



Appeal Decision

Inquiry held on 6-9 and 13-16 January 2009

Accompanied site visits made on 12 and 13 January 2009

by Robert Mellor BSc DipTRP DipDesBEnv
DMS CEnv MRICS MRTPI

an Inspector appointed by the Secretary of State
for Communities and Local Government

The Planning Inspectorate
4/11 Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN

☎ 0117 372 6372
email: enquiries@pins.gsi.gov.uk

Decision date:
12 February 2009

Appeal Ref: APP/R2928/A/08/2075105

Land to the South East of Kiln Pit Hill, Northumberland DH8 9SL

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a failure to give notice within the prescribed period of a decision on an application for planning permission.
- The appeal is made by NPower Renewables Ltd against Tynedale District Council.
- The application, Ref 20060052, is dated 12 January 2006.
- The development proposed is the erection of 6 wind turbines, associated infrastructure and services.

Decision

1. I allow the appeal, and grant planning permission for the erection of 6 wind turbines, associated infrastructure and services on land to the South East of Kiln Pit Hill, Northumberland DH8 9SL in accordance with the terms of the application, Ref 20060052, dated 12 January 2006, and the plans submitted therewith, except where information submitted with the application is affected by the planning conditions to which this permission is subject and which are set out in the attached schedule.

Procedural Matters

2. Following the submission of the appeal, the Council resolved that, had the appeal not been submitted, it would have refused planning permission for two putative reasons which may be summarised as: (1) The Council could not be satisfied that civil aviation interests had been resolved before it could decide the application; and (2) The acknowledged benefits towards addressing climate change, by providing renewable electricity and reducing emissions of carbon dioxide and other gases, would not outweigh the considerable harm to the historic heritage of the area and the landscape setting of nationally important listed buildings, and the civil aviation interests.

Environmental Impact Analysis

3. The scheme constitutes EIA development as it falls within the descriptions set out in Schedule 2 and exceeds the thresholds in column 2 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. The submitted Environmental Statement addresses:
 - Socio-economics
 - Landscape and Visual
-

- Noise
 - Ecology and Nature Conservation
 - Birds
 - Traffic and Transportation
 - Cultural Heritage
 - The Water Environment
 - Infrastructure, Telecommunication, Television, Aviation Safety and Shadow Flicker
4. The scheme was modified at the design stage to mitigate its environmental impacts. The necessary comments from statutory consultation bodies were obtained have been submitted and taken into account together with the environmental information contained in the Environmental Statement, further information submitted subsequently at the request of the Council and evidence presented for and at the Inquiry.

Main issues

5. I consider the main issue to be whether the benefits of providing renewable energy would be outweighed by:
- a) a harmful impact on the setting of listed buildings at Greymare Hill; and/or
 - b) an adverse impact on radar images and the associated safety of air traffic control at Newcastle International Airport (that could not be mitigated by the application of a suitable planning condition) together with any adverse environmental consequences that may arise were flights to be rerouted to avoid the location of the windfarm.

Reasons

Benefits of Renewable Energy

6. The development plan here includes the North East of England Plan Regional Spatial Strategy (July 2008) (RSS), the Tynedale Local Development Core Strategy (October 2007) (CS), and those policies of the Tynedale Local Plan (April 2000) (LP) that were saved from expiry in 2007. There are now no relevant Structure Plan policies.
7. The RSS is the most up-to-date part of the development plan and it merits full weight. Paragraph 3.177 refers to the Government's commitment in the Energy White Paper to seek 10% renewable electricity by 2010 and 20% by 2020 with considerably higher longer term targets. Box 5.3.3 of the White Paper sets out the Government's Renewables Statement of Need which requires in summary that the planning system gives significant weight to the crucial national benefits of reduced emissions and more diverse supplies of energy even where projects may not always appear to convey any particular local benefits. Key principle 1(iv) of the Government's Planning Policy Statement 22 'Renewable Energy' (PPS22) similarly requires significant weight

- to be given to the wider environmental and economic benefits of all proposals for renewable energy projects.
8. To reflect the national targets, RSS Policy 39 seeks to facilitate the generation of at least 10% of the Region's consumption of electricity from renewable sources by 2010. This is defined as 454MW of 'installed capacity'. The policy also provides for a minimum sub regional target for Northumberland of 212MW by 2010. The Council does not dispute that there is this need for renewable energy or that the development would contribute to its provision.
 9. The Statement of Common Ground between the Council and the Appellant suggests that installed capacity both in the North East Region and especially in Northumberland will fall well short of the RSS targets for 2010. Some objectors nevertheless claim that the North East regional target for 2010 will be met by other means. In particular, reliance is placed on RESTATS data for schemes which are either in operation or are 'awaiting construction/under construction' as well as on planning applications and appeals that remain to be decided. This does not demonstrate that the target capacity will actually be 'installed' by the 2010 target date, now less than 2 years away. Neither more particularly is there any evidence that the sub-regional target for Northumberland will be achieved by that date.
 10. In any event the national, regional and sub-regional targets have clearly been devised in relation to what the policy-makers considered likely to be achievable by the relevant dates. The targets are not maxima. If higher capacity can be achieved at an earlier date, that would support the principal objective to facilitate generation from renewable sources and to thereby reduce carbon dioxide emissions, both regionally and nationally, so as to mitigate the impacts of climate change. Moreover, paragraph 16 of the Climate Change Supplement to the Government's PPS1 'Delivering Sustainable Development' is specific that strategic targets should not be applied to individual planning applications. Even had the 2010 targets clearly been attainable, paragraph 3 of PPS22 'Renewable Energy' makes it clear that the fact that a target has been reached should not be used in itself to refuse planning permission for further projects.
 11. I acknowledge the Council's point that the amount of saved carbon emissions may vary from that claimed by the Appellant should the mix of alternative forms of energy production change; for example as the result of differing proportions of nuclear energy or coal generation or because of the application of carbon capture technology to coal generation. Nevertheless I conclude that significant weight must be accorded to the benefits of the proposal in creating additional renewable energy capacity and thereby contributing to reduced carbon emissions and a more diverse energy supply. The proposal accords with those objectives of the development plan and national policy.
 12. Key principle 1(i) of PPS22 states that: 'Renewable projects should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily'. In this case RSS Policy 41 identifies the Kiln Pit Hill area as a 'broad area of least constraint' for onshore wind energy having potential for 'medium scale development'. RSS paragraph 3.192 broadly defines medium scale development as up to 20-25 turbines with small scale defined as up to 5 turbines. The location is indicated by a 'W' symbol on the key diagram. It is

not otherwise defined in the RSS and Policy 41 instead seeks that the broad locations of the area be identified within Local Development Frameworks (LDF) using RSS Policy 40. That policy identifies relevant criteria that are also material to the consideration of individual planning applications.

13. The adoption of the LDF Core Strategy pre-dates the final RSS and it does not further define the 'W' area at Kiln Pit Hill. However CS Policy EN2 does set out further criteria for Commercial Scale Renewable Energy Development. These are to be applied across the District and they are highly material to this proposal. The supporting text also refers to the use of detailed studies into the areas of least constraint in order to assess specific proposals that come forward. Such a study has been carried out for Kiln Pit Hill by consultants (the Arup Report).
14. The Arup Report concluded in summary that the Kiln Pit Hill Area is incapable of accommodating up to 25 turbines 'without a significant change in landscape character' and that the maximum magnitude of development should be one small windfarm of less than 7.5MW, 1.5km east of the summit of 'Kiln Pit Hill'. It was agreed by several Inquiry witnesses that this is actually intended to refer to land 1.5km east of the summit of Greymare Hill. That recommended location does not include the appeal site and the appeal proposal would have a higher capacity of 12MW. Nevertheless, whilst the Arup Report is a material consideration, I can accord it little weight in that: it is not itself part of the development plan; it has not been subject to public consultation in its preparation; and it is not to be adopted as a Supplementary Planning Document in the LDF. Moreover, its conclusions were made known to the Secretary of State prior to the approval of the final RSS. The RSS nevertheless retains Kiln Pit Hill as an area of least constraint for medium scale development.

Setting of Listed Buildings

15. The main reason cited by the Arup Report for its recommendations was to protect the setting of the Grade II nationally listed Church of St Andrew and the adjacent Grade I nationally listed Hopper Mausoleum. These stand on the summit of Greymare Hill. The Report does not explain why its recommended 1.5km separation between the listed buildings and its preferred windfarm location was modified from the 2km separation referred to elsewhere in the Report which itself appears somewhat arbitrary. The nearest turbines in the appeal proposal would stand just under 1km south east of these listed buildings. However PPS22 paragraph 14 provides that 'buffer zones' should not be created around nationally designated areas to prevent the development of renewable energy projects; albeit that the impact on such areas remains a material consideration for planning applications.
16. As the Arup Report is not adopted planning policy, greater weight must be accorded to criteria based policies in the adopted development plan and to the relevant statutory duty in respect of listed buildings and their setting. In these regards, RSS Policy 40 includes as a criterion for assessing development the: 'effect on ... national ... designated heritage sites ... including the impact of proposals close to their boundaries'. CS Policy EN2 requires that there be no significant adverse effect on (amongst other things) areas and sites of historic interest. Section 66 of the Planning (Listed Buildings and Conservation Areas)

Act 1990 requires that: 'special regard shall be had to the desirability of preserving the [listed] building or its setting'. However none of these policies or statutory provisions mandate that there must be no adverse effect on the setting of a listed building. Only LP Policy BE22 would not permit any development that: 'would adversely affect the essential character or setting of a listed building'. However I attach greater weight to the more recently drafted RSS and CS policy wording.

17. There is no statutory definition of the setting of a listed building but paragraph 48 of the Technical Annex 'Wind' to the PPS22 Companion Guide refers to the Government's Planning Policy Guidance note 15 (PPG15). That addresses setting at paragraphs 2.16 and 2.17. Paragraph 2.17 confirms that setting can include land some distance from the building and also that a proposed high building can alter views of a historic skyline.
18. English Heritage has responsibilities for listed buildings and advises at paragraph 76 of 'Conservation Principles – Policy and Guidance' (2008) that: 'Setting ... relates to the surroundings in which a place is experienced, its local context, embracing present and past relationships to the adjacent landscape' and 'Definition of the setting of a significant place will normally be guided by the extent to which material change within it could affect (enhance or diminish) the place's significance.' More specific English Heritage guidance 'Wind Energy and the Historic Environment' (2005) does allow that change within the setting of a listed building can be acceptable but in certain instances may be inappropriate. Factors are suggested for consideration which include that, where a hilltop monument is the most visually dominant feature in the surrounding landscape, 'adjacent' construction of turbines may be inappropriate.
19. In this instance I judge that the Appellant's witness's preferred definition of setting as encompassing only the graveyard curtilage of the church would suit the several listed gravestones within that graveyard, but it is untenable as the full setting of the church and the mausoleum. These larger structures are experienced over a much wider area, as the submitted Environmental Statement acknowledges. This wider setting encompasses not only the immediate approaches on footpaths from the north (which also includes views of the modest Grade II listed hearse house) and from the east, but also views from roads, footpaths and private buildings and land. These are available at varying distances over a radius of almost 360 degrees. In most of these views the simple outline of the church and the more elaborate profile of the mausoleum command the hilltop on the skyline in a highly distinctive composition which contributes strongly to the perceived character of the buildings. As one moves around the locality this impact is only occasionally interrupted by intervening buildings (such as the growing complex at Greymare Cottage Farm), or by vegetation or local topography.
20. The longest views are available from the south, east and west. The visual impact of the listed buildings does however diminish with distance due to their relatively small scale. At a distance (such as from the former Hopper family home at Black Hedley farmhouse), they become indistinguishable from the more commonplace domestic and farm buildings that are scattered across the local landscape. Extensive views out from the churchyard and its approaches

over a wide landscape to the south, east and west are also material to the way that visitors experience the listed buildings and their context.

21. The nearest turbine would be almost 1km from the church and thus not 'adjacent' to it. That distance and the proposed siting of all the turbines on lower ground would together mitigate their greater height in some important views to and from the church and mausoleum. The English Heritage objection to the scheme made particular reference to the impact on the footpath approach from the north west which is now the main access route used by visitors. However in these views the turbines would typically be glimpsed between or to the side of (rather than above) the listed buildings and their size would be diminished by distance. The church and mausoleum would continue to dominate their surroundings.
22. In views out from the church entrance, the distance and lower ground level would also mean that the wind farm would occupy only a relatively small proportion of the very wide and long landscape vistas towards the south, east and west. The background of the turbines would be the town of Consett. From the heavily trafficked A68 looking east, the visual separation between the 2 distinct groups of structures would preserve the integrity of the hilltop setting of the listed buildings. Similar circumstances would apply in views from the northern part of the U8108 Greymare-Shotleyfield lane looking west and from the public footpath that approaches the church from the east.
23. Where the U8108 descends a slope the listed buildings are temporarily concealed from view. However in views north from the southern part of the U8108, and from parts of the C263 lane from Unthank to Newlands Grange, the buildings would be seen between and behind the turbines. In those views the 100m height of the turbines would cause them to dominate the view and they would detract from the viewer's experience of the church and mausoleum on their isolated hilltop site. However this is only one location and these roads are less frequented than others in the vicinity such as the A68. The church and mausoleum in their hilltop setting could continue to be appreciated in more open views from numerous other places, where the impact of the turbines would be much less distracting. An important consideration that is referred to in the English Heritage guidance is that wind farm developments are reversible. The anticipated life of this proposal is 25 years. The main parties are agreed that conditions should be applied to any permission to then require the removal of the turbines and restoration of the site, in which event the impact on the setting of the listed buildings would cease. Any proposals to extend the life of the windfarm or to replace the turbines would require a further planning application and assessment. The guidance also points to the potential harm of climate change to the cultural heritage. That would include for example any enhanced risk of storm damage to buildings such as these in exposed situations. However it would also have a wider application such as the impact on the cultural heritage in coastal locations affected by rising sea levels caused by global warming.
24. I conclude on this issue that the proposed development would have a significant adverse impact on some views of the listed buildings and their setting. That would contravene the objectives of CS Policy EN2. However the impact would be more limited in most views of the buildings and their setting because of the relative ground levels and separation distances. The listed

buildings could continue to be appreciated in their dominant and isolated hilltop position from many viewpoints. The development is also reversible. Whilst there is residual harm to the setting of the buildings it is incorrect to describe this as intrinsically unacceptable harm which must inevitably override all other considerations. The harm must instead be weighed with the benefits of the development including the benefits of addressing climate change (which also include benefits to the wider cultural heritage).

Aviation Matters

25. Paragraph 25 of PPS22 includes the statements that: 'Regional spatial strategies should not include specific policies relating to the impact of wind turbines on airport operations, radar and aircraft ...' and 'It is the responsibility of developers to address any potential impacts, taking account of Civil Aviation, Ministry of Defence [MoD] and Department for Transport Guidance in relation to radar and aviation ...' and finally 'Local Planning Authorities should satisfy themselves that such issues have been addressed before considering planning applications.' CS Policy EN2 includes a requirement that there be no significant adverse impact, directly or cumulatively, on aircraft and radar systems.
26. In this case the MoD withdrew its original objection, however Newcastle International Airport Ltd (NIAL) (under licence from the CAA) has objected to the impact on radar unless there is to be suitable mitigation. The Appellant considers technical mitigation to be unnecessary. Negotiations between the Appellant and NIAL before and after the submission of the planning application have failed to resolve this issue.
27. The windfarm would be to the south west of Newcastle Airport and within 2 nautical miles (nm) of the usual existing flight path for those aircraft which arrive on Runway 07. Because runway use varies with wind direction that accounts for about one third of all arrivals. That could involve up to 100 arriving aircraft per day in busy periods. The Class D controlled airspace used by most of the commercial airport traffic lies above 3,000' and thus the turbines would not present a physical hazard to such aircraft. The issue instead relates to the visibility of the turbines on the airport's radar.
28. It is not disputed that of the 6 turbines, 4 would not be within line of sight of the airport's primary radar but Turbines 1 and 4 (T1 and T4) could be intermittently visible. This would depend on factors such as whether the turbines are rotating and to what angle they are turned to make best use of the wind. The original Pager Power Ltd 'Line of Sight Analysis' submitted by the Appellant predicted that up to 19m of the 100m height of T4 would be visible as would up to 28.6m of the 100m height of T1. Negotiations with NIAL had been conducted on that basis. However, for the Inquiry the Appellant's witness Mr Rundle appended to his proof of evidence a new 'Radar Technical Assessment' (RTA) by BAe Systems. This predicts that only up to 6m of the height of either turbines T1 or T4 would be visible. Whilst the Appellant's witnesses judged the recent RTA to be the most accurate, the reason for the significant difference between the two expert assessments has not been adequately explained. However even with only 6m visible the predicted Radar Cross Section would remain equivalent to the image of a medium sized aircraft.

29. NIAL accepts that a single turbine visible on the radar would not create difficulties for air traffic control as it would not appear to be moving. However NIAL argues that if both turbines T1 and T4 are within the primary radar's line of sight, they could resemble a moving aircraft on the radar screen display. Whilst the identity, speed and altitude of most commercial aircraft can be shown on the radar by transponders that are picked up by a secondary radar system, not all other aircraft carry such transponders. These may include small planes, gliders, helicopters and military aircraft. These would typically operate at lower altitudes than the larger commercial aircraft with a correspondingly reduced risk of conflict. However, as the primary radar cannot detect the altitude of aircraft, there is a potential for the turbines to appear as if they are aircraft without transponders at an unknown altitude and within 2nm of the commercial aircraft. That is less than the safe horizontal separation distances of 3nm and 5nm that are normally applied by the airport.
30. NIAL argues that an Air Traffic Control Officer (ATCO) would respond to the unidentified image by laterally diverting or 'vectoring' the commercial aircraft so as to maintain safe separation distances. At the Inquiry, NIAL's witness accepted that safety would not be compromised in that these ATCO actions would maintain safe separation between aircraft, whether these are genuine aircraft or wind turbines 'mimicking' aircraft. There are nevertheless other potential adverse consequences including additional route miles flown, increased use of fuel, and over-flying of different settlements with associated noise impacts and complaints. These impacts have not been quantified but could be significant. The BAe Systems RTA further concludes that there would be a small zone in the vicinity of the windfarm where aircraft detection probability may be reduced.
31. The Appellant's air traffic control witnesses dispute that it would be necessary to divert aircraft away from the windfarm or that all alternative routes would necessarily be longer. Moreover, they argue that ATCOs would wait for further sweeps of the radar before concluding the image was the windfarm rather than a conflicting aircraft and that diverting action would then be unnecessary. The Appellant also points to the location of the windfarm within airspace that has a dispensation for a long-established gliding club to operate at up to 4,500' on 3 afternoons per week. However it is already the practice of ATCOs to divert commercial aircraft laterally away from the area rather than directing them to over-fly the gliding area at higher altitude.
32. The BAe Systems RTA concludes overall that it is unlikely that the windfarm will have a significant performance and operational impact and therefore technical mitigation 'may not be necessary'. In the alternative, Air Traffic Control operational mitigation is considered feasible in the RTA including the application of a 'Video Map Border' to the radar display screens indicating the location of the windfarm to be avoided when the gliding club is not in operation.
33. Whilst the area in the vicinity of the proposed windfarm is currently largely free of clutter on the radar displays, NIAL is concerned that the large number of wind turbines proposed to be developed at various locations around the airport would contribute to cumulative clutter in the future. For that reason and because they consider that it would remain uncertain whether the image within the border is an aircraft, NIAL disputes that a video map border would be an acceptable solution, or one that could be applied to other similar developments.

34. CAP764 'Civil Aviation Authority Policy and Guidelines on Wind Turbines' does allow that small areas of radar clutter may be excluded from operational consideration in some circumstances and subject to consideration of a range of issues. However the NRL and NIAL witnesses disagreed as to whether the circumstances and issues here would allow the clutter to be disregarded.
35. Two alternative forms of technical mitigation were examined at the Inquiry, either of which should reduce or eliminate visible screen clutter. The first involves a reduction in the height of either T1 or T4 by the 6m which the RTA suggests is necessary to make that turbine invisible. In fact the Appellants had previously suggested a 10m height reduction to both turbines but that was rejected by NIAL at the time as the turbines would have remained visible according to the greater visible turbine heights forecast in the previous Pager Power Ltd report. The Appellant now resists such a height reduction owing mainly to concerns about the impact on the viability of the development, particularly if the turbine would be of bespoke dimensions or otherwise different to the other 4 turbines. However no financial evidence has been produced in support of that position.
36. The alternative solution proposed by NIAL is the application of a 'Non Acquisition Area' (NAA) to the primary radar, the effect of which would be to blank out any return from the vicinity of the windfarm. Aircraft with transponders would remain visible to the secondary radar. Testing of such a system is underway and the approval of the CAA would be required. NIAL has previously proposed that such an approach be applied to other windfarms. Two such developments have recently been allowed on appeal at Cramlington (Appeal Ref APP/N2915/A/07/2051193) and at Lynemouth (Appeal Ref T2920/A/07/2046453) where Grampian style negative planning conditions prevent the operation of turbines unless a mitigation system is installed. The respective developers did not dispute those measures and there is no evidence that height reduction was a feasible option there.
37. Whilst it appears that the necessary NAA software can be applied to the existing radar hardware at modest cost, NIAL considers that it would then be necessary to replace the secondary radar in 2010 and the primary radar in 2018. This is said to be only necessary because of the use of NAAs. Without that system NIAL claims that it would not replace the current radar equipment after those dates and would instead rely on feeds from off-site radar which the airport does not own or control. The radar replacement would require capital investment. Before consenting to the use of this technology, NIAL would therefore seek financial contributions from the respective windfarm developers related to the number of turbines. These would be put towards the future radar hardware replacement costs as well as towards the software testing and any other costs which they will incur. The contribution that has been suggested to the current Appellants is £200,000.
38. The NAA system would degrade the radar image to a degree as no primary radar images would be received from within the blanked out areas of the display. Whereas NIAL suggests that this solution could be adopted for some additional turbines proposed to be developed within line of sight of the airport, NIAL accepts that there would be a finite capacity to this method of mitigation before the radar image became unacceptably degraded.

39. The loss of part of the primary radar image by applying a NAA would conceal both the windfarm and also any aircraft at a similar distance and bearing. Consequently no action would be taken by the ATCO to divert aircraft. That this would be acceptable to NIAL confirms that there would not be a direct safety issue if the image were visible on radar but were to be ignored by the ATCO. However were the image visible, the ATCO would have to take a deliberate decision whether to act on it or ignore it. The current safe practice is to take action where there is the potential for conflict, for example by directing commercial aircraft to divert around the gliding club airspace instead of over-flying it. The need for a decision in each case involves additional work for the ATCO which would be multiplied were other windfarms similarly to be developed with visible images that have some potential to be confused with aircraft.
40. On the submitted evidence it appears that in some cases a NAA may prove to be a suitable option for windfarms, subject to satisfactory testing and CAA approval. However in this case, where a modest height reduction of only one turbine would avoid all confusion with moving aircraft without degrading the radar image, that has to be the preferable solution.
41. Various forms of planning condition were discussed at the Inquiry. Because the Appellant's 2 submitted radar assessments have conflicting estimates as to the visible height of the radars, NIAL would prefer wording which would seek a height reduction but would provide for a fallback situation of applying the NAA were both turbines to remain visible on the primary radar even if reduced in height. That would however result in uncertainty for the developer in relation to whether or not the significant additional cost of implementing the NAA would be incurred on top of what may be increased installation costs or reduced returns from a lower turbine with potential implications for viability. I consider that a preferable alternative would be to require a supplementary radar report before the turbines are erected. This would compare the results of the two conflicting previous radar height assessments for Turbines 1 and 4 in order to confirm that a height reduction of at least 6m or at most 10m for one of these turbines would render it invisible. One turbine could then be constructed at the reduced height and the other at the full height of 100m. If it did turn out that both T1 and T4 were visible after construction, contrary to that prediction, NIAL should rely on operational mitigation only. On the other hand, if the supplementary radar report determined that even a 10m height reduction for one turbine would be likely to still leave both turbines visible to radar, then a NAA should be applied from the outset.
42. I conclude on the balance of probabilities that, subject to the imposition of a planning condition on the above lines, there is unlikely to be an unacceptably adverse impact on radar images and the associated safety of air traffic control at that airport. That in turn should avoid any significant adverse environmental consequences from the re-routing of flights and it would avoid significant adverse impact on aircraft or radar systems as required by CS Policy EN2.

Other Matters

43. Further matters were considered in the Council's Committee Report that are not disputed between the Council and the Appellant. However some have been raised by other interested persons and I have taken them into account

together with all other matters raised at the Inquiry or in writing. I refer in particular to the following matters.

Landscape

44. The site lies outside and to the north east of the North Pennines AONB and outside and to the south west of the Green Belt. The former local Area of High Landscape Value designation referred to in some representations is no longer in effect and is therefore not material to the determination of this appeal. Extensive consideration has been given to landscape impact in: the Arup Report; the Environmental Statement (ES) including the Landscape and Visual Impact Assessment (LVIA); the audit of the ES for the Council by Ironside Farrar; and (most recently) the Capita Lovejoy Report for the Council which took into account the earlier studies as well as the policy context. The Arup Report highlighted the listed buildings' setting as its main concern with regard to the siting a windfarm in this part of the study area. I address this separately above as a main issue. The Capita Lovejoy Report concluded amongst other things that the windfarm was 'under assessed' within the ES but would be well located and largely compliant with the planning policy context, except for the same issue of the setting of the listed buildings.
45. In the light of planning policy and the 'limited effects' of the development, the Capita Lovejoy Report concluded that there were insufficient grounds to contest the issue of the setting of the AONB. However, as the effects on the AONB might extend further than originally concluded in the ES and because of concerns of the AONB officer, I visited more distant locations within the AONB including the Dead Friars Quarry viewpoint recommended by that officer. The dominant AONB landscape in that vicinity is of a remote wild upland. However I judged that the windfarm would appear very small at such distances and clearly located within a different and more managed agricultural landscape. Thus it would not have a significant adverse effect on the landscape character and setting of the AONB.
46. The windfarm would obviously have a greater impact on closer views. However this is a very wide landscape which is capable of accommodating some change. The windfarm would only be dominant within a relatively small area. I conclude that the general landscape impact would be acceptable subject to consideration of the harm to the setting of the listed buildings which I address above.

Equestrian

47. The network of rural lanes to the east of the A68 carries little vehicular traffic and consequently the lanes are particularly popular with horse-riders from several local equestrian establishments. They are concerned that horses may be alarmed by the turbines. There have been previous suggestions by the Appellant that an alternative bridleway route might be provided. This is not now proposed. A route suggested by some objectors would require land over which the Appellant and (in some parts) the landowner of the appeal site do not have ownership or control. Neither is there evidence of any support for the proposal from that or other landowners. It would also require changes in the status of existing footpaths which might well be objected to by other users. Consequently to apply the requested planning condition would not ensure its

provision and it is not reasonably likely that such a bridleway could be created before the date for implementation of the planning permission had expired, if at all. The imposition of a condition would thus not be reasonable and is not in my view necessary. The British Horse Society's recommended separation distances are non-statutory. The lanes near the appeal site are more likely to be used repeatedly by the same horses and riders, who would become more familiar with the turbines. Also the turbines would normally be approached from a distance, reducing the risk of sudden disturbance of the horses. Neither is there clear and substantive evidence before me of actual harm where turbines have been sited at about 100m from routes used by horses, as proposed here.

48. There is potential for conflict between construction activities and recreational use of nearby lanes by horse-riders, walkers and cyclists. I therefore accept that a variation of the permitted construction hours is appropriate to reduce such conflicts. This would exclude all construction activities on Saturdays as well as on Sundays and Public Holidays. However I do not consider it reasonable to also shorten the permitted hours between Monday and Friday, having regard to other constraints such as traffic conditions and the technical requirements of concrete pouring as well as the consequent lengthening of the construction period and the associated disruption. Specific measures to mitigate the impact of traffic can be considered as part of a traffic management plan which can be required by condition.

Access

49. The principal access route during construction would be the C263 which connects the A68 to the site through the hamlet of Unthank. Works are proposed to widen the junction with the A68 to accommodate longer vehicles and to make other alterations to the lane including the provision of passing places. The lane is relatively straight and is wider than some other lanes in the area. There is no more obviously suitable route. A traffic management plan can be required by a condition which can require prior local consultation before it is submitted for approval. That is the best means for addressing local safety and other traffic concerns. Details of the highway works can also be reserved by condition but would in any event require the approval of the highway authority where the works are to take place within the highway including highway verges. There is no safety objection from the highway authorities and a lack of evidence to support the views of some objectors that the windfarm would materially distract or otherwise add to existing hazards for users of the A68.

Wildlife

50. A number of wildlife issues are addressed in the ES. Particular concerns were raised by the County Ecologist, Natural England and others, mainly in relation to birds and protected species. However, Natural England has confirmed in an email dated 10 April 2008 that they do not consider that there would be a significant effect on a nearby Special Protection Area and thus an 'Appropriate Assessment' is not required under habitat regulations.
51. The Appellant has agreed to the Council's reasonable suggestion that further protected species surveys and associated mitigation may be necessary before

the development commences. This should address any gaps in information already obtained and would up-date information since previous surveys were undertaken. Any identified effects on protected species would be subject to other legislation and licensing requirements.

52. Further bat and ornithological surveys were requested by the County Ecologist. However the suggested monitoring of a 'nearby reference site' is too vague. Also, should the requested post development surveys demonstrate impacts on wildlife greater than predicted in the ES, the requested conditions do not make provision for any additional avoidance, mitigation or compensatory measures in relation to the subject windfarm development. Neither is it obvious what mitigation would be possible in that event other than the unacceptably onerous requirement to cease power generation or to dismantle the turbines. In these circumstances I do not consider that on-going monitoring would be suitably relevant to the development permitted or would serve a planning purpose for the purposes of the tests for planning conditions in Circular 11/95. Neither would it directly add to biodiversity interests for the purposes of Key Principle (ii) of PPS9 'Biodiversity and Geological Conservation' as claimed by the County Ecologist.
53. I consider that the suggested requirement for a condition that commencement of the operation of the wind farm take place outside of the bird breeding season of March to August is too onerous and have reduced this period to April-June which is the main bird breeding season.

Shadow Flicker and Blade Length

54. The risk of shadow flicker affecting the windows of any lawfully occupied dwellings is predicted by the ES to be small and to only occur for 14.5 hours per year at one window of one dwelling which is in the same ownership as the appeal site. A condition can be applied to require a scheme for its alleviation by stopping the movement of the turbine blades at relevant times. Those measures are better determined once the turbines are in position and actual impacts can be observed. The proposed blade length is 35m and all visual and other assessments have been on that basis. I therefore do not consider that longer blades would be justified.

Noise

55. Extensive conditions and survey methodology have been proposed to define the maximum permitted noise levels and to address any complaints to establish whether these levels are exceeded. It is unnecessary to require continual noise monitoring in addition to this and it would be impractical to achieve that at all relevant locations, including those on private land.

TV and Radio Interference

56. The Appellant has submitted a completed unilateral S106 planning obligation of measures to address problems that might arise with domestic TV reception and to remedy these. Having regard to the relatively small number of properties in the surrounding area, I do not consider the £20,000 ceiling on the cost of such measures to be unreasonable or that a further planning condition is necessary. I therefore agree with the appellant that the planning conditions requested by the Council are not necessary in respect of TV reception. However, as the

undertaking does not also cover radio reception. I agree that the Council's requested condition should be applied in that regard.

Conclusions on Other Matters

57. I conclude that several of the other matters raised can be addressed by the application of planning conditions and that the other considerations do not outweigh my conclusions on the main issues or result in material conflict with the development plan.

Conditions

58. The conditions are set out in the attached schedule. I have addressed some matters relating to conditions above. I have otherwise taken account of the conditions suggested by the main parties and the other interested persons and the discussion on these matters which took place at the Inquiry. In some instances of disputed wording I broadly favour the wording of conditions suggested by the Council, whereas in others I favour the wording of another party. I have also considered the tests for conditions set out in Circular 11/95 and have made further wording changes where necessary to satisfy one or other of those tests. I have amended the timings of some requirements for the approval of details or the implementation of requirements. However further suggested amendments in that regard are unnecessary. I have also amended the wording of some conditions to make their requirements clearer such as the provision for a decommissioning method statement.
59. The conditions are generally needed to protect visual or residential amenities or aviation safety, to minimise adverse environmental impacts from aviation, and to comply with the objectives of relevant development plan policies including RSS Policy 40, CS Policies EN2 (renewable energy), NE1 (natural environment) and BE1 (built environment), and LP Policies GD2 (design criteria), GD4 (highway safety), and BE28 and BE29 (archaeology). In the latter regard, having regard to the previous archaeological investigation and the comments of the County Archaeologist, I consider that a condition to require a watching brief will be sufficient.

Conclusions

60. My overall conclusion is that the potential harm to aviation interests and the associated environmental impact of diverted flights can be satisfactorily mitigated by the application of a suitable planning condition which should avoid or minimise such impacts.
61. The development would have a significant adverse impact on the setting of listed buildings at Greymare Hill and especially in some views from the south east which cannot be mitigated (except that the development would be reversible on the expiry of the permission). Nevertheless these buildings and their setting could continue to be widely appreciated from many other near and distant viewpoints. The significant adverse impact on the setting of the listed buildings during the life of the planning permission would therefore be limited in extent. That and any other more minor residual harm remaining after the application of mitigation by way of the scheme design and planning conditions would to my mind be outweighed by the benefits of providing renewable energy as set out in local, regional, and national planning policy.

62. The Council suggested in closing that 'if one is to weigh a national need against an adverse impact [to heritage interests], that must invite consideration of whether there is evidence that other potential sites to accommodate renewable energy development would involve creating a comparable degree of adverse impact'. However the Council has not submitted evidence to support its contention that there must be less harmful sites in other 'areas of least constraint' or outside any such area. Whilst some windfarm developments have been permitted outside these identified areas, the slow delivery overall of installed capacity in Northumberland suggests that sites are not easy to find and develop.
63. That the Kiln Pit Hill area of least constraint survived the RSS process, even after the impact on the listed buildings had already been highlighted by the Arup Report, suggests that it has already been assessed to be less constrained in the round than areas which have not been identified in the RSS. The Arup Report did identify that the development of another part of the Kiln Pit Hill area with a small windfarm would have less impact on the listed buildings but that site would not on its own result in the delivery of the medium scale of development identified for Kiln Pit Hill in the RSS. Whilst there may be other identified areas of least constraint elsewhere in Northumberland or in the North East Region with less impact on listed buildings, it has not been demonstrated that the identified Kiln Pit Hill area is not also needed.
64. I conclude for the above reasons that the appeal should be allowed and that planning permission should be granted subject to conditions.

Robert Mellor
INSPECTOR

SCHEDULE OF CONDITIONS

Time Limits and Site Restoration

- 1) The development hereby permitted shall begin not later than three years from the date of this decision.
- 2) This permission shall expire no later than 25 years from the date that electricity is first exported to the electricity grid from the wind turbines ("date of first export"), such date shall not be within the period April to June in the first year of operation and the date shall be notified to the Local Planning Authority not later than one month after the said first exportation of electricity. Within 12 months of the expiration of the permission, all elements of the development above ground level, excluding access tracks, shall be removed and the land restored, in accordance with the Decommissioning Method Statement required by condition 4.
- 3) In the event that for a continuous period of twelve months any particular turbine comprising part of the development hereby permitted does not produce any electricity supplied to a local grid then it shall be deemed to have ceased to be required and, unless otherwise agreed in writing with the Local Planning Authority, the wind turbine and the ancillary equipment directly relating to that wind turbine shall be removed and the land restored, in accordance with the Decommissioning Method Statement required by condition 4.
- 4) Prior to the date of first export, a Decommissioning Method Statement in respect of the decommissioning of any individual turbine or of the site as a whole, to include an environmental management plan and a noise management plan to include: identification of access routes; locations of material lay down areas; details of equipment to be employed; operations to be carried out; mitigation measures; and a scheme of noise monitoring and a programme for implementation, shall be submitted to and be approved in writing by the Local Planning Authority.

Height and Appearance

- 5) No wind turbine shall be erected and no external transformer unit (if any) installed until details of the make, model and external appearance (including colour and surface finish) of the wind turbines and unit transformer housings (if any) have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.
- 6) All wind turbine blades shall rotate in the same direction.
- 7) Notwithstanding any design or colour approved by the Local Planning Authority pursuant to condition 5, all wind turbines shall be of a three bladed configuration and shall be of a semi-matt finish and shall not display any prominent name, sign, symbol or logo on any external surfaces other than those necessary to meet statutory health and safety requirements.
- 8) Construction of the substation building shall not commence until details of the external treatment of that building, including materials, access from the public highway and landscaping measures, including a

programme for implementation, have been submitted to and approved in writing by the Local Planning Authority. The development shall be constructed in accordance with the approved details.

- 9) No external lighting shall be installed anywhere on the turbines or the appeal site without the prior written consent of the Local Planning Authority.
- 10) All cabling shall be installed underground except where it joins to the appropriate apparatus.

Aviation Mitigation and Height

- 11) The erection of Turbine T1 or Turbine T4, whichever is to be commenced later, shall not commence until there has been submitted to the Local Planning Authority and approved in writing after consultation with Newcastle International Airport Ltd a supplementary Radar Technical Assessment which shall review the Pager Power Ltd Line of Sight analysis and the BAe Systems Radar Technical Assessment to determine the reasons for the different results in respect of visible turbine height and the report shall include any further technical analysis necessary to confirm what predicted height reduction in the last of the two turbines to be erected would render that turbine invisible to the primary radar at Newcastle Airport. Should that height reduction be 10m or less, the turbine shall be erected at that maximum height with the blades not to exceed 35m in length and those dimensions shall not thereafter be exceeded. In the alternative, should the approved supplementary radar report confirm that a predicted height reduction in excess of 10m would be necessary to render the turbine invisible, that turbine shall not be erected until a scheme to introduce a Non Acquisition Area on the primary radar display at the airport has been submitted to and approved in writing by the Local Planning Authority in consultation with Newcastle International Airport Ltd; which scheme shall be implemented before that turbine commences rotation and which shall endure for the life of the development unless an alternative mitigation scheme has been approved in writing by the Local Planning Authority in consultation with Newcastle International Airport Ltd.
- 12) Except as provided for by condition 11 above, the overall height of the wind turbines shall not exceed 100m to the tips of the turbine blades and the length of the blades shall not exceed 35m.
- 13) The development hereby permitted shall not commence until, the developer has notified the Local Planning Authority, the Civil Aviation Authority, Newcastle International Airport Limited and Defence Estates Operations North of: the date that construction is expected to start and end; the maximum height of construction equipment and the maximum height of each turbine above Ordnance Datum; and the latitude and longitude of every turbine.

Construction Method Statement

- 14) The development hereby permitted shall not commence until a Construction Method Statement has been submitted to and approved by the Local Planning Authority in writing and thereafter the construction of the development shall only be carried out in accordance with the

approved Statement. The Construction Method Statement shall include the following:

- (a) Dust management
- (b) Cleaning of site entrances and the adjacent public highway and the provision of a wheel wash in an appropriate location to be used by all vehicles exiting the site onto the public highway. The sheeting of all HGV's taking spoil or construction materials to/from the site to prevent spillage or deposit of any materials on the highway.
- (c) Protection of water courses, ground water and soils.
- (d) The bunding of fuel storage areas.
- (e) Sewage disposal.
- (f) Noise management plan. The plan shall include identification of access routes, locations of material lay down areas, details of equipment to be employed, operations to be carried out, mitigation measures and scheme of noise monitoring.
- (g) Vibration control.
- (h) Temporary Site Illumination.
- (i) Disposal of surplus materials.
- (j) Details of the proposed temporary site compound for storage of materials, machinery and operatives parking within the site clear of the highway, and the restoration of the site of the compound within 12 months of the first commercial generation of the wind farm, to include the siting of temporary buildings and all means of enclosure, oil/fuel and chemical storage and any proposals for temporary lighting.
- (k) Details of the timing of works.
- (l) Surface water run-off. To include measures to prevent erosion, sedimentation or discolouration of controlled waters shall be provided, along with monitoring proposals and contingency plans.
- (m) Environmental management. To include the identification of mechanisms to ensure awareness of relevant environmental issues during pre-construction, construction and pre-decommissioning and details of emergency procedures/pollution response plans.
- (n) Details of surface treatment and construction of all hard surfaces and tracks.
- (o) Details of all means of enclosure to be erected on the site to include details of height, siting, appearance and construction.

Shadow Flicker

- 15) Prior to the date of first export, a scheme to satisfactorily alleviate the incidence of shadow flicker at any affected property shall be submitted to and approved in writing by the local planning authority. Unless otherwise agreed in writing by the local planning authority, any turbine producing shadow flicker at any lawfully occupied dwelling which existed at the time that permission was granted shall be shut down and the blades remain stationary until the conditions causing those shadow flicker effects have

passed. The development shall be carried out in accordance with the approved details.

Siting

- 16) The turbines shall be erected at the following coordinates:

| | |
|-----------|-------------|
| Turbine 1 | 05348 54682 |
| Turbine 2 | 05590 54583 |
| Turbine 3 | 05838 54459 |
| Turbine 4 | 05159 54376 |
| Turbine 5 | 05370 54237 |
| Turbine 6 | 05785 54145 |

No variation of the position of any turbine shall be permitted without the prior written approval of the Local Planning Authority. A plan showing the position of the turbines as built shall be submitted within one month of the Date of First Export (as defined in Condition 2).

Construction Hours

- 17) No construction activities including deliveries of materials shall be carried out on the site on any Saturday, Sunday or Public Holiday or outside the hours of 08.00hrs to 18.00hrs on Mondays to Fridays, unless prior written agreement is obtained from the Local Planning Authority.

Archaeology

- 18) The development hereby permitted shall not commence until a written scheme for an archaeological watching brief has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented in full subject to any variations agreed in writing by the Local Planning Authority.

Wildlife

- 19) The development hereby permitted shall not commence until a detailed Land Management Scheme to include an environmental management and enhancement plan and habitat management plan, has been submitted to and be approved in writing by the Local Planning Authority. The Land Management Scheme shall be implemented in full.
- 20) The development hereby permitted shall not commence until a specification for protected species surveys to be carried out has been submitted to and be approved in writing by the Local Planning Authority. The survey results and a programme of mitigation work to address significant issues identified by the surveys shall be submitted to and be approved in writing by the Local Planning Authority. The surveys will be undertaken by a suitably qualified ecologist in the last suitable season prior to site preparation and construction work commencing, and the approved programme of mitigation work will be implemented in full.
- 21) There shall be no ground clearance works, tree felling, or vegetation removal during the main bird breeding season (April – June inclusive). If any such works are scheduled for March, July or August, a suitably qualified ecologist must carry out a comprehensive search of the affected

area for nesting birds before the works commence. If active nests are found, ground clearance, tree felling or vegetation clearance around the nest (including a buffer area determined by the ecologist), will be avoided until the breeding attempt has ended as confirmed by the ecologist in writing. The date of first export will take place outside of the main bird breeding season (April-June inclusive).

Access

- 22) Notwithstanding the highway drawings that have previously been submitted and which are taken to be illustrative, no development shall commence until detailed access and road improvement drawings to include the improvement of the A68/C263 Unthank junction and a system of inter-visible passing places along the C263 road from its junction with the A68 up to the final access to the site and a timetable for their implementation have been submitted to and agreed in writing by the Local Planning Authority in consultation with Highway Authority. No other development of the wind farm other than such site establishment necessary to ensure that these works can be completed shall take place until the approved highway improvements have been implemented in full prior.
- 23) Within 3 months of the completion of the construction works, the temporary vehicular crossings shall be stopped up and the highway verges and means of enclosure shall be restored.
- 24) No development shall commence until a detailed Traffic Management Plan covering the full construction period has been subject to consultation with residents and then submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority. The Traffic Management Plan must include details of all turning facilities, routing, schedule and timing of movements, details of escorts for abnormal loads, temporary warning signing, banksman/escort details and proposed mitigation measures through Unthank village. The approved Transport Management Plan shall be implemented in full throughout the construction period.

Noise

- 25) The Rating Noise Levels from the combined effects of the wind turbine generators on the wind farm hereby approved shall not at any time exceed the levels shown in Tables 1 and 2 below. Rating Noise Levels will be derived from levels measured, and corrected if necessary for tonal quality, in accordance with procedures in the Schedule of Noise Guidance Notes attached to this decision:

Table 1 At dwellings where neither the windfarm operators nor the landowners of the windfarm site have any financial involvement:

| Wind speed @10m height m/s > | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Night time (23.00 – 07.00) Maximum Noise Level $L_{A90,10m}$ dB | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 45 | 47 | 48 | 48 |
| Other times Maximum noise level $L_{A90,10m}$ dB | 35 | 35 | 35 | 35 | 37 | 39 | 42 | 44 | 46 | 48 | 50 | 51 |

Table 2 At dwellings where the windfarm operators or the landowners of the windfarm site have a financial involvement:

| Wind speed @10m height m/s > | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Night time (23.00 – 07.00) Maximum Noise Level $L_{A90,10m}$ dB | 45 | 45 | 45 | 45 | 45 | 43 | 45 | 45 | 45 | 47 | 48 | 48 |
| Other times Maximum noise level $L_{A90,10m}$ dB | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 46 | 48 | 50 | 51 |

- 26) In the event of a complaint being received in writing by the Local Planning Authority alleging noise nuisance due to the wind turbines, the wind farm operator shall measure the level of noise emissions from the wind farm at the location of the complainant’s property (or, in the event that access is not possible, at the nearest publicly accessible location acceptable to the Local Planning Authority) and the operator shall co-operate with the Local Planning Authority to confirm and eliminate any noise nuisance.

Radio Interference

- 27) Prior to any site preparation and construction works a survey shall be undertaken by a suitably qualified person to identify those properties that may experience a reduction in the quality of radio reception received as a result of the development of the windfarm, and a scheme of mitigation shall be prepared and shall be implemented in full prior to the first commercial generation of the wind farm. A copy of the report shall be submitted to the Local Planning Authority. Within one month of the first commercial generation of electricity at the site, a second survey shall be undertaken to ensure that all affected properties have been identified. Any required additional mitigation measures shall be implemented in full within two months of the first commercial generation of the wind farm. A copy of this report shall be submitted to the Local Planning Authority.

Contact Person

- 28) The development hereby permitted shall not commence until there has been submitted to, and have been approved in writing by, the Local Planning Authority details of a nominated representative to act as a local point of contact for local residents together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated local representative shall have responsibility for dealing with any complaints made during the construction, operation and decommissioning of the wind farm and liaison with the Local Planning and Environmental Health Departments.

SCHEDULE of NOISE GUIDANCE NOTES

The following paragraphs are based upon steps 2-6 specified in Section 2 of the Supplementary Guidance Notes to the Planning Obligation contained within pages 102 and following pages of "The Assessment and Rating of Noise from Wind Farms, ETSU-R-97" published by ETSU for the Department of Trade and Industry. It has been adapted in the light of experience of actual compliance measurements.

NOTE 1

Values of the LAF90, 10min noise statistic should be measured at the affected dwelling using a sound level meter of at least IEC 651 Type 1 quality (or the equivalent relevant UK adopted standard in force at the time of the measurements). This should be fitted with a ½" diameter microphone and calibrated in accordance with the procedure specified in BS4142: 1997. The microphone should be mounted on a tripod at 1.2 - 1.5 m above ground level, fitted with a two layer windshield or suitable equivalent according to current best practice, and placed in the vicinity of, and external to, the dwelling. The intention is that, as far as possible, the measurements should be made in "free-field" conditions. To achieve this, the microphone should be placed at least 3.5 m away from the building facade or any reflecting surface except the ground.

The LAF90, 10min measurements should be synchronised with measurements of the 10-minute arithmetic mean average wind speed and with operational data from the turbine control systems of the wind farm or farms.

The wind speed and wind direction and a note of all 10 minute periods when one or more of the turbines was not operating normally should be available to enable an analysis to take place.

The precise definition of "normal operation" should be agreed in writing with the local authority prior to the commencement of the development on the basis of data available but should generally be taken to mean when one or more wind turbines are rendered non-operational by loss of connection to the electricity grid network; maintenance or repair work; application of emergency trips or alarms; or having been switched off or disconnected for any reason.

In the interests of commercial confidentiality no information is required to be provided for individual turbines or on the nature of any abnormality or for any period during which noise monitoring is not taking place.

NOTE 2

The noise measurements should be made over a period of time sufficient to provide not less than 100 valid data points. Measurements should also be made over a sufficient period to provide valid data points throughout the range of wind speeds considered by the Local Planning Authority to be most critical. In determining the wind speeds most critical the Local Planning Authority shall have regard to those wind speeds which were most likely to have prevailed during times when the complainant alleges there was disturbance due to noise. Valid data points are those that remain after the following data have been excluded:

All periods during rainfall

All periods during which the measurement position is not within 45 degrees of being downwind of any wind turbine.

All periods during which turbine operation was not normal.

A least squares, "best fit" curve of a maximum 4th order should be fitted to the data points.

NOTE 3

Where in the opinion of the Local Planning Authority, the noise emission contains a tonal component, the following rating procedure should be used. This is based on the repeated application of a tonal assessment methodology.

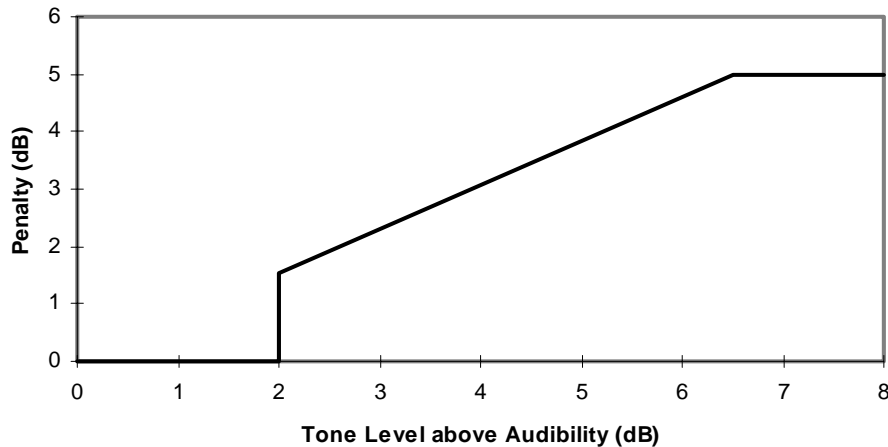
For each 10-minute interval for which LAF90, 10min data have been obtained, a tonal assessment is performed on noise emission during 2-minutes of the 10-minute period. The 2-minute periods should be regularly spaced at 10-minute intervals provided that uninterrupted clean data are obtained.

For each of the 2-minute samples the margin above or below the audibility criterion of the tone level difference, *Ltm, is calculated by comparison with the audibility criterion given in Section 2.1 on page 104 and following pages of ETSU-R-97.

The margin above audibility is plotted against wind speed for each of the 2-minute samples. For samples for which the tones were below the audibility criterion or no tone was identified, substitute a value of zero audibility.

A linear regression is then performed to establish the margin above audibility at the assessed wind speed. If there is no apparent trend with wind speed then a simple arithmetic average will suffice.

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



The rating level at each wind speed is the arithmetic sum of the wind farm noise level, as determined from the best fit curve described in Note 2, and the penalty for tonal noise.

The rating level shall be determined for each integer wind speed. If the rating level lies at or below those values set out in condition 25 then no further action is necessary.

NOTE 4

If the rating level is above the limit, a correction for the influence of background noise should be made. This may be achieved by repeating the steps in Note 2, with the wind farm switched off, and determining the background noise at the assessed wind speed, L_b. The wind farm noise at this speed, L_w, is then calculated as follows where L_a is the measured level with turbines running but without the addition of any tonal penalty:

$$L_w = 10 \log \left[10^{L_a/10} - 10^{L_b/10} \right]$$

The Rating level is re-calculated by adding the tonal penalty (if any) to the wind farm noise. If the rating level lies at or below those values set out in condition 25 then no further action is necessary. If the rating level exceeds those values set out in condition 25 then the development fails to comply with condition 25.

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

| | |
|------------------------------|--|
| Mr M Carter | of Counsel, Kings Chambers, 36 Young Street, Manchester M3 3PT, instructed by Mrs Helen Winter, Director of Planning , Tynedale DC |
| He called | |
| Mr P Lewis BA(Hons) MA MRTPI | Principal Planner with England and Lyle Town Planning Consultancy and Temporary Planning Officer for Tynedale DC |
| Ms Elaine Gray MA MSc | Senior Conservation Officer, Tynedale DC |

FOR THE APPELLANT:

| | |
|---|---|
| Mr D R Hardy LLB(Hons) BCL (Oxon) | Barrister and Solicitor, Cobbetts LLP, Number 1 Whitehall Riverside, Leeds LS1 4BN |
| He called | |
| Mr K Halliday BSc(Hons) MPhil MLI | Landscape Architect, Stephenson Halliday, 32 Lowther Street, Kendal, Cumbria LA9 4DH |
| Mr A N Brown BA BArch MSC MRTPI RIBA IHBC | Woodhall Planning and Conservation, Woodhall, Woodhall Lane, Calverley, Leeds LS28 5NY |
| Mr C B Rundle | Air Traffic Control Instructor, Consultant for Insyte (BAe Systems) |
| Mr D Johnston BSc Dip | Licensed Air Traffic Controller, Consultant for Airport Planning and Development Ltd, Linden House, Sardinia Street, Leeds, West Yorkshire LS10 1BH |
| Mr P G B Dixon MA MRICS CEnv | Planning Consultant, Savills, City Point, King Street, Leeds LS1 4HR |

FOR NEWCASTLE INTERNATIONAL AIRPORT LTD [Rule 6(6) Party]

| | |
|---------------------------|---|
| Mr T Hill | of Counsel 4-5 Gray's Inn Square, London WC1 instructed by Ward Hadaway Solicitors, Sandgate House, 102 Quayside, Newcastle NE1 3DX |
| He called | |
| Mr G Mason BA(Hons) MPhil | Head of Planning and Corporate Affairs, Newcastle International Airport |
| Mr K Rodgers | Senior Air Traffic Control Officer, Newcastle International Airport |

INTERESTED PERSONS:

| | |
|-------------------------|--|
| Mr C Woodley Stewart | Officer, North Pennines AONB Partnership, Weardale Business Centre, 1 Martin Street, Stanhope, County Durham DL3 8NE |
| Ms J Stevenson, | Local Resident (Also Parish Councillor) Dale View, Unthank, Kiln Pit Hill, Northumberland DH8 9LP |
| Mr S McIntyre | Local Resident, Kiln Pit Hill House, Kiln Pit Hill, Consett DH8 9RW |
| Dr M Eagle PhD MSc MCSP | Local Resident, Rose Cottage, Kiln Pit Hill, Consett DH8 9RW |
| Mr A Thompson | Local Resident, Unthank Farm, Kiln Pit Hill, Northumberland DH8 9LP |
| Mrs T Kibler | Local Resident, Newlands Grange, Consett DH8 9LH |
| Mr W Short | Resident of Tynedale District, Ingledew, |

Dr R Court CEng MIMMM
Mr M Reid

Kirkwhelpington, Newcastle NE19 2RT
Local Resident, The Old Dairy, Field Head Farm,
Shotley Bridge, Consett DH8 9TQ
Resident of Tynedale District, Ash Tree Cottage,
Riding Mill, Northumberland NE44 6DY

DOCUMENTS SUBMITTED AT THE INQUIRY BY THE COUNCIL

TDC3 Note on Greymare Hill Cottage Farm planning history
TDC4 2nd Letter of notification of appeal and list of persons notified
TDC5 Opening submissions
TDC6 Closing submissions
TDC7 Report of Bovale Ltd v SoS CLG, Hereford Council (HC 13-10-2008)

DOCUMENTS SUBMITTED AT THE INQUIRY BY THE APPELLANT

NRL18 TDC Conservation and Design consultation response 25 July 2006
NRL19 S106 Unilateral Undertaking addressing TV Interference (Completed version)
NRL20 Emails between TDC and Arup
NRL21 Circular 01/2007 Revisions to the Principles of Selection for Listed Buildings
NRL22 English Heritage Commemorative Structures Selection Guide
NRL23 English Heritage Places of Worship Selection Guide
NRL24 Rev B to Figure Appendix C.1 Cumulative Assessment Location Plan
NRL25 Greymare Hill Cottage Farm Report 20070908 (Stables)
NRL26 Greymare Hill Cottage Farm Report 20070983 (Replacement Barn)
NRL27 Greymare Hill Cottage Farm Report 20080494 (Balcony)
NRL28 Greymare Hill Cottage Farm Report 20080888 (Garage, workshop, office)
NRL29 BERR Speech by former SoS John Hutton to Fabian Society – 17 September 2007
NRL30 First Report of the Committee on Climate Change – December 2008
NRL31 Proof of Evidence of A P Ormshaw to Knabs Ridge Windfarm Inquiry – June 2005
NRL32 Draft conditions relating to height reduction of turbines 1 or 4
NRL33 Plan showing land owned by same landowner but not in Appellant's control
NRL34 Plan showing approximate line of ethylene pipeline across appeal site
NRL35 Opening Submissions
NRL36 Closing Submissions

DOCUMENTS SUBMITTED AT THE INQUIRY BY NEWCASTLE AIRPORT

NIAL21 Lynemouth Appeal APP/T2920/A/07/2046453 SoS Decision (21/2) and Inspectors Report (21/2)
NIAL22 Letter from CAA Safety Regulation Group to NIAL dated 13 January
NIAL23 Suggested Planning Conditions
NIAL24 Amended Suggested Planning Conditions
NIAL25 Closing Submissions

DOCUMENTS SUBMITTED AT THE INQUIRY BY MR MCINTYRE

SM1 Statement
SM2 Update of progress in meeting NE renewable energy targets
SM3 Original Objection Report by Mr McIntyre and others (missing from questionnaire documents)
SM4 Supplement to above Report as response to additional information (also missing from questionnaire documents)
SM5 Representations on Regional Spatial Strategy Area of Least Constraint

DOCUMENTS SUBMITTED AT THE INQUIRY BY MR W SHORT

JWS1 RESTATS Renewable Energy Statistics
JWS2 Sembcorp Biomass Power Station
JWS3 RSS Technical Background Paper No 7 Energy
JWS4 Biomass Power Station Teesport Final Scoping Report

JWS5 Schedule of Northumberland Renewable Energy Planning Applications
JWS6 Statement
JWS7 Closing submissions

ADDITIONAL CORE DOCUMENTS AND DOCUMENTS SUBMITTED JOINTLY

DOC 1 Statement of Common Ground between TDC and NRL (SCG)
DOC 2 Suggested planning conditions (revised from SCG)
DOC 3 Suggested planning conditions (revised from SCG with change tracking)
DOC 4 CD18(w) Clochnahill Wind Farm Planning Decision
DOC 5 CD52 Colour Copy of Arup Report
DOC 6 CD67(a) Extract from CAP493 Manual of Air Traffic Services Ch5 p13
DOC 7 CD70 Missing page from Cap764 Ch 4 p3
DOC 8 CD75(a) Newcastle Currock Hill Gliding Procedures MATS/SOI - 2009
DOC 9 CD75(a) Plan for above with full colouring
DOC10 CD18(x) Routh Appeal Inspector' Report APP/E2001/A/07/2050015

DOCUMENTS SUBMITTED AT THE INQUIRY BY OTHER PERSONS

DOC 11 Letters from Mr Palmer – Greymare Hill Cottage Farm (11/1 and 11/2)
DOC 12 Statement by Mr A W Thompson
DOC 13 Planning conditions suggested by Mr Thompson
DOC 14 Statement by Dr Eagle
DOC 15 Statement by Dr Court
DOC 16 Statement by Mrs Kibler
DOC 17 Statement by Mr Reid
DOC 18 Statement By Mr Woodley Stewart
DOC 19 Statement by Ms Stevenson
DOC 20 Planning Conditions suggested by Ms Stevenson
DOC 21 Closing submissions by Dr Eagle