

ELECTRICITY ACT 1989 (SECTION 36 AND SCHEDULE 8)  
TOWN AND COUNTRY PLANNING ACT 1990 (SECTION 90)  
THE ELECTRICITY GENERATING STATIONS AND OVERHEAD LINES (INQUIRIES PROCEDURE)  
(ENGLAND AND WALES) RULES 2007

PUBLIC INQUIRY TO CONSIDER SECTION 36 ELECTRICITY ACT 1989 APPLICATION BY STEADINGS  
WIND FARM LIMITED FOR CONSENT AND DEEMED PLANNING PERMISSION TO CONSTRUCT AND  
OPERATE A WIND FARM AT KIRKWHELPINGTON, NORTHUMBERLAND (KNOWN AS STEADINGS)

PROOF OF EVIDENCE OF  
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LANDSCAPE AND VISUAL EFFECTS  
ON BEHALF OF STEADINGS WIND FARM LIMITED

BERR REFERENCE: GDBC/001/00278C

TYNEDALE COUNCIL REFERENCE: 20060540

NORTHUMBERLAND COUNCIL REFERENCE: 06/00023/CPC

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This document has been prepared and checked in accordance with BS EN ISO 9001 : 2000

## 1.0 Qualifications and Experience

### 1.1 Professional Qualifications

1.1.1 My name is Colin Goodrum. I am a landscape architect and I have a Bachelor of Science Honours Degree in Physical Geography with Agriculture and a Diploma in Landscape Architecture. I was elected as a Member of the Landscape Institute in 1984.

### 1.2 Experience

1.2.1 I have over 27 years experience as a landscape architect. I am a Partner of LDA Design and am responsible for a wide range of projects including the planning, design and implementation of residential and mixed use developments, major infrastructure schemes including wind energy, new settlements, business parks, large and small scale commercial developments, health-care projects, inner city regeneration, town centre pedestrianisation and landscape assessment. Work involves site appraisals, consultation, environmental impact assessments, masterplanning, landscape and urban design and the implementation of landscape, public realm and open space schemes. I have appeared as an expert witness on landscape and other matters many times in the last twelve years, including significant infrastructure projects such as wind farms, port and rail projects. Many of the projects have been taken through the full planning process, followed by detailed design and implementation. I have given evidence in support of wind farm applications at both Section 36 and T&CP Inquiries

1.2.2 Prior to working for LDA Design I spent two and a half years as Regional Landscape Architect for PSA Region, based in Cambridge, preceded by six and a half years in local government in the West Midlands.

1.2.3 I have several roles within the Landscape Institute (the professional body representing landscape architects, landscape scientists and landscape managers), being Honorary Treasurer, and a member of both the Executive and the Council, as well as serving on the Environment and Technical Committees. I was a Founding Vice Chairman of the UDAL (Urban Design Alliance) Steering Committee and I am a past Chairman of the East Anglian Branch of the Landscape Institute.

### 1.3 LDA Design

1.3.1 LDA Design is an established landscape and urban design and environmental planning practice, with partners and staff numbering over 110. The landscape and environmental planning, masterplanning and urban design, implementation and management of development at all scales has been, and continues to be, a major feature of the work of the practice, along with particular specialisms in landscape and visual assessment. LDA Design is engaged nationally on such projects in coastal, rural, urban fringe and town

centre situations. The practice provides advice to WAG, CABE/ CABESPACE, CCW, Natural England and others including local authorities regarding sustainable development, design advice and on landscape assessment.

- 1.3.2 Year on year, the practice has consistently won national design and landscape planning awards. These include Landscape Institute awards in 2004 for local and site planning for the Bathside Bay Container Port in Harwich and in the communication category for the Rotherham Urban Renaissance Charter; and a Principal BALI National Landscape Award for the restoration of Forbury Gardens, Reading in 2005. Awards received last year include an Urban Green Space Award for Gunpowder Park, a Green Flag Award for Forbury Gardens, New Homes Awards 2006 for Royal Victoria Dock Phase 1 and School Square at Greenwich Millennium Village, and a LI Award for the Essex Green Grid project. Awards this year include four Landscape Institute awards in the Landscape Policy; Strategic; and Local Landscape Planning; and Heritage and Conservation categories.

## 2.0 Background, Brief and Objectives

### 2.1 Background

- 2.1.1 The background to my evidence is set out fully in Mr Provan's Proof of Evidence. Relevant documents include the Environmental Statement (ES) [CD2] and associated appendices, submitted with the planning application in April 2006 and particularly the Landscape and Visual Assessment (chapter 6 of the ES), prepared by Wardell Armstrong. The ES was further updated in August 2006 by the Regulation 13 submission [CD3] which included additional material specifically in relation to cumulative landscape effects (chapter 3). Further Supplementary Environmental Information (SEI) [CD7] was submitted in September 2007, which addressed changes to the scheme. For both of these documents, the additional information in respect of landscape and visual effects was prepared by Wardell Armstrong. For the purposes of my evidence, I have reviewed all of this material. No useful purpose would be served by my repeating it here, though it should still be treated as effectively being included in my evidence. I shall only repeat material from the ES in so far as is necessary or appropriate for clarity.
- 2.1.2 I append selected plans from the ES, along with further material as appropriate in order to provide material to illuminate the points I wish to make in my evidence.
- 2.1.3 Whilst the landscape chapters of each of these documents also covers effects on heritage features, my evidence does not cover these aspects which will be dealt with in Dr Collcutt's evidence. This includes the effects on a World Heritage Site, Scheduled Ancient Monuments, Parks and Gardens of Historic Interest, Listed Buildings and Conservation Areas. Similarly Mr Latimer deals with matters of ecology and trees.
- 2.1.4 Given that Mr Provan deals with various matters of background, as well as the policy context, I do not seek to repeat any of this information. My evidence is focussed on relevant landscape and visual factors, including effects on heritage and public rights of way, so far as they lie within my area of expertise.
- 2.1.5 The Non-Technical Summary for the ES concludes that:

*"The site location has been carefully chosen and the wind farm layout has been iteratively designed. The design of the wind farm has been informed by the landscape and visual assessment process.*

*With regards landscape effects the assessment has concluded that there would be adverse effects on small parts of landscape character types immediately adjacent to the site, but that these would not be sufficient for the landscape character types to experience a loss of character as a whole. ...*

*Key designated areas of Northumberland National Park, North Pennines AONB and Hadrian's Wall World Heritage Site would not be significantly adversely affected.*

*A range of visual receptors has been assessed, with 10 of the 30 representative viewpoints predicted to receive significant adverse effects."*

It should be noted that though the final statement gives a correct general impression of the level of visual effects, there is a typographic error (38 viewpoints were assessed), and having completed my own assessments, the numbers referred to above have altered, as I indicate later in my evidence.

- 2.1.6 An initial discussion to agree cumulative assessment scope and methodology was held in October 2007 between me, Ms Rebecca Rylott, representing Amec, and Ms Kay Hawkins, representing Wind Prospect. Subsequent discussions with Dr Guy Wimble, representing Tynedale have led to a draft Statement of Common Ground (SoCG) concerning Cumulative Landscape and Visual Impact Assessment (CLVIA). At the time of writing this remains a draft. A well progressed draft was provided to the council on the 5 November, and lodged with the Programme Office on 16 November 2007. I understand Mr Simon White's comments (on behalf of the County Council) have also been represented by Dr Wimble in our discussions. Comments were received from the council on the 27<sup>th</sup> November. The document sets out the scope and methodology for the cumulative assessment and its presentation. A joint (i.e. SWFL, Amec and Wind Prospect) set of graphics, based on this methodology, is in the process of being produced. I intend to seek agreement of the CLVIA graphics and matters of the assessment with Tynedale District Council subsequently.
- 2.1.7 Separately I have contributed to the SoCG between SWFL and Tynedale, which again remains draft at the time of writing.

## **2.2 Brief**

- 2.2.1 In August 2007 I was instructed by Banks Ltd to prepare expert evidence in support of the application for this Appeal. Prior to that, I have had no involvement in the project.
- 2.2.2 My proof is structured as follows; I continue within this section to review the background, including some of the Objectors' Statements of Case. In sections 3, 4 and 5 I review aspects of the planning context of specific relevance to my case, including capacity studies. In Section 6, I review matters relating to the landscape and visual baseline.
- 2.2.3 I deal with the effects of the scheme of the proposal in Section 7 as assessed by me, with reference to the landscape resource, landscape character, visual effects, heritage, effects on designated landscape and planning policy. Section 8 introduces the subject of

cumulative effects. Where matters of effect are agreed, this will be stated in the SoCG. Section 9 deals with an analysis of consultee and third party responses in respect of landscape issues. Finally, in section 10 I draw conclusions relevant to my topic area.

2.2.4 My appendices are structured as follows, with Appendices 1-4 in SWFL3.3:

- Appendix 1 contains relevant extracts and material relating to landscape character and capacity studies.
- Appendix 2 contains figures and tables relating the landscape and visual impact assessment.
- Appendix 3 contains material relating to public opinion in respect of wind farms.
- Appendix 4 contains extracts from Inspector's decisions to which I refer in my evidence, and not included in the core documents.
- Appendix 5 (document SWFL 3.4) contains wireframe visualisations from those viewpoints not previously (in the ES or SEI) produced to current SNH standards (i.e. all those which were not included in the submitted photomontages, except for a replacement VP20 (Steadings only) to correct an error).

2.2.5 Where I refer to core documents with 'CD' references in this proof these relate to Issue 1 (29 November 2007) of the Inquiry Core Document list.

## 2.3 Relevant Issues

2.3.1 The Planning Inspectorate letter dated 24 May 2007 sets out those matters considered to be relevant. My evidence seeks to assist, within my areas of professional expertise, primarily with the following, using the notation in the letter.

- a) Consistency with the relevant development plans
- b&c) Consistency with the Government's policy on energy as contained within PPS22 and the Energy White Paper.
- d) justification for the site.
- e) the visual impact, particularly from the Northumberland National Park and the North Pennine AONB.

2.3.2 Mr Provan deals with items a – d within his evidence and I only include in my evidence issues arising from these items that relate directly to landscape and visual matters. Dr Collcutt deals primarily with matters in relation to impacts on heritage and my evidence only addresses this in respect of the contribution that heritage features make to landscape character. The bulk of my evidence thus relates to item e.

2.3.3 In addition to these matters, whilst the Secretary of State refers to visual impact, I also deal with the separate issue of the landscape impact of the Steadings scheme in terms

of both individual and combined scenarios. For reasons which I will not rehearse here, it has not proved possible to finalise part of my evidence relating to cumulative effects that will be submitted separately in due course.

## 2.4 Tynedale Planning Committee Reports

May 2007 Committee Report

- 2.4.2 The May 2007 committee report reviews both the ES and Regulation 13 submission material with the assistance of a report from Ironside Farrar. Section 5 of the report discusses responses from consultees (some of these are addressed in section 9 of my evidence). Section 6 of the report reviews National Regional and Local Planning Policy, and the North East Region and Knowesgate area capacity studies [CD142 and CD104] before coming to the broad conclusion in paragraph 6.23 that “*national and regional guidance, and policies in the Joint Structure and the Local Plan, do broadly support the principle of wind energy development in the Knowesgate area, which would include the Steadings wind farm application site.*”
- 2.4.3 In paragraph 6.31 it is noted that the Ironside Farrar review of the proposals suggests that landscape impacts in the ES are underestimated. I provide a more detailed commentary on the Ironside Farrar report below, in section 2.6.7.
- 2.4.4 Paragraph 6.38 states that “the ARUP methodology is currently being tested at a planning appeal”. This refers to the Wern Ddu appeal and I provide evidence regarding this in section 5 of my evidence. Paragraphs 6.35 to 6.40 discuss the ARUP study findings and appear to rely on the fact that the proposal does not fit within the identified ‘preferred scenario D’, to assert in paragraph 6.40 that the proposed wind farm would “*exceed the carrying capacity of the landscape*”, despite also acknowledging that the proposal lies mainly within one of the identified broad areas of least constraint. In applying this criterion, it would appear that the Council is only prepared to accept development that fits ‘Scenario D’, which would have the effect of limiting wind farm development in the area by requiring it to come forward in the small areas identified.
- 2.4.5 Paragraph 6.59 states that “*the area around the Wanneys is considered popular with walkers and climbers, and it can be concluded that many of these would not wish to visit this area if a wind farm is present.*” Public opinion surveys do not support this assertion, as I discuss later in my evidence and Mr Provan discusses generally and in relation to tourism within his evidence.
- 2.4.6 In paragraph 7.3 it is concluded that the proposal should be objected to on the grounds that “*The proposed development would cause demonstrable harm in landscape and visual terms, exceeding the carrying capacity of the landscape, when taken in isolation*

*and when taken cumulatively with the proposed Green Rigg and Ray wind farms.”*  
(amongst other reasons). The recommendation states that the proposal would be contrary to:

- Policy EN3 of RPG1,
- Policies 41 and 42 of the submission draft RSS,
- Policy M4 of the Joint Northumberland and National Park Structure Plan
- Policies NE1, NE16 and CS16 of the Tynedale District Local Plan

I examine the policy background further in sections 3 to 5 of my evidence.

May 2007– Ironside Farrar review of ES [CD9]

2.4.7 This review notes the following key matters in respect of landscape and visual impacts:

- Effects of the grid connection should be assessed. This is addressed within my evidence.
- A number of issues are raised regarding the methodology, in particular the ways in which sensitivity of receptors is assessed and the threshold at which effects are deemed to be significant.
- The baseline description and assessment is described as *“detailed and well illustrated”*.
- The assessment of impacts is described as *“detailed and comprehensive as well as being well illustrated”*.
- The number of viewpoints is regarded as being *“more than adequate”*, but the report considers that for a significant proportion of the viewpoints the assessments of magnitude and significance, and the descriptions given, tend to underestimate effects. A detailed description is given of the viewpoints deemed to be affected by this and I review this within my own evidence regarding visual effects in section 7.5.
- A number of other minor inconsistencies are also identified. I address these at the appropriate points within my evidence.

October 2007 Committee Report

2.4.8 The October 2007 committee report concerns the amended proposal (now 21 turbines, the subject of the SEI submitted in September 2007). The report sets out the policy background and discusses a small number of objection letters before examining the issues arising. Paragraph 6.4 notes that the RSS identifies the Knowesgate area as being an area of least constraint for Medium Scale (20-25 turbines) wind development and that the proposal falls within this definition. It also notes that cumulatively with Green

Rigg and Ray Fell, the total number is outside this limit, but also that PPS22 states that arbitrary limits on numbers should not be set.

2.4.9 Paragraph 6.11 describes the review (by Ironside Farrar) of the LVIA submitted in the SEI. This states that the scheme is a 'large size proposal', which view I note is in conflict with the definition used in the RSS (i.e. 20-25 turbines is deemed a Medium scale development). The proposal is reviewed against the findings of 'Wind farm Development and Landscape Capacity Studies: Knowesgate and Harwood Forest' (Ove Arup and Partners for North East Regional Assembly, June 2006), [CD104] and it is noted that the amendments remove turbines from areas identified as being unsuitable for wind farm development, meaning that all of the scheme is situated within areas identified within that study as having capacity for wind farm development. It also notes that the amendments would reduce cumulative effects and improve visual cohesion by amending the scheme to three rather than four clusters.

2.4.10 Paragraph 6.20 discusses the Great Bavington Conservation Area and refers to the publication of a Draft Conservation Area Appraisal [CD191] which describes the importance of the landscape setting to the Conservation Area. Dr Collcutt deals with the Conservation Area in detail in his evidence, I also discuss effects on views from Great Bavington in section 7.

2.4.11 Within the recommendation, item 1 states that the proposal "*when taken in isolation and when taken cumulatively*" would "*exceed the carrying capacity of the landscape*". The preceding policy analysis (paras. 6.4 and 6.11 as described above) only partly lends support to this assertion as paragraph 6.4 recognises that the regional capacity study [CD142] identifies the area as being suitable for the proposed scale of development. The recommendation states that the proposal would be contrary in terms of its landscape and visual effects to:

- Policy EN3 of RPG1,
- Policies 41 and 42 of the emerging RSS,
- Policy M4 of the Joint Northumberland and National Park Structure Plan
- Policies NE1, NE16 and CS16 of the Tynedale District Local Plan
- Policies GD1, GD2, NE1, EDT1, EN1 and EN2 of the Tynedale District Core Strategy

I examine the policy background further in sections 3 and 4 of my evidence.

October 2007 – Ironside Farrar review of SEI [CD10]

2.4.12 In addition to the findings described within the Committee report which I have discussed above, this report also expresses the view that some visual effects are underestimated

and notes that the effects of the borrow pit should be considered. I deal with both aspect later on in my evidence. It also notes that the errors and inconsistencies found within the ES have been carried through and that *"the number of minor inconsistencies that cloud the overall understanding of the report"* but concludes that overall the SEI *"appears to be sufficiently detailed and competently executed for the reader to gain a reasonable understanding of the nature and extent of the changes in the development and its environmental effects"*.

2.4.13 I provide within my evidence a full review of the landscape and visual effects of the current scheme (within in this proof and supplemented by appendices 2.1 to 2.3). Inevitably different landscape professionals do not always agree on each and every judgement made in assessing a given project. I do not dissent from the overall assessment made in the Steading's ES material but where I take a different view on a particular aspect I shall identify and explain the difference from the submitted assessments, and making reference to the Ironside Farrar reviews of the submitted documents where appropriate. As I was not responsible for the preparation of the submitted documents, and my opinion differs slightly from these in some respects, I indicate this where necessary within my proof of evidence. I also re-present the visual material (in appendix 5 to my evidence – document SWFL3.4), to meet the newly published standards for the presentation of visualisations ("Visual Representation of Wind farms: Good Practice Guidance",SNH, 2006 [CD133]), and to correct the minor inconsistencies referred to by Ironside Farrar, where relevant.

## **2.5 Tynedale District Council's Case**

2.5.1 The Statement of Case for Tynedale District Council largely summarises and repeats the reasons for their resolution to object to the original proposal (i.e. as per the May 2007 committee report). Paragraph 4.8 notes that the SEI was not due to be considered until after the submission of the Statement of Case. Their case is therefore further set out in a letter to the Secretary of State, dated 24 October 2007 which details the resolution to object as discussed in section 2.4.11 of my evidence.

2.5.2 Whilst not referred to in its reasons for objection, the Statement of Case indicates that policies 33 of the emerging RSS and L8 of the Joint Structure Plan (both regarding landscape character); and policies LR19 and TP27 (both saved policies from the Local Plan regarding Public Rights of Way) will be referred to in their evidence. I discuss matters of planning policy later in my evidence.

2.5.3 The statement of case also indicates that the Knowesgate and Harwood Forest capacity study [CD104] is regarded by Tynedale as a relevant material consideration, but it

notably does not mention the North East Regional Renewable Energy Strategy [CD142] as being of relevance.

## 2.6 Northumberland Planning Committee Reports

2.6.1 The 1 May 2007 committee report identifies a number of relevant structure plan policies in relation to landscape matters (L2, M2, M4 and M5). In particular it discusses in paragraphs 5.3 to 5.5 the fact that policy M5 reflects the adopted RPG policy EN2 which identifies the Knowesgate Area as an Area of Least Constraint for wind development.

Paragraph M5 states that:

*“Policy M5 does not define the scale of development which could be accommodated in the areas of least constraint. However, at the time of preparing the structure plan it was anticipated that small to medium scale wind farms within the least constraint areas would not exceed 50 Megawatts.”*

2.6.2 Neither the RPG [CD34], the draft RSS [CD44] or the regional capacity study [CD142] provides any basis either for the expectation that wind farms would be “medium to small” (the area is identified for medium-scale development in the capacity study), or that they would be less than 50MW. These figures are only supported if at all by the Knowesgate Area study [CD104] which paragraph 5.8 notes is not policy and does not form part of the Development Plan.

2.6.3 The report then goes on to discuss the Knowesgate Area study in some detail, comparing the Steadings proposal to the various scenarios in the report before concluding that as the Steadings proposal does not coincide with the scenarios examined in the Knowesgate study, and particularly not with the preferred scenario, it *“does exceed the carrying capacity of the landscape to a significant extent”*, also noting that that *“there are other areas within the area of least constraint which are more appropriate”*. This approach is tantamount to indicating that only proposals which fall within the report’s preferred scenario will not meet with an objection. Paragraph 6.3 within the conclusion to the report, makes it clear that it is the fact that the Steadings site does not fall within the preferred scenario D which forms the basis for the County Council’s objection on the basis that the proposal would *“significantly exceed the carrying capacity of the landscape”*. I examine the Knowesgate area study in more detail later in my evidence, and Mr Provan’s evidence also provides detailed comment on the methodology of this report.

## 2.7 Northumberland County Council’s Case

2.7.1 The Statement of Case for Northumberland County Council identifies that one of their two reasons for objection is that *“The proposed turbines, due to their scale, would have*

*an adverse impact on the landscape character of the area;*". As worded, this objection appears to be on the basis of the physical size of the turbines, rather than their number or distribution (it refers to the scale of the turbines, rather than the scale of the development).

2.7.2 The statement of case generally identifies the same policies and documents as being of relevance as Tynedale District Council:

- policies 41 and 42 of RPG1 (though not policy 33);
- policies M4 and L8 of the Joint Structure Plan, but in addition, policies L2, M2 and M5;
- Knowesgate and Harwood Forest capacity study; once again the North East Regional Renewable Energy Strategy is not listed as being of relevance even though Joint Structure Plan Policy M5 arises directly from the findings of the latter study.

## **2.8 Northumberland National Park Authority's Statement of Case**

2.8.1 The Statement of Case for Northumberland National Park Authority (NNPA) indicates in para. 2.1 that they object to the Steadings proposal on the basis that it would have a significant adverse impact on the "*setting*" of Northumberland National Park. Particular issues are stated to be:

- Existing landscape character - openness and elevation, tranquillity and remoteness.
- Visual effects arising from the movement of the blades, vertical structures on horizontal horizons, high degree of intervisibility with the National Park.
- Cumulative impacts in addition to Kirkheaton.
- Potential impacts of grid connections.
- Effects on rights of way within the National Park.
- Effects on 'gateway settlements' of Bellingham, Otterburn and West Woodburn

2.8.2 I deal with each of these matters at the relevant points within my evidence. However, a key point I would raise in respect of the statement of case is that the wording used in the key introductory and concluding paragraphs (2.1 and 3.1) refers to effects on the "*setting*" of the National Park, rather than on the National Park itself. Whilst the concept of 'setting' in respect of listed buildings and other heritage features is well-established, the notion that a landscape designation has a setting is not. The implication would be that the National Park needs an area of 'sympathetic' surrounding landscape in order for

its importance to be properly appreciated. There is no support for the idea of a 'setting' within the legislation and guidance relating to national parks and this is not a matter borne in mind when drawing up National Park boundaries (areas are either suitable to fall within the designation or not). It would therefore appear that the idea of a 'setting' to the National Park is being used as a way of establishing a 'buffer zone' contrary to the direction of paragraph 14 of PPS22. (see section 4.4).

## **2.9 Other Parties' Statements of Case**

- 2.9.1 A number of the other Statements of Case raise issues in respect of landscape matters. Most of these are dealt with in the main body of my evidence and those that are not are covered in section 9 of my evidence.

### 3.0 Planning Policy

3.1.1 Detailed evidence regarding planning policy is provided by Mr Provan. In order to avoid repetition I therefore refer only to some particular matters that I wish to highlight in respect of landscape matters.

3.1.2 Regional Planning Guidance for the North East (2001) (RPG1) [CD34]

Policy EN3

3.1.3 Policy EN3 is cited by Tynedale in their decision to object to the proposal. Whilst it mentions *“appropriateness of the location in relation to the local and wider landscape”* in respect of wind farms, the policy is not intended to be used to assess individual proposals, but is guidance to local authorities in preparing their own policy. In this respect, it is clear that the *“appropriateness of the location”* of the Steadings site has been endorsed by the RSS and Structure Plan (see below) in the identification of *‘broad areas of least constraint’* for wind development.

3.1.4 North East of England Regional Spatial Strategy (RSS text showing proposed changes, May 2007) [CD44].

3.1.5 Policies 41 and 42 of the emerging RSS are cited by Tynedale in their decision to object to the proposal. Policy 41 lists the criteria that should be used in assessing renewable energy proposals, these include, inter alia:

*“b) acceptability of the location and the scale of the proposal and its visual impact in relation to the character and sensitivity of the surrounding landscape;*

*h) visual impact of new grid connection lines;*

*i) cumulative impact of the development in relation to other similar developments;”*

The policy also refers to the need to consider the effects on nationally designated sites. I consider all of these matters within my evidence and am of the opinion that effects arising from this proposal are acceptable in these respects.

3.1.6 Policy 42 requires a *“positive policy framework to facilitate onshore wind energy development”* within identified *“broad areas of least constraint”* including the Knowesgate Area (which includes the Steadings wind farm site) which is identified as being suitable for medium scale development. As Mr Provan also highlights within his evidence, the proposed development of 21 turbines fits the criterion of 20-25 turbines which was defined at the EiP as being ‘medium scale’. As I have discussed previously, Tynedale District Council’s use of the more detailed study of the Knowesgate area in

coming to its decision to object is restrictive rather than positive, as is the Knowesgate area study itself ( as described later in my evidence at paras. 5.1.7-5.1.13).

- 3.1.7 Tynedale’s Statement of Case also refers to policy 33, which appears only to be of relevance in so far as it requires that regard be had to landscape character assessments in development control decisions. The submitted assessments and my own evidence provide sufficient information to enable this Inquiry to be fully informed in this respect.

Joint Northumberland and National Park Structure Plan (Adopted 1996) [2.4]

- 3.1.8 Policy M4, listed by Tynedale District Council amongst their reasons for objection, is a saved policy beyond September 2007. It requires local planning authorities to support and encourage major renewable energy developments outside nationally and internationally designated areas and gives a list of criteria against which proposals should be assessed including implications for:

- a) landscape character and capacity;*
- b) visual amenity;*
- e) living conditions nearby;*
- j) cumulative impact with other similar development”.*

I consider all of these matters within my evidence and am of the opinion that effects arising from this proposal are acceptable in these respects.

- 3.1.9 Tynedale’s Statement of Case also refers to policy L8, which requires that local plans should include *“detailed policies, which seek to ensure that development respects the distinctive character of the Countryside Character Areas.”* In my opinion, the proposals respect the distinctive character of the landscape in so far as that is possible for a development type which is not identified as being ‘in character’ for any landscape within England.

- 3.1.10 Northumberland’s Statement of Case also refers to policies L2, M2 and M5. Policy L2 seeks to protect the *“character and distinctiveness”* of the North Pennines AONB. As I discuss later within my evidence, effects on the AONB arising from the development will be Negligible. Policy M2 requires the Environmental Assessment of major developments, including the assessment of effects on landscape character and visual amenity. The submitted assessments and my evidence address this policy requirement. Policy M5 reflects the Regional capacity study (see later within my evidence at paras. 5.1.5-5.1.6) in identifying the area around Knowesgate as being an area of *“least constraint for major wind energy developments”*.

Tynedale District Local Development Framework Core Strategy (Adopted October 2007) and Local Plan (Adopted 2000) [CD 37]

3.1.11 As Mr Provan highlights within his evidence, the Core Strategy was not adopted at the time of submission of either the ES or the SEI for the proposal. Consequently, the council list a number of local plan policies in coming to their decision to object which are no longer applicable. Of particular relevance in respect of landscape matters is the replacement of policy NE16 with policy NE1 which removes the Area of High Landscape Value designation which formerly included the site. Paragraph 5.2 of the Adopted Core Strategy retains a reference to the AHLV, however Jonathan Nicholson of Tynedale DC has orally acknowledged that the reference should not have been retained, but was an oversight.

3.1.12 Tynedale District Council refer to policies GD1, GD2, NE1, EDT1, EN1 and EN2 of the Tynedale District Core Strategy in their objection to this proposal. In seeking to apply policy GD1 (which states that development in the open countryside should be *limited to the reuse of existing buildings*) to this proposal, the Council is not only in conflict with the advice given in PPS7, but also in conflict with its own policy EN1 which is intended to provide for the *“sensitive development of renewable energy resources”* (EN1). It is in the nature of commercial scale wind farms that appropriate sites will be located within the open countryside (for reasons of landscape and visual impact as well as other considerations). Policy GD2 is similarly inapplicable as it requires the use of brownfield land or sites within or adjoining settlements. Policy EDT1 has no relevance to landscape matters.

3.1.13 Policy NE1 sets out a number of wide-ranging principles including the objectives to:

*“a) Protect and enhance the character and quality of the landscape”*

As I demonstrate within my evidence, this proposal protects landscape character by being sited in an area that has been identified as having a lower level of sensitivity than surrounding areas and by being of a scale that is compatible with the local landscape capacity. Indeed, as Mr Provan has confirmed, the site was selected for this very reason, amongst others.

*“b) Manage the relationship between development and the natural environment in order to:*

- *Minimise risk of environmental damage*
- *Avoid the urbanisation of the countryside”*

The requirement to ‘minimise risk of environmental damage’ is very open to interpretation. If used narrowly, it could have the effect of restricting development as a way to reduce the risk; if used in a more considered way then, in the context of this proposal, it would require the potential risks of damage from climate change to be weighed against the identified effects of the development, in keeping with national policy. Wind farms are not associated with urban form and do not represent, in my view, urbanisation of the countryside.

*“g) Enable and encourage people to experience, enjoy and understand the natural environment.”*

As Mr Provan discusses within his evidence and I discuss in relation to visual effects within my evidence, the variable nature of people’s individual responses to wind turbines means that for some their enjoyment of the landscape may be diminished, for others it will be unchanged, and for others it will be enhanced. Wind turbines also symbolise one of society’s responses to climate change. As such they aid an understanding of the natural environment and the processes acting on it.

The policy also provides for the protection of the landscape quality of both the North Pennines AONB and the Northumberland National Park. I give evidence regarding the effects (which are not significant) of the proposal on these two designated areas.

- 3.1.14 Mr Provan discusses the fact that policy EN2, taken in isolation, appears to require that renewable energy developments should give rise to *“no significant adverse impact”* on *“the character or appearance of the landscape”*; *“the amenity ... of local residents”*; or on *“the character and setting”* of the North Pennines AONB and the Northumberland National Park.
- 3.1.15 I concur with Mr Provan that there will always be significant visual effects arising from the construction of a commercial scale wind farm, at least in the near vicinity of the site. Whether that effect is adverse is an important matter for debate - it is a common assumption that ‘out of character’ development is harmful and thus the policy could have the effect of preventing wind farm development if applied with that assumption.
- 3.1.16 It is also the case that some local residents will inevitably regard their amenity as having been adversely affected. Therefore, taken as written, the policy could be over-restrictive. The supporting text (paragraph 11.6) to the policy refers to the need to give *“significant weight to the wider ... benefits”* of proposals, but this is not reflected within the wording of the policy.

## 4.0 National Planning Guidance

4.1.1 Mr Provan's evidence deals specifically with these matters and I will touch only on various aspects that relate specifically to landscape and visual matters that are of particular relevance to the proposals.

## 4.2 PPS1, Delivering Sustainable Development [CD70]

4.2.1 One of the key principles stated within this document setting out national Government policy is that:

*"(ii) Regional planning bodies and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change - through policies which ... promote the development of renewable energy resources, and take climate change impacts into account in the location and design of development. "[Para. 13]*

*Under the heading of "Protection and Enhancement of the Environment" [Para. 19], PPS1 requires that:*

*"Plan policies and planning decisions should be based on:*

- *the potential impacts, positive as well as negative, on the environment of development proposals (whether direct, indirect, cumulative, long-term or short-term); and,*
- *recognition of the limits of the environment to accept further development without irreversible damage. (my underlining)*

4.2.2 The recent publication of the Consultation Draft of the Planning and Climate Change Supplement to PPS1 in December 2006 [CD71] is relevant as it states that planning authorities should [Para. 22]:

- *"look favourably on proposals for renewable energy, including on sites not identified within development plan documents;*
- *not require applicants to demonstrate the overall need for ... a particular proposal for renewable energy to be sited in a particular location;"*
- *avoid policies that set stringent requirements for minimising impacts on landscape ... if these effectively preclude the supply of certain types of renewable energy, and therefore other than within the most exceptional circumstances, such as within nationally designations, avoid such restrictive policies".*

### 4.3 PPS7, Sustainable Development in Rural Areas [CD72]

- 4.3.1 PPS7 sets out national Government policy aimed at ensuring appropriate development within rural areas. It is mainly aimed at development involving the construction of buildings but does explicitly note that [Para. 16]:

*“When preparing policies for LDDs and determining planning applications for development in the countryside, local planning authorities should: ... (iv) provide for the sensitive exploitation of renewable energy sources in accordance with the policies set out in PPS22;”*

### 4.4 PPS22 Renewable Energy [CD74] and Companion Guide [CD75]

- 4.4.1 PPS22 sets out national Government policy for renewable energy and emphasises the need for *“positive planning”* in facilitating renewable energy developments. It identifies eight key principles [Para. 1] that *“local planning authorities should adhere to ... in their approach to planning for renewable energy”*:
- 4.4.2 Principle (ii) stipulates that *“local development documents should contain policies that promote and encourage, rather than restrict, the development of renewable energy resources”*.
- 4.4.3 Principle (iv) states that *“The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.”*
- 4.4.4 As I have discussed previously in my evidence, in their objection, Tynedale Council rely on policy EN2, which has the effect of restricting development (contrary to principle ii) of such schemes as it does not seek to weigh the benefits of such schemes against their impacts (contrary to principle iv), but rather asserts that schemes must not have *“significant adverse impact”*.
- 4.4.5 Paragraph 19 of PPS22 states that:

*“The landscape and visual effects of particular renewable energy developments will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development. Some of these effects may be minimised through appropriate siting, design and landscaping schemes, depending on the size and type of development proposed. Proposed developments should be assessed using objective descriptive material and analysis wherever possible even though the final decision on the visual and landscape effects will be, to some extent, one made by professional judgement.”*

In this case, all of these points have been addressed. Mr Provan’s evidence demonstrates that the site has been selected to minimise effects and that scheme revisions and appropriate mitigation measures have been included to further reduce effects. The assessments contained within the ES use objective descriptive material and my evidence reflects my professional judgement.

Paragraphs 11, 12 and 14 of PPS22 deal with the potential effects of wind farm developments on nationally designated sites. Paragraphs 11 and 12 describe how wind farm development within national designations should be approached. Paragraph 14 states that:

*“Regional Planning Authorities and Local Planning Authorities should not create “buffer zones” around international or nationally designated areas and apply policies to these zones that prevent the development of renewable energy projects. However the potential impact on designated areas of renewable energy projects close to their boundaries will be a material consideration to be taken into account in determining planning applications.”*

Thus, the NPA’s objection needs to be considered in the light of this approach, given the proposal lies outside the National Park.

## **4.5 National Park Designation**

4.5.1 The criteria for National Park designation are described in the 1949 National Parks and Access to the Countryside Act. The 1995 Environment Act subsequently revised National Park purposes and Circular 12/96 which provides amplification of this Act, provides advice on how National Park Authorities should identify the special qualities of their Park, which form the basis of the designation. For the Northumberland National Park, these criteria are not explicitly defined, but both the Northumberland National Park Management Plan and emerging Northumberland National Park LDF Core Strategy refer to the criteria summarised in the vision statement as follows:

*“...its special qualities, including a richness of cultural heritage and biodiversity, a true sense of tranquillity and a distinct character associated with a living working landscape”.*

4.5.2 In my assessment of effects on the National Park, I therefore address how the proposed development affects the sense of tranquillity and character of the National Park.

## **4.6 Climate Change Policy**

4.6.1 Mr Provan provides evidence regarding national and regional policy in respect of climate change and the need to develop renewable energy sources. As he highlights at points in

his evidence, these policies recognise the potential for climate change to alter the landscape by affecting biodiversity and through increased flooding and other extreme weather events. I fully support his detailed review, analysis and conclusions. I return to this later in my evidence.

## 5.0 Landscape Character and Capacity Studies

### Introduction

5.1.1 A number of studies of landscape character and/or capacity have been carried out in this area, as follows:

- National - Countryside Character Map of England, Volume 1: North East (1999)
- Regional – North East Regional Renewable Energy Strategy (TNEI for North East Assembly, March 2005) [CD142], based on ‘Landscape Appraisal for Onshore Wind Development’ (University of Newcastle for Government Office for the North East (GONE), July 2003), [CD143]
- Sub-regional – ‘Wind farm Development and Landscape Capacity Studies: Knowesgate and Harwood Forest’ (Ove Arup and Partners for North East Regional Assembly, June 2006), [CD104]
- Local – ‘A Landscape Character Assessment of Tynedale District and Northumberland National Park’ (Julie Martin Associates and Alison Farmer Associates for Tynedale District Council, June 2007).

5.1.2 I include in my appendix 2.1 plans from the ES illustrating the distribution of landscape character areas (SEI figures 3 and 4), along with extracts from the national and local assessments (appendices 1.1 and 1.5)

### National

5.1.3 The Countryside Character Map of England is an accepted study which forms the national baseline for all Landscape Assessment in England. It describes the character of an identified area, but does not comment on capacity for development.

### Regional - North East Regional Renewable Energy Strategy [CD142]

5.1.4 The Regional Strategy is focussed specifically on identifying the landscape capacity within the region for renewable energy developments, including onshore wind farms. The resulting map is derived from the separate regional landscape studies including a landscape character study and was supported by a GIS based study which identifies the likely visibility of wind farms located in certain areas, as well as reviewing likely effects of development on landscape character. A revised version of the map was tabled at the Examination in Public for the North East Regional Spatial Strategy and is included in appendix 1.2. This shows a ‘W’ in the general area of this proposal, indicating capacity for a medium-scale wind farm (20-25 turbines – as clarified during the EiP).

5.1.5 Analysis based on the criteria used for the GIS study that accompanies this study (AONB and National Park areas, and a 400m radius around residential properties as absolute constraints to wind farm development) (see appendix 1.3) confirms that there are no landscape constraints identified that would apply to the Steadings wind farm site. As Mr Provan has confirmed, it is important to note the Regional Landscape Study and the resultant Renewable Energy Strategy are the only such studies for the area which have been fully tested through the normal plan making and examination procedures.

Sub-regional – ‘Wind farm Development and Landscape Capacity Studies: Knowesgate and Harwood Forest’ [CD104]

5.1.6 The Sub-regional Study is a more detailed examination of the capacity of the Knowesgate area for wind farm development. This study also uses GIS datasets (not made available) to derive the study area, but with different assumptions to the regional study. As for the regional assessment, it must be remembered that these strategic studies should be viewed as such, with an appropriate weight given when considering specific proposals. That weight will also need to reflect the extent the study has been tested and thus its rigour. It is the case only the Regional Study was tested through the RSS and Structure Plan processes, the Sub Regional study was not.

5.1.7 Notwithstanding all of this, it is however also still valid to try and understand the basis and methodology of such a study as the Sub Regional document. Having reviewed the Knowesgate study it is clear that some of the assumptions used are false - as an example, in my opinion, two of these assumptions regarding Landscape and Visual amenity are unjustified:

- A 600m buffer from residential properties is not necessary for the mitigation of visual effects, particularly if those properties have a financial interest in the development. The removal of this ‘constraint’ would have generated a larger study area – particularly to the east (see figure 1 on page 15 of the report). The GIS data supporting the regional study uses a more reasonable 400m buffer.
- National Parks and AONBs should not be regarded as ‘absolute constraints’ to wind farm development, but as areas requiring consultation. Paragraph 8.29 of the EiP Panel Report clearly indicates that applications for renewable energy projects within these areas will be granted if designation objectives are not compromised and adverse effects are outweighed by benefits.

The study also redefines ‘medium-scale’ as being 9-16 turbines on the basis that *‘given modern turbine outputs the installed capacity in MW is likely to be the same’*. As the NEA had given that definition as recently as 2006 at the EiP it is inconceivable that

100m-125m blade tip turbines would not have been considered at that time. This redefinition is not justified on that basis.

The study then divides the area into a number of zones, and the capacity of each zone is assessed. This assessment makes use of formatted worksheets to analyse landscape capacity. The underlying assumptions used to create this sheet dictate the results, which are, in my opinion, flawed as a result. For instance, exposed landscapes and levels are considered to be of high sensitivity, as are landscapes with a strong pattern. All of these criteria could be used, for example, to describe the Cambridgeshire and Lincolnshire Fens and yet these landscapes are generally regarded as having a high capacity for the development of Medium to Large wind farms as indeed is now illustrated by various developed schemes (See Appendix 1.4).

5.1.8 Ove Arup undertook a similar study to the one prepared for the Knowesgate area which is referred to as a 'refinement study' in the decision regarding a proposed wind farm at Wern Ddu (15 June 2007). In his decision (see appendix 4.1), the Inspector expresses concerns over the methodology used and the results thus produced. Whilst the specific assumptions are different from those used in the Knowesgate study, the process of making assumptions about the acceptability of certain impacts and then zoning out all areas where those might be expected remains the same. It is this approach which the Inspector criticises in paragraphs 19 and 20, as being overly restrictive in reducing available areas for development, commenting that: *"I can appreciate that the intention was to try and remove land which was subject to identifiable constraints so that the remaining area was technically and practically available. However it still did not go into anything like the detail required in an Environmental Statement. The problems and constraints of an individual site are likely to further reduce the areas of where turbines may be sited."*

5.1.9 The Steadings site lies within three of the identified Zones in this study [CD104] – 19, 20 and 21. Each is identified as having Medium sensitivity to wind farm development and being suitable for Medium small (4-9 turbines) scale development of up to 100m in height. The comments regarding the height of turbines are not justified within the report, except via the statement on page 25 that *'smaller turbines (sub-100m to blade tip)'* are *'often more desirable in landscape terms'*. In my experience, this is not the case. Unless turbines are significantly smaller (e.g. only 80m to blade tip) the difference in height makes little difference to either the extent of visibility, or the significance of effects from nearby viewpoints. This can readily be seen by comparing the 80m hub and 125m blade tip ZTVs (figures 11 and 12 in appendix 2.1) which show few additional areas of visibility at the greater height. In real terms, these increases would mean blade tips becoming visible where they were not visible for the shorter turbines. In part, due to the nature of

the terrain, this would be from some nearby viewpoints where the blade tips of the taller turbines would be visible above ridgelines or hilltops, but much of the increase would be from distant locations where effects would be insignificant.

- 5.1.10 Furthermore, In examining visual effects it is likely in my opinion that the methodology used in this study will tend to over-estimate effects. In particular, it can be seen from table 6 on page 34, that it would not be possible to have a Minor effect on a High sensitivity receptor as the scale jumps from Negligible to Moderate. Given the number of High sensitivity receptors in the study area, this will have a considerable influence on the findings.
- 5.1.11 The study then goes on to rank the zones in order of preference and to derive from this a number of scenarios which are tested for cumulative effects. Table 7 on page 43 suggests some objectives to inform the planning process. These objectives are clearly aimed at restricting wind farm development and have a key role in informing how the findings of the report are formed. For, in order *“To maintain Northumberland as a county in which it is perceived that there is only some limited wind energy development”* and *“To maintain landscape character ... by working within the landscape capacity”*, the implication is that only very minimal change to the landscape will be found acceptable. Three scenarios are then tested for acceptability based on a *“strongly positive response to the RSS”*, a *“neutral response”* and a *“stringent assessment of the landscape and visual capacity”*. The final scenario (Scenario D) is then derived, based on the results of these tests and put forward as a preferred model for development. It falls between the ‘neutral’ and ‘stringent’ scenarios. It is this scenario that is referred to in Tynedale’s committee report commentary on the proposal, and bearing in mind the restrictive nature of Scenario D, neither it, nor the study as a whole, should not be used as a reason for rejecting an application.
- 5.1.12 Figure 2587/02 in appendix 2.1 to my evidence overlays the ‘preferred’ Scenario D with the Regional Study [CD142] landscape character areas. It can clearly be seen that most of the Scenario D ‘preferred’ areas lie within Medium-High sensitivity landscapes, despite there being immediately adjacent lower sensitivity areas. Overall, there are some puzzling inconsistencies in the Knowesgate capacity study [CD104] work, which reflects the fact it has not been properly tested.

Local – ‘A Landscape Character Assessment of Tynedale District and Northumberland National Park’

- 5.1.13 This study, the status of which is agreed (ie independent and not adopted, see CLVIA SoCG), is primarily a landscape character study, though it does contain some commentary on sensitivity to wind farm development. This commentary is not specifically

required by the brief for the assessment, which instead refers to ‘factors of change’, including development (see Appendix 1.5). The predisposition of the authors of the report towards wind farm development is made clear in section 4.3.2 (‘Strategic Priorities’) under the heading of *“A precautionary approach in relation to any major development with landscape impacts”* in which it is stated that *“A key current threat to the landscapes of the study area is from the development of major wind farms”*. It is of particular note that, in the immediately following paragraph, the report also states that climate change is *“an overarching issue, potentially affecting all landscapes”*. This latter point concurs with general thinking, and an acceptance of the science, that climate change is happening and the effects on the landscape are potentially significant. Topic Paper 9 [CD139] highlighted these issues when it was published 4 years ago, which are now very real. It is also interesting to note that all of the recommendations within the report regarding climate change recommend adaptation and that the connection between the possibility of accommodating wind farm development in order to help reduce such effects is not made.

- 5.1.14 The map of character areas accompanying this study is not sufficiently clear to be certain, but it appears that the site lies mainly within the Upland Fringe Farmland and partially within the Outcrop Hills and Escarpment character areas. These correspond broadly with the similar areas from the Regional study. For both character areas it is suggested that the development of wind farms would be undesirable resulting in loss of tranquillity and visual effects such as fragmentation, *‘cluttering’* of the skyline and visual effects on the surrounding areas. However the report makes similar observations for all except 3 (Moorland Forestry Mosaic – including Kielder Forest; and Intermediate Rolling Farmland – including the area around Kirkheaton and Wallington and Coalfield Upland Fringe) of the 26 character areas, and actually recommends the removal of existing tall vertical structures (i.e. turbines and masts) for 5 character areas.

#### Summary

- 5.1.15 Of the four studies discussed above, only the Regional studies [CD142 and 143] and the map of ‘areas of least constraint’ (appendix 1.2) within that have any formal standing, having been endorsed at the Examinations In Public of both the Structure Plan and the RSS. These identify the Knowesgate area as being suitable to accommodate 20-25 turbines. The Knowesgate area study [CD104] and Tynedale LCA are independent specialist reports, intended to aid decision making and the formulation of policy. Both of these reports recommend a cautious approach to the siting of wind farm development based on the premise that landscape character should not be permitted to change significantly.

- 5.1.16 In my opinion, such an approach is too conservative to permit an effective response to combating climate change. A rational approach in reducing overall landscape effects is deliberately to target higher capacity landscapes and maximise the capacity of each site, so that wind farms become characteristic of certain areas. This would preclude any potential for dilution of character by ubiquitous wind farm development and reduce the need for development within more sensitive landscapes, thus reducing landscape impacts on a regional and national scale. That said, the appropriate way forward in respect to any proposal to come forward is for it to be tested on a site specific basis, as has been the case for the Steadings Wind Farm.
- 5.1.17 Regarding the effects of such an approach on visual impact; larger groups of turbines or wind farm clusters have smaller overall visual footprints than the same number of turbines distributed as isolated groups, as the overlaps in visibility reduce the total area affected but only slightly increase the magnitude of effects within that area.

## 6.0 Description of the Proposal and Baseline Conditions

### 6.1 The Scheme

- 6.1.1 The location of the proposed wind farm scheme is approximately 20km west of Morpeth, 13km north of Hexham and 9km east of Bellingham in Northumberland. The nearest settlements are Great Bavington and Thockrington at less than 1km from the site, with Kirkharle, Kirkwhelpington and Knowesgate at distances of 3-5km.
- 6.1.2 The scheme is for the construction of 21 turbines of 80m hub height and 125m blade tip height along with access tracks, substation, meteorological mast and borrow pit. The grid connection would form a separate application, and details yet to be refined, but I give an assessment of likely effects (based on realistic assumptions) within my evidence.
- 6.1.3 The proposed borrow pit would be located on the hill top near the northern edge of Bavington Crags. In order to minimise visual effects and aid integration into the local landscape, I have advised that the borrow pit should be surrounded by a drystone wall (rather than the bund and fencing indicated on the generic diagram included in the SEI). Following excavation of material, the slopes could be reduced through reprofiling and the disposition of arisings from the turbine bases in order to create a shallower profile. I understand this could amount to 15-20% of that extracted. Habitat creation measures, including planting may also be considered. My client fully agrees with these proposals.
- 6.1.4 The grid connection building and compound is broadly described in the evidence of Mr Steve Pears. I understand the externally located plant comprising switch gear etc, and from which the grid connection overhead wires extend, is approximately 6m high. Mitigation could be provided through tree planting which would screen views of the plant and compound fencing and aid integration into the local landscape.
- 6.1.5 From the compound, the grid connection would be carried on 14-18m high wooden poles placed at approximately 100m intervals as described and illustrated within the evidence of Mr Pears. The route would head east towards one of three connection points. Similar connections provide power to the small settlements across the area and can be seen in a number of the viewpoint photographs.
- 6.1.6 As referred to earlier, Mr Provan gives evidence in relation to site selection and the fact that landscape designations and capacity considerations were used as key criteria in that process along with other constraints also identified by the University of Northumbria data which supported the Regional Capacity Study.
- 6.1.7 Landscape and visual impacts have also been considered in the design of the site, in particular an initial layout which included turbines near Great Wanney Crag was rejected

due to concerns over effects on the amenity of this popular walking and climbing area. Potential impacts on local residents and settlements also led to revisions to the scheme.

## 6.2 The Study Area

- 6.2.1 The study area used in all of the submitted material is 30km radius from the turbines. It is noted that a 35km study area was requested for the Ray Fell submission and that SNH guidelines suggest that a 35km study area may be appropriate for turbines of over 100m to blade tip. However, the assessments made for the ES do not suggest that further significant effects would be identified by widening the study area. Indeed, as part of the SoCG CLVIA discussions, a 30km study zone was agreed with Dr Wimble as was a 15km zone for landscape effects.

## 6.3 Landscape Setting and Character

- 6.3.1 The site lies to the eastern side of a broad sandstone ridge and is located within a transitional landscape between the exposed heather moors and crags of the hilltops to the north and west, and the settled, undulating, well-wooded lowland farmlands to the east.
- 6.3.2 The Northumberland National Park lies 9km to the west, coinciding with the Upland Forests and Moorland and Rolling Uplands landscape character areas. The North Pennines Area of Outstanding Natural Beauty (AONB) lies 18km to the southwest, as shown on my plan 2587/01 Appendix 2.

Countryside Character Map of England (1999) – Volume 1: North East (Appendix 1.1)  
The site is located within the Northumberland Sandstone Hills National Landscape Character Area (NLCA) (No. 2) with the Mid Northumberland NLCA (No.12) lying immediately adjacent to the southeast. The only other NLCA's that lie sufficiently close to the site potentially to experience significant effects (i.e. within 15km of the turbines) are the Tyne Gap and Hadrian's Wall NLCA (No. 11), and the Border Moors and Forests NLCA (No. 5) both of which lie more than 7km from the turbines. The main relevant details of these and lower tier character areas are set out in appendix 2.2:

- 6.3.3 The site and immediate surroundings are very typical of the Upland Fringe farming character area in which they lie; being a medium to large scale landscape of open, rolling pasture and grazed moorland. Isolated farms such as those at North Heugh, Crookdene, Hawick and Plashetts are interspersed with geometric conifer plantations which sit uncomfortably within the undulating landscape. To the north and west, around Sweethope and the Great Wanney crags transition to the craggier, exposed uplands of the Outcrop Hills and Escarpment is evident. To the east, near Kirkwhelpington and Little

Bavington the transition to the more settled farmlands of the Rolling Lowland Farmland character area can be seen.

- 6.3.4 The Tynedale Landscape Character Assessment (relevant extracts in Appendix 1.5) describes broadly similar character areas to the regional study. It also makes references to the potential for wind farms to affect the tranquillity of the local landscape. Tranquillity is recognised as being difficult to define and exponents rely on the Campaign for Rural England's (CCRE) work. The methodology behind the CPRE's tranquillity mapping has not been published. What is known, however, is that wind farms feature at number 14 of their list of 22 criteria of 'what tranquillity is not'. Also, in my view this is not a particularly tranquil landscape, with low flying by aircraft, loud explosions from, I believe, blasting at Divethill Quarry, and/or military training areas having both been witnessed during site visits. Mr Provan deals with the issue of tranquillity in his evidence.

## 6.4 Heritage

- 6.4.1 Dr Collcutt addresses matters regarding the effect of the proposals on heritage within his evidence. I only refer to this matter in respect of the contribution that heritage features make to landscape character.
- 6.4.2 The various landscape character assessments that cover the study area make references to the contribution of the heritage assets of the area to the present day landscape. In the wider landscape, Hadrian's Wall (World Heritage Site) is a striking feature, both due to its location taking advantage of the top of the scarp slope of the Whin Sill, and due to the Roman fortifications along its length.
- 6.4.3 Closer to the site, the areas of ridge and furrow referred to in character assessments are frequently in evidence and there are easily visible earthworks that indicate that Great Bavington (a Conservation Area) and Thockrington were once larger settlements. With the exception of St Aidan's church at Thockrington, these two villages communicate little of their heritage except to the knowledgeable observer, or those prepared to explore more closely. The historic core of Great Bavington is not accessible by car and its presence is not immediately apparent either to those passing through the main routes through the village, or to those seeing the village from a distance. The large barns which form dominant features in both villages make them appear more as particularly large farms rather than small villages or hamlets.
- 6.4.4 Only St Aidan's church has any strong presence within, or apparent relationship to, the present day landscape as it is seen isolated from the other buildings in the village, perched on an outcrop of the Whin Sill – particularly in views from the south and west. As Dr Collcutt's evidence demonstrates the isolation of the church is a comparatively

recent occurrence and the church would have been seen surrounded by buildings (mostly on the higher ground) and activity until the early 19<sup>th</sup> century. Thus this apparent relationship with the landscape is residual and caused by accident rather than design.

## **6.5 Rights of Way**

- 6.5.1 The Pennine Way and Hadrian's Wall Path national trails pass through the 30km radius study area but do not closely approach the site, being 10-11km from the site at their nearest. The Pennine and Hadrian's National Cycle Routes also pass through the study area with their nearest approaches to the site being 7km and 12km respectively. Other long distance routes within the study area include St Oswald's Way (a walking route) and the Reivers (regional) cycle route. These two routes approach the site quite closely (within 1km). Plan 2587/01 in my Appendix 2 illustrates these routes
- 6.5.2 There are also a number of local routes (6 footpaths, 2 bridleways and 2 routes with public access) as well as an area of land with open access either within or immediately adjacent to the site.

## **6.6 The Visual Baseline**

- 6.6.1 The landscape around the Steadings site includes a number of features that give rise to difficulties in terms of computer-based visual analysis. The detailed shape of crags and local rocky outcrops are not included in the OS heights data. Furthermore, the Ordnance Survey data in this area is not of particularly good quality and it has been noted during the course of this work that some fairly significant topographic features are not reflected in the data. Therefore, whilst it is sufficiently accurate to give a realistic impression of the visibility of the proposals, in areas on the margins of blade tip visibility (i.e. those areas able to see approximately 10m of blade) the base data, and therefore the visualisations, are not sufficiently accurate to say definitively that blade tips would or would not be visible.
- 6.6.2 As much of the woodland is forestry or plantation and there is a high probability of clear-felling, the ZTV studies have been prepared on a 'bare ground' basis and do not allow for the screening affects of woodland, settlements or localised features such as hedges of buildings. This means that effects are generally overstated, particularly to the north and northwest of the site, where significant forested areas exist.
- 6.6.3 Weather conditions will also affect visibility, with clear conditions needed to see turbines over distances of more than 10-12km when turbines are seen above the skyline (as is the case in the majority of views).

## 6.7 Climate Change

6.7.1 The Energy Review Report (2006) [CD117], as referred to by Mr Provan, proposes that Inquiries should not get bogged down in national issues. I therefore do not present detailed evidence on the existence of the predicted effect of climate change on the UK landscape. However, I wish to highlight that the 'do nothing' scenario for this development does not mean 'no change' to the landscape. The Stern Review report [CD118] concludes that sea level rises of 1m are plausible by the end of this century. Since then, further statements from international groups of scientists have confirmed the science behind the predictions. Landscape character assessment series: Topic paper 9: Climate change and natural forces – the consequences for landscape character [CD139] provides a fuller description of the potential effects of climate change on the landscape. Warmer air temperatures and changes to rainfall patterns and water tables will affect vegetation, changing the natural distribution of our native plants and affecting the viability of crops, changing our farming patterns. That such change has the potential to affect the landscape of the North East region is recognised within the emerging RSS [CD44] within paragraph 2.12:

*"It is likely that these impacts [of climate change] will have varying effects on different social, economic and environmental features and activities. These can include:*

- *increased flood risk ...*
- *increased likelihood of storms and other severe weather events ...*
- *changes in growing season*
- *changes in winter and summer temperatures and the patterns of rainfall, affecting agriculture, forestry, tourism and leisure*
- *changes in the habitats that are suitable for plants and animals"*

6.7.2 As discussed previously in my evidence, the Tynedale LCA (see appendix 1.5) also, correctly, recognises the potential for climate change to have effects on the local landscape.

6.7.3 Cumulatively, each refusal for a wind farm application means taking a step closer to accepting these changes to the landscape that will be wrought by climate change.

6.7.4 Therefore the decision not to build a wind farm may effect a more significant and permanent change to the landscape than the decision to build one would. At its most basic, the decision is between the certain, localised, immediate but temporary effects caused by building a wind farm and the predicted, international and national, permanent future effects of climate change.

## 7.0 Assessment of Effects

### 7.1 Introduction

7.1.1 The assessments used in my evidence use the following criteria and terms in the judgement of effects:

Landscape Value, Condition and Sensitivity

7.1.2 The sensitivity of a landscape to a particular development depends on:

- the nature of the development and how it fits with the existing characteristics; wind farm development is generally more suited to larger scale, simple landscapes that are either flat or gently undulating.
- the landscape value (some landscapes are more valued than others - this is generally recognised by national or local designations); and
- landscape condition or quality (the intactness of the existing character).

7.1.3 Thus a highly valued landscape with very intact character will be highly sensitive to development of a form that is inappropriate to the character of the area.

7.1.4 The judgements of sensitivity given within my evidence are either directly drawn from, or based on (for national character areas) the Regional landscape assessment [CD143]. It should be noted however that they are only fully relevant for those character areas in the near vicinity of the proposed turbines, as direct effects on character only tend to occur within 3km of the turbines. For more distant character areas effects will be indirect, caused by views of turbines, and the significance of this depends on how important such views are to the character of the area. However, the sensitivity rating given can be used as an indicator of the relative sensitivity of each character area.

Visual Sensitivity

7.1.5 A wide variety of visual receptors can reasonably be anticipated to be potentially affected by the proposed development. The range of visual receptors will include pedestrians, and recreational users of the surrounding landscape such as walkers, cyclists and those otherwise engaged in the pursuit of leisure activities within the visual envelope of the site, local residents, motorists, those working outdoors and other workers. All categories of receptors can potentially be affected to a greater or lesser degree by the proposed development of the site. Local outdoor workers and residents are likely to be more sensitive to any changes, whilst it can be anticipated that other, periodic, visitors will be less affected.

7.1.6 Additionally, it is expected that those whose principal preoccupation is with the enjoyment of the outdoor environment and the open countryside will be more sensitive to visual changes.

7.1.7 The four main visual receptor groups are considered in more detail below under the headings of residents, the travelling public, and visitors.

#### Residents

7.1.8 Local residents tend to have a higher level of sensitivity to changes in their landscape and visual environment than those passing through. For residents, the most important views are those from their homes, and particularly from the main living rooms, although they will also be sensitive to other views such as those experienced when travelling to work or other local destinations. However, it is these latter views, from public areas nearby houses that are of relevance to this assessment. Views from private property are not a material consideration in determining planning applications unless the proposed change is sufficiently unpleasant or intrusive to render the property concerned 'unliveable'. For wind farms there is a general consensus (based on Public Inquiry decisions) that in terms of visual effects, intrusive views could only exist within 1km of the site (see appendix 4.2).

#### Workers

7.1.9 Workers within the study area will be undertaking a range of activities, including outdoor work such as agriculture or forestry. No major centres of employment lie within 15km of the site. Effects on workers will therefore tend to be of a similar magnitude to those assessed for the local roads, settlements, footpaths and viewpoints, but as a general rule, workers tend to have a Low sensitivity to effects as they are focussed on their work rather than the landscape.

#### The Travelling Public

7.1.10 This category of visual receptor group overlaps to a degree with the other two general categories in that it embraces both local residents and those who come to visit the area. This group of visual receptors will include the following:

- Travellers along the main A roads falling within the visual envelope of the site. (*Low to Medium* level of sensitivity to change, as these are considered to be scenic routes)
- Travellers along the various local roads (*Medium* sensitivity)

7.1.11 Users of the roads identified above will vary in their level of sensitivity to the proposed development depending primarily upon the purpose for which they are travelling. For

example, local residents will be more preoccupied with achieving their destination than in enjoying the scenery and the views available along their route. In contrast, day trippers and longer term visitors to the area are likely to be more concerned with the views they enjoy as they travel.

- 7.1.12 Cyclists and footpath users are addressed under the heading of visitors as they are generally less concerned with the object of reaching their destination than with the enjoyment of being outside and enjoying the landscape and available views.

#### Visitors

- 7.1.13 This category includes several visual receptor groups, each with different objectives and levels of sensitivity to any change in the fabric or character of the landscape and visual impact arising from the proposed development. This group includes those who are mainly concerned with enjoyment of the outdoor environment but also those who may pursue indoor recreational pursuits and is anticipated to include the following (arranged in decreasing sensitivity):

- Those whose sole preoccupation is the enjoyment of scenery (*High* sensitivity), though likely to be relatively few in number as the area is not particularly renowned for its scenery.
- Recreational walkers (*High* sensitivity)
- Those visitors engaged in cultural pursuits (*High to Medium* sensitivity)
- Cyclists (*High to Medium* sensitivity)
- Equestrians (*Medium* sensitivity)

#### Magnitude and Significance

- 7.1.14 For identified effects, the Magnitude of the effect is stated, categorised as follows:

- High
- Medium
- Low
- Negligible

- 7.1.15 The overall Significance of each effect is determined by assessing its Magnitude against the Sensitivity of the environmental receptor and any other relevant factors such as the number and activities of people affected. Significance is categorised as:

- Substantial
- Moderate
- Slight

- No change

7.1.16 A 'significant effect' in terms of the EIA regulations is deemed to be Moderate or greater.

7.1.17 The primary differences between this methodology and those used for the ES and SEI are:

- The number of 'grades' for significance is reduced from 5 to 4, and the threshold for significance is Moderate or Higher.
- Viewpoint sensitivity is assessed according to different criteria – in particular roads viewpoints not accessible to the public are deemed to be of lower sensitivity.

## 7.2 Landscape Character Assessment

7.2.1 Despite the clarity of the available guidance it is still the case that landscape character assessment is sometimes dealt with as though the most important aspect of landscape character is the visual environment. Landscape character (defined as *"the distinct, recognisable and consistent pattern of elements in the landscape that makes one area different from another"* – Landscape Character Assessment – Guidance for England and Scotland, CA/SNH, 2002 [CD136] ) is, in short, formed of those features that create a 'sense of place'. The character creates the visual environment, in that the various physical attributes and characteristic patterns of the landscape (including vegetation types and patterns, farming practices, field enclosure, topography, settlement distribution and form, building materials, local industries, etc.) contribute to the way it looks, rather than vice versa.

7.2.2 I raise this issue as it should be recognised that assessments which give undue weight to the visual environment in assessing character will tend to overestimate the character influence of wind farms due to the large physical size of their component turbines, and wide extent of visibility. In general, wind farms are, in character terms, a new presence in the landscape, they do not alter or take away any of the existing characteristics. As described in the ES and expected to be agreed in the SOCG, character effects are mainly limited to the area in the immediate vicinity of the wind farm in which it is the most noticeable presence in the landscape to the extent that other aspects of character (e.g. arable fields and hedgerows) are less significant. This effect diminishes rapidly with distance as the characteristic landscape patterns become the more dominant feature and the wind farm a presence on the horizon. The fact that the wind farm can be seen does not necessarily have a significant effect on the character of the place from which it is viewed. This last statement is also true when assessing effects on cultural heritage.

### 7.3 Positive/Adverse

7.3.1 Recent inquiries regarding wind farms have raised the issue of positive/adverse judgements as professionals increasingly recognise that for wind farms these judgements are highly subjective. In the case of wind farms it is important to recognize the polarity of opinions revealed by the extensive available research and to take account of the fact that, for the same development some may view the impact as adverse, some as positive and yet others as neutral.

Public opinion

7.3.2 In the case of wind farms, it is difficult to indicate whether landscape and visual effects will be positive or adverse. Much depends upon the attitudes and predispositions of the individual. As has been shown in a number of opinion surveys (as described within the evidence of Mr Provan and see also 'Green on Green': Public Perceptions of Wind Power in Scotland and Ireland [CD236 and appendix 3.1 to my evidence, the attitudes of the general public (and indeed Inspectors) vary widely from those who think that wind farms blight the landscape to others who feel that they are a beautiful addition, in some instances regardless of the natural beauty/value of the landscape in question. In general terms there appears to be a majority view that is positive towards wind energy generation and its appearance in the countryside. There is also a marked shift in opinions expressed before and after the construction of a wind farm, with a more positive view of the development becoming more common post-construction.

7.3.3 In examining visual effects, it is not realistic to ignore public opinion when discussing the effect upon views perceived by the public. This has been recognised in a number of previous Inquiries. In the Appeal Decision regarding the Elsham wind farm proposal in Lincolnshire [CD130(hh)] the Inspector notes that receptors *"will have their views of ... the countryside heavily influenced by the presence of the turbines. The degree of harm is to an extent subjective"*. In the Appeal Decision regarding the Parc Cynog wind farm proposal in Carmarthen [CD130(k)], the Inspector observed that, *"How individuals view them is, therefore, very much a subjective matter with opinions based as much on an attitude of mind as on the intrinsic nature of the object."* More recently (in June 2007) in the appeal decision regarding Hockley Farm, Bradwell [CD130(o)], the Inspector noted that *"I recognise that many people are offended by the presence of wind turbines in remote areas, but equally I am aware of the fact that not all of the population share that opinion. There is also an evidence base which shows that opinions change positively after turbines have been constructed."*

7.3.4 The approach taken in the ES and SEI is that all visual effects are judged to be adverse, as the worst case scenario is that a negatively predisposed viewer would be making the

judgement. This approach is potentially unhelpful as it take no account of the nature of the view or impact. Were such an approach taken routinely to assessment then all interventions (even those designed to have a positive visual impact e.g. The Angel of the North) would be assessed as adverse, as there will always be individuals who regard developments as adverse.

#### Landscape Character

- 7.3.5 For similar reasons, making positive/adverse judgements for effects of wind farms on landscape character based on current guidance would be of questionable value, particularly if using the accepted interpretation of the guidance that any 'out of character' development should automatically be considered adverse. This would not be particularly instructive in this case and it is more useful to consider sensitivity, capacity and scale, which I do in my evidence.

#### Potential for misunderstanding and inconsistencies in guidance

- 7.3.6 The assignment of positive/adverse judgements is also slightly complicated by a common misunderstanding, which is exacerbated by inconsistency in previous guidance, regarding what a judgement means. The current guidance (2004 LVIA guidelines) supports an approach in which the decision regarding the significance of effect and the decision regarding whether an effect is positive or adverse are entirely separate. Thus a rating of e.g. Substantial, Positive would indicate an effect that was of great significance (acknowledging the sensitivity of the receptor and the magnitude of the effect), and on balance positive.
- 7.3.7 Unfortunately, there exists older guidance such as the Guidance on the methodology for multi-modal studies (GOMMS), (DTLR, 2000 ) which is sometimes still used by practitioners, that indicates that such a rating would actually mean that the proposals were judged to be extremely beneficial.
- 7.3.8 It is for these reasons that the opinions regarding whether effects are positive, neutral or adverse given in my evidence may differ from those given in the submitted reports. The basis of my judgements regarding visual effects are:
- Adverse factors – pronounced contrasts in scale between turbines and other elements of the view; where the turbines would distract from other key aspects of the view, where the view is 'unexpected', such as nearby blade tips seen over the skyline or where the turbines are seen entirely below the skyline; apparent 'untidiness' in the composition of the turbines as seen in the view.
  - Positive factors – where the turbines add interest to an otherwise uninteresting view, where the composition of the turbines in the view creates an even, similar

sized composition which fits in well with the existing view; where there is a relationship between the viewpoint location and the turbines.

#### Summary

- 7.3.9 I raise all of these issues in order to ensure a full consideration of the issues that affect whether the landscape and visual effects are deemed to be positive or adverse. It is these factors that merit consideration at this Inquiry, rather than simplistic positive/adverse judgements. The approach taken within the ES is consistent with the PPS22 Companion Guide as the effects have been clearly described in such a way as to ensure that the Planning Authority is well informed of the issues involved. Notwithstanding all of this, I give my view of the nature of impact, later in this proof.

## 7.4 Landscape Assessment

- 7.4.1 Analysis of the ZTV study shown on SEI figures 11 and 12 (and included as Appendix 2.1 to my evidence), and site-based assessment indicates that effects on National and Local Character Areas will be as follows:

CHARACTER AREA	SENSITIVITY TO WIND FARMS	OVERALL MAGNITUDE	OVERALL SIGNIFICANCE	COMMENT
National Character Areas				
Northumberland Sandstone Hills	Low-Medium in area of site, Medium-High elsewhere	Low	Slight	Areas within 2km of the turbines will experience direct effects on landscape character, with the wind farm becoming a defining characteristic of the landscape. The woodlands that lie to the west and the north of the site will act as an edge to the area in which the wind farm becomes a key characteristic. The area thus affected marks the extreme southern tip of the character area and most of the rest of the character area will have no visibility of the scheme.
Mid Northumberland	Medium-High	Low to Medium	Slight	The change of character area along a line between Kirkwhelpington and Great Bavington is quite marked will act as an 'edge' to the area in which the wind farm becomes a key characteristic. The area in this vicinity is already affected to some degree by Kirkheaton wind farm. There will be visibility of the scheme across a reasonably wide area.
Border Moors and Forests NLCA	Low-Medium	Negligible	Negligible	Very minimal visibility of the turbines except in the Simonburn / Haughton common area at distances of 11km or more from the turbines.

CHARACTER AREA	SENSITIVITY TO WIND FARMS	OVERALL MAGNITUDE	OVERALL SIGNIFICANCE	COMMENT
Hadrian's Wall NLCA	High	Low	Slight	Visibility of the scheme from the Hadrian's Wall NLCA will be restricted to the area around Hurnshaugh and a narrow strip following the B6318 and Hadrian's Wall path along the northern edge of the character area. These visual effects will be between Low and Negligible magnitude, and will constitute an effect of Low magnitude on character as northward views from Hadrian's Wall are a key characteristic of the area.
Regional Character Areas				
Upland Fringe Farming (including site area)	Low-Medium	Medium to High	Moderate	Areas within 2km of the turbines will experience direct effects on landscape character, with the wind farm becoming a defining characteristic of the landscape. The wind farm will be visible across most of the character area.
Upland Fringe farming (Other 3 areas to south of and west of site.)	Low-Medium	Negligible	Negligible	The areas are all too distant from the site to experience effects.
Rolling Uplands	Medium-High	Negligible	Negligible	These areas will have very minimal visibility of the scheme, at distances of 10km or more.
Upland Forest and Moorland	Low-Medium	Negligible	Negligible	Very minimal visibility of the turbines except in the Simonburn / Haughton common area at distances of 11km or more from the turbines.
Parallel Ridges and Outcrops	High	Low to Negligible	Slight	Visibility of turbines at distances of 10km or more. However, northward views from Hadrian's Wall would be affected. These views are a key characteristic.
Outcrop Hills and escarpment	Medium-High	Low	Slight	Two turbines lie within this character area and areas within 2km of the turbines will experience direct effects on landscape character, with the wind farm becoming a defining characteristic of the landscape. The woodlands that lie to the west and the north of the site will act as an edge to the area in which the wind farm becomes a key characteristic. The area thus affected marks the extreme southern tip of the character area and most of the rest of the character area will have no visibility of the scheme.

CHARACTER AREA	SENSITIVITY TO WIND FARMS	OVERALL MAGNITUDE	OVERALL SIGNIFICANCE	COMMENT
River Valley with Settlements	Medium-High	Low to Negligible	Negligible	Minimal areas of visibility at distances of approx. 10km or more.
Open Upland Valley	Low-Medium	Negligible	Negligible	Minimal areas of visibility at distances of approx. 13km or more.
Rolling Lowland farmland	Medium-High *Transition area is Low to Medium sensitivity.	Low to Medium	Slight	The change of character area along a line between Kirkwhelpington and Great Bavington is quite marked will act as an 'edge' to the wind farm landscape. The area in this vicinity is already affected to some degree by Kirkheaton wind farm. There will be patchy visibility of the scheme across a reasonably wide area, but the character area is large and much of it will experience no effects.

#### North Pennines AONB

- 7.4.2 The North Pennines AONB, at 18km distant from the site will not experience effects on its landscape character and any visibility of the turbines will be of Negligible significance. Effects on the AONB are therefore judged to be Negligible.

#### Northumberland National Park

- 7.4.3 There is a clear distinction in character between the National Park and the site which are separated by a distance of 7-15km and the intervening valley landscape. Effects on the landscape character of the National park arising from the development would be Negligible.
- 7.4.4 The ZTV studies (figures 11 and 12 in appendix 2.1) indicate that visibility of the turbines from within the National Park would be very limited, most of the areas indicated to have visibility lie within forested areas, from which outwards views would, in practice, not exist. There are a number of locations to the northeast of the site from which some of the turbines would be visible, most of these lie more than 15km from the site, with the exception of Corsenside Common, Hareshaw Common and Troughend Common. The only other areas that may experience significant views of the site are at Simonside (16km northeast of the site – viewpoint 35) and Simonburn Common, Haughton Common and the nearby length of Hadrian's Wall (viewpoints 32 and 33). Visual effects on the Northumberland National Park will consist of very infrequent views of turbines at distances of 7km or more. The grid connection for the proposal would not be visible from the National Park. 8 viewpoints within the National Park are included within the

visual assessment. Of these, 6 would experience effects of Negligible magnitude, and two, effects of Low/Negligible magnitude.

- 7.4.5 Effects on Rights of Way within the National Park are assessed as being of Negligible significance, due to distance and general lack of intervisibility (see section 7.5 of my evidence).
- 7.4.6 The proposals would not be visible from any of the “*gateway settlements*” (Otterburn, West Woodburn and Bellingham) identified within the Statement of Case for the National Park Authority.
- 7.4.7 Due to the intervening distance between the site and the National Park, and the infrequency of views of the wind farm from locations within the National Park, most of the views of the wind farm in which it has any noticeable presence (i.e. within 15km of the site) tend to be views in which one is looking out of the National Park, rather than across it. In some of these nearer views, Kirkheaton wind farm is already visible. In no views will it be the case that the wind farm will be perceived as being within the National Park. It is therefore unlikely that the distant visibility of the turbines (the blade movement will not be ‘eyecatching’ over this distance) will affect the perception of tranquillity within the National Park. The Knowesgate Area capacity study [CD104] indicates that with respect to visibility from the National Park, the zones containing the Steadings site perform better than the rest of the study area for that report (table 7).

#### Summary

- 7.4.8 The only landscape receptor to experience significant (Moderate or greater) effects would be the Upland Fringe Farming character area in which the site lies, which would experience Moderate effects on landscape character. It is worth noting that the other three areas of this character type would not be affected by the proposals.
- 7.4.9 The ES indicates slightly greater effects on a number of the more distant character areas than my assessment. In section 7.2 of my evidence I refer to a common tendency to overestimate the importance of visual effects when assessing effects on landscape character. In my opinion this factor has played a part in the assessments undertaken for the ES and SEI.

## 7.5 Visual Assessment

### ZTV Studies

7.5.2 The ZTV studies (SEI figures 11 and 12 in appendix 2.1) indicate that the turbines would be visible in almost all areas up to 2km from the turbines, and most areas up to 5km from the turbines except for an area to the northwest of the site between Chesterhope Common and Comb Rigg. It should be noted however, that significant areas in these zones to the northwest of the site are covered by woodland and that effects in this area will be significantly less than indicated by the ZTV studies.

7.5.3 Between 5km and 15km visibility decreases markedly, with distinct areas of visibility as follows:

- A patchy 'corridor' to the north of Hadrian's Wall.
- Isolated patches from where a few turbines can be seen at Hareshaw Comon, Troughend Common and Corsenside Common (all within the National Park).
- A broad, but patchy, band to the east of the site.
- An area to the northeast of the site including Rothley, Harwood, Harwood Forest and the Simonside Hills. There is significant woodland cover in this area and visibility will be likely to be confined to a few small areas to the north west of Rothley and an area between Simonside, Dove Crags and Spy Law in the Simonside Hills.

7.5.4 Between 15km and 30km (at which distance the turbines would only be visible in clear conditions), visibility can also be divided into broad zones as follows:

- To the west, whilst a number of patchy areas of visibility are indicated, the screening effects of the Wark and Kielder Forests would mean that the only likely areas of visibility would be from Haughton Common (southwest of the site), and patches from which a few turbines may be visible between Snabdaugh Moor and Thorneyburn Common. (all locations within the National Park).
- To the northwest there would be isolated pockets from where a few turbines can be seen from areas within the National Park.
- To the east a patchy arc of visibility is indicated, generally to the west of the A1, but extending eastwards towards Morpeth, Ashington and Cramlington. In much of this area the built form of the settlements will have screening effects as will the woodland belts, which occur relatively frequently.
- To the southeast, several areas of visibility are indicated between Painshawfield and Gateshead. The significant areas of settlement and woodlands are likely to make visibility from this area minimal.

- An area to the south of the site including the open moors within the North Pennines AONB and some immediately adjacent areas to the north of the AONB. In the areas outside the AONB, visibility is likely to be significantly less than that indicated in the ZTV studies as each of the areas is well wooded, particularly Slaley Forest.

7.5.5 A full assessment of effects is included in appendix 2.3 and is summarised below. It can be seen from the table below that effects would decrease rapidly with distance from the site, only being significant (Moderate or greater) within 5km. 19 viewpoints (50%) are expected to be subject to Adverse effects – primarily due to scale contrasts with existing landscape elements, or ‘unexpected’ views of nearby blade tips above the skyline; 4 viewpoints will experience Positive effects and on the remainder the effects will be Neutral. Note that distances are given to the nearest turbine, rather than the site boundary.

SIGNIFICANCE	VIEWPOINTS	DISTANCES	COMMENT
Substantial	1 (Positive) 4,6, (Neutral) 2,3,9,13,14,43 (Adverse)	130-650m	
Substantial / Moderate	11,17,18,39,40 (Adverse)	0.7-1.4km	
Moderate	10,27 (Positive) 42 (Neutral) 20,21,48 (Adverse)	1.1-3.7km	
Moderate / Slight	29 (Adverse)	5.7km	
Slight	28 (Positive) 22,30 (Neutral) 25,31,32 (Adverse)	7.1-11.9km, 4.8 km, 5.5km	Viewpoint at 4.8km is low sensitivity – Kirkheaton wind farm, viewpoint at 5.5km – Wallington hall - is well screened by vegetation.
Slight / No Change	35 (Adverse)	16.8km	From this viewpoint turbines will be seen against the landscape and will be more visible than would normally be the case at this distance.
No Change	19,33,34,36,37,38,41, 44,46,47	12-25km (2.3-7.8km)	The more nearby viewpoints are those from which turbines would be obscured either entirely or almost entirely.

Effects on local residents

7.5.6 I concur with the findings of the SEI (table 12) that visual effects on the majority of settlements within the study area will be of Negligible significance. The following settlements are identified as experiencing visual effects:

SETTLEMENT	DISTANCE FROM NEAREST TURBINE	SIGNIFICANCE OF EFFECT	COMMENT
Knowesgate	3.3km	Moderate	Open views towards the site from the main crossroads.
Kirkwhelpington	2.5km	Slight	Main body of village is screened by vegetation. Views mainly from roads approaching the village from the A696.
Capheaton	5.7km	Slight	Vegetation will screen almost all views of the turbines.
Kirkheaton	5.2km	Slight	The existing wind farm nearby will be a more dominant factor.
Thockrington	1.3km	Substantial / Moderate	Turbines are sometimes screened by buildings on the north side of the road through the village, but will be generally visible nearby.
Great Bavington	0.8km	Substantial / Moderate	Turbines will not be visible from the historic core of the village but will be visible nearby from the roads through the village and the northern and western edges.

7.5.7 Table 13 of the SEI provides a list of properties within 2.5km. In keeping with findings of previous Inquiries as discussed previously within my evidence, I only examine effects on those properties that lie within 1km of the nearest turbine, as follows:

PROPERTY	DISTANCE FROM NEAREST TURBINE	SIGNIFICANCE OF EFFECT	COMMENT
Sweethope	413m	Substantial	
Hawick Farm	497m	Substantial	
Quarry House	530m	Substantial	
Crookdene	532m	Substantial	Views of turbines partially screened by trees.
Ferney Rigg	548m	Substantial	

PROPERTY	DISTANCE FROM NEAREST TURBINE	SIGNIFICANCE OF EFFECT	COMMENT
North Heugh	593m	Substantial	
Newonstead Farm	622m	Substantial	Main frontage faces southwards, away from wind farm
Plashetts Farm	617m	Substantial	
Northside (Great Bavington)	984m	Substantial	

7.5.8 In my opinion, none of these properties will experience 'overbearing' or 'oppressive' views of the turbines such that no-one would choose to live there.

7.5.9 Effects on footpaths.

ROUTE	CLOSEST APPROACH TO SITE	SIGNIFICANCE OF EFFECT	COMMENT
Pennine Way	11km	Negligible	Visual effects are Slight to Negligible at most, and Negligible for most of the route.
Hadrians Wall Path	10km	Negligible	Visual effects are Slight to Negligible at most, and Negligible for most of the route.
St Oswald's Way	1km	Substantial and Neutral from some viewpoints in the immediate vicinity of the site, decreasing with distance. Slight and Neutral overall	As with all long distance routes, St Oswald's Way passes through a variety of landscapes, including passing within 2km of Kirkheaton wind farm to the southeast of the site.
Hadrian's Cycleway (National Route 72)	12km	Negligible	ZTV studies (figures 11 and 12 in appendix 2.1) indicate that there will be no visibility of the turbines.
Pennine Cycleway (National Route 68)	7km	Negligible	ZTV studies (figures 11 and 12 in appendix 2.1) indicate that there will be little or no visibility of the proposals from this route as it passes through areas within 15km of the turbines.
Reivers Regional Cycle Route	1km	Substantial and Neutral from some viewpoints in the	As with all long distance routes, St Oswald's Way passes through a variety of landscapes, including

		immediate vicinity of the site, decreasing with distance. Slight and Neutral overall	passing within 2km of Kirkheaton wind farm to the southeast of the site.
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7.5.10 There are also a number of local routes (6 footpaths, 2 bridleways and 2 routes with public access) as well as an area of land with open access either within or immediately adjacent to the site. It is agreed that users of the bridleways and footpaths in the vicinity of the site will experience Substantial effects on visual amenity. However, the response of individuals to those effects will vary from those who find the wind farm to be a positive addition to the landscape, to those who feel it to be an adverse addition.

Differences from the ES

7.5.11 My assessment differs from those given within the ES and SEI as follows:

- In preparing new visual material it has been noted that the main reason for differences in assessments of effects has been that the views in the ES and SEI were restricted to 90 degree arcs. Thus whilst the assessment given was generally acceptable for the view presented, it was not once the full range of view available from the viewpoint was taken into account. For this reason a number of nearby viewpoints have been assessed as experiencing greater effects. One other notable difference was for viewpoint 2 where it appears that a mis-reading of the wireframe meant that the base of a very nearby turbine was ‘missed’ in the assessment of magnitude within the ES and SEI. My evidence indicates that 22 of the 38 viewpoints will experience significant (i.e. Moderate or greater) visual effects.
- I identify only 50% of the assessed viewpoints as experiencing adverse effects. The methodology of assuming a ‘worst case observer’ used within the ES does not form a basis for making useful judgements on the nature of effects.
- In my opinion, the ES slightly overestimates the effect on most of the affected settlements, presumably as it took into account both private and public viewpoints. However, I am of the opinion that the effects on Thockrington were slightly underestimated.

**7.6 Effects arising from other Components of the Scheme**

Grid Connection Building and Compound

7.6.2 During and immediately following construction the effects arising from the compound will be adverse but localised; it will be visible primarily from the local roads near Plashetts

Farm. As planting matures, it will screen the fencing and plant from view, such that after approximately 5-7 years they would be unlikely to be visible and the appearance would progressively resemble a block of woodland. In the short term therefore, effects will be locally significant (Moderate and Adverse), but in the long term they will be Slight to Negligible and Neutral.

#### Grid Connection

- 7.6.3 In the areas immediately around the site, the poles would be slightly more noticeable than they would in the more settled and urbanised areas, where the frequency of such poles is sufficient to render them largely unnoticeable. Despite this, the addition of one wooden pole route will not be significant. The overall effects arising from the grid connection route will be Negligible.

#### Borrow pit

- 7.6.4 Active and disused quarries are a frequent occurrence in the general area, including the nature and scale of that proposed, as are dry stone walls and the borrow pit would therefore have a Negligible effect on landscape character.
- 7.6.5 The only viewpoint included in the assessment from which it would be visible is viewpoint 43, which is located at the Trig. Point north of Great Bavington. It would not be seen in the view pictured but would be approximately 200m behind and approx 8m below the viewer. The only location likely to be significantly affected would be near this viewpoint at the highest point of the road between Great Bavington and Plashetts Farm, from where it may be possible to see part of the pit, or working machinery above the dry stone wall. Users of the Route with Public Access between Great Bavington and West Harle would not be able to see into the pit as they would be 20m below it. Visual effects arising from the borrow pit are thus judged to be Negligible.

#### Lighting

- 7.6.6 As Mr Spaven discusses within his evidence, there should be no reason for the turbines to be lit. Any request for lighting would need to be carefully considered against the potential visual effects that may arise. There are currently no other tall lit structures in this vicinity (except for radio mast near the A68 at Beukley) and the general lack of settlement means that there is little lighting of any kind.
- 7.6.7 Were lighting required, mitigation measures could include reducing the number of lit turbines, and a pragmatic response would be to light only the outer turbines. Further, I understand a MOD representative has stated in respect to another site that the MOD would consider a request for low intensity lighting as a response to landscape/ visual factors.

#### Access tracks

- 7.6.8 Access tracks would be constructed of crushed local stone. There are a number of such tracks within the general area of the site and these would therefore have a Negligible effect on landscape character.
- 7.6.9 Access tracks would only be readily noticeable to very nearby viewers where they cross or approach roads or public footpaths (e.g. at viewpoints 2,3, 4 and 13). In all of these locations the turbines would be a more dominant feature and effects arising from the access tracks would be Negligible.

## 7.7 Summary

- 7.7.1 The only landscape receptor to experience significant (Moderate or greater) effects would be the Upland Fringe Farming character area in which the site lies, which would experience Moderate effects on landscape character. It is worth noting that the other three areas of this character type would not be affected by the proposals.
- 7.7.2 Neither the North Pennines AONB or the Northumberland National Park would experience significant effects. The most significant effects on these two receptors would be some Slight/Negligible visual effects on a small number of viewpoints within the National Park.
- 7.7.3 Viewpoints within 4km of the site would experience significant (Moderate or greater) effects. Effects would decrease to Slight beyond 5km and beyond 12km the visual effects would generally be No Change. In my opinion, visual effects would be either Neutral or positive in nature from 50% of the assessed viewpoints.
- 7.7.4 Significant visual effects would be experienced by residents living within the settlements of Thockrington, Great Bavington and Knowesgate, and those living in properties within 1km of the turbines. None of the properties would experience effects sufficient to render them 'unliveable' and all of those less than 900m from the nearest turbine would have an ongoing financial interest in the proposal, which would compensate for the visual impacts.
- 7.7.5 The footpath and bridleway network in the vicinity of the site would experience localised significant visual effects, including St Oswald's Way National Trail and the Reivers Way Regional Cycle Route which pass within 2km of the turbines. However, not all users of these routes will find these views to be adverse, and some may welcome them as a positive addition to their route.
- 7.7.6 None of the ancillary elements of the scheme would have significant effects with the exception of the grid connection building and compound which would have significant

adverse effects in its immediate locality until planting was sufficiently mature to provide screening (approximately 5 years).

## 8.0 Cumulative Study

### 8.1 Introduction

- 8.1.1 A full study of cumulative effects is in preparation at the time of writing, as referred to earlier in my evidence.
- 8.1.2 Whilst the various submissions for each of the three developer's schemes contained some cumulative assessment material which may be of use to this Inquiry, none of this material amounts to a clear and comprehensive cumulative study (in accordance with the available guidance) of the 3 schemes as currently being proposed. In each case the assessment is either out of date (due to revisions to one of the schemes) or incomplete.
- 8.1.3 In recognition of this, and the need for clear evidence to this Inquiry regarding cumulative effects, a methodology and scope for cumulative assessment is currently being agreed between the 3 Applicants' Landscape witnesses and Tynedale. Once agreed the assessment can be completed and will be the subject of a further proof.
- 8.1.4 Thus, at this stage, it would be both premature and impossible to conclude on this matter.

## 9.0 Consultee Responses and Outstanding Objections

9.1.1 I have reviewed consultee responses to the ES and the SEI and the points raised are largely covered by the statements of case submitted to the Inquiry. My evidence has sought to cover the majority of the matters raised. I note that Natural England, in their letter of 11 May 2007, state that the agency has no objection to the proposal on any grounds, including landscape matters. Some of the consultee responses and Statements of Case raise matters that I have not addressed elsewhere in my evidence. My silence on a particular point does not indicate agreement with it. My specific comments on two matters are as follows:

### Visualisations

9.1.2 Some objectors express the opinion that the visualisations in the ES and SEI misrepresented the true effects. Whilst wirelines and photomontage are illustrative, by definition, they and particularly wirelines, provide an aid to making judgements. In order to ensure that the inquiry is in no doubt regarding this issue, I have included within my evidence (document SWFL 3.4 – appendix 5 to my evidence) a set of visualisations, prepared to the recent SNH guidance [CD133] from all of the viewpoints which were in the ES and SEI, but not prepared to those standards ie. all except those included in the A2 photomontages (Appendix 1 to the SEI). In addition I provide a replacement VP20 photomontage to correct an error in the original).

### Wilderness

9.1.3 A number of objectors mention the fact that the area is known as “the Wilds of Wanney” in support of their argument that this is a wild and remote landscape. Correspondence on RootsWeb ([www.rootsweb.com](http://www.rootsweb.com)) between local people researching their family history in the area indicates that the origin of this phrase is unclear (though there is a local folk song of 1860 with a similar title), but that the origin of the saying may be in respect of ‘wild’ weather conditions that can occur on the exposed hill tops, rather than wild landscape. Both historic and present levels of settlement would indicate that this is a landscape which has been modified and occupied by people for some period of time. The rectangular conifer plantations provide a very obvious marker of modern landscape interventions. Furthermore, whilst levels of settlement are not high, farmsteads, small villages and the ease of access via A and B-roads (the site is a 40 minute drive from the centre of Newcastle) mean that the area does not seem particularly remote.

## 10.0 Summary and Conclusion

### Suitability of Site

- 10.1.2 The Steadings site lies within an area identified within the emerging North East of England RSS [CD44] as being suitable for a medium-scale wind farm (20-25 turbines) on the basis of a regional assessment of landscape sensitivity [CD143] and the renewable energy strategy [CD142]. It thus satisfies RPG1 [CD34] policy EN3 that proposals be located in *“an appropriate location in relation to the local and wider landscape”*. The location of the proposal within this *‘area of least constraint’* also satisfies Structure Plan policy M5 which reiterates the suitability of the identified area for medium scale wind farm development.

### Assessment of Effects

- 10.1.3 Both the Regulations and planning policy at all levels require a full assessment of landscape and visual impacts. These have been provided both within the submitted documents and within my evidence. Thus the requirements of PPS1, PPS22, policies 33 and 41 of the emerging RSS and policies M2 and M4 of the Structure Plan are satisfied in this respect.

### Landscape Character

- 10.1.4 The only landscape receptor to experience significant (Moderate or greater) effects would be the Upland Fringe Farming character area in which the site lies (though the other three areas of this character type would not be affected). This modest level of effects is in keeping with policy NE1 of the Tynedale LDF Core Strategy [CD39] which requires the protection, through management of *“the relationship between development and the natural environment”*, of the character and quality of the landscape.

### Landscape Designations

- 10.1.5 Neither the North Pennines AONB or the Northumberland National Park would experience significant effects. The *“true sense of tranquillity and a distinct character”* identified as criteria for the designation of the National Park would not be affected by the Slight/Negligible visual effects on a small number viewpoints within the National Park arising from the Steadings proposal. Thus the proposal satisfies policy requiring the protection of these nationally designated areas from effects that would undermine their reasons for designation.

### Visual Effects

- 10.1.6 Viewpoints within 4km of the site would experience significant (Moderate or greater) effects. Effects would decrease to Slight beyond 5km and beyond 12km the visual

effects would generally be No Change. In my opinion, visual effects would be either Neutral or positive in nature from 50% of the assessed viewpoints.

10.1.7 Significant visual effects would be experienced by residents living within the settlements of Thockrington, Great Bavington and Knowesgate, and those living in properties within 1km of the turbines. None of the properties would experience effects sufficient to render them 'unliveable'.

10.1.8 The footpath and bridleway network in the vicinity of the site would experience localised significant visual effects, including St Oswald's Way National Trail and the Reivers Way Regional Cycle Route which pass within 2km of the turbines. However, not all users of these routes will find these views to be adverse, and some may welcome them as a positive addition to their route.

10.1.9 Whilst these effects would not satisfy the requirements of policy EN2 of the Tynedale LDF Core Strategy [CD39], the requirement that there be "*no significant adverse impact*" on "*the character or appearance of the landscape*", this requirement appears over-restrictive in the context of wind farm development.

10.1.10 When I have completed my detailed cumulative assessment, I will provide my overall conclusion.

Conclusion

10.1.11 Thus, at this stage, based on the evidence in this proof of evidence, it is my opinion that the landscape and visual effects of the Steadings wind farm proposal are acceptable and the landscape is able to accommodate the proposal. I therefore respectfully suggest there are no landscape or visual reasons why the Steadings scheme should not be permitted.

10.1.12 This concludes my evidence on these matters, and finally, I confirm the following:

- I understand my duty to the Inquiry and have complied, and will continue to comply, with that duty.
- I confirm that this evidence identifies all facts which I regard as being relevant to the opinion which I have expressed, and that the Inquiry's attention has been drawn to any matter which would affect the validity of that opinion.
- I believe the facts stated within this proof are true and that the opinions expressed are correct.

Signed..... Dated.....