

Millennium Wind Farm Extension

Environmental Statement Volume 2



Produced by



West Coast Energy Ltd The Long Barn Waen Farm Nercwys Road Mold Flintshire CH7 4EW

On behalf of





MILLENNIUM WIND FARM EXTENSION

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MILLENNIUM WIND FARM EXTENSION

Chapter One

Introduction



CHAPTER ONE: INTRODUCTION

1.1 THE APPLICATION

- 1.1.1 This Environmental Statement (ES) supports an application to The Highland Council by West Coast Energy Ltd (WCE), for consent under the Town and Country Planning (Scotland) Act 1997 to extend the permitted Millennium Wind Farm on the Achlain and Aberchalder Estates, south of Glenmoriston in the Scottish Highlands. The proposal comprises the construction of an additional 4 wind turbines and associated access track. The land on which the development will be situated is located to the south of the permitted Millennium Wind Farm site, approximately 7km to the north west of Invergarry. Figure 1 of Volume 3 provides details of the site location.
- 1.1.2 The Millennium Wind Farm Extension application seeks consent for the installation of 4 wind turbine generators and associated access track. The maximum base to blade tip height of the turbines would be 115m (379ft 6inches) this being when the blades reach their highest point. Ancillary development will include the construction of a limited amount of access track, underground electricity cable network, and hardstandings. It is proposed to utilise the substation and temporary compound area associated with the existing permitted Millennium scheme. Figure 3 of Volume 3 provides details of the proposed extension.

1.2 THE APPLICANT

1.2.1 West Coast Energy Limited, with offices in Mold North Wales and Edinburgh, was formed in 1996 and has been involved in developing a number of wind farms around the UK. West Coast Energy Limited will act as agent to manage the application process on behalf of Falck Renewables, the long term owner / operator of the site. WCE has been responsible for the planning of the Millennium Wind Farm Extension.

1.3 THE ENVIRONMENTAL STATEMENT

1.3.1 EC Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment defined a process for the provision of environmental information to local planning authorities to enable them to determine the likely environmental effects of certain developments. The 1985 Directive was implemented by the Environmental Impact Assessment (Scotland) Regulations 1999. To overcome omissions in the process defined in the 1985 Directive, the Council of Environment Ministers of the European Communities adopted an amending Directive (97/11/EC) in so far as it applies to development under the Town and Country Planning (Scotland) Act 1997. The Directive has been implemented in Scotland through the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 1999, which came into force on 1st August 1999.

- 1.3.2 Under the 1999 Regulations, the proposed development is classed as a "Schedule 2 Development". "Schedule 2 developments" are defined by type of development and applicable thresholds and criteria are applied which classify the development. Section 3 (I) for the Installations for the harnessing of wind power for energy production (Wind Farms) identified that where the development involves the installation of more than 2 turbines; or the height of any turbine or height of any structure exceeds 15 metres, an Environment Impact Assessment is required. Discussions with The Highland Council indicated that the development should be subject a formal environmental assessment. An Environmental Statement has therefore been prepared to accompany the Planning Application.
- 1.3.3 The purpose of the Environmental Statement (ES) is to:
 - Explain the need for the proposals and describe the physical characteristics, scale and design of the wind farm;
 - Examine the existing environmental character of the application site and the area likely to be affected by the wind farm;
 - Predict the possible environmental impacts of the wind farm;
 - Describe measures which would be taken to avoid, offset or reduce adverse environmental impacts; and,
 - Provide the public, the planning authority and other consultees with information on the proposals, which would assist The Highland Council in the determination of the wind farm application.

1.4 CONSULTATION

- 1.4.1 A formal opinion on the scope of the ES, for the now permitted Millennium scheme, was sought in 2003 from the Scottish Executive and The Highland Council (THC). Views were sought on a much larger area than that which was subsequently submitted and permitted. The responses to that request followed consultation with statutory and non-statutory consultees and defined the aspects of the development they required to be covered in this ES. Due regard has been given to these requirements, which have been incorporated in the ES for the extension to the Millennium Wind Farm. Additional dialogue has been held with THC to determine the scope of the landscape and visual impact assessment with respect to existing and proposed wind farms and other construction activities.
- 1.4.2 A number of independent consultants were engaged to carry out studies and provide advice where appropriate. A list of the main consultants is provided below.

1.5 SITE DESIGN PROCESS

1.5.1 The Environmental Assessment has been used as part of the iterative process of planning and developing the wind farm proposal. Changes were made as a result of advice provided by the consultants in order to minimise the impact of the project on the environment. Evolution of the site design is further discussed in Chapter Two of this ES.

1.6 THE SIGNIFICANT EFFECTS APPROACH

- 1.6.1 The Environmental Impact Assessment (Scotland) Regulations 1999 enable local authorities to require the statutory environmental assessment of projects which would be likely to have significant effects on the environment by virtue of factors such as nature, size or location. Schedule 4 to the Regulations specifies the information to be contained in an Environmental Statement, including a description of likely significant effects on the environment of the development.
- 1.6.2 The Environmental Statement is intended to provide the Local Planning Authority with the information it requires in order to undertake an Environmental Impact Assessment of the proposed development.
- 1.6.3 An enduring difficulty with the process of environmental assessment is the achievement of a consistent definition of a degree of likely effects of a proposal on particular interests, particularly in defining whether or not such effects are significant.
- 1.6.4 Predicting impact significance is partly objective and partly subjective. It relies on the professional judgement of those who place varying weight on the many factors involved. The Environmental Statement therefore sets out the basis of these judgements so that the weight attached to the different factors and the rationale of the assessment can be understood.
- 1.7 STRUCTURE OF THE DOCUMENTS
- 1.7.1 There are 4 volumes of documentation submitted with the planning application for the Millennium Wind Farm Extension
 - The Planning Application forms and relevant figures

The Environmental Impact Assessment consists of the following volumes:-Volume 1 contains the Environmental Statement (written text), including the reports on the surveys and assessments, which have been undertaken by internal specialist staff and external independent consultants. The structure of Volume 1 is as follows:

- Chapter 1 Introduction
- Chapter 2 Site Selection and Project Design
- Chapter 3 Needs and Benefits
- Chapter 4 Project Description
- Chapter 5 Landscape and Visual Assessment
- Chapter 6 Ecology Habitats Flora and Fauna
- Chapter 7 Ornithological Assessment
- Chapter 8 Geology/ Hydrology/ Hydrogeology/Peat Slide
 Assessment
- Chapter 9 Noise Assessment
- Chapter 10 Cultural Heritage

- Chapter 11 Infrastructure and Safety
- Chapter 12 Human Environment and Land Use
- Chapter 13 Planning Policy
- Chapter 14 Conclusions

Volume 2 contains the Appendices attached to the Environmental Impact Assessment within Volume 1.

Volume 3 is an A3 Volume containing the maps and figures that support the assessments presented in Volume 1.

Volume 4 Contains a Non-Technical Summary

1.7.2 Copies of the application documentation can be purchased in paper format for £150.00 or CD format for £20.00, the Non-Technical Summary is available free of charge, separately on request. Contact: Simon Green, West Coast Energy Ltd, The Long Barn, Waen Farm, Nercwys Road, Mold Flintshire CH7 4EW. (Tel: 01352 757604, e-mail info@westcoastenergy.co.uk)

1.8 LIST OF CONSULTANTS

1.8.1 In the preparation of this Environmental Statement, the following consultants have been commissioned to provide specialist advice and to undertake the individual assessments of the proposed development, which are reported on in this ES.

Landscape and Visual Assessment – Enviros

Ecology –West Coast Energy Ltd

Ornithology – Highland Ornithology and West Coast Energy Ltd

Noise - Enviros

Cultural Heritage – Headland Archaeology

Hydrological Assessment/ Peat Slide Risk Assessment – Enviros and West Coast Energy Ltd

Project Management, Figures & Visuals, Planning Policy – West Coast Energy Ltd

REFERENCES

BWEA, 1994, Best Practice Guidelines for Wind Energy Development, BWEA, ISBN 1870064216.

EWEA, European Best Practice Guidelines for Wind Energy Development, <u>http://www.ewea.org/BPG.pdf</u>

The Environmental Impact Assessment (Scotland), Regulations 1999 Circular15/1999, Scottish Executive.

A Handbook on Environmental Impact Assessment "Guidance for Competent Authorities, Consultees and others involved in the Environmental Impact Assessment "Process in Scotland", January 2002 – Scottish Natural Heritage.

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MILLENNIUM WIND FARM EXTENSION

Chapter Ten

Cultural Heritage



CHAPTER TEN: CULTURAL HERITAGE

10.1 INTRODUCTION

- 10.1.1 This chapter addresses the impacts of the construction, operation and decommissioning of the proposed extension to Millennium Wind Farm upon sites of cultural heritage interest. Sites of cultural heritage interest are defined as archaeological sites, man-made features predating the First Edition Ordnance Survey map of the area (surveyed 1871) and selected later sites, such as Listed Buildings and military sites. This is in keeping with the approach currently in use by Historic Scotland and the Royal Commission for Ancient and Historical Monuments of Scotland (RCAHMS).
- 10.1.2 The key objectives are:

To identify and evaluate known cultural heritage sites that may be affected by the extension to the wind farm

To assess the impact of the wind farm extension on the identified cultural heritage sites and to assess the significance of the impact

To identify measures for avoiding/mitigating potential impacts

10.2 METHODOLOGY

Study Areas

- 10.2.1 The study took in three concentric areas:
 - Inner study area; based on the proposed wind farm extension's boundary. Within this area all known sites were considered as indicated on Figure 11 of Volume 3 of this ES.
 - 10km study area; 10 km buffer based on the inner study area. Within this area all sites of national importance, defined as Scheduled Ancient Monuments, Category A Listed Buildings and Non-Statutory Register (NSR) Sites of Schedulable Quality (The Highland Council Category C and V) or of national importance in the opinion of the assessor, were considered based on the extents of the ZVI. Such sites are deemed to be the most sensitive to impacts upon setting and hence act as an indicator of potential impacts upon setting. Figure 11 of Volume 3 of this ES indicates the 10km buffer zone.
 - 30 km study area; based on extents of ZVI. Within the ZVI, sites of exceptional sensitivity were considered.

Data Sources

10.2.2 The following data sources have been used in the compilation of this assessment:

The Schedule of Ancient Monuments, the Statutory List of Buildings of Special Architectural or Historic Interest maintained by Historic Scotland

National Monuments Record of Scotland (NMRS)

Aerial photographs held by RCAHMS

Superseded Ordnance Survey and pre-Ordnance Survey maps held by the National Library of Scotland

The Highland Council Archaeology Service Sites and Monuments Record (SMR)

Statistical Accounts of Scotland

The National Archives of Scotland

A list of sources and references is set out in Appendix 10.3 in Volume 2 of this ES.

Consultations

- 10.2.3 Historic Scotland has submitted a list of sites that are being proposed for scheduling in 2006. This is an ongoing assessment and part of the Inverness Scheduling Project 2005. A number of these sites are within the 10km study area but lie outwith the ZVI. These have not, therefore, been included in this assessment.
- 10.2.4 The Highland Council Archaeology Service provided a brief for this assessment. No particular sites or issues were identified but attention was drawn to Historic Scotland's Scheduling Project.

Field Survey Methodology

10.2.5 A walkover survey of proposed turbine locations and access tracks was carried out to inform the cultural heritage impact assessment. A handheld GPS set was used to guide the walkover and to record the location of any identified sites.

Assessment Methodology

Criteria for Assessment of Direct Impacts on Cultural Heritage Sites

10.2.6 The sensitivity of a cultural heritage feature to direct impacts reflects the level of importance assigned to it. This is the product of a number of factors, including its potential as a resource of archaeological data, its association with significant historical events, its role as a local landmark with cultural associations and its aesthetic value. Official designations applied to archaeological sites and buildings have been taken as indicators of importance, as they reflect these factors. Scheduled Ancient Monuments are considered of national importance, as are sites identified as candidates for scheduling on non-statutory registers. NPPG 5 also allows for other sites to be classified as of regional or local importance,

although these are not formal designations and do not imply any legal status. The three grades of listed buildings Categories A, B and C (S), identified in the Memorandum of Guidance, approximate the levels of importance assigned respectively to archaeological sites of national, regional and local importance.

- 10.2.7 In defining what constitutes a key element of the site, or a major, slight or negligible alteration, account has been taken of the extent to which the factors outlined above contribute to the overall value of the feature.
- 10.2.8 The criteria used for defining a site's sensitivity to direct impacts and then assessing the magnitude of those impacts are summarised in Table 10.1 and Table 10.2 below. The criteria for assessing the significance of such impacts are presented in Table 10.5.

Table 10.1: Criteria for Assessing the Sensitivity of Cultural Heritage Features to Direct Impacts

Sensitivity of receptor	Definition		
High	Sites of National Importance, including Category A Listed Buildings, Scheduled Ancient Monuments and Non-Statutory Register sites of schedulable quality as maintained by The Highland Council.		
Medium	Archaeological sites or buildings of regional importance, including Category B Listed Buildings and Non-Statutory Register sites of regional importance as maintained by The Highland Council		
Low	Archaeological sites or buildings of local importance, including Category C (S) Listed Buildings		
Negligible	A badly preserved or extremely common type of archaeological site/building of little value at local, regional or national levels.		

Table 10.2: Criteria for Assessing the Magnitude of Direct Impacts on Cultural Heritage Features

Magnitude of impact	Definition	
Major	Total loss or major alteration of the site.	
Moderate	Loss of one or more key elements of the site.	
Minor	Slight alteration of the site.	
Negligible	Very slight or negligible alteration of the site	

Indirect Impacts

Sensitivity of Setting

10.2.9 Classification of a site as being of national *importance* reflects a range of different considerations and the designation itself should not be taken to intrinsically equate to high *sensitivity* to impacts on setting. The assessment of sensitivity used in this assessment is informed by current practice in Visual Impact Assessment, which identifies and assesses

impacts on 'sensitive receptors'; locations in which people are predicted to experience visual effects. The sensitivity of a visual receptor depends largely on the numbers of people experiencing a visual effect, their expectations and the context in which it is experienced (LI-IEMA. 2002).

- 10.2.10 The sensitivity of a cultural heritage site's setting can be similarly evaluated, and a number of factors are taken into account in assessment of sensitivity. Promotion refers to awareness of the site beyond the archaeological community and is a measure of the extent to which it is presented to the public as a site worth visiting. The accessibility of a site, the ease with which it can be visited, is also relevant. Presence in the landscape refers to the extent to which the site exists as an identifiable feature that can be appreciated and understood by the average visitor/'observer', and has some bearing on likely visitor numbers as well as the value any visitors are likely to attach to the site. The present condition of the site and its setting is also relevant to sensitivity, as it affects the quality of the visual characteristics of a site, and whether these are likely to be understood and valued by those who experience it. Where the relationship between a site and its original setting survives as a wellpreserved archaeological landscape, the level of sensitivity will be higher than in cases where more recent land use has disrupted the coherence of the site's setting, making the location of the site more difficult to 'read' on the ground. The sensitivity of the setting of some sites resides largely in a site-specific and subjective 'sense of place'. Such considerations, whilst relevant, do raise problems for objective assessment, but can sometimes be corroborated by previous written accounts of a site.
- 10.2.11 Table 10.3 provides a guide to the attributes of sites considered to be of high, medium, low or negligible sensitivity.

Table 10.3: Criteria for Assessment of Sensitivity of a Site to Impacts on its Setting

Sensitivity	Definition
High	A site that is readily identifiable to the average observer, which is potentially easily accessible with signposts and information provided on site, and which is situated in a well-preserved archaeological landscape, with the relationship between the feature and the surrounding landscape being easily understood.
Medium	A feature which may be identified by the average observer, and which can be accessed (with a degree of effort) and which is situated in a landscape setting which is only partially modified by later land use, the relationship with which can still be readily understood.
Low	A feature which can be identified on the ground only by the trained observer and is difficult to access, with a landscape setting that may have been substantially altered from its original condition but can still be understood, which is unlikely to be visited or appreciated by the average observer.
Negligible	A feature whose presence in the landscape is imperceptible, or which has been effectively divorced from the relevant elements of its setting, and which is not likely to be readily identified, accessed or understood by the average observer.

10.2.12 It should be noted that not all the qualities listed need be present in every case, and that professional judgement may be used in balancing the different criteria. It may therefore be that a readily identifiable site without signposts or interpretation, but which has a clear relationship with the surrounding landscape, is considered to be of high sensitivity.

Magnitude of Impact

- 10.2.13 The magnitude of an impact reflects the extent to which relevant elements of the site's setting are changed by the development, and the appropriateness of those changes in terms of compatibility between the site and the development. Impact magnitude is judged to be major, moderate, minor or negligible, as described in Table 10.4, this is intended as a general guide, and it is not anticipated that all the criteria detailed will be present in every case.
- 10.2.14 The criteria for assessing magnitude include the *scale* of the development in relation to the archaeological site/feature, determining whether the setting element of the archaeological site, or the development will be the dominant visual feature within the post-development (contemporary) setting of the site. *Complementarity* is also considered, referring to the extent to which the intrinsic nature of the development is in keeping with the land use history of the archaeological site and its setting, represents a positive contribution to its surroundings, or introduces a new and incompatible element into the landscape. The *permanence* of the changes are also taken into account; irreversible changes being of greater magnitude, whilst the magnitude of temporary or reversible changes take account of the planned lifetime of the development in comparison with the age of the archaeological site.
- 10.2.15 Based on the above criteria, any change to elements of the landscape that are considered relevant to the setting of the archaeological site will generally result in an impact of minor, moderate or major magnitude. Changes to the landscape, which reduce the ability of an average observer to interpret a site in its setting are usually, judged to have a higher magnitude than ones, which merely alter the aesthetic appearance of the site. However, in sites with a strong 'sense of place', where past events are more easily imagined, aesthetic considerations can be given greater weight.

Table 10.4: Criteria for Assessing the Magnitude of Indirect Impacts on Cultural Heritage Features

Magnitude	Definition
Major	The characteristics of landscape elements relevant to the setting of the site are radically and irreversibly changed as a result of the development, so that the relationship between the site and its setting is no longer readily interpreted.
Moderate	The characteristics of landscape elements relevant to the setting of the site are substantially changed as a result of the development: relevant setting characteristics can still be appreciated, but with the introduction of new, unrelated elements that distract from and compete with the relevant setting elements, and cannot easily be reversed to approximate pre-development conditions.
Minor	The characteristics of landscape elements relevant to the setting of the site are slightly changed as a result of the development, but without adversely affecting the interpretability of the site and its setting: characteristics of historic value can still be appreciated, the changes do not strongly conflict with the character of the site, and could be easily reversed to approximate the pre-development conditions.
Negligible	The characteristics of landscape elements relevant to the setting of the site are only imperceptibly changed as a result of the development, or are changed in ways that positively complement the character of the site; the only noticeable adverse changes to the landscape are to elements that are not considered relevant to the setting of the site.

Impact Significance (Direct and Indirect)

10.2.16 The *significance* of an impact on the setting of an archaeological site is determined by considering the *magnitude* of the impact and the *sensitivity* of the setting of the site. The matrix shown in Table 10.5 below provides a guide to decision-making but is not a substitute for professional judgement and interpretation, particularly where the sensitivity or impact magnitude levels are not clear or are borderline between categories. Predicted impacts of major or moderate significance equate to potentially significant impacts in terms of the EIA (Scotland) Regulations 1999

Magnitude of Impact	Feature Sensitivity				
	Negligible	Low	Medium	High	
Major	Negligible	Moderate	Major	Major	
Moderate	Negligible	Minor	Moderate	Major	
Minor	Negligible	Negligible	Minor	Moderate	
Negligible	Negligible	Negligible	Negligible	Minor	

Table 10.5: Significance Criteria

10.3 PLANNING POLICY CONTEXT

National

10.3.1 National guidance on the treatment of Cultural Heritage in the planning process is provided in NPPG 5 (Archaeology and Planning) and its associated Planning Advice Note (PAN42), NPPG 18 (Planning and the Historic Environment) and the Memorandum of Guidance on Listed Buildings and Conservation Areas.

Structure Plan

10.3.2 The Highland Structure Plan (March 2001) Policy BC1 states that archaeological sites affected by development proposals should be preserved, or, in exceptional circumstances where preservation is impossible, the sites will be recorded at the developers expense.

Local Plan

- 10.3.3 The Inverness Local Plan (December 2005) includes the area of the wind farm. Although no policies are relevant in the present context, the local plan states its aims to conserve the elements of the built environment, including their wider settings, from inappropriate development.
- 10.4 EXISTING CONDITIONS
- 10.4.1 The proposed wind farm extension lies between 500 and 650 m OD and is characterised as heather moorland, with areas of bog, crossed by numerous small streams and gorges. No sites of cultural heritage have been identified within this area due mainly to the altitude and quality of the ground; the slopes are too steep and the soils too poor to support permanent settlement or even seasonal shieling activity.
- 10.4.2 There are 10 cultural heritage sites of national importance within the 10 km study area and the ZVI. The majority of the sites identified within the study area are located around Loch Garry and within Glen Mor. They mostly date to the prehistoric period and include crannogs (ES 2, 3, 4 & 8) and hut circles (ES 5 & 10). The remainder of the sites date to the 18th and 19th century. These include two sections of General Wade's Military Road (ES 6 & 9), sections of the Caledonian Canal (ES 1) and an estate burial ground (ES 7). Details of all these sites are found in Appendix 10.1 of Volume 2 of this ES.
- 10.4.3 Planning permission has already been granted for the Millennium Wind Farm immediately to the north of the proposed extension. The ZVI considered within this assessment is only for the four turbines within the proposed extension.

Cultural Heritage Sites within the Inner Study Area

10.4.4 No cultural heritage sites were identified within the Inner Study Area.

Potential for Unrecorded Sites of Cultural Heritage Interest

10.4.5 The upland moorland area (Figure 11 of Volume 3 of this ES), where the proposed turbines will be located, has not been enclosed or improved. No settlements are recorded here and given the unsuitability of the ground for agriculture it is unlikely to have been used for anything other than grazing and, more recently, for shooting. Given the unsuitability of the land, there is limited potential for previously unrecorded sites of cultural heritage interest to lie within the inner study area. The absence of settlement militates against the potential for ritual sites, such as burial cairns, that tend to be placed to be intervisible with areas of settlement and cultivation. Furthermore, in the absence of intensive agriculture, such monuments could be expected to survive as upstanding features and hence to have been recorded previously.

Sites of National Importance or with Statutory Protection within the 10 km Study Area (Figure 11 of Volume 3 of this ES)

Scheduled Ancient Monuments and Sites of Schedulable Quality

- 10.4.6 Two Scheduled Ancient Monuments lie within the 10 km study area and the ZVI: the Corrieyairack Pass section of Military Road (ES 6) and two Scheduled sections of the Caledonian Canal (ES 1). Details of these are found in Appendix 10.1 of Volume 2 of this ES.
- 10.4.7 There are eight sites appearing on The Highland Council SMR of sites of schedulable quality (NSR code C or V) within the 10 km study area and the ZVI: Eilean Nan Mhuilchean West Crannog (ES 2), Eilean Nan Mhuilchean East Crannog (ES 3), Eilean Mhic Ranuill Crannog (ES 4), Creagan An Torra Hut Circle (ES 5), Tor-ya-Carry graveyard (ES 7), Greenfield Bay Crannog (ES 8) Fort William to Inverness Military Road (ES 9) and Coille Leitir Fhearna Hut Circle (ES 10). Details of these are found in Appendix 10.1 of Volume 2 of this ES.

Listed Buildings

10.4.8 No Listed Buildings are located within the 10 km study area and the ZVI.

Sites of Exceptional Sensitivity within the 30 km Study Area

- 10.4.9 No sites of exceptional sensitivity deemed to be at risk of impacts upon setting were identified within the 30 km study area.
- 10.5 ASSESSMENT OF CONSTRUCTION IMPACTS

Wind Farm Construction

10.5.1 As no known sites of cultural heritage interest have been identified within the boundaries of the proposed extension to the wind farm, the sole potential impact is damage to or destruction of previously unrecorded sites of cultural heritage interest. Due to the upland location of the wind farm extension and the absence of identified sites, this potential is negligible.

Proposed Mitigation Measures

10.5.2 As the potential for unrecorded sites to exist within the boundary of the wind farm extension is deemed to be negligible, no archaeological work is proposed for this area.

10.6 ASSESSMENT OF OPERATIONAL IMPACTS

Wind Farm Operation

- 10.6.1 The settings of sites and predicted impacts upon settings are summarised in Appendix 10.2 in Volume 2 of this ES.
- 10.6.2 The ZVI (Figure 11 of Volume 3 of this ES) indicates that turbines will be visible from 10 cultural heritage sites of national importance. The current settings of the ten sites and the predicted impacts of the wind farm upon these sites are detailed in Appendix 10.2 in Volume 2 of this ES. None of these sites is considered to have a wider landscape setting and all cases impacts were adjudged to be of negligible significance.

Cumulative Impacts

10.6.3 All impacts have been assessed as being of negligible significance as none of the sites is deemed to have a wider landscape setting. In the absence of effects resulting from the proposed wind farm extension it therefore follows that there can be no potential cumulative impact with other wind farms.

Proposed Mitigation and Enhancement Measures

10.6.4 All operational impacts have been assessed as being of negligible significance and no mitigation is proposed.

Residual Impacts

- 10.6.5 The operational impacts, all assessed as being of negligible significance, will persist throughout the lifespan of the wind farm and cease upon its decommissioning.
- 10.7 SUMMARY OF IMPACTS
- 10.7.1 A summary of impacts is provided in Table 10.6.

Table 10.6 Summary of impacts

Potential Impact	Proposed mitigation	Significance	Residual impact
Direct impacts upon unknown sites	None	Unknown	Unknown
Impacts upon setting	None	Negligible	Negligible

