) concept effectively address the objective basis of assessment.

5.12 There have been 6 appeal and call-in decisions in Wales since 1991. There is a concentration of operating sites in the Mid-Wales area and in Anglesey. The pattern of contracts is different but reflect 2 key features; that the sites are in rural, windswept locations and prospective developers have avoided proposals in National Parks.

The Development Plan and Local Planning Policies and Guidance

5.13 Document 1.1(vii) discusses in detail the range of local policies and published guidance of

relevance to this proposal. In summary, the Dyfed Structure Plan adopted in 1989 (document CDl) provides the strategic policy advice for the proposal but predates the development of windfarms in the UK. However policy EN18 supports renewable energy developments in principle provided they meet a number of criteria. Various other policies relate to historic features, ecological matters, areas of special landscape and EN13 on the need for development to have regard to the character of its urban or rural setting.

5.14 In terms of local planning policies, the North Pembrokeshire Local Plan was adopted in 1998 (document CD2) and has spec policies dealing with renewable energy and wind energy proposals. Details are provided on the evolution of the key policies EV14 and EV16 in documents 1.1 (vii) and CD3. These policies are supportive in principle and set out issues that have to be addressed in order to secure approval for a scheme. The deposit version of the plan identified 5 preliminary search areas for possible windfarm sites. Two of these were west of the Preseli Hills at Ysgubor Mountain and near Letterston, two more were west of Haverfordwest and north-east of Milford Haven. However these search areas were deleted and policy EV16 underwent textual changes. A number of the findings of the Inspector who held the local plan inquiry are of relevance given the wide range of objections both for and against wind energy in particular. Policies to control development just on the fringes of the National Park and a policy presumption against windfarms in certain areas were ruled out He accepted that windfarms should not be barred as a matter of principle despite the high quality of a landscape and that there would inevitably be landscape change if a windfarm were to be built He doubted whether limited windfarm development would be detrimental to tourism.

5.15 Policy EV14 is a general policy that covers all renewable energy developments and overlaps with policy EV16 which deals with larger wind energy sites only. The first criteria of this policy, (A), relates to the size, siting, design and materials which should conform to and not unacceptably dominate the landscape in close or distant views. Criteria (H) on the environment cannot be distinguished from the domination issue in (A). The supporting text is clear that term "size" relates to the extent of the development and not the WTGs. The term "domination" could be taken to mean "overwhelm" a landscape in distant views. The effect on close views depends on where the views are from. However windfarms by their nature will always dominate close views but need to be placed in the landscape context. This proposal of 17 WTGs is less than half the maximum of 30-40 referred to in this policy.

5.16 The proximity of this proposal to the National Park is a material consideration, although the provisions of the Pembrokeshire Coast National Park Local Plan (document CD13) do not apply to the appeal site. The extent to which a development will affect the setting of a National Park is a question of judgement on a site by site basis. Its policies on renewable energy demonstrate that it is highly unlikely that a major windfarm development will be successfully promoted within the National Park.

5.17 The 1993 Dyfed CC guidelines on wind energy (document CD7) can have only limited weight as they are not part of the development plan and go much further than the current adopted Local Plan policies. They rule out a far wider range of sites as a matter of principle than the latter. The Pembrokeshire CC Supplementary Planning Guidance of 1997 (document CD6) elaborates on the terms of the policies in the, then, emerging Local Plan. There is potential conflict between the terms of this advice and the actual adopted policies- in that its general presumption against a wide range of specific areas goes much further. 5.18 In respect of local landscape and visual impact policies, there are none that rule out a development such as this merely because it is near an Area of Special Landscape Value (ASLV), an AONB or National Park. There are a number of examples where windfarms have been permitted within ASLV status or in close proximity to a National Park. For instance in Cornwall 4 out of the 6 windfarms are in designated landscapes. In all such cases there has been a balance between the impact on the wider landscape and in the perception of those who live relatively close by against the national need to develop renewable energy resources wherever they occur. Any windfarm will have an impact on its surrounding landscape because of its intrinsic features and site specific requirements.

5.19 With regard to the effect of the proposal on properties in the area, no-one has a right to a view. Also any loss of property value that may arise from a development is not in itself a material planning consideration. In reality it is very difficult to find locations for WTGs in landscapes that are even sparsely settled that will not have some visual impact or some impingement of a view. It is necessary in such cases to assess the extent, scale and seriousness of that impact.

5.20 The general conclusions on policy matters are that the Government anticipates a significant contribution from wind energy towards future energy needs. This can only be harnessed under particular favourable wind regimes. The NFFO contracts inevitably concentrate on certain areas and those awarded to date to sites in Pembrokeshire indicate an expectation that the County will make a contribution towards national supply. The planning decisions on wind energy proposals linked with the TAN and other guidance set a firm framework within which a proper balance has to be struck between the need for renewable energy and local environmental considerations.

Site Selection

5.21 The 1999 Environmental Assessment regulations raise the question of how alternative sites have been considered, although the national policy framework suggests that renewable energy resources can only be developed where they occur and where it is economically attractive to harness them. However there is no requirement to demonstrate whether there are any better sites. In reality only the coastal and upland areas with the necessary windspeeds can be considered. Document 1.1 (viii) details the way in which the appeal site was selected and discusses the constraints placed upon the actual selection of sites for windfarms. A number of potential sites in North Pembrokeshire have been investigated, including Mynydd Cilceffith which was also refused planning permission having secured a NFF03 contract. However it raised issues of cumulative impact with this appeal proposal. A site on Mynedd Castlebythe was not pursued as it fell within a National Park extension area in 1995. Ysgubor Mountain did not secure a NFFO contract as it was not as commercially viable. A site at Eglwyswrw was within the proposed areas of search but had a low average wind speed.

5.22 The areas of the County that might provide a windfarm site are very limited if account is taken of areas within 2.7km of the National Park and within 500m of every town and settlement (see map at document 1.29), and the safeguarding of airfields. Nationally the selection of sites is far more complex than suggested by the Countryside Commission. Because of the requirement for access to the appropriate wind resource, the usual measures of siting and landscape protection measures cannot be employed and by their nature windfarms have generally been sited in rural areas. Many other factors have to be taken into account including landscape constraints, settlement pattern, noise

impacts, visual amenity from properties, access for construction traffic, driver distraction from roads, archaeology, electromagnetic interference, connection to the grid and a willing landowner.

5.23 An analysis has been carried out to test the availability of sites in an area of apparently favourable wind-speeds. This demonstrated the inherent constraints of settlement pattern. A similar exercise in Pembrokeshire highlighted the difficulties in identifying sites with sufficient separation from dwellings to achieve even a modest amount of development. Thus the potential harnessing of the resource is very constrained by key planning factors. The loss of half of the NFF02 schemes largely due to planning problems highlights the difficulties in this respect.

Public Perception and Impact on Tourism

5.24 Public attitudes towards windfarms have been the subject of a number of studies. These are detailed in document 1.1(ix) and documents 1.31-1.33 and have been carried out throughout the UK both for developers and for independent bodies such as the BBC and Countryside Council for Wales (CCW). These show a high proportion of respondents support wind energy development. A key point from the findings of a survey of people living close to one of the 4 Scottish windfarms was that concerns prior to construction were largely dissipated once it was operating.

5.25 In relation to the potential impact on tourism, experience gained in Cornwall and from surveys carried out in Cornwall, Anglesey and Cumbria, detailed in documents 1.1(ix), show that no apparent harm has been identified as a result of windfarm development. The evidence of thousands of visitors to the interpretation centres in Cornwall and the lack of any impact on overall visitor numbers suggests that harm to the tourist industry is not a likely result. From surveys of visitor numbers and attitudes carried out in Cornwall, Cumbria and Anglesey it is clear that the presence of windfarms has not had any identifiable effect on the attitudes of those taking holidays there. The high rating that is given by visitors to the scenic beauty of the area and the lack of reference to windfarms as a negative influence feature strongly in the surveys. In both Cornwall and Anglesey repeat bookings were high while in Cumbria visits to tourist attractions outside the National Park have risen significantly.

5.26 Much of what has been said about the effect of tourism appears to be based on personal views as to fears about what might happen. But this appears to rely largely on a questionnaire completely lacking in objectivity. On the other hand the simple and objective survey of 100 tourism businesses operating in areas where windfarms are in existence show an upward trend with none blaming a windfarm for a loss of trade. Pembrokeshire visitors are no different from those going to these other areas that have high rates of return visits and customer loyalty. The economic characteristics and tourism situation are very similar in Cornwall and Pembrokeshire.

5.27 In respect of general recreation, there are very few rights of way available to walkers and riders in the area around the appeal site, with just two short lengths in or adjoining the site (document 2.2). The presence of a windfarm does not in itself mean that there is a negative effect as shown in a publication on walks in the Dovey valley which includes Mynydd-yCemmaes windfarm as a destination (document 1.40) and in a guide for visitors to renewable energy schemes in Wales (document 1.39). Although the National Park. is a prime recreational resource, the main footpath through it is on the coast with no direct association with the area around the appeal site.

Landscape and visual Assessment

Method of assessment

5.28 The method for assessing the landscape and visual effects on the landscape and visual amenity are described in detail in documents 1.53 and 1.50(i) This combines current guidelines for landscape and visual assessment (including document CD14) with experience and professional judgement. It involves information review, fieldwork observations and photography, computer-based data processing and analysis and subjective professional judgement. This is undertaken in several stages: the visual characteristics of the development, the landscape context, a visual assessment, and an assessment of effects.

Construction and development visual impacts

5.29 A description of the 3 phases of the proposed development is set out in document 1.50(ii). The limited extent of the disturbance to the ground, the short duration (8 months) and the reinstatement of the working areas will ensure that the effects of the construction phase on the landscape of the site and the visual amenity of the locality will be minimised. During operation, the scheme achieves many of the recommendations for WTG design and layout in TAN8, the CCW and County Council guidelines. Thus the development is in 2 small clusters around two high points, most WTGs are alongside field boundaries and will respect the grain and form of the landscape. The scheme will also minimise visual clutter in the landscape as most elements would be underground or incorporated within the base of the WTGs, the width and number of site tracks would be minimised and the substation would be finished in traditional materials which would be next to a suitable grid connection. Thus the new site entrances, substation and anemometry masts are unlikely to have significant effects on the landscape and any visual and landscape impact would be confined to the WTGs. It is acknowledged that the movement of the WTGs is not expressly specified as a factor in the visual assessment of the development. Decommissioning would remove all above ground structures.

Landscape context

5.30 The landscape character of the study area, within a 20km radius of the appeal site, is described in detail in documents 1.49 and 1.50(ii). Briefly, the North Pembrokeshire landscape has been previously studied and analysed in 2 studies in 1992 and 1996 (documents CD15 and 16) and for the ES in the Cilciffeth Windfarm proposal. These characterised the landscape slightly differently and so further fieldwork and assessment have been carried out. As a result the study area is characterised into 6 landscape character types. These have some similarity with the other studies but are more extensive. Each landscape type is described in terms of its character, landscape designations, the location of visual receptors, the nature of the views, a subjective assessment of the physical and aesthetic landscape quality of each, and the sensitivity of each to wind energy development. The 6 types are illustrated at document 1.51 figure 2. It is accepted that this plan is not detailed, but identifies broad scale character areas, and that the hills on St David's Head have been omitted.

5.31 In this case there are two generic regional landscape types, the Coastal Plateau and the Preseli Hills. The 6 landscape areas within these are, the Preseli Hills, Preseli outliers, isolated hills with rocky crags, steep-sided and wooded valleys, rolling coastal plateau, and the coastal plateau edge

with cliffs. These are described in detail in documents 1.49 and 1.50(iii). The appeal site and its surroundings are in the rolling coastal plateau. This character type is extensive, with rolling topography, long shallow valleys, a patchwork of fields, winding lanes, small scattered settlements and farms and high hedgebanks topped with scrubby vegetation. There are few trees in the landscape and the Western Cleddau Area of Special Landscape Value (ASLV) is just to the south of the site. Visual receptors include local residents, motorists on the A40 and A487, rail travellers on the line to Fishguard, horseriders, walkers on local footpaths and visitors to Priskilly golf course. Because of the hedgebanks and rolling topography views are variable and mainly short and medium distance. The landscape quality varies between medium to high depending upon the built development and rural landscape condition. It lacks the drama of other landscape types and is neither remote nor wild but is man modified. It is considered that the sensitivity of this landscape to wind energy developments is medium to high where the landscape is of small to medium scale, of high quality with few detracting elements. It has medium sensitivity where the landscape is already developed and the wind energy development would be part of a middle distance view.

Visual assessment

5.32 The potential effects of the WTGs on landscape and visual amenity have been analysed by assessing the potential visibility on the basis of topography and then by undertaking a viewpoint analysis. These are described in document 1.50(iv). The Zone of Visual Influence (ZVI) in the ES, which shows the main locations within the study area within which topography would permit views of the WTGs, was revised following the reduction of tower height to 38m. The ZVIs for the 20km and l0km radius areas are shown on figures 3 and 3.1 of document 1.51. These are divided into 4 zones where none or at least parts of 1-6, 7-12 and 13-17 of the WTGs may be visible. Figure 3.2 of document 1.51 divides the latter zone into 4 categories depending upon how much of 13-17 WTGs would be visible. Comments on the interpretation of the ZVIs are at document 1.64.

5.33 In reality the screening effects of local topographic and landscape features will reduce the size of these zones and reduce the extent and number of WTGs visible from any one location. However these ZVIs show the following. At a distance of 10-20km from the site the topography would screen views of the WTGs from most of this zone. Inside this ZVI are small patches of rolling coastal plateau and of the west facing slopes of some Preseli Hills and outliers, the isolated hills near St David's Head and short sections of coastal edge. These are within the National Park and include some 31m of coastal path, mainly on Dinas Head. Some settlements are also within this zone. At a distance of 5-10km from the site the ZVI includes higher parts of the Plateau, west facing slopes of the Preselis and 3 of the outlier hills. Short sections of the coastal zone are also within the ZVI which is within the National Park and include about 6km of coastal path. It also includes the settlements of Goodwick, Trecwn and Penparc, scattered residential properties, sections of the local footpath and bridleway network, a short section of the A40, the B4330 and several minor roads. From most of these locations the lower half of the towers of some of the WTGs would be screened and the only locations where at least 13 entire WTGs would be visible are some of the area between

Mathry and Croes-goch, the high ground at Treffgarne to the south, and from 3 Preseli outliers as well as sections of minor road.

5.34 About 80% of the area within 5km of the site would be within the ZVI from which there would be views of at least some of the WTGs. This zone of visibility would include a part of the National Park around Aber Mawr with some 2km of coastal path and a 4km section of the coastal area. Also included would be a number of settlements, notably Letterston, Mathry, Scleddau and Castlemorris, Priskilly golf course, scattered properties and sections of local footpath, bridleway and road network. The latter would include the A40, A487 and B4331. However in most locations where at least 13 WTGs would be visible, the lower half would be screened while the area from which at least 13 or more complete WTGs would be visible would be confined to Letterston, parts of the site itself, south-west of Priskilly golf course around Mathry and Llangloffan. In reality the screening effects of local features will reduce the size of most of these zones and the number and extent of WTGs likely to be visible from any one location.

5.35 A number of representative viewpoints for the purpose of visual analysis of the development have been agreed with the Council, shown on figure 4 document 1.51 and as explained in document CD12 relating to the scoping study. Existing and predicted views from these 9 points are at figures 5a-i of document 1.51. The method of assessing receptor sensitivity, the magnitude of predicted change and the significance of the overall effect of the proposed development is described in detail in documents 1.50(iv), and 1.53. Table 4 of the former summarises the results of the viewpoint analysis for fixed and linear route receptors. A judgement is made as to the sensitivity of a visual receptor. In this case residents, those at scenic vantage points, users of national linear routes and users of signed scenic routes are considered to have high sensitivity. The magnitude of the change in the view as a result of the wind farm development depends upon the distance from the development, the extent it would be visible, the proportion of field occupied, the scale and character of the landscape, the extent of other development and the duration of view. The final assessment of predicted effects can be made using a matrix so that, for instance, high sensitivity combined with major magnitude of change results in major effects. The summary of the viewpoint analysis shows major predicted effects on visual amenity from the viewpoint on the A40 just north of Letterston and major to moderate effects from Mathry village green.

Assessment of effects

5.36 The effects on the landscape fabric of the site will not be significant as there would be a land take of only 1 % and several new gateways in hedgebanks which would be reversible on decommissioning. In respect of landscape character there would be significant effects at 3 of the viewpoints; the A40 north of Letterston, the bridleway near Priskilly golf course and Mathry village green. There would not be significant effects from Goodwick due to the urban landscape nor from Garn Fawr in the National Park due to distance. With regard to landscape areas, there would be significant effects on the landscape of the higher parts of the rolling coastal plateau within the triangle formed by Mathry to the north of the A487 near Manorowen and east to the A40 at Letterston. Even within this zone the number and parts of the WTGs that would be visible would be quite variable. Beyond this area there are no views of the WTGs or they would be too distant to change the landscape character. The wind farm would not significantly affect the landscape character of parts of the Western Cleddau ASLV which has some wooded screening and from the Great Treffgarne to Plumstone ASLV the WTGs would be too distant to have a significant effect. In

respect of the landscape of National Park, most of the Park is too distant for effects on its landscape character to be significant although there would be a significant effect on the two rounded hills on either side of Aber Mawr to the west. In general this proposal would not dominate the character and essential qualities of the National Park.

5.37 In relation to visual receptors in the study area, there will be significant effects on the visual amenity of residents influenced mainly by distance from the site, views from properties and the landscape context. Comments on views of the proposed development from a number of local properties around the site are contained in document 1.63 and cross sections from the nearest properties to the WTGs are provided at document 1.46. The lines of sight on the latter do not take into account any intervening trees or hedges. The views from some properties quite close to the site, such as at Llangloffan and Llangwarren will be largely screened by vegetation. Similarly topography around Jordanston Hill would partly screen views. However most of the landowners would have clear views of the WTGs and it was confirmed that properties with open views of the site would be significant effects on the visual amenity of some residents on the eastern side of Mathry and just to the north of the A487, on the site and its surroundings, on the western side of Scleddau, on either side of the A40, on the northern side of Letterston and in Castlemorris.

5.38 However there would not be a significant effect on visitors to the scenic vantage points in the study area (shown on the map at document 1.58 in respect of the National Park) as in the panoramic views from them the proposed wind farm would not be the focal point and would occupy a very small proportion of the view. In respect of walkers on the coastal path, there would be views of the WTGs from about lOkm, some 3% of the total length, mainly southwest of Gars Fawr to Trefm. However only parts of the WTGs would be visible in the middle to far distance and would not be the focal point in any views from it. Thus any effect would not be significant. There would be significant effects on the visual amenity of walkers and horse riders on some of the local footpaths and bridleways and of motorists on short sections of the A40, A487, the B4331 and the network of minor lanes.

5.39 It is unlikely that a proposal to site a new wind energy development in the UK would not result in some significant effects on the landscape character and visual amenity of the immediate locality. However significant effects are not necessarily adverse. In this case the landscape of the site and its surroundings has a sense of neatness and manmade order defined by the field pattern. The WTGs would be elegant structures and sited to reflect the form of the landscape. They would be adequately absorbed into the landscape in views from the residential properties in the area, from short sections of the public rights of way network and from scenic vantage points in the National Park and Treffgarne Mountain ASLV. It is therefore considered that this development would be acceptable in this location.

Ecological Matters and Badgers

5.40 The national guidance in TAN8 suggests that the effects of the windfarm on the ecology of the area are likely to be minimal as most of the land would be left undisturbed. The ES addresses this in some detail (document CD10 section 8). This suggests that there would be minimal danger to bird life and that no animals would be affected. Reference is made to an article on birds and wind turbines (document 1.48) on the subject. However in the light of comments received about badgers,

a confidential report on the subject was commissioned and a survey carried out in 1997 (document CD10 volume 4). This satisfied the Council and no reason for refusal related to this subject.

5.41 In view of later comments from the West Wales Badger Group a further survey was carried out in October 2000 which is detailed in document 1.66(ii). The results show that there is a thriving badger population using the appeal site and the surrounding area. There is a well occupied stretch of countryside here. It is very difficult to provide population estimates but there are dozens of animals within 2km². There are about 6 main setts within the main study area, about 12 subsidiary Betts and some 100 outliers at any one time, about a third of which have been recently used. Between 1997 and 2000 the overall amount of badger activity has remained relatively steady. The main setts have been stable but there have been many detailed changes in the location and use of smaller Betts, activities and location of home ranges. The setts are almost invariably within field boundaries or other banks due to the waterlogged fields and construction of dry, well-drained hedgebanks typically made of- local stone in a double wall with earth and rubble filling. It is likely therefore that all tunnels are contained within the banks and do not go under the fields. The number of latrine areas and main Betts would indicate that the badgers on the site comprise several, 5 to 6, social groups, but territorial disputes would be likely.

5.42 The windfarm construction would need to fully take account of an up to date survey of badger activity. The WTGs take up a much smaller area than shown on the site plan. This means that the precise location of the WTGs have been envisaged as sufficiently flexible to ensure that construction activity is removed 20m or more from the nearest sett entrance. In a few cases the location of accesses are fixed but these would have no effect on current badger setts but may give rise to the need for licensed exclusion from outlier setts should animals open new ones. Larger setts are unlikely to be built anew because they are more stable in location and tend to avoid boundaries with the public highway.

5.43 A number of measures will be put in place that will avoid significant impacts during construction. These are detailed in document 1.66(iii) and a CCW guide for developers (document 3.22). In essence any activity within 10m of a sett entrance will require means to avoid harming the animals to be implemented under license from the Countryside Council for Wales (CCW). Within 20m of a sett entrance licensed work can be carried out using certain machinery under close supervision. The purpose of these distance guidelines is to avoid direct impacts on setts and the animals. Any license should be based on a detailed survey of the setts that could be potentially disturbed with any contingency measures. Licensed work is seasonally restricted to between July and November. Where there are fixed points of access from a highway, licensed exclusion of any animal occupying an outlier sets may be required before construction starts. All construction work would take place during daylight when badgers are not active as foraging takes place at night. Only a small proportion of the foraging area would be disturbed, but measures such as exit ramps would be needed to allow animals free egress from any open excavations. Badger-proof fencing is unlikely to be effective.

Other Technical Matters

5.44 The ES addresses a number of other issues, including geology, archaeology, noise, traffic, electromagnetic interference and safety, in some detail (document CD 10, sections 6, 9, 10 and 11). The ES concludes, in respect of noise, that the impact arising from the WTGs would be negligible

and discussion has taken place with officers of the Council. It is considered that there would be no breach of the criteria regarding noise in c-tnnection with windfarms and appropriate conditions can be applied to ensure the noise cont als are in place (see Council's memorandum at document CD5a).

5.45 An archaeological study has been carried out and there is no objection from CADW. A condition can be imposed to provide a watching brief over works on the site. By their nature WTGs have to be designed for safe operation in extreme windy conditions. There have been occasional instances of the loss of part of a blade and storm damage occurred at Cemmaes during the most extreme wind conditions ever recorded. Technical issues regarding two bladed machines are not applicable in this instance. There have been no recorded instances of death or injury from being struck by a part of a blade out of more than 20,000 WTGs in the world. The minimal separation distance between dwellings and WTGs will always be much more than that necessary to meet safety standards while on a number of approved sites the public are able to walk right up to the base of WTGs. The BBC in their consultation response comments on the possibility of television interference. This can be dealt with by way of a survey and remedial measures.

Conditions

5.46 Suggestions as to conditions to be attached to any grant of planning permission in the event of a successful appeal are at document 1.41. These have been the subject of further discussion and amplification (document CD17) as a result of which a final agreed set of conditions is produced (CD 18).

Overall Conclusions

5.47 National energy policy is not for debate in this appeal. Although the CPRW welcomes renewable energy, it has objected to every windfarm proposal in Wales and has adopted a policy that would lead inevitably to objections to all future rural windfarms. All evidence is therefore coloured by this outright opposition. CCW's 1999 policy on windfarms, which includes a policy that they should not be sited on highly visible hill crests and skylines, would result in no wind energy development if fully implemented as any windfarm development would present skyline views. Little weight should be attributed to such a policy.

5.48 In striking a balance between the need for and benefits of the proposed development and perceived local environmental impacts it is necessary to examine the policies in the development plan. Structure Plan policy EN18 is criteria based but does not advise on such a balance. Policy EV16 of the Local Plan is similarly criteria based but allows for no balance to be struck if the criteria are not met in full. In respect of criterion EV16A there appears to be no dispute as to the design, layout and materials used proposed for the windfarm. The primary issue is whether or not what is proposed does conform to and not unacceptably dominate the landscape in either close or

distant views. The term "conform" means to respect and there is consensus that views within 2kms must be regarded as close with the potential for dominance of the landscape. It is accepted by the Council that some element of domination of the landscape is inevitable in the case of wind energy development, especially in view of the distinctive verticality of WTGs and their characteristic of

movement.

5.49 It is submitted that this proposal fulfils the advice in policy EV16(A). It would respect the character of the landscape and any local domination of the landscape would be acceptable, including that of the effects on linear receptors. There would be no dominance beyond 2kms. This policy has been promoted by the Council in the context of a scattered settlement pattern within the whole of the district and the fact that escape from proximity to dwellings would be impossible. No other policies in the development plan would be breached if permission were to be granted. In relation to the purposes of the National Park, the landscape and visual effects of the proposed development would not prejudice these. The provisions of the development plan are therefore complied with.

5.50 However if this were not the case there are other off-setting material considerations. There has been a step change in the Government's approach to renewable energy since 1997. Renewables are an essential ingredient of the climate change programme and there is a challenging target of 5% of the UK's electricity requirements from renewables by the end of 2003 which will be met mostly from existing capacity and NFFO contracts. This is a positive and clear approach which should be given very considerable weight. Furthermore the NAW recognises the major opportunities in Wales for a dynamic renewable energy industry and calls upon CCW and local authorities to co-operate positively in the advancement of the industry. Thus the need for and benefits of the proposed development outweigh any breach of the development plan provisions.

6. The Case for Pembrokeshire County Council, Pembrokeshire Coast National Park and the Countryside Council for Wales

The material points are:

Planning Policy

6.1 The agreed statement on planning policy (document AS2) contains all the relevant sources of policy guidance. The development plan for the purposes of Section 54A is constituted by-the 1990 Dyfed Structure Plan and the 1998 North Pembrokeshire Local Plan. The latter must be afforded particular weight as being recently adopted including a rigorous testing of the policies, particularly those related to wind power. Policy EV16 deals specifically with proposals for windfarm development and is criteria based; all nine of which have to be met in full. It was agreed that, in this case, there was no conflict with criteria B to G. Criteria H and I, in effect, could be subsumed within criteria A. In respect of the latter, the main concern is the location of the proposed windfwm. Under the terms of this criteria it is accepted that it is implicit that dominance can be acceptable. The definition of close and distant views is a matter of judgement but the former could be within 2kms and the latter could be over 5kms.

6.2 It is recognised that there are elements of policy guidance in PGW which seek to stimulate the exploitation and development of renewable energy sources and that their contribution on reducing emissions of greenhouse gasses should be considered. However this policy support is not unqualified. More particularly one of the objectives of sustainable development is the effective

protection of the environment; the countryside should be protected for the sake of its landscape and its quality should be maintained and, where possible, enhanced; and the development of renewable energy sources should be stimulated wherever they are economically attractive and environmentally acceptable. National guidance therefore seeks a balance between exploitation of renewable energy sources and the need to protect the environment generally and the countryside in particular.

6.3 Local planning policies place even greater emphasis on the protection of the landscape character of North Pembrokeshire. This is seen as the area's primary resource and is reflected in the general thrust of the Local Plan (see document 2.1, paragraph 2.10 and the supporting text of policy EV16). The Local Plan policies on windfarms were a particular issue at the local plan inquiry in 1994/5 (document CD3). In the report of the Inspector it is commented that the scenery is particularly beautiful, an important factor in the attraction of tourists, and that extensive windfarm development could change perceptions of the area which could undermine the tourist industry. It can be concluded that the policies on windfarm development in the Local Plan have been carefully worded to suit the particular circumstances of the area

The Planning Application

6.4 The responses from bodies consulted on the application in 1997 are summarised in the Committee Report of January 1998 (document CD5). Two themes emerge from this. One is opposition to the appeal project shared by all bodies whose remit includes responsibility for landscape including CCW, PCNPA, Council for National Parks and the CPRW. CCW has a statutory role in this connection and under the supplementary planning guidance on windfarm development, the Council will take into account any impact on the National Park. This unanimity of opinion on the unacceptable harm which the appeal proposal would cause should carry significant weight. The second theme is that the technical consultation responses did not give rise to any fundamental objection but indicated the need for certain conditions and clarification. The Committee report also summarised the representations received from the public and other organisations (reproduced in full at document iv). This demonstrated an overwhelming opposition from a mix of people living in the County (some in the immediate area), from others living elsewhere and from special interest organisations such as the Ramblers and those concerned with tourism. The Council are aware of the benefits to be derived from the use of renewable energy but in this case it was considered that the benefits were not sufficient to outweigh the objections and breach of policy.

Impact on the Pembrokeshire Coast National Park

6.5 The National Park is unique in England and Wales in being designated primarily for the beauty of its varied coastal landscapes that stretch for 240kms (map at document 2.7). The twin statutory purposes of the Park are to conserve and enhance its natural beauty, wildlife and cultural heritage, and to promote opportunities for the understanding and enjoyment of its special qualities by the public. Section 62(2) of the Environment Act also places a responsibility on other public bodies to have regard to these pwposes in carrying out their functions in relation to or so as to affect land in the Park. Full details of the designation, purposes and drawing of boundaries of National Parks and the history of the designation of the Pembrokeshire Coast National Park in particular are provided at document 2.11.

6.6 The Park is not a self-contained landscape unit, but has a road defining its boundary to the north

and west. To the east there is also no clear topographical boundary. Thus the intervening plateau is close to both sections and the wider Pembrokeshire landscape is an important backcloth to the Park making an essential contribution to the public's enjoyment of its special qualities. In many views there is no real sense of where the Park boundary lies and the need for the protection of the countryside adjoining the Park has long been recognised. The Park is generally narrow with a long boundary which leads to increased vulnerability to impact from development outside its boundary. While the Park's Local Plan policies on wind power (document CD13) do not form part of the development plan for this case, they are considered to be material in appraising proposals adjacent to the Park. These seek to support renewable energy proposals that do not have a significant adverse effect on the National Park purposes.

6.7 There is a wide range of locations within the Park from which all or part of the windfarm would be potentially visible although local topography and screening would reduce the effect. The principal concern is over the impact of the development when viewed from the Pencaer peninsula, including from the coast path south from Pwll Deri, from Garn Fawr and from the lanes and public rights of way running southwards from the neighbouring rocky outcrops (map at document 2.8). This area has a very special remote and tranquil landscape that is included within the second register of Landscapes of Outstanding Historic Interest in Wales (documents 2.10 and 1.62). Coastal path user surveys (document 2.9) demonstrate that Pencaer is one of the most popular stretches with high levels of use by local and long distance walkers. The path from the car park at Garn Fawr is very popular and several footpaths are promoted in walks literature. A large part of the spectacular panorama from Garn Fawr (viewpoint 5, document 1.51) lies outside the Park.

6.8 It is considered that the proposed windfarm would be an unacceptably intrusive element in this landscape. At between 5.5 to 7,5km it would be prominently visible with a strong vertical emphasis, movement and a position in relation to the skyline which includes the distinctive Treffgarn rocks about 15kms away. It would disrupt the harmonious and timeless quality of the landscape and thus would harm the quality of experience offered to all who use the Park, many of whom have been specifically drawn by its natural beauty and unspoilt nature.

6.9 The second area of concern is of views from the south-western flanks of the Preseli Hills to the south of Dinas in the range 7.5km to 12.5km. This is a popular area for touring motorists and walkers who enjoy de facto access to a large area of open hill country. From this area the proposed development would be visible, occupying two rounded hills in the middle distance. The moving structures would be clearly visible at 10km as large and alien features in the coastal plateau. From other more distant viewpoints it is agreed that the effects of tie proposal on the visual amenities of the Park would be negligible and have a low significance.

6.10 The contribution of renewable energy provision towards the Government's strategy on climate change is recognised, but it is considered that this should not be made at an unacceptable cost to the natural beauty of the Park and the enjoyment of its special qualities.

Countryside Council for Wales Policy

6.11 CCW first published policies on wind turbine developments in 1992. These have been reviewed and revised in 1999 (document CD9). CCW has a statutory duty to advise Government as it sees fit and each proposed development is assessed on its merits. Policy 5 states that the introduction of

commercial windfarms in National Parks, AONBs and Heritage Coasts would be opposed. In addition Policy 6 opposes wind turbine developments in areas of close proximity to sites with the benefit of statutory designation where such development would seriously affect the visual quality and amenity of the borderland area or would seriously diminish the quality of the view from or visitor experience within the designated area. The effect on views from a National Park is a material consideration and, if their quality is to be maintained, the potential impact of development outside them must be taken into account. In this case the location of the proposed development is in the field of view between two sections of the Park and therefore its effect on the enjoyment of its natural beauty, the conservation of which is especially desirable, is a material consideration.

Impact on Tourism

6.12 The structure and characteristics of the Pembrokeshire local economy is described in document 2.12(i). Briefly, many key sectors of the local economy, notably agriculture and defence, have experienced very significant declines in recent years. Much of the contribution that used to be provided by refineries and power generation has disappeared and traditional resorts have experienced severe competition from sunnier holiday destinations. The inherent problems of distance from markets and a lack of critical mass in terms of population and manufacturing and service base have made it difficult to attract inward investment. There is therefore only a narrow range of opportunities for future economic recovery. It is notable that even in mid-summer, unemployment is about 40% higher (at 6.4% for August 2000, unadjusted), than for Wales as a whole.

6.13 The Pembrokeshire economy is therefore fragile. It needs to retain existing employment while attracting very significant amounts of additional investment if it is to escape a downward spiral of insufficient employment and declining expenditure which could lead to further retrenchment. The County has one distinct advantage in dealing with these challenges, namely its coast and countryside, which are widely recognised as being outstandingly attractive. Tourism currently supports around 17% of all employment (8350 jobs) in the County and a rather higher proportion of the basic economy. In effect it is now the largest single industry on which the rest of Pembrokeshire relies. There are two tourism markets. The largest is the traditional family seaside holiday the contribution of which is limited by the short season. The other is year round and based on the County's natural environment and historic buildings. In practice there is overlap between the two. Visitors based in coastal and rural locations account for about two-thirds of the total level of spending by visitors. The importance of this type of tourism is underlined by the support of public bodies, including contributions towards the cost of developing the national trails including 58 new or enhanced links or circular walks from the Coastal Path (see document 2.8) and publicised guides to art, craft and food attractions (documents 2.3 - 2.5).

6.14 The natural assets of the County are used extensively in tourism and other brochures produced by the Wales Tourist Board, County and independent commentators. A series of surveys (document 2.12(ii)) in recent years provide extensive evidence concerning the characteristics of the tourism economy in the County. An attractive natural environment is a key attraction with three-quarters of a 1994 survey rating its scenery and landscape as very important. The attractive coast and countryside together with peace and tranquillity are important reasons for visitors to come to the area. Repeat visits are relied upon quite heavily and it is considered that such visitors are even less likely than first time visitors to welcome new, large scale structures appearing in the landscape. Visitors to the County tend to be relatively affluent and in a position to exercise choice of holiday destination. The reaction of visitors to the Pembrokeshire environment and the prospect of a windfarm can be gauged from some of the letters received by the County (document (iv)). In many cases they echo what the formal visitor surveys reveal about the importance of an unspoilt landscape.

6.15 Information from .a 1999 visitor survey of Cornwall has been obtained for comparative purposes (document 1.36). The visitor profiles are somewhat different with a higher percentage in the higher socio-economic groups; 75.1 % in Pembrokeshire as opposed to 69.7% in Cornwall. There would also seem to be a much stronger emphasis on the natural environment and on activities connected to this in Pembrokeshire than in Cornwall.

6.16 The fact that the proposed development would be visible from some of the most popular roads for tourists in the area, such as the A487 and the A40 as well as by those going to and from Ireland using the latter road, would add to the difficulties it would pose for tourism. It is impossible to give precise figures for the total probable negative impact of the proposed development on the local economy. It would not be expected that there would be a lot of evidence of damage to the tourist economy of Wales from the presence of windfarms as it is difficult to find evidence related to 60m WTGs. If the impact were limited to some 5% of the overall tourism economy in the County it could represent a loss of about 400 jobs. Any such impacts would be in an area where there are few alternatives available. Reputations based on factors such as an attractive countryside are not easily restored once damaged, as shown in the case of the Sea Empress pollution incident.

6.17 Any potential gains to the local economy from the proposed development would be minor at best and it would not support more than 1 or 2 jobs. The experience of the visitor centre at a windfarm at Dalabole in Cornwall is suggested as a positive impact. However the setting is different and no visitor centre is proposed. The WTGs proposed are considerably larger. More relevant is a case of a series of windfarms in north-east Scotland where tourism is important to the economy and which were dismissed on appeal. It is concluded that the risks of introducing this windfarm into the landscape of North Pembrokeshire are unacceptably high and would clash with those policies and goals of the Local Plan that seek to promote tourism. The proposed development would be very large and very obviously not part of the attractive natural environment on which the continuing success of the tourist industry depends. As windfarms increasingly proliferate across Britain there is little that would be novel about their presence and they would become reminders of the everyday and detract from the sense of remoteness in the landscape.

Landscape and visual impact

6.18 A detailed description and assessment of the landscape and historic character of North Pembrokeshire, the sensitivity of the landscape around the appeal site, and visual impact of the proposed development in the landscape is provided in documents 2.14 - 2.19.

The landscape character of the area

6.19 The landscape of the general area can be divided into 4 generic types reflecting similarities of topography, landcover, and landscape elements (document 2.17). This overall classification and the transition between them is acknowledged in various studies (documents CD 15 and 16)

6.20 The extensive area of undulating coastal plateau in which the appeal site is located is primarily a rural landscape consisting of numerous long, shallow valleys and flat-topped ridges. From the many vantage points on ridge tops and surrounding hills, the plateau gives the appearance of being relatively open and treeless and characterised by an intricate and unusually well preserved historic pattern of fields and roads enclosed by hedgebanks, dispersed villages and farmsteads. The plateau is often incised by numerous steep-sided, often wooded stream and river valleys. These valleys, like the coastal edge, often remain hidden from view from much of the plateau. Overlooking the coast and undulating plateau are isolated hills and rock outcrops to the north and west between Dinas and St Davids. These, like the Preseli Hills to the east, are prominent in the landscape and rich in historic features.

6.21 The character of the plateau has responded to the influence of coastal climate and different patterns of historic settlement and use of the land. Successive generations have made different territorial and economic demands on the landscape. The rare survival of an ancient Celtic landscape is to be found in the northern coastal plateau. This is now expressed in the present pattern of routes, tracks, settlement and field hedgebanks and remains relatively undisturbed. This landscape of the "Welshry" contrasts with the character of the plateau areas inland and to the south, which reflect changes wrought by the Normans and more modern interventions. It may not have the obvious drama of the Preseli Hills or the coastal edge, but its character and sensitivity is derived from a combination of its scenic and historic values. The site is on the border of the Celtic and Norman historic landscapes and is within an area where the two mix. Such cultural and perceptual factors are very important to the make up and intrinsic nature of a landscape, in addition to its physical features.

6.22 Current guidance on landscape assessment suggests several criteria to be used to establish the sensitivity of landscape character areas to wind energy development. These include proximity to features and areas of acknowledged importance, effect on intrinsic features of the landscape, and the visual impact of the development in terms of visibility from viewpoints and areas. The Zone of Visual Influence (ZVI) for the appeal proposal strongly suggests that its potential effect on the northern coastal plateau would be predominantly within the 5/ 6km range of the site. This zone includes the following landscape character units (document 2.17):

Plateau south of Fishgnard: the appeal site is located in this unit. Most of it is overlooked by higher ground in the National Park on two sides, the slopes of the Preseli Hills to the east and the ridge on the Pencaer peninsula to the north. This part is a valuable historic landscape with the existing and intricate pattern of settlement, routeways and field accurately reflecting Celtic origins. However around the site the fields are larger where the southern limits are less definite. Typically it is open, exposed and treeless with long and distant views of a generally unspoilt landscape from many vantage points. An essential ingredient is the contrast between enclosure and openness. A close relationship with the surrounding high quality landscape, a strong historic integrity and a vulnerability to visual intrusion make this part of the plateau sensitive to change from wind farm development.

Peacaer and platean west of Fishgnsrd: much of this remote, high quality and distinctive landscape is within the National Park. The scenic quality of the panoramic views to the cost and plateau from Gam Fawr and other high outcrops is unquestionable. This distinctive character and quality is not self-contained since open views of the wider undeveloped plateau and coastline are an integral part of it. The rich historic pattern and heritage also spreads into the wider area. This area is

therefore highly sensitive to changes in the landscape from the proposed development.

Preseli Hills: the high quality of the landscape is acknowledged by their inclusion in the National Park. The wide open landscape of the hills is not self-contained since the wider coastal and inland plateau landscapes are an important backcloth in panoramic views from the outer hill slopes and summits. The mainly undeveloped character and scenic quality of the coastal plateau and wide extent of the views from the slopes of the Hills make them highly sensitive to changes from potential windfarm development in the plateau landscape.

Visual impact of the proposed development

6.23 The ES indicates that the windfarm would be potentially very visible from the surrounding landscape plateau and adjacent hills. In particular the ZVI analysis suggests that it would be potentially visible from almost the entire area within 5 - 6km of the site, although local landscape features would screen views to a degree. The extent of this visibility arises from a combination of the relatively flat plateau topography and the very large scale of the WTGs. The 2 clusters stand on a ridge rising from 86m AOD to 131m AOD. Being 60m tall to blade tip they would reach a height of between 146m and 191m AOD (document 1.47). Thus the tops of the blades would be comparable to some of the highest natural features on the northern plateau area, such as Mathry at 143m AOD and Gam Fawr at 213m AOD.

6.24 Clusters of large scale WTGs cannot be readily absorbed into the small and intricate scale of the local plateau landscapes. It is acknowledged that there would be no circumstances when the WTGs would not dominate a close landscape. In this case they would dominate both the local and middle landscape within 2.5km to 5km. Although at a distance and in some circumstances screening such as tree cover, structures and hedgebanks can mitigate the visual impact, this screening would not be fully effective. In general, within the local landsc: :pe of the site, which is taken to be up to 2.5km, the WTGs would be very visible due to their height. Beyond this there are numerous public roads and routes in the near to middle distance, that is within 2.5 to 5km, where attractive panoramic views include wide areas of landscape and possible views of the windfarm. The drama of such open and unspoilt views in the hinterland of the coastal strip and the transition to the Preseli Hills is an essential ingredient of the distinctiveness of the plateau.

6.25 The set of viewpoints in the ES and shown on the revised visualisations (documents CD10 and 1.51, figures 5a-i) does not include an adequate representation of views in the near distance or local views. Additional photomontages have therefore been prepared so that the overall impact of the WTGs can be evaluated. Since the WTGs individually and in clusters would be very large in scale in an otherwise intricate and small landscape, it is inevitable that their impact would be greatest in the local landscape. The magnitude of such impact must be added to the evaluation of intermediate and more distant views. In interpreting the photomontages it is important to be aware of all the other dynamics that come into play that are not easy to represent. These include the weather, varying light conditions, movement and who the observer is.

6.26 A detailed review of all the viewpoints and an assessment of the significance of impact of the proposed development are set out in document 2.14(ii). A similar procedure for this assessment has been carried out to that of the appellants, except that the degree of significance has been added. In effect professional judgements have been made about the sensitivity of the landscape and in

assessing the significance of the impacts. Such judgements are not easily fitted into the matrix approach, which has not been used, as it could be too mechanical an approach to making a judgement.

6.27 This analysis suggests that the magnitude of change to views of the landscape from local roads and landscape, the A40 corridor, the A487 corridor, areas in the middle distance and from the National Park is greater than suggested in the ES and on behalf of the appellant. The degree of impact of the proposed development on the landscape and on visual amenity was assessed using 3 factors; the sensitivity of the selected viewpoint, the sensitivity of the surrounding and intervening landscape and the magnitude of predicted visual impact from the selected viewpoint. The assessment suggests that the impact of the windfarm on the landscape as seen from the coastal part of the National Park, especially from the popular views at Garn Fawr and from the coastal path which is heavily promoted, would be from medium to high significance. Its impact on the landscape from the Preseli Hills, as from viewpoint 7 on the south-western slopes, would also be of medium to high significance.

6.28 From local roads, routes and the A40 and A487, the impact of the proposal would be of a medium to high significance. Observations suggest that the network of minor roads located in the hinterland of the National Park that provide access to a growing number of tourist facilities are well travelled by visitors and tourists, especially in the summer. The ZVI shows clearly that the windfarm would be theoretically visible from an extensive area of the coastal plateau within 5-6km of the site where there are a considerable number of private properties. The ES correctly indicates a medium to high significance of impact for properties in Mathry, Panteg, Goodwick and the A40 corridor. The height of the WTGs and their sheer physical presence on a ridge results in dominance of the close locality. The only local comparison is the 2 silos at Jordanston Hall which are about 25m tall. However a more comprehensive survey and analysis of views from local properties would be needed before a conclusion could be drawn on the significance of the visual impact of the proposed development.

Conclusions on landscape and visual impact

6.29 This analysis indicates that the proposed development would be a prominent and intrusive feature in the distinctive, historically important and sensitive landscapes of the coastal plateau, as seen in near and far distance views from numerous vantage points. It would dominate the landscape in views from the local area where no other significant structures exist. The site is overlooked by some of the high quality landscapes of the National Park and would be prominent and detrimental from these views.

6.30 The landscape character of the coastal plateau is of a special quality and is closely associated, visually and in terms of character, with the National Park both on the coast and the Preselis. This relationship, together with its open and attractive character and historic value makes this part of the plateau highly sensitive to change. The large scale of the windfarm cannot be readily absorbed into the small scale of the local landscape. Although at a distance the visual impact would be mitigated by screening from landscape features, this would not be effective in such an open landscape that is overlooked by high ground. It would have a significant impact which would be detrimental to the quality, sensitivity and visual amenity of both the local landscapes and those of the National Park. It would not therefore conform to the criteria set out in Policy EV16 of the Local Plan or the

requirements of the policies concerned with the conservation of the landscape, character, quality and amenity of the plan area.

Overall Conclusions

6.31 The case for the Council, National Park Authority and CCW is that this proposal is not in accordance with the policies relating to windfarm development in the Local Plan and would undermine the statutory purposes of the National Park as set out in S5 of the 1949 Act as amended, to which the National Assembly has to have regard. The advice of CCW, as statutory adviser on National Parks and the landscape in Wales is that this proposal is so harmful to the landscape that it should be refused. The correct approach is that it is not compliant with the development plan and should be refused unless material considerations outweigh the breach of policy. The national policy on renewable energy and the contribution the proposal could make towards meeting that need must be weighed. Other impacts also need to be considered in particular its effect on the local tourist industry and upon residential amenity.

6.32 In respect of the effect of the proposal on the landscape it is submitted that the appellants' assessment is flawed because:

- It fails to take into account relevant factors in landscape characterisation, more particularly the cultural and historic aspects.

- It understates landscape sensitivity.

- It understates the magnitude of change in that photomontages tend to understate the real life impact, the movement of the blades needs to be acknowledged, close and middle views are largely absent and the accumulation of impacts has to be considered.

- It relies on a mechanistic system that is not robust, as it is susceptible to very fine distinctions.

6.33 The assessment of visual impact also needs to be robust. The appellants' viewpoint approach is not and the ZVI suggests extensive and serious visual impact, given the scale of the proposed structures. In respect of policy EV16 of the Local Plan, this poses the question whether the proposal would unacceptably dominate the landscape in close or distant views. Dominance is clearly established when judged by the extent of the ZVI, the impact on viewpoints and the particular and unique attributes of the WTGs. Its acceptability depends on the sensitivity of the receiving landscape. This one is particularly sensitive with its open nature viewed from above and its intrinsic values of a historic pattern of cultural significance some of it within a National Park.

6.34 The national policy on renewable energy is not challenged. However planning policy on the matter only supports such development when it is environmentally acceptable. It is not a policy of development of renewable energy wherever technically feasible irrespective of the environmental cost. As yet there is no system of regional quotas and the targets are 5% of renewable energy production by 2003 and 10% by 2010 from all forms of renewable energy. By the end of 1999, 2.8% had been met. Considerable weight should be placed on the fact that all 3 bodies with statutory responsibility in relation to the landscape in the County oppose this scheme.

6.35 The County's economy is fragile and tourism accounts for at least 17% of it. It is impossible to predict the effect of the proposal with certainty but it would impact on the perception of the area. Both promotional literature and visitor surveys highlight the beauty of the landscape and the qualities of peace and naturalness. The proposal would be visible over a wide area fitting this description. There is thus real cause for concern as to the effects on the economy. In respect of residential amenity, no point is taken as to safety or noise, and this matter is covered by the CPRW coalition.

6.36 This proposal is in conflict with the development plan in relation to both windfarms and the protection of the landscape. It would cause serious harm to landscape and visual amenity within 0-51m of the site and damage views from the National Park, contrary to the statutory purposes. Other material considerations are affected. It is not the case that the national need for the proposal is so pressing and unique that it has to be accommodated in the County whatever the cost. This case involves a contribution towards one technology's part in meeting the UK's overall targets for renewable energy. This is a uniquely sensitive location for 17 WTGs of 60m high that would be visible over a wide area. They would not be environmentally acceptable and so would not satisfy national guidance.

7. The Case for the Campaign for the Protection of Rural Wales and other interested Parties and Persons (the CPRW Coalition)

The material points are:

Campaign for the Protection of Rural Wales

CPRW Policy

7.1 The CPRW is committed to the construction of coalitions of like-minded third-party objectors at public inquiries. This consists, in this case, of the local objectors' group JAWS, the West Wales Badger Group, Friends of Pembrokeshire National Park, and the Council for National Parks. The CPRW also supports the objections of the local planning authority, National Park Authority and CCW.

7.2 A full description of the CPRW as an organisation, its position on global pollution and renewable energy issues in relation to the landscape and planning decisions, and its policies on wind energy proposals are set out in document 3.1. Briefly the CPRW is the foremost voluntary organisation specialising in all issues relating to conservation and the enhancement of the living countryside with 17 branches and some 3,800 members.

7.3 CPRW is as concerned as any that climate change could threaten the planet and welcomes the Government's commitment to meet targets on the reduction of greenhouse gasses. Its policy on renewable energy is a result of a decade of debate and argues that proposals for renewable projects are only of benefit if they do not prejudice the integrity, diversity, scale, space and accessibility of the landscape. It is concerned that present policies do not provide sufficient recognition of the need

to protect the landscape and environment of rural Wales.

7.4 A definitive policy on renewable energy installations was produced in 1995 which, in respect of wind power has been reviewed, debated and endorsed in 2000. The 2000 policy for onshore wind power has been adopted in the light of an appreciation of the reasons for the Government's targets to increase all forms of renewable electricity. However the NFFO and successor mechanisms produce a divisive conflict between the aims of reducing harmful emissions and of protecting high quality landscapes. There is a disproportionate number of increasingly large WTGs constructed in Wales predominantly within or near areas recognised for their special landscape qualities. It is considered that the intermittent and unreliable energy generated by such schemes is insignificant in relation to their adverse visual impact and, on balance, the benefits do not justify damage to the Welsh landscape. The concentration on upland and coastal sites represents an unjustified imbalance between energy and countryside policies.

7.5 In effect, 3 policies have been adopted for on-shore wind installations. These.oppose large scale or visually intrusive proposals in upland and coastal locations, in rural locations where residential and community amenity would be adversely affected, and in other areas that are valued locally, nationally or internationally for qualities that would be jeopardised. Proposals which are small scale in their physical context and which would not have unacceptable impacts will not be opposed while all should be the subject of a full EIA. The gist of CPRW's policies for off-shore installations are that they would normally be supported subject to no significant detriment and their deployment in an environmentally sensitive manner.

UK context for wind power development

7.6 Wind power development in the UK and the selection of the site for the appeal proposal is examined in document 3.26(i). Between 1991 and August 2000 57 wind power installations and single WTGs were constructed in the UK. These amounted to 827 WTGs (see document 3.27). 43% of WTGs are in Wales although it has only 5% of the population and 8.5% of the area, and 32% are in England, 17% in Scotland and 8% in Northern Ireland. During this period the installed capacity of each machine has increased from around 300kW to 6/700kW. Typical hub heights have similarly risen from 25m to 35-40m. Most Welsh sites have been in coastal or on high moorland plateaux. The proposed 60m high WTGs would be physically larger than any constructed on a multi-turbine installation in Wales. The individual bladeswept area is also related to the degree of visual impact

and, in this case, is the largest in Wales and 40% greater, at $1521m^2$, than for the 53.5m high WTGs at Dufryn Brodyn in Carmarthenshire.

7.7 The issue of site selection is germane and 4 alternative sites were reviewed in the ES. However these are restricted to North Pembrokeshire with 3 rejected as unsuitable and the remaining one refused planning permission three dynes and an appeal withdrawn. There is no specific target or guidance for individual renewable technologies for the County or for Wales. Thus it is not shown that there are no alternative sites of comparable generating potential but with less environmental impact. The need for this particular site to be selected has not been demonstrated.

Visual impact

7.8 An assessment of the visual impact of the proposed development is provided in document 3.26 (iii). In brief, as the size of WTGs increase so does the potential visibility, visual impact and threshold of significance increase. The appellants produce no data on this. A matrix has been prepared (document 3.28) as a preliminary guide and based on some 3-400 observations in the field. This shows the type of impacts at different distances that would be expected in largely clear unimpeded visibility for WTGs 52m to 55m in height in a wide range of landscapes. Thus WTGs would be dominant due to their large scale, movement, proximity and number at up to 2.5km away. They would have adverse impacts that may be significant between 2.5km and 5km. Up to llkm they would be clearly visible and may produce significant harm. Beyond that distance they become less distinct, although movement is discernible and individual views may be important.

7.9 No systematic assessment of the distances between the proposed WTGs and public roads or other routes is presented by the appellants. Information in document 3.26(iii) shows that 8 WTGs are less than 100m away from the lane that crosses the site from north to south and 3 are 60m away or less. 3 WTGs are very close to the drive to Llan yr Esgob. Thus the WTGs would tower over traffic and users of the lane and drive. Horses and riders would also be affected as all but 7 of the WTGs would breach the British Horse Society policy advising a 200m limit (document 3.29). Many properties would be adversely affected by the WTGs because their curtilages would be in line of sight or normal travelling would be within close visual range. A table in document 3.26(iii) lists 42 properties within lkm of the site and" all within the ZVI. Even with local screening the occupiers of these would unavoidably encounter the WTGs at close quarters throughout their everyday lives, including the users of the school buses that run through or close to the site (map at document 3.34).

7.10 The photographic depiction of the landscapes, although a major tool in assisting the assessment of visual impact, fail to an extent to convey their actual perceived physical features. The photographs produced in the evidence reveal a reduction of the vertical dimension in relation to the horizontal (ie. a `hill-flattening' effect). When individual photographs are laterally extended into composites there is a combined effect of vertical compression and horizontal elongation. In reality hills will seem higher, slopes steeper and physical features more pronounced. This also takes attention away from the central subject as opposed to the human eye which concentrates on the object in view. This evidence has been accepted at other planning inquiries (document 3.30). Any optical drawback which cause the relevant photograph to be at variance with what is actually seen are inevitably reflected in the wireframe computer simulations of the landscape. It is necessary therefore to view comparable WTGs in a similar landscape to evaluate the photographic evidence.

7.11 The 9 viewpoints used in the ES do not reflect the extreme proximity of the WTGs to roads and domestic properties. This amounts to a serious under-representation of the visual impact of the proposed development at relatively close quarters and within the 0-2.5km zone. A composite plan showing promoted visitor and tourist routes in the vicinity of the site, by car, cycle and walking, is at document 3.33. It is noted that this constitutes a very dense and complicated network of routes and that there is multiple promotion of some. Additional viewpoints are suggested in document 3.26(iii) near Llangloffan Cross and the A487 turn, Tredafydd Cross to the south-east, Tregroes Moor on the A40, Henner Cross near St Nicholas, Fishguard harbour and Mynydd Cilciffeth.

Renewable energy policy

7.12 Comments on the implications of the government's energy policy in respect of wind energy and

the deployment of wind power .tations is set out in document 3.26(iv). In essence, it is maintained that the renewable energy policies, and in particular the operation of the NFFO system, are to an extent in conflict with other nationally and locally defined policies for conserving the landscape qualities of the countryside. The fundamental qualities of openness extensiveness and naturalness are now threatened by a type and scale of development which is alien to these qualities and never envisaged in such areas. The extent of the problem and its potential for proliferation is apparent from the substantial and accelerating role of wind power generation within the Government's general targets for renewables for an increase from some 2% to 10% of electricity demand by 2010.

7.13 The BWEA (British Wind Energy Association) have calculated that if 10% of electricity were to be produced from wind alone by 2025, this would require 10,280 WTGs of an average capacity of 1.2MW, likely to be around 90m high. This forecast is likely to be conservative since it relates to current levels of electricity demand which is in fact growing at 2.4% pa.

7.14 The implications of reaching the wind power element of the 10% target for the UK have been prepared for the Countryside Agency in 1999 and published as part of its submission to the DTI. These are set out in document 3.26(iv). It is concluded that the option with a high wind element would require in the UK a mix of 460 extra on-shore wind power stations of various sizes using 3,350 WTGs ranging in capacity from 1-2MW. In Wales this would require 141 further on-shore installations involving 1,195 WTGs. Despite the existing concentration of WTGs in Montgomeryshire and Anglesey, the distribution of unfulfilled NFFO contracts demonstrate an intense, short-term pressure on and around these areas. The Countryside Agency, in its submission to the DTI Renewables Review in May 1999, commented that: *While we acknowledge that onshore wind has a part to play in the renewables mix, we cannot support the ambitious scale of the resource implied by the consultation document This is an important comment from the Government's statutory advisor in England.*

7.15 A parallel forecast of the extent of off-shore deployment by 2010 is made (document 3.26(iv)). By then off-shore WTGs would represent the majority of new deployment probably in the form of a relatively small number of major concentrations more than 5-10kms offshore and probably sharing common landfall facilities.

7.16 The wind industry has complained that the main obstacle to wind energy development is achieving planning consent. There is a view that this regime should be relaxed in the interests of renewable energy. However it is considered that there is a need to clarify the dangers of promoting large land-based wind energy schemes without adequate regard to their impact. This is especially so when other less objectionable sites, with perhaps a lower wind speed, are available in quasi-industrial locations that are already blighted, or when the offshore potential remains unexploited. The industry recognise that ultimately lower speed wind sites and off-shore site will have to be developed. However the pattern of NFFO contracts and policy guidance has encouraged developers to pick the more profitable windy sites almost irrespective of location, apart from just avoiding the National Parks. It is now acknowledged that off-shore deployment offers not just an alternative but a preferable location for the future (document 3.32).

Council for National Parks

7.17 A description of the Council for National Parks (CNP), the evolving policies for National

Parks, their statutory purposes, and the implications of siting wind power stations in areas adjacent to National Parks is set out in document 3.2. CNP is the only national voluntary organisation concerned exclusively with the national parks. Established in 1936, today it is made up of 40 bodies representing over 3.5 million people.

7.18 It is considered that the appeal proposal is of national importance because it is part of a trend of proposals for wind energy development on the fringes of national parks and because of the impacts it would have on the Pembrokeshire Coast National Park. Such proposals in the zone immediately surrounding national parks must be especially closely scrutinised. The current proposal constitutes a major development on the edge of the Park. The 1947 Hobhouse Report was the first to recognise the importance of protecting this sensitive boundary zone which should not be regarded as a sharp barrier. This recognition has been carried foreward into the statutory duty under S62 of the 1995 Environment Act on all relevant authorities to have regard to the national parks' statutory purposes, into the policies of CCW and in a number of planning appeals (document 3.4).

7.19 It is inconceivable that the construction of a high, large scale industrial and visually intrusive development on the edge of the National Park could further or be compatible with its statutory purposes. In large groups they are seen as very modern structures, part of the energy industry and an incongruous feature in the landscape. The introduction of vertical and mobile structures in a rolling, unindustrialised and largely static landscape would impinge on both statutory purposes. It would damage the integrity and continuity of the landscape inside and outside the Park, would impact upon people's enjoyment of the Park, including tranquillity, open views and the ability to enjoy a landscape free of clutter. It would also impair the public's opportunity to understand the Park's special qualities. The latter include the ability to enjoy panoramic views from the coastal path- with views of the sea- on one side and the timeless sweep of the Preselis on the other.

7.20 At relatively near views, up to about 7.5km, the 17 WTGs of 60m in height are capable of producing individually discordant and significant intrusion in the landscape. More distant views are in themselves less objectionable but would have a negative effect. Areas within the Park most affected include parts of the coastal path near Trevine and Pwll Deri, the popular visitor attraction of Garn Fawr, and the nearer slopes of the Preselis. Views of the Park from outside would be impaired from the heavily used A40 route.

7.21 The scale and nature of the development undermine the original concept of National Parks and are at odds with the founding philosophy of the National Parks as set out in the Addison, Dower, Hobhouse and Sandford reports. The Government has afforded them the highest status of protection in term of landscape and scenic beauty, which should be protected in the national interest. They are hugely important to the public with at least 76 million visitor days annually. Surveys show that the majority of visitors seek the qualities for which they were designated. The Pembrokeshire coastal path is very important to the area in term of visitors, more than a quarter of a million pa, and jobs (over 550 jobs).

Friends of the Pembrokeshire Coast National Park

7.22 A statement on behalf of this body was read out (document 3.5). Briefly, it is a charity established nearly 10 years ago committed to help, protect, conserve and enhance the National Park for all to enjoy. The evidence of the CNP is supported. This Park is unique in that it is the only one

designated primarily for the beauty of its coastal features and estuaries. The landscape does not recognise administrative boundaries and areas near the Park boundary are just as important to protect. This is especially so in this case where the proposals are of such a scale as to be dominant from and perceived as part of the Park's landscape. There is concern at the number and increasing size of wind power stations around the edges of some National Parks. The open and coastal landscapes are particularly vulnerable to large scale and mobile intrusions. In this case the WTGs would be twice as tall as any electricity pylon and would dwarf ancient church towers.

7.23 The development would make a dramatic change to this part of the Park. For instance it would intnide on the views from the popular, wild, open and accessible peak of Garn Fawr. In more distant views it would be perceived as a highly discordant feature from the popular Foel Eryr at the western end of the Preselis. Wind power is no different from any other kind of intrusive industry.

Jordanston Against the Windpower Station (JAWS)

7.24 This organisation represents over 60 local people. A detailed critique of the September 1997 ES is contained in document 3.6. This largely reproduces the original objection submitted to the County at the time of the application (document iv). In essence the ES, while purporting to be a balanced view, contains a number of serious errors and omissions, does not form a basis on which a decision should be made, and fails to show that the proposal satisfies the planning criteria laid down of LP Policy EV16.

Description of the area

7.25 Also contained in document 3.6 is a description of North Pembrokeshire, its economy and the settlement pattern around the site. The Jordanston ridge rises up to 130m above sea level with the surrounding land rising out of shallow valleys to gentle hills of around 18-20m lower. It is part of an undulating plateau of man-managed farming landscape opening into a gentle rolling plateau between 60-90m above sea level. This area became part of the Bishop's of St David's in 1082 and has survived largely unaltered since then. The present pattern of settlements and scattered farms and boundaries can be traced back to the Black Book of St David's in 1326. Although the cross roads in the middle of the appeal site is set in a broad, open field pattern, there is a more detailed and intricate landscape, part of the Celtic inheritance, to the north and west of Cam Llys, north-west of the site.

7.26 The network of local roads is used by residents and visitors alike travelling to and from St David's and Fishguard and from the A40 to the coastal fringe in the National Park. The area has a number of small businesses, several of which are tourist attractions while others provide employment based on the visual attractiveness of the landscape. Farming and tourism are the principal activities in North Pembrokeshire.

7.27 The area surrounding the site is characterised by small discrete settlements which have extended along the roads with short ribbons. The settlement pattern and communities within 2kms, with the number of dwellings, are shown in document 3.7. Within this zone there are 314 properties,

all or virtually all of which lie within the ZVI. 58 of these are within 1km of the site. It is acknowledged that localised topography and vegetation could screen some of these. The settlements within this area include Scleddau, parts of Letterston, Llangloffan, Panteg and Castlemorris. Further away is Mathry, about 4km distant. As many as 2500 people live in these areas which may double in the summer. The infants school at Tredafydd has 35 on the register and is under 1.5km from both turbine clusters.

7.28 A written statement of Mr L Nichols was put in (document 3.35) that concerns the experience of residents of Marton, Askam and Ireleth in Cumbria in relation to the construction in 1998 of Far Old Park Farm (Askam) windfarm consisting of 7 WTGs of 64m in height. It is contended that this causes problems of construction disturbance, noise, shadow flicker, and visual domination to a population of about 2,600 within 1.5km. The proposed development would use WTGs of a similar size and specification, is close to homes and residential areas and is near to a National Park.

Safety

7.29 A particular concern of the occupants of Clan yr Esgob, which is about 500m east of the northern group of WTGs, is the matter of safety. This is set out in documents 3.16 and 3.17. In essence, the approach to the property is via a track, adjacent or near to which are 3 of the proposed WTGs. In all 5 WTGs would be between 5-800m of the house. The fire damage and scattered debris of one of the turbines at Mynydd y Cemmaes have been observed in January 1998. Numerous pieces of debris were found, with the largest about 150m from the base of the damaged turbine. Photographs of these are in document 3.17. In addition to proximity of the turbines to the property and access, 13 of the 17 would be within 200m of public roads and 8 within 100m. 5 of these would be within 100m of the school bus route in the middle of the site (shown on plan at document 3.34).

7.30 There is, therefore, natural concern as to the safety of the proposed WTGs, although they would be of later construction and a different design. However they would be much larger. In addition the noise level at 20mph wind speed generated by the proposed development would exceed the daytime noise level criterion at the property which is downwind. All this will mean a loss of amenity value while the visual impact of the development would make the property virtually unsaleable.

Impact on the property market

7.31 The statement of an estate agent specialising in rural and coastal properties in the area is at document 3.15. In brief, the proposed windfarm is in an area of the County which is highly sought after because of the quality of the landscape. Many of the properties in the immediate area are holiday letting, second homes and permanent residences chosen because of the landscape. The northern part of the County has a more buoyant market than the south with properties of a certain character and privacy having a premium. About a third are sold to those returning to the area. The economy of the northern part is also different and confined to farming and tourism. It is not broad based and anything which changes the character of the area could have dire consequences for tourism and the property market.

7.32 A windfarm in this context would fundamentally change the landscape of the area and remove one of the reasons people are attracted to it. Although no comparative evidence is put in, it is considered that the development would have a serious effect on property prices and those in the immediate vicinity would be blighted. This impact would be significant because of the fragile and unique circumstances with serious consequences for the whole of the area.

Impact on Panteg

7.33 Panteg is a community of 15 properties with about 50 people about 800m NNE of the appeal site. The impact on this settlement is examined in documents 3.8 and 3.9. but is virtually ignored in the ES produced by the appellants. No viewpoint analysis or computer generated views are available to assess the effect on the visual amenity of the residents of Panteg. Diagrams and cross-sections have been prepared (document 3.9) in an attempt to assess the visibility of the VVTGs. It is accepted that these sections exaggerate the vertical scale, but they show how many WTGs would be seen and the fact that they would overlap. Even the most rudimentary study reveals that from the most southerly of the properties 9 WTGs of the northerly cluster would be visible to an extent with the blades overlapping. The result would be a kaleidoscope of turning blades that would be visible at all times. In winter the shadow of these would also create a disturbing flicker.

Shadow flicker

7.34 A particular concern of the resident of Trebrython Farm, located about 1.Zkm north-east of the northern cluster on the other side of the valley, is the effect of shadow flicker on the health of his daughter who is severely epileptic (document 3.24). The elevation of the farmhouse and drive to it is 95m to 115m while the base of the turbines is shown as about 110m to 130m above sea level. Thus the top of the towers would be over 50 m higher than the farm and for a proportion of the year the sun would set behind the rotating blades. Advise has been given to avoid exposure to flickering and turbine blades moving in front of low angle sunlight have been implicated as a trigger of epileptic fits. It would be impossible to prevent exposure to the effects of sunlight fractured by the rotating blades or the glinting effect of the sun on the blades themselves.

Effect on bird life

7.35 A detailed study of the bird life of the area and the impact the proposed windfarm could have is presented at document 3.25. Briefly the ES contains limited information on species diversity in the area. However the site overlooks an extensive stretch of the Western Cleddau, part of which is an SSSI. This is a corridor for the movement of a wide variety of bird species, both resident and visitors at particular times of the year. Between them they present a wealth of avifauna in one small locality which is seldom surpassed in Britain. They make an excellent environmental indicator and the great ecological diversity is shown by the high proportion of species of butterfly and moth with 24 species of butterfly recorded out of 36 in the County and 57 in the UK.

7.36 A record of the birds within the area around the appeal site has been kept over the last 35 years. This includes a total of 90 avian species including 7 sea and coastal species, 16 aquatic and wetland, 10 raptorial and 64 birds of open grassland, woodland and hedgerows. The indications are clear that, even though a limited area may present a restricted avian habitat, the picture changes when the entire ecosystem of adjoining valleys and woodlands are added. Today the locality around lordanston is rich in birdlife of all kinds but once-common species are declining (such as the Barn Owl, and Tree Sparrow). Many others are threatened unless active steps are taken to promote the environment.

7.37 All human activity has an effect on other species. Overhead hazards like pylons and power lines are known to cause mortality among many species of birds like plovers, coot, moorhen, thrushes, fieldfares and redwings. Many other small summer visitors who arrive exhausted and have to fly inland are likely to be at risk from the very high, moving turbines. In southern Spain, at Tarrifa Point the wind turbines laid out along the coastline and on a migration path claim large numbers of casualties each year. The risk is even greater in bad weather when darkness, fog, mist, gales and heavy rain often cause birds to be driven off course even on a well known route and when objects in their path cause confusion. Noise and vibration may have an impact on species such as owls. There is no single impact upon the ecology of an area as whatever affects one species will have consequences for others.

Economic effects

7.38 A statement concerning the conversion and renovation of old properties in the area was made (document 3.18). Currently work is in progress on the conversion of the old manorial farmyard at Llangwarren, about 500m south of the appeal site, into 6 residences to be sold in the open market. 4 of these would face, in part, the windfarm with only a partial screening by vegetation. Concern is expressed that the proposed windfarm would constitute a major nuisance to the future occupiers of these properties who would currently have undisturbed rural views. Two other similar sites are also being developed in North Pembrokeshire and as a result investment is being made within the local community at a rate of about £400,000 pa with direct employment of 15 local tradesmen. Any benefits to the local landowners of the appeal site should be balanced against the potential loss of income to those letting holiday cottages and to new residents.

7.39 The results of a survey to find out the extent to which the landscape plays a material part in attracting visitors to north Pembrokeshire is at document 3.10-3.11. This was conducted by way of a questionnaire placed at tourist related businesses in the area (lordanston Bridge, Llangloffan, Croesgoch and Mathry) before the application was determined on 1997. A total of 595 people provided information. They had been visiting North Pembrokeshire for an average of 15.1 years and rated the landscape very highly. This shows that the landscape is the prime attraction of the area and the tourist trade is discerning and specialist and would suffer if the landscape were to be compromised by wind turbines. Also put in was a letter from the Wales Tourist Board (document 3.12) of 5 October 2000 which sets out the Board's revised stance on windfarms. It opposes the introduction of commercial wind power stations on natural sites that are clearly visible from the primary designated areas.

7.40 Also put in were the written statements of Ms S Evans and Mr LK Williams (documents 3.36 and 3.37) who are concerned about the impact of the proposed development on the tourist industry and particularly holiday lettings.

West Wales Badger Group

7.41 The Group was inaugurated in 1987, covers Pembrokeshire and parts of Carmarthenshire and has an international reputation and semi-public role. A sanctuary is operated where 15/16 injured badgers are dealt with every year. The report to the Council on the application in 1997, comments

on the survey in the ES, CCW advice on the matter and the results of a later survey of 14 October 2000 are at documents 3.19 to 3.23. From the survey results, including the latest information, it would seem that 11 of the 17 WTGs are within 30m of a new or existing sett; that is within the CCWs specified distance where potentially harmful activity with heavy machinery may only be carried out under licence. WTG construction would inevitably destroy at least 3 setts and possibly a further 3. The appeal site is very densely populated with badgers and, although difficult to estimate, there could be up to 100 badgers in 1 social group in the area. If disturbed such a group would become disorientated, would not stay together but could run awoke with the risk of fighting with other social groups. Any construction work would be disturbing as the badgers would be aware of the activity and not come out of the setts even at night. The proposed construction would involve a lot of excavation all around the site, the period is a long time and would take over much of the foraging area. In addition badgers are active underground during the day, especially with cubs. If they were to fall into trenches it is the experience that they would normally stay there and have to be lifted out.

7.42 Because of the comprehensive nature of the proposal and the fact that 11 of the WTG sites would be affected, the CCW could not issue a licence for the project to go forward without a degree . of disturbance taking place. This would threaten the long-term survival of a substantial number of animals in this locally important community. The group has experience of managing licensing work although the CCW do not have a lot of experience of supervision. It is acknowledged that the CCW could refuse a licence if undue disturbance could not be avoided. Thus any work is contingent on getting a licence and the purpose of the legislation is to avoid any disturbance.

Overall Conclusions

7.43 A proposition in the County's Supplementary Planning Guidance on windfarm development (CD 6) is that visual tolerance primarily relates to the landscape's ability to absorb the visual impact of the proposal. This encapsulates the key question in this case. This is whether, having regard to the circumstances, the impact of the proposal will be so great as to harm the landscape and its enjoyment by those who visit it or live and work within it. There can be little doubt that policy EVI6 of the Local Plan has been breached. 60m high W'fGs could not conform to the landscape and would unacceptably dominate both close and distant views. The highest man-made objects in the landscape, the 2 silos at Jordanston, are, at about 25m, lower at their highest point than the bases of many of the WTGs. In respect of the National Park, it is submitted that it is the thrust and direction of the National Park policies that constitute a material consideration. Indeed the decision maker is required to comply with the mandatory application of a protective policy.

7.44 It is submitted that this proposal contravenes the development plan as well as offending the direction of the National Park Local Plan. However it would be wrong not to recognise the central thrust of Government policy on renewable energy which must be seen as a material consideration in favour of the proposal. It is accepted that this proposal would make a contribution, however tiny, to the UK's 5% and 10% renewables targets by 2003 and 2010 respectively, as recognised in the NFFO contract. But the NFFO contract for the site does not give any priority within the planning system. In addition, despite the many policy and other statements extolling the need for and desirability of power from renewable sources, there is no evidence of any change in national guidance to any presumption in favour of wind power or any other renewable technology. The overarching criterion in Government's policy includes environmental acceptability and this has remained in place.

7.45 In the end the balance must be struck between the landscape and visual impact and benefits that may flow from the proposal. The material produced by the appellants on landscape and visual impact retains fundamental flaws stemming from an inadequate consideration of impacts in the vicinity of the site, on the residential and general amenities of local people and from the cumulative effect of several technical and conceptual shortcomings. For instance the intense pattern of locally promoted and nationally recognised routes within the perceived ZVI and also an analysis of close viewpoints in the 2.5km zone of visual dominance are omitted from or seriously under-represented in the receptor sensitivity assessment. The appellants' conclusion that the development would be adequately absorbed into the landscape with limited effects on the landscape and visual amenity is, therefore, manifestly untenable.

7.46 It is a salient feature of this case that very many local residents and business people feel that the proposal would have a direct and negative effect on their lives. This is not an isolated and remote community with a sparse population whose lives would be largely unaffected by the windfarm. Public opinion may be a material consideration (Gateshead). In respect of the impact on tourism no one can prove that visitors to the area would be deterred by a windfarm but no one can say they would not. This issue is tied in with the impact on the landscape as this is the reason most visitors come to the County. Thus greatest care should be exercised not to compromise the features which give the otherwise fragile economy its share of the economy. This apprehension, that tourists may be tempted not to return to the area because the very feature which brought them here in the first place has been harmed, should be weighed in the balance.

7.47 There is no doubt that the site contains a large and settled population of badgers that are likely to be disturbed by the construction of the development. Badgers have a special level of protection and in principle it is undesirable to disturb the habitat of a protected creature. Licences are available on application to the CCW but it is questionable whether this disturbance can be managed. Also badgers affect tL :: siting of the towers. Although the WTGs have been placed so as to respect the field boundaries, they would need to be 20m to 30m away from these in order to protect the badger setts and would, in effect, be in the middle of the fields. This could also affect their visual impact. No case is made that the WTGs would be too noisy, although any noise forecast can only be an estimate. The draft conditions relating to noise are considered satisfactory.

7.48 In conclusion it is time to re-emphasise the dangers of promoting large land-based wind energy schemes without adequate regard to their impact. There is now no need for sites which have a manifest and major conflict with the development plan. Given the evidence of harm to interests of acknowledged importance the balance of judgement in this case can only lie with the landscape and the locality rather than with the WTGs.

8. Other Interested Persons

The material points are:

8.1 Mr Bowen George, a Town Councillor for Fishguard and Goodwick, referred to a letter published in the newspaper (document 4.1). In essence this reaffirms his strong opposition to the appeal site. The Fishguard area is very beautiful and the Jordanston area can be seen from all vantage points. Most people are not against the principle of the development but there are alternative

forms of renewable energy technologies. The visual intrusion is magnified 10 times because of the movement of the blades.

9. Written Representations

9.1 A letter from Mrs B H Jackson was put in during the inquiry (document iii) objecting to the proposal on the grounds of its visual impact on the landscape and National Park. In effect the 17 WTGs, with huge rotating blades, would dominate the landscape affecting the whole of this region and its National Park. Although in favour of renewable energy, this is the wrong location for it.

9.2 A number of letters were received in response to the letter of notification of the inquiry. These are at document vi. The overwhelming number (35) were from objectors to the scheme and echoed many of the concerns expressed at the inquiry by CPRW and the local residents' group (JAWS). Included in these were letters of objection from Pencaer Community Council and Dinas Cross Community Council. Of the 4 who expressed support for the proposal 2 were from Community Councils; Trecwn and Scleddau Community Councils. Both of these Councils had objected to the proposal at the time of the application in 1997. A summary of the comments of all those bodies consulted at this time is contained in the Committee Report of 29 January 1998 (document CD5). At the same time a large number of letters were received from the general public. These are at document iv as are the full consultation responses. A summary of the responses of individuals is also contained in the Committee Report This notes that 260 letters were received from people living within the County, mostly from the Fishguard/Letterston area, and just over 300 from those living outside the County. A large number of the latter state that they are regular visitors to the County. The main theme of all these is an objection on the grounds of the landscape impact of the proposal and that the existing landscape is a primary resource and a major attraction for visitors to the area. All of these representations echo points made during the inquiry by the Council and other bodies who object to the appeal proposal.

10. Conclusions

[The references in brackets are to source paragraphs and documents]

Planning policy context

10.1 The planning policy framework applicable to the consideration of a windfarm such as that proposed is set out in Planning Guidance (Wales) at paragraph 13.1. This reaffirms the Government's policy to stimulate the exploitation and development of renewable energy sources. Successive statements by the Government, in response to concerns about climate change, provide positive encouragement to the development of UK renewable energy programmes and set out 5 % and 10% targets for the provision of electricity from renewable sources by 2003 and 2010. Indeed in relation to prospects for renewable energy in the 21st Century, it is stated that *The planning system has an important role to help to deliver the Government's targets and goals for renewable energy and climate change, which are central to achieving sustainable development.* [11,13]

10.2 Thus the need for and desirability of power from renewable sources, including on-shore wind power, cannot be questioned. However such support is not unqualified. It is recognised that the

planning system, in having an important role in helping to deliver renewable energy targets, also has the important role of continuing to protect the countryside. Planning Guidance (Wales) states that the development of renewable energy resources should be stimulated wherever they have the prospect of being economically attractive and environmentally acceptable. The economic viability of this scheme and its contribution to the overall supply of electricity from renewable sources is already established by the fact that it is the subject of a NFFO 3 contract. The question of environmental acceptability is taken up in TAN 8 on renewable energy which, at paragraph A44 in relation to commercial wind farms, sets out the balancing exercise that is usually necessary in cases such as this: that is local planning authorities must always weigh the desirability of exploiting a clean renewable energy resource against the visual impact on the landscape of wind turbines. [28]

10.3 The development plan for North Pembrokeshire consists of the 1990 Dyfed Structure Plan and the 1998 North Pembrokeshire Local Plan. The former pre-dates the development of large wind power schemes but at policy EN 18, encourages such developments where they have regard to the character of the area among other factors. Policy EV16 of the Local Plan specifically addresses larger wind farm development. Under this policy such schemes will only be permitted if they meet certain criteria in full. There was general agreement that criterion A was of particular relevance and much discussion at the inquiry revolved around its terms: *The size, siting, design, layout and materials used in the construction of the windfarm should conform to and not unacceptably dominate the landscape in either close or distant views.* [15,16, 69]

10.4 In the light of the above points, the main considerations in this case are the landscape and visual impact of the proposed development, whether it would unacceptably dominate near and distant views, including those to and from the Pembrokeshire Coast National Park, and its impact on residential amenities in the locality. Additional considerations relate to possible impacts on tourism and badgers.

Landscape and visual impact

10.5 The proposed WTGs would be among the largest currently built in Wales in terms of height (60m to blade tip) and blade swept area $(1,521m^2)$. The latter factor is important as it relates to the visual impact of the moving parts of a WTG. Movement is one of the distinctive features of WTGs, as noted in TAN 8, and this tends to draw far greater attention to them, as modern structures in a usually open and exposed location, than would be the case than if they were static objects in the landscape. The land coverage of the windfarm as a whole is also significant. While individually the WTGs take up comparatively little land area, some 1 % of the appeal site, the height, layout and number of proposed WTGs, at 17 in 2 clusters about 900m apart, is such that their visual impact would extend over a very wide area.[9,54,112]

10.6 A detailed analysis of the extent to which the proposed development would be visible, not taking into account local screening features, has been undertaken. The Zone of Visual Influence (ZVI) shows that about 80% of the area within 5km of the centre of the appeal site, including part of the National Park, would potentially have views of all or some of the windfarm. Over a significant proportion of this area over 13 WTGs, in whole or at least the blades, would be seen at any one time. It was agreed that at distances of up to about 2km the WTGs would be of such a scale as to dominate close and local views. This would be due to their proximity, large scale, in terms of height and blade

swept area, movement and number seen at any one time. At distances of between 21n and about 5km from the proposed windfarm, the WTGs would have the potential and capability, in my opinion, to dominate the landscape. This is supported by the evidence of the CPRW which is based on a large number of observations. Over a distance of 5/6km and up to about 10km WTGs of the size and type proposed would be remain clearly visible and, depending upon the circumstances, could be intrusive. Within this zone the ZVI for the proposed development includes the higher parts of the North Pembrokeshire plateau, west facing slopes of the Preseli Hills (partly within the National Park), parts of the coastal section of the National Park to the west and north-west including 6km of coastal path, and the higher ground to the south at Treffgarne. [50-52, 66, 91, 92, 112, document 3.28]

10.7 It is axiomatic that merely because an object is visible or dominating it does not necessarily follow that it becomes unacceptable in environmental terms. The assessment approach followed by those submitting evidence in this case included an appreciation of such factors as the magnitude of change in the view and landscape as a result of the proposed development, the sensitivity of the visual receptors and the sensitivity of the surrounding and intervening landscapes. For the appellants it was confirmed that receptors of high sensitivity included residents, those at scenic vantage points, users of national linear routes and users of signed scenic routes. [53, 94, 95]

10.8 An important tool used in the assessment of visual impact is the photographic depiction of landscapes upon which photomontages and computer generated wireframes of the proposed development can be based. These can be useful in providing a general indication of possible visual effects but they do have significant limitations and cannot replicate professional judgements in the field. Notably photographic material tends to underrate the true scale of vertical features in the landscape and, most crucially, it does not incorporate the effects of movement, which is an integral characteristic of WTGs. The movement of WTGs, as viewed at other windfarms, is such that, especially at relatively close quarters within about lam, it has a discordant effect on the eye. The rotation of the blades of WTGs in a cluster, while in the same direction, is not synchronised and gives a constant restless quality to the overall experience of a landscape. Especially when several overlapping WTGs are in view at one time, this has a highly distracting and discordant effect that detracts from any sense of tranquillity that an area may have. [114]

10.9 With the above points in mind it is important to note the particular characteristics of the area within which the windfarm is proposed. It is located in an area of scattered properties and settlements, some of which come to within 600m of the WTGs. Within the 2km zone of potential visual dominance there are some 314 properties and a school, with 58 properties within Ilan of the WTGs. While localised topography and vegetation may screen some~of these, a large proportion lie within the ZVI and would have a view of the proposed development. The somewhat wider zone of up to Skm from the WTGs includes parts of the National Park with about 2km of the coastal path and, at about S.Skm distant, the popular Gars Fawr scenic point, several settlements, notably Mathry, Scleddau and Letterston, Priskilly golf course and a very dense pattern of national and scenic routes. These cover all forms of transport - car, cycle and walking - and include the A40 (T), used by local travellers, visitors and travellers to and from Ireland alike, the A487 to St Davids, a network of promoted scenic and cultural routes including the Saints and Stones Trail through the middle of the appeal site, and the nationally renowned coastal path. [52, 81, 96, 115,130 doc 3.33]

10.10 The characteristics of the locality are such that, to my mind, it is highly sensitive to the visual

and landscape impact of the proposed development It is not a sparsely populated area and there are a number of properties within relatively close proximity, within 0.5 to Ilan of the site. The landscape is relatively open and treeless on a gently rolling plateau with higher ground in most directions within the 6 to Man zone. This area is also within the relatively close field of view between two sections of the National Park, which at this point are only some 8 to 13km apart, and forms an integral part of its landscape context. The WTGs are also laid out in 2 clusters at between 86m AOD and 131m AOD, some 18m to 20m above the general level of the surrounding land. At 60m tall, the WTGs would therefore reach a height of 146m AOD to 191 m AOD; making them much higher than any other features in the landscape and comparable to some of the highest natural features 4 to 6km away, such as Mathry (143m AOD) and Garn Fawr (213 AOD). [74, 91,129]

10.11 In this context I consider that the proposed development would have a highly significant impact on the landscape and visual amenities of the area within 5 to 6km of the site. This, as already stated, is a locality that is very sensitive to change, parts of it are within the National Park, it is well settled and enjoyed by visitors to the many nationally and locally promoted attractions and linear routes. Particularly noteworthy would be the impact of this proposal on that part of the National Park around Garn Fawr, including an elevated section of the coastal path n warby to the south-west From Garn Fawr the proposed windfarm would be in direct line of sight between this vantage point and the prominent rocky outcrops on the skyline at Treffgarne south of the site; which are viewpoints approached by well signed paths off the A40(T). In effect the proposed windfarm would be in the middle of a significant and extensive panorama from and across highly attractive, historic and spectacular landscapes and the WTGs would partly break the skyline directly between these two well used natural scenic points. [75, 76, 90]

10.12 With regard to closer viewpoints, it is agreed that the proposed development would have a significant effect on the landscape and visual amenities in views from the village of Mathry. From this attractive hilltop settlement the WTGs, at about 4.Skm away, would be clearly seen on the middle horizon against the backdrop of the Preseli Hills in the National Park. Even closer, such as from Priskilly golf course between 2 and 4km away to the south-west, the proposed WTGs would be spread out along much of the near horizon, breaking the skyline and dominating the view. A similar situation would apply from the lanes, school, bridleway and properties on the higher ground between the railway line and the A40(T) about 1 to 2km east of the 2 Clusters. [54, 55, documents 1.51(5b) and 2.19C]

10.13 In the immediate locality, within about Ilan of the appeal site, the WTGs would have a profound influence on the landscape and visual amenities of the area and on the day-to-day lives of a significant number of people. The roads through the middle of the appeal site serve a number of properties as well as one being part of a signed and promoted. historic and cultural tourist route and a school bus route. From nearby, especially from those properties very near to the site such as Gwelfor, Llan-yr-Esgob, Llangwarren, Jordanston Bridge and Greengmil Farm, these large WTGs would appear as intimidating and dominating structures, especially when moving, the effect of which it would be impossible to ignore as local residents go about their daily lives. [75, 76, 90, document 3.33]

10.14 It is accepted that in certain landscapes, wind turbines may be seen as striking, even elegant, modern symbols of a desirable and clean form of energy production. However in this particular location the characteristics and sensitivity of the area are such that turbines of this scale would

appear intimidating and would dominate to an unacceptable extent both local and intermediate views. This would have an undesirable impact on local residents, visitors and tourists to the area and would prejudice the statutory purposes of the National Park to conserve and enhance its natural beauty in respect of those parts within about 6km of the WTGs. As a consequence the proposed wmdfarm would not meet criterion A of policy EV16 of the adopted Local Plan in that it would unacceptably dominate the landscape in close and distant views. [73]

Other material considerations

10.15 In the light of the above the development would conflict with the provisions of the development plan. It is therefore necessary to examine other material considerations. The possible effect on tourism was raised during the inquiry. It is difficult to come to a conclusive view on this matter as much rests on intangible perceptions and assumptions as to the reactions of visitors to the area. Undoubtedly the major attraction of North Pembrokeshire for tourists lies in the quality of its coastal and countryside scenery and historic and cultural associations. The natural assets of the County and National Park are heavily promoted and there is a high proportion of return visits. [82]

10.16 It is argued that the situation in other scenically attractive areas such as Cornwall, Anglesey and Cumbria where wmdfarms are located is similar and that they have had little impact on visitor numbers. I accept that in some circumstances a windfarm may be an attraction in its own right and that people generally support the principle of the development of renewable energy sources. However much will depend upon the characteristics of the area surrounding a windfarm. Also such developments are becoming less novel as they increasingly proliferate throughout the western parts of Britain and especially in Wales where 43% of all WTGs are located. The proposed windfarm would impact on some of the most popular tourist routes in the County and over a wide area of the landscape of North Pembrokeshire; the very attribute that draws visitors to it. Whether the presence of a large windfarm would lead to an overall reduction in visitors can only be a matter of conjecture. It is possible that the attractions of the spectacular coastline may outweigh any negative impact that the proposed development would have on tourist perceptions but this is a risk that has to be weighed in the balance. [42, 43, 45, 84, 110, 143]

10.17 In respect of the effect of this proposal on the ecology of the site itself, most of it would be left undisturbed. While there may be a diversity of bird life in the general area, the literature suggests that there would be no problems of disturbance effects on any species, other that in those specific cases of inappropriately sited and designed windfarms as in Spain and California. There has been no suggestion that that may be the case in this instance. [58, 140, doc 1.48]

10.18 There is no dispute that there is a thriving and dense population of badgers on and around the site. The many main and outlier setts are almost invariably located within the dry, well-drained hedgebanks of the field boundaries. Most of the proposed WTGS are also positioned close to the field boundaries. In such circumstances the construction of the windfarm and associated works is likely to interfere with and cause disturbance to the badgers and their setts. While it is maintained that adjustments could be made to the siting of the WTGs, the location of these would also need to take account of other technical and siting constraints and it is likely that an appropriate licence would need to be applied for. Although the effectiveness of the licensing regime and other protection measures is doubted by the local expert group, the purpose of the legislation is to avoid or minimise any disturbance and it is not appropriate to call into question the statutory regime that has

been put into place. It would seem to me that the significant presence of badgers and their setts on the appeal site acts as an additional constraint on the development of a windfarm at this location. [22, 59, 61, 145, 146,151]

10.19 The Government's policy on the development of renewable sources of energy is evidently highly material in this case, to which considerable weight should be given. As already stated, renewables are an essential ingredient of the climate change programme and the 5 % target of the UK's electricity production from renewables by 2003 includes on-shore wind power as a key component. However national policy requires the stimulation of clean, renewable energy resources subject to the test of environmental acceptability and to balance it against the visual impact on the landscape of wind turbines. In this case it is proposed to locate an extensive, prominent and large scale windfarm in a particularly sensitive landscape that is well settled, positively promoted for its natural qualities and historic and cultural associations and between two sections of the National Park. In such circumstances it would cause serious harm to the landscape and visual amenities of an extensive area around it and it would damage views from parts of the National Park. As such I do not regard this proposal as environmentally acceptable and therefore I do not consider that the necessity to develop a renewable source of energy in this location is sufficient to outweigh the resultant breach of the provisions of the development plan. [25, 68]

10.20 Should it be considered that the need for and benefits of the proposed windfarm are sufficient to outweigh the provisions of the development plan, appropriate planning conditions were the subject of discussion and agreement during the inquiry. I consider that these, as set out in the agreed document, provide the necessary and reasonable controls over such matters as noise, access and other technical considerations. [64, document CD181

11. Recommendation

11.1 I recommend that the appeal be dismissed.



Inspector

APPEARANCES

For National Wind Power Ltd

Mr M Trinick Solicitor and Partner, Bond Pierce,

Solicitors, Plymouth

He called:

Mr D I Stewart MA DipTP MRTPI Principal, David Stewart Associates, Collumpton, Devon

Ms K Hawkins BSc BID MLI Principal, E4 Environmental Ltd, Landscape Consultants, Shrewsbury

Dr C W D Gibson MA Dphil MIEEM Director, Bioscan (UK) Ltd, environmental consultanccy, Godalming

For Pembrokeshire CC, Pembrokeshire Coast National Park Authority,

Countryside Council For Wales

Miss Morag Ellis Of Counsel, instructed by the Principal Advocate PCC

She called:

Mr D Lawrance DipTP MSc MRTPI Head of Development Control, PCC

Mr I Jones BA MSc MRTPI Head of Conservation, PCNPA

Mr B K Long ARICS Area Officer, West Wales, CCW

Mr C Blandford BA DILA MLA FLI Director, Chris Blandford Associates, Environmental

Planning and Landscape Architectural Consultants, Uckfield.

Mr K Conway MA DipTP FRTPI MTS FRSA Tourism Consultant, Chris Blandford Associates.

For the CPRW Coalition

Mr J Campbell Queens Counsel, instructed by the CPRW

CPRW

Mr M Williams BA Director, Campaign for the Protection of Rural Wales, Welshpool

Mr G Sinclair Principal, Environmental Information Services, Narberth

Council for National Parks

Ms R Chambers BSc MSc Deputy Director, CNP

Friends of the PCNP

Mr R Powell Vice-Chairman, FPCNP

Jordanston Against the Windpower Station (JAWS)

Mr M Charlton Gwelfor, Castle Morris, Haverfordwest

Mr R Griffiths Bryngolau, Panteg, Fishguard

Mrs O Davies Min yr Mon, Jordanston, Fishguard

Mr K Smith Senior Partner, Coast and. Country Properties, Estate Agents, Fishguard

Mr G A Badland Llain yr Esgob, Dwrbach, Fishguard

Mrs J Chambers Marcham Ltd, Castle Cenlas, Mathry, Haverfordwest

Mr A James Trebrython Farm., Dwrbach, Fishguard

Mrs A Eastham Cleddau Laboratory for Archeaozoological Analysis, Dolau, Dwrbach, Fishguard

West Wales Badger Group

Mrs J Hands High Garth, The Ridgeway, Saundersfoot

Other interested persons

Mr Bowen George Town Councillor, Glanymor, Goodwick

Documents, Plans and Photographs

i. Lists of persons present at the inquiry

ii. Notice of the inquiry and list of those notified

iii. Letter put in at the inquiry from Mrs B H Jackson

iv. Local Planning Authority questionnaire and letters and consultations received in response to application publicity.

v. Notes of the pre-inquiry meeting of 8 August 2000

vi. Letters received in response to inquiry notification

Core Documents

- CD 1 Dyfed County Structure Plan 1990
- CD2 North Pembrokeshire Local Plan 1993-2005, 1998
- CD3 Report of Inspector following Local Plan inquiry, 1996

CD4 PG(W) 1999

CD5 Report to Council's Planning Committee, January 1998

CD5a Report to Council, noise criteria and conditions

CD6 Supplementary Guidance on Wind Farm Development PCC 1997

CD7 Supplementary Guidance on Wind farm development Dyfed CC 1993

CD8 TAN 8 on Renewable Energy 1996

CD9 CCW Policy on Wind Energy 1999

CD10 Environmental Statement September 1997 (4 volumes)

CD11 Amendments to ES

CD12 Additional environmental information following requests from the Welsh Office 1998 and 1999

CD13 Pembrokeshire Coast National Park Local Plan

CD14 Interim Landscape Character Assessment Guidance 1999

CD15 Landscape Impact Assessment for Wind Turbine development in Dyfed, Blandford 1992

CD16 Landscape Assessment of Preseli Pambrokeshire District, Blandford 1996

CD17 Suggested planning conditions with annotations, 9/11/00

CD18 Agreed conditions

AS I Description of development proposals

AS2 Policy context

AS3 Zone of Visual Influence and Viewpoints

AS4 Site and surrounding area

AS5 Technical matters, access, geology, hydrology, archaeology, safeguarding, EMI and public safety

AS6 Ecology [not agreed by CPRW coalition]

1.0 Put in by the Appellants

Associated with the evidence of Mr D I Stewart

- 1.1 Matters contained in proof of evidence
 - i) Wind energy development in the UK
 - ii) Description of proposed development
 - iii) International and national policy background on renewable energy
 - iv) Potential benefits of proposed development
 - v) National planning policies and guidance on wind energy
 - vi) Previous windfarm appeal decisions
 - vii) Local planning policy context and supplementary guidance
 - viii) Site selection
 - ix) Public perception and tourist surveys
- 1.2 Extracts of statements of government policy up to 1997

- 1.3 Extracts from New and Renewable Energy, Prospects for the 21" century, 1999
- 1.4 Speech by Michael Meacher 1999

1.5 House of Lords debate into renewable energy and Government's response, 1999

1.6 Extract from Hansard, speech by Helen Liddell, 2000

1.7 Government response to New and Renewable Energy, Prospects for the 21st century, February 2000

- 1.8 Speech by Lord Whitty and DETR and BWEA press releases
- 1.9 Summary of Report, Royal Commission on Environmental Pollution, 2000
- 1.10 Report of debate, Welsh Assembly, May 2000
- 1.11 Statistics and map of NFFO contracts and sites
- 1.12 Extract from annex to New and Renewable Energy prospects paper on emissions
- 1.13 Comments on PG(W), Planning Policy 1999
- 1.14 Comments on TAN 8
- 1.15 Government response to Welsh Affairs Committee recommendations on wind energy
- 1.16 Comments on CCW policy on wind energy
- 1.17 -1.28 Bundle of 12 appeal decisions relating to wind energy
- 1.29 Map of west Pembrokeshire of National Park and settlement pattern
- 1.30 Extract from Preseli Pembrokeshire Local Plan report
- 1.31 Public opinion surveys at Northen Ireland windfarms
- 1.32 Opinion surveys at Nympsfield
- 1.33Scottish Executive opinion survey
- 1.34 Extract from tourist guide to Kerrier District
- 1.35 Extract from Western Daily Press on regional promotion

- 1.36 Extract from Cornwall tourist information pack
- 1.37 Extracts from 1992 and 1998 Cumbria visitor surveys
- 1.38 Anglesey 1997/8 visitor survey
- 1.39 Renewable energy map of Wales
- 1.40 Extracts from Walks in the Dovey valley
- 1.41 Draft list of conditions
- 1.42 Extracts from New and Renewable Energy, Prospects for the 21" Century, DTI 2000
- 1.43 News release of 24/210/00
- 1.44 Plan of County showing areas more than 7.5km from the National Park
- 1.45 Tourism and windfarm survey Cornwall October 2000
- 1.46 Cross sections from nearest properties to the WTGs
- 1.47 Height of WTGs above sea level
- 1.48 Birds and Wind Turbines in Britain, British Wildlife, Oct 2000

Associated with the evidence of Ms K Hawkins

- 1.49 Statement on landscape character
- 1.50 Matters contained in proof of evidence
 - i) Method of landscape assessment
 - ii) Description of proposed development, construction, operation, design and layout
 - iii) Landscape character and assessment
 - iv) Visibility and viewpoint assessment
- 1.51 Figures 1-5
 - 1 Topography

2 Landscape character

- 3 Blade tip ZVI, 20 and 10km radius, 10km radius parts of WTGs
- 4 Viewpoint locations
- 5 a -i , viewpoints 1 9
- 1.52 References
- 1.53 Method of assessment
- 1.54 Photomontage production
- 1.55-57 Correspondence with the County
- 1.58 National Park map
- 1.59 National Park Authority leaflet
- 1.60 Pembrokeshire Coast Path national trail information
- 1.61 Statement on shadow flicker

1.62 Consultation letter of 15/9/99 on draft Pen Caer, Garn Fawr and Strumble Head landscape of outstanding historic interest

- 1.63 Comments on views of the appeal site firm local properties
- 1.64 Comments on interpretation of ZVI
- 1.65 Sections of A40(T) from which the appeal site could be seen

Associated with the evidence of Dr C W D Gibson (badgers)

1.66 Contained in proof of evidence

- i) Planning policy
- ii) Survey of badgers on the site
- iii) Potential effects of windfarm construction

2.0 Documents put in by the County Council, PCNPA and CCW

Associated with the evidence of Mr D Lawrance (planning)

- 2.1 Matters contained in proof of evidence
 - planning policy
 - consultation replies
 - planning application publicity
- 2.2 Schedule and plan of public rights of way
- 2.3 Plan of North Pembs Food and Arts and Crafts Trails
- 2.4 Pembrokeshire Arts and Crafts Guide
- 2.5 Pembrokeshire Food Guide
- Associated with the evidence of Mr I Jones (PCNPA)
- 2.6 Report to NPA development Control Committee of 19.11.97
- 2.7 Map of National Park
- 2.8 Map of features in and near Pen Caer area and of public rights of way
- 2.9 Extracts from Pembrokeshire Coast Path user survey 1996/97
- 2.10 Plan of draft Pen Caer Landscape of Special fistoric interest

Associated with the evidence of Mr B Long (CCW)

2.11 Matters contained in proof of evidence

- CCW
- Purpose of National Parks
- Status of PCNP
- National Park boundaries

- CCW policy on wind energy

Associated with the evidence of Mr K Conway (tourism)

- 2.12 Matters contained in proof of evidence
 - i) the local economy
 - ii) Marketing and survey of visitors in relation to the environment

iii) references

2.13 Note on visitor profiles, Cornwall and Pembrokeshire

Associated with the evidence of Mr C Blandford (landscape)

- 2.14 Matters contained in proof of evidence
 - i) landscape character of the area
 - ii) Visual impact
- 2.15 Viewpoint locations
- 2.16 References
- 2.17 Landscape character areas
- 2.18 Location of CBA viewpoints
- 2.19 Viewpoints A G
- 2.20 map of promoted tourist road, cycle and footpath routes
- 2.21 Leaflet of Saints and Stones trail

3.0 Put in by CCW coalition

3.1 Mr N Williams, CPRW's position on renewable energy and wind power policies

3.2 Ms R Chambers, Council for National Parks - the CNP, National Park origins, statutory purposes, sites adjoining National Parks and renewable energy issues.

3.3 List of references

- 3.4 Extracts from relevant planning appeal decisions
- 3.5 Statement of Mr R Powell, Friends of PCNP
- 3.6 Mr R Chamber, JAWS description of North Pembrokeshire, critque of ES
- 3.7 Plan and statement identifying all properties within 2km of the appeal site
- 3.8 Mr R Griffiths impact of proposed development on Panteg
- 3.9 Cross sections from Panteg to WTGs
- 3.10Mrs 0 Davies survey of visitors to the area
- 3.11 Copy of survey form
- 3.12Letter from Wales Tourist Board of 5/10/00
- [3.13 3.14 deleted]
- 3.15 Mr K Smith the local property market
- 3.16 Mr G Badland impact on Llan-yr- Esgob
- 3.17 Bundle of photographs of fire damage to WTGs on Mynydd y Cemmeas, January 1998
- 3.18 Mrs J Chambers impact on Langwarren
- 3.19 Mrs J Hands impact on badgers
- 3.20 Report of West Wales badger group of 3/11/97
- 3.21 letter of 7/9/94 from O'Conner & Cooper, Vets of Fishguard
- 3.22 Badgers, a Guide for Developers, CCW 1999
- 3.23 insults of badger survey of the site of 14/10/00
- 3.24 Mr A lames impact on Trebrython farm
- 3.25 Mrs A Eastham impact on bird life
- Associated with the evidence of Mr G Sinclair (CPRW)

3.26 Matters contained in proof of evidence

- i) UK windfarm development
- ii) Site selection
- iii) Visual impact and critique of photographic and visualisation techniques
- iv) Implications of government energy policy
- 3.27 Table f UK wind power stations
- 3.28 Visual impact of WTGs in relation to distance
- 3.29 British Horse Society policy 1998
- 3.30 Comments on photographic material in appeal decisions
- 3.3.1 Suggested viewpoints of windfarms
- 3.32 References to off-shore wind proposals
- 3.33 Promoted tourist and visitor routes
- 3.34 Map of local school bus routes
- 3.35 Written statement by Mr L Nchols of MAIWAG
- 3.36 Letter from Mr L K Williams of Millbrook
- 3.37 Ms S Evans of Coastal Cottages, Pembrokeshire

4.0 Put in by other interested persons

4.1 Extract from Western Telegraph put in by Councillor Bowen George