

**THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT)
(SCOTLAND) REGULATIONS 2000.**

**SCOPING OPINION FOR THE PROPOSED EXTENSION TO THE
MILLENNIUM WIND FARM
SOUTH OF GLEN MORISTON AND APPROX 7km NORTH WEST OF
INVERGARRY, HIGHLAND REGION**

1. Introduction

Any proposal to construct or operate a power generation scheme with a capacity in **excess of 50 megawatts** requires Scottish Ministers' consent under section 36 of the Electricity Act 1989.

Schedule 9 of the Act places on the developer a duty to "have regard to the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna and geological and physiological features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". In addition, the developer is required to give consideration to Scottish Planning Policy 6 on Renewable Energy, other relevant Policy and National Policy Planning Guidance, Planning Advice Notes, the relevant planning authority's Development Plans and any relevant supplementary guidance.

Under the Electricity Works (Environmental Impact Assessment) (Scotland)(EIA) Regulations 2000, the Scottish Ministers are required to consider whether any proposal for a wind farm is likely to have a significant effect on the environment. In terms of these Regulations, we must consult the planning authority, Scottish Natural Heritage and the Scottish Environment Protection Agency and other relevant consultees.

2. Aim of this Scoping Opinion

Scottish Ministers are obliged under the EIA regulations to respond to requests from developers for a scoping opinion on outline design proposals.

The purpose of this document is to provide advice and guidance to developers which has been collated from expert consultees whom the Scottish Government has consulted. It should provide clear advice from consultees and enable developers to address the issues they have identified and address these in the EIA process and the Environmental Statement associated with the application for section 36 consent.

**** Consultees are invited to insert definitive comments on the outline proposals complete with any cross references to the relevant information contained in the scoping report submitted by the developer.**

3. Description of your development

From your submitted information it is understood, the proposed development is for a 6 turbine extension to the wind farm, and supporting infrastructure. ..

The turbines, each with an individual capacity of up to 2.5MW, of a type still to be identified, will be of uniform modern design with a maximum height to blade tip of 125 metres.

The wind farm site is located on a ridge line approximately 4km south of the A887 and River Moriston. The six proposed turbines forming this application extend further down the southern flank of the ridge, on the Aberchalder Estate.

Scottish Ministers are of the view that the EIA process should inform the final site selection and design process. This Scoping Opinion should be used in conjunction with design considerations to provide a fully detailed and qualitative application, complete with a description of the site layout, construction, and operational processes.

4. Land Use Planning

Scottish Planning Policy SPP 6, Renewable Energy sets out the national planning policies for renewable energy developments. It outlines the process of encouraging, approving and implementing renewable energy proposals to ensure the delivery of renewable energy targets. The SPP identifies the issues that Scottish Ministers will take into account when considering applications for on-shore electricity generation schemes under Section 36 of the Electricity Act 1989 .

The whole series of SPPs (and those National Planning Policy Guidelines (NPPGs) which have yet to be replaced) should be taken as an integral policy suite and considered along with the supporting advice and information in Planning Advice Notes (PANs) and Circulars. Planning documents that a developer should particularly consider include:

- Planning Authority Development Plans, including the Highland Structure Plan (March 2001) and Lochaber Local Plan (February 1999)
- Planning Authority Supplementary Planning Guidance
- National Planning Framework for Scotland
- SPP1: The Planning System
- SPP6. Renewable Energy
- SPP7: Planning and Flooding
- SPP15: Planning for Rural Development (2005)
- SPP17: Planning for Transport (2005)
- SPP 21: Green Belts
- NPPG5: Archaeology and Planning
- NPPG14: Natural Heritage
- NPPG18: Planning and Historic Environment
- PAN42: Archaeology–Planning Process and Scheduled Monument Procedures
- PAN45: 2002 Renewable Energy Technologies
- PAN 50: Controlling the Environmental Effects of Surface Mineral Workings
- PAN 51: Planning, Environmental Protection and Regulation

- PAN56: Planning and Noise
- PAN58: Environmental Impact Assessment
- PAN60: Planning for Natural Heritage
- PAN68: Design Statements
- PAN69: Planning and Building Standards Advice on Flooding
- PAN 75: Planning for Transport
- PAN 79: Water and Drainage

5. Natural Heritage

Scottish Natural Heritage (SNH) has produced a service level statement (SLS) for renewable energy consultation. This statement provides information regarding the level of input that can be expected from SNH at various stages of the EIA process. Annex A of the SLS details a list of references, which should be fully considered as part of the EIA process. A copy of the SLS and other vital information can be found on the renewable energy section of their website – www.snh.org.uk

6. General Issues

Aviation

In the wake of recent consultation with the aviation organisations such as NATS, BAA, CAA, MOD etc, it is clear that large scale wind farm proposals can impact significantly on primary, secondary or weather radar stations and thus affect operational safety. Developers are encouraged to engage with these organisations and airport operators at an early stage in the design process, to establish the potential impacts and agree acceptable technical solutions. Where actual or potential conflicts exist, it is important that a solution is identified and that the relevant consultee agrees to that solution being realised within a suitable timescale.

A link to relevant aviation guidance is available at the following website link, however it should be noted that this guidance is being reviewed; <http://www.berr.gov.uk/files/file17828.pdf>

NATS En Route Plc (“NERL”) is responsible for the safe and expeditious movement in the en-route phase of flight for aircraft operating in controlled airspace in the UK. To undertake this responsibility NERL has a comprehensive infrastructure of radars, communication systems and navigational aids throughout the UK, all of which could be compromised by the establishment of a wind farm. In this respect NERL is responsible for safeguarding this infrastructure to ensure its integrity to provide the required services to Air Traffic Control (ATC). In order to discharge this responsibility NERL assess the potential impact of every wind farm development in the UK which have applied for planning approval.

NERL offer services to assist in pre-planning for wind farm developments. Details of these services are available on <http://www.bwea.com/aviation/nats.html> or by contacting NERL directly on NATSSafeguarding@nats.co.uk or writing to

NERL Safeguarding – Mailbox 27
NATS - CTC
4000 Parkway
Solent Business Park
Whiteley
Hampshire
PO15 7FL

NATS are unable to evaluate the proposal until the ground to blade tip height and OS Grid Reference for each individual wind turbine (eastings and northings) is received.

The Wind Energy Team at Defence Estates is the focal point for all wind farm proposals in MOD. The team seeks to work with industry at the earliest stages of proposed development to minimise the impact on Defence, to ensure public safety is not compromised, and maximise the likelihood of planning success. Each pre-planning proposal is assessed on a case by case basis by up to 10 technical advisors. Some of the main concerns the MOD has are interference with Air Defence Radar and Air Traffic Control Radar, plus the creation of obstacles in Low Flying Areas, which negate the usefulness of the training undertaken there. Aviation safety lighting should also be considered through consultation with the aviation authorities and the relevant planning authority.

The pre-planning consultation form traditionally found at annex E of the Wind Energy and Aviation Interests – Interim Guidelines should be completed and e-mailed to Defence Estates at modwindsystems@de.mod.uk

Consultees should insert specific advice for the developer;

[No advice to insert in this area.](#)

Economic Benefit

The concept of economic benefit as a material consideration is explicitly confirmed in SPP 6. This fits with the priority of the Executive to grow the Scottish economy and, more particularly, with our published policy statement “Securing a Renewable Future: Scotland’s Renewable Energy”, and the subsequent reports from the Forum for Renewables Development Scotland (FREDS), all of which highlight the manufacturing potential of the renewables sector. The application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction operation and decommissioning of the development.

Local Planning Agreements

There are two main tests in determining whether a consideration is material and relevant. These are:

- it should serve or be related to the purpose of planning – it should therefore relate to the development and use of land; and
- it should fairly and reasonably relate to the particular application.

Only those issues that meet the above tests can be taken into account when considering applications. Where relevant, developers should identify such issues in their application, including evidence to support compliance with these tests.

Consultees should insert specific advice for the developer;

No advice to add in this area

7. Contents of the Environmental Statement (ES)

We recommend the contents of the ES should be structured as follows below:

7.1 Format

Developers should be aware that the ES should also be submitted in a user-friendly PDF format which can be placed on the Scottish Government website. A description of the methodology used in assessing all impacts should be included.

It is considered good practice to set out within the ES the qualifications and experience of all those involved in collating, assessing or presenting technical information.

7.2 Non Technical Summary.

This should be written in simple non-technical terms to describe the various options for the proposed development and the mitigation measures against the potential adverse impacts which could result.

7.3 Site selection and alternatives

First, there is the general choice of site in the broader context, and the applicant should demonstrate that a fairly wide set of environmental and economic parameters have been used to narrow down choice of sites and how this choice takes account of the spatial framework set out in Annex A to SPP 6. Secondly, there should be a detailed examination on these parameters to minimise the impact of the proposal by sensitive design and layout.

Wind potential and access to the grid are key to initial sieve-mapping exercises for site selection, but environmental constraints other than landscape character should also be included in this initial site selection process. Avoidance of areas of deep peat, avoidance of unnecessary watercourse crossings, avoidance of wetlands, location of protected species, would be other examples of additional environmental constraints to be considered both from the outset and in the detailed design and layout.

Architecture+Design Scotland (A+DS) suggest that a planning and design strategy should first look at the proposed location and address whether this is a sensible location in relation to wind, access to the grid and to the character of the landscape.

Consultees should insert specific advice for the developer;

No advice to add to this area

7.4 Description of the Development

Your description of the proposed development in the Environmental Statement should comprise information on the site boundary, design layout, and scale of the development.

Where it is required to assess environmental effects of the development (see EIA regulation 4 (1)(b), the Environmental Statement should include;

(a) a description of the physical characteristics of the whole development and the land use requirements during the construction, operation, decommissioning and restoration phases;

(b) a description of the main characteristics of the production processes and nature and quality of the materials used; and

(c) an estimate by type and quantity of expected residues and emissions resulting from the operation of the proposed development.

Consultees should insert specific advice for the developer;

No advice to add here

7.5 Construction

Considered design details will be required for all aspects of site work that might have an impact upon the environment, containing further preventative action and mitigation to limit impacts.

You should be aware of useful guidance on, *inter alia*, minimising the impact from construction of the type of access roads used in wind farms. Such guidance can be found in “Forests and Water Guidelines” Fourth Edition (2003) which can be obtained from the Forestry Commission. www.forestry.gov.uk and “Control of water pollution from linear construction projects” (CIRIA C648, 2006) which can be obtained from CIRIA. However, given that tracks in some cases will be located on peat and will carry very heavy loads, evidence will be necessary of additional consideration of specific measures required in similar schemes elsewhere to deliver best practice. Additional guidance is also available in ‘Constructed tracks in the Scottish Uplands’ (2006) published by SNH and available at

<http://www.snh.org.uk/pdfs/publications/heritagemanagement/constructedtracks.pdf>

Consultees should insert specific advice for the developer;

The Mountaineering Council of Scotland has concerns about the proliferation of upland tracks in Scotland and their detrimental impact on the visual amenity and the perception of wild land characteristics.

There are also planning considerations in these regards, which Highland Council will observe

In principle, it is advisable to avoid disturbance of peat, which causes carbon release

7.6 Decommissioning

The subsequent application and supporting environmental statement should include a programme of work complete with outline plans and specifications for the decommissioning and reinstatement of the site. Information should be provided on the anticipated working life of the development and after use site reinstatement.

Consultees should insert specific advice for the developer;

[No advice to insert here](#)

7.7 Grid Connection Details

The impacts of constructing, installing and operating the following infrastructure components should be considered and assessed by developers, if known;

- Substation.
- Cabling (Underground).
- Cabling (Overhead).
- Monitoring and control centre.

Consultees should insert specific advice for the developer;

[No advice to insert here](#)

8. **Baseline Assessment and Mitigation**

This section should clearly set out a description of the environmental features of the proposed wind farm site, the likely impacts of the wind farm on these features, and the measures envisaged to prevent, mitigate and where possible remedy or offset any significant effects on the environment. It should incorporate details of the arrangements and the methodologies to be used in monitoring such potential impacts, including arrangements for parallel monitoring of control sites, timing and arrangements for reporting the monitoring results.

It should be noted that there is a danger that these measures could themselves have secondary or indirect impacts on the environment.

8.1 Air and Climate Emissions

The Environmental Statement should fully describe the likely significant effects of the development on the environment, including direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary e.g. construction related impacts, positive and negative effects of the development which result from:

- a) the existence of the development.
- b) the use of natural resources.
- c) the emission of pollutants, the creation of nuisances and the elimination of waste.

8.2 Carbon Emissions

To assist Scottish Ministers in making a determination on the application, developers are invited to produce a statement of expected carbon savings over the lifetime of the wind farm. The statement should include an assessment of the carbon emissions associated with track preparation, foundations, steel, and transport; any carbon losses from tree felling (and offsetting from tree planting); and any carbon losses from loss or degradation of peaty soils. Reference can be made in this respect to the SNH guidance on ‘Wind farms and Carbon Saving’ (SNH 2003 1).

It is also important to ensure that the carbon balance of renewable energy projects is not adversely affected by management of peat resource. There need to be measures in place to ensure that the development does not lead to significant drying or oxidation of peat through, for example, development of access tracks and other infrastructure, drainage channels, or “landscaping” of excavated peat. The basis for these measures should be set out within the ES, on which a detailed peat management scheme, required through planning condition, can subsequently be designed to ensure that the carbon balance benefits of the scheme are maximised.

Consultees should insert specific advice for the developer;
[The MCofS strongly endorses the comments in the above paragraph](#)

Under each section below developers are asked to consider:

- Aspects of the environment likely to be affected by the proposals.
 - Environmental impacts of the proposals.
 - Methods to offset adverse environmental effects.
 - Effects of the phases of the development; Construction, Operation, Decommissioning and Restoration.

8.3 Design, Landscape and the Built Environment

Scottish Ministers consultees such as Architecture+Design Scotland (A+DS) places particular importance on the layout design of wind farms and considers there is a need for a coherent, structured and quality driven approach to wind farm development. The appearance of wind farms is of particular interest and the need for a coherent design strategy to be considered at scoping stage and to be prepared before submission of the Environmental Statement. The strategy should explain the design principles behind the layout plan in a rational way that can be easily understood. The design strategy for the wind farm should be expressed through a design statement. The Design Statement should describe a clear strategy for meeting these objectives, a justification for the resulting layout and evidence that the design ideas have been tested against the objectives.

Wind farms are prominent features in the landscape and hence a full assessment of the effects on landscape and visual amenity is important. The assessment methodology should follow the approach promoted by the Landscape Institute and Institute of Environmental Management and Assessment ('Guidelines for Landscape and Visual Impact Assessment', second edition, Spon 2002). General guidance on the range of issues to be considered in assessment of wind farms is set out, in the form of a scoping checklist, at Appendix 1 of 'Guidelines on the Environmental Impacts of Wind Farms and Small Scale Hydroelectric Schemes' (SNH 2001).

As regards the portrayal of visual and landscape impacts within Environmental Statements, guidance has also been developed, jointly by SNH and the Scottish Renewables Forum, on 'Visual Representation of Wind Farms – Good Practice Guidance' (SNH 2007).

The ES should include a description of the landscape character of the area and how that character will be affected by the impact on any landscapes designated for their landscape or scenic value, including National Parks, National Scenic Areas, or local landscape designations such as Area of Great Landscape Value or Regional Scenic Area (the terminology is varied) and the impact on any area which is a recognised focus for recreational enjoyment of the countryside, eg a Regional Park or Country Park.

Consultees should insert specific advice for the developer;

The Mountaineering Council of Scotland is supportive of renewable energy strategies. However, we also have concerns that in some instances there is a significant effect on landscape character, particularly where wild land locations may be impacted upon. There can be a loss of visual amenity for local residents and visitors [tourists and hillwalkers]. This is detrimental to both local and national socio-economic and tourism industry interests. In the case being considered we recognise that the additional effect on the landscape of the proposal under consideration may, in fact, have less impact than the existing turbine presence. However, the size of the windfarm would increase significantly and become more dominant and a major feature in the landscape. On the supplied maps the turbines labelled in the map legend as permitted [Jan 08] as indicated by green dots were in fact not on the maps themselves, making it difficult to assess impact of any additional turbines.

We strongly recommend that ZVI wireframes/photomontages should include assessments from several viewpoints in the area, the most significant probably being those listed below, which have been arrived at by careful scrutiny of OS maps for the area. A grid reference has been given for each and all are well within the 30km radius.

Carn Ghlusaid [Munro] 146125

Ridge north of Meall Breac, approximately at 121124

Carn Dearg [Corbett] 349967

The summits on the North Loch Arkaig ridge [Sgurr Coinich 128949, Geal Charn [Corbett] 156943, Meall Coire nanSaobhaidh 174951, Meall na h-Eilde [Corbett] 185946, Meall an Tagraidh 195941]

Ben Tee [Corbett]241972

Carn Chuilinn [Munro] 416034

Druim nan Cnamh 789M, [Corbett, not named on the 1:50000 OS map] 131077

Sron a Choire Gharbh [Munro] 223945

We note that Meall Dubh the Corbett at 245078, is actually on the windfarm itself

Please also refer to the comment given previously concerning upland hill tracks.

8.4 Construction and Operation

The ES should contain site-specific information on all aspects of site work that might have an impact upon the environment, containing further preventative action and mitigation to limit impacts. Elements should include: fuel transport and storage management; concrete production (including if batching plants are proposed and measures to prevent discharges to watercourses); stockpile storage; storage of weather sensitive materials at lay-down areas; haul routes and access roads (and if temporary or permanent); earthworks to provide landscaping; mechanical digging of new or existing drainage channels; vehicle access over watercourses; construction of watercourse crossings and digging of excavations (particularly regarding management of water ingress); temporary and long-term welfare arrangements for workers during construction ; maintenance of vehicles and plant; pollution control measures during turbine gearbox oil changes; bunding or roofing of transformer areas; use of oil-cooled power cables and related contingency measures; and dewatering of turbine base excavations. With regards to oil, it is imperative that there is a detailed contingency plan to deal with large oil spills that cannot be dealt with at a local level. The ES should identify if there are particularly sensitive receptors of pollution (e.g. salmonid rivers, rivers with freshwater pearl mussels ect).

Such information is necessary in order to assess the environmental impact of the proposals prior to determination and provide the basis for more detailed construction method statements which may be requested as planning conditions (it is recommended that the relevant Planning Authorities, SNH and SEPA are provided with the opportunity to view these method statements in draft form, prior to them being finalised should development take place).

The applicant should be aware of information provided by SEPA that may be of use such as rainfall and hydrological data. The need to plan the works in order to avoid construction of roads, dewatering of pits and other potentially polluting activities during periods of high rainfall is important. The ES needs to demonstrate which periods of the year would be best practice for construction for the site, taking into account the need to avoid pollution risks and other environmental sensitivities affecting operational timing, such as fish spawning and bird nesting.

The impact of the proposed development on public footpaths and rights of way should be clearly indicated. If any re-routing of paths under a Right of Way is required alternative routes should be highlighted for consideration.

The ES should set out mechanisms to ensure that workers on site, including sub-contractors, are aware of environmental risks, and are well controlled in this context. The ES should state whether or not appropriately qualified environmental scientists or ecologists are to be used as Clerk of Works or in other roles during construction to provide specialist advice. Details of emergency procedures to be provided should be identified in the ES.

The process whereby a method statement is consulted upon before commencement of work is satisfactory at many sites where sensitivities are non-critical. However for

environmentally sensitive sites it is recommend that, following consultation, method statements be approved by the planning authority in consultation with SNH, prior to the commencement of construction work.

Consultees should insert specific advice for the developer;

No advice submitted here

8.5 Archaeology and Cultural Heritage

Historic Scotland recommends that you contact the relevant Council Archaeological Service and that you engage suitably qualified archaeological/cultural heritage consultants to advise on, and carry out the detailed assessment of impacts on cultural heritage aspects of the development proposal.

Consultees should insert specific advice for the developer;

No advice submitted here

9. **Ecology, Biodiversity and Nature Conservation**

Scottish Government suggests that all ecological survey methods are agreed with SNH specialist advisers, and conform to the best available standard methods for each habitat and species. SG also requires that all ecological survey data collected during ES survey work should be made available by the applicant to SG and SNH, in a form which would enable them to make future analysis of the effects of wind farms if appropriate.

In major developments [such as this] additional specialist advice should be sought from known experts in the field such as RSPB, Plantlife other NGOs etc.

9.1 Designated sites

The ES should address the likely impacts on the nature conservation interests of all the designated sites in the vicinity of the proposed development. It should provide proposals for any mitigation that is required to avoid these impacts or to reduce them to a level where they are not significant. SNH can also provide specific advice in respect of the designated site boundaries for SACs and SPAs and on protected species and habitats within those sites. The potential impact of the development proposals on other designated areas such as NSA, LSA, SSI or Regional/National Parks etc should be carefully and thoroughly considered and appropriate mitigation measures outlined in the ES. Early consultation and agreement with SNH, the relevant planning authority and other stakeholders is imperative in these circumstances.

For developments with a potential to affect Natura sites, applicants must provide in the ES sufficient information to make clear how the tests in the Habitats Regulations will be met, as described in the June 2000 Scottish Government guidance. The information in the ES should enable the assessments required by the legislation to be completed by the Scottish Government. Specific guidance on the Habitats and Birds Directive regarding the appropriate impact assessments and associated alternative solution and IROPI tests is available on the following website link <http://www.scotland.gov.uk/library3/nature/habd-00.asp>

Within the Regulations the first step is whether the proposal is necessary for the management of the site: this will not be the case for wind farm applications. The next step is to ask whether the proposal (alone or in combination with other proposals) is likely to have a significant effect on the site. If so, the Scottish Government as the Competent Authority under the Habitats Directive will draw up an ‘appropriate assessment’ as to the implications of the development for the site, in view of that site’s conservation objectives.

The scoping report should aim to present sufficient information to enable a conclusion to be drawn on this test, ie as to whether there is likely to be a significant effect on the site. If that information is provided, SNH will be able to advise, when consulted upon the scoping request, whether an appropriate assessment will be necessary. In the event that detailed survey or analysis is required in order to reach a view, the survey and analysis should be regarded as information contributing to that assessment. Note that such information should be provided for the wind farm itself together with any ancillary works such as grid connections and vehicle tracks, and cumulatively in combination with any other wind farm consented or formally proposed in the vicinity.

Consultees should insert specific advice for the developer;

We are offering no additional advice here, other than reiterating our concerns re upland hilltracks which leave landscape scars, in some instances contribute to high levels of peat, vegetation and habitat disturbance, and in the case of permanent tracks tend to be over engineered

9.2 Habitats

SNH suggest that the ecological survey methods are agreed with their specialist advisers and all ecological survey data collected during ES survey work should be made available by the applicant to SNH, in a form which would enable them to make future analyses of the effects of wind farms if appropriate. Surveys should be carried out at appropriate times or periods of the year by appropriately qualified and experienced personnel, and suitability of the timing needs to be considered within the ES.

The ES should provide a comprehensive account of the habitats present on the proposed development site. It should identify rare and threatened habitats, and those protected by European or UK legislation, or identified in national or local Biodiversity Action Plans. Habitat enhancement and mitigation measures should be detailed, particularly in respect to blanket bog, in the contexts of both biodiversity conservation and the inherent risk of peat slide. Details of any habitat enhancement programme (such as native- tree planting, stock exclusion, etc) for the proposed wind farm site should be provided. It is expected that the ES will address whether or not the development could assist or impede delivery of elements of relevant Biodiversity Action Plans.

Particular attention should be paid to the effects of the proposals on any peat land habitats on the site. SEPA emphasises that the ES should demonstrate that turbine locations have been determined on the basis of habitats on the site, especially with regard to any areas of deep peat and intact hydrological units of mire vegetation. Turbines therefore need to be located in the light of vegetation survey work. Similarly, the ES needs to demonstrate that roads have been located to minimise impact on vegetation communities, peat habitats and peat depth. Measures to avoid pH impact on peatland from use of cement/concrete (e.g. use of blinding cement on roadways, wash-out during construction, integrity of shuttering) should be set out.

9.3 Habitat Management

SNH and RSPB would wish to see a Habitat Management Plan for the area of the wind farm and any area managed in mitigation or compensation for the potential impacts of the wind farm. A commitment to maintain and/or enhance the biodiversity of the overall area is expected. Monitoring of any specific potential impacts of the development, and of the outcome of any habitat management measures, should form

part of the ES proposals. Developers may also want to consult other interested parties in preparation of the HMP information or relevant studies/surveys.

The ES should also outline provisions made regarding public access, having regard for the requirements of the Land Reform (Scotland) Act 2003, clarifying the extent of any access restrictions proposed, if any, during construction or operation, and indicating any new facilities for access to be provided on or off site.

Consultees should insert specific advice for the developer;

The ridges in the vicinity of these proposed turbines are popular with walkers, especially those visiting the Corbett Meall Dubh. Any re-routing of a temporary nature that may be necessary must not prevent access or direct walkers to alternative activities other than their objectives. The Land Reform [Scotland] Act 2003 should be adhered to

9.4 Species : Plants and Animals

The ES needs to show that the applicants have taken account of the relevant wildlife legislation and guidance namely, Council Directives on The Conservation of Natural Habitats and of Wild Flora and Fauna, and on Conservation of Wild Birds (commonly known as the Habitats and Birds Directives), the Wildlife & Countryside Act 1981, the Nature Conservation (Scotland) Act 2004, the Protection of Badgers Act 1992, the 1994 Conservation Regulations, Scottish Executive Interim Guidance on European Protected Species, Development Sites and the Planning System and the Scottish Biodiversity Strategy and associated Implementation Plans. In terms of the SG Interim Guidance, applicants must give serious consideration to/recognition of meeting the three fundamental tests set out in this Guidance. **It may be worthwhile for applicants to give consideration to this immediately after the completion of the scoping exercise.**

It needs to be categorically established which species are present on the site, and where, before the application is considered for consent. The presence of protected species such as Schedule 1 Birds or European Protected Species must be included and

considered as part of the application process, not as an issue which can be considered at a later stage. Any consent given without due consideration to these species may breach European Directives with the possibility of consequential delays or the project being halted by the EC. Likewise the presence of species on Schedules 5 (animals) and 8 (plants) of the Wildlife & Countryside Act 1981 should be considered where there is a potential need for a licence under Section 16 of that Act.

Plants

A baseline survey of the plants present on the site should be undertaken, and field and existing data on the location of plants should be used to determine the presence of any rare or threatened species of vascular and no-vascular plants and fungi.

Birds

The ES should provide an assessment of the impact of the wind farm on birds. The assessment should follow the guidance in 'Methodology for assessing the effects of wind farms on ornithological interests (SNH and BWEA 2001). A baseline survey of the species and number of birds present on the site throughout the year should be undertaken. Particular attention should be paid to specially protected and/or vulnerable species. All ornithological survey work should conform to *Survey methods for use in assessing the impacts of onshore wind farms on bird communities* (Scottish Natural Heritage, 2005).

Survey work should include assessments of the flight lines of breeding birds and birds whose migrations or other seasonal distributions traverse or are in close proximity to the site. Collision risk analyses will be necessary for species which regularly pass through the site at any time of year. The analysis should follow the principles set out in the above SNH/BWEA guidance and in 'Wind Farms and Birds: calculating the theoretical collision risk assuming no avoidance' (SNH 2001)

In the interests of all stakeholders involved in the consultation exercise, the presence of protected species must be included and considered as part of the section 36 application process. Submitting this information as an addendum at a later date will require further publicity and consultation which will delay the overall determination.

An Annex of Environmentally Sensitive Information may be required to provide information on nest locations or other environmentally sensitive information related to specially protected species. However, the annex should not include any information that is not confidential, or if it does this information should be contained elsewhere within the text of the environmental statement.

Mammals

A baseline survey of the species and number of mammals present on the site should be undertaken. Particular attention should be paid to specially protected and/or vulnerable species, especially European Protected Mammals, and those potentially affected by the development.

Reptiles, amphibians

A baseline survey of the species and number of reptiles and amphibians present on the site should be undertaken. Particular attention should be paid to specially protected and/or vulnerable species, especially European Protected species, and those potentially affected by the development.

Fish

A baseline survey of the species and number of fish present in the waterbodies and watercourses on and around the site throughout the year should be undertaken. This should extend to watercourses which may be affected by run-off from the site during construction, operation or decommissioning. Particular attention should be paid to specially protected and/or vulnerable species, especially European Protected species, and those potentially affected by the development. Developers should be aware that wind farm developments will have considerable construction implications and these can be conducted without proper regard or understanding of their potential impacts on watercourses and water quality, and on fish and aquatic invertebrate populations.

Invertebrates

A baseline survey of the significant invertebrates present on the site and in the waterbodies and watercourses on and around the site throughout the year should be undertaken. This should be guided by existing information on the presence, distribution and abundance of notable invertebrates. Sampling of aquatic invertebrates should extend to watercourses which may be affected by run-off from the site during construction, operation or decommissioning. Particular attention should be paid to specially protected and/or vulnerable species, especially European Protected species, and those potentially affected by the development.

Consultees should insert specific advice for the developer;

[We have no additional advice to add here](#)

10. Water Environment

Developers are strongly advised at an early stage to consult with SEPA as the regulatory body responsible for the implementation of the Controlled Activities Regulations (CAR), to identify 1) if a CAR license is necessary and 2) clarify the extent of the information required by SEPA to fully assess any license application.

All applications (including those made prior to 1 April 2006) made to Scottish Ministers for consent under section 36 of the Electricity Act 1989 to construct and operate a electricity generating scheme will require to comply with new legislation. In this regard we will be advised by the Scottish Environment Protection Agency (SEPA) as the regulatory body responsible for the implementation of the Water Environment (Controlled Activities) (Scotland) Regulations 2005, and will have regard to this advice in considering any consent under section 36 of the Electricity Act 1989.

SEPA produces a series of Pollution Prevention Guidelines, several of which should be usefully utilised in preparation of an ES and during development. These include SEPA's guidance note PPG6: Working at Construction and Demolition Sites, PPG5: Works in, near or liable to affect Watercourses, PPG2 Above ground storage tanks, and others, all of which are available on SEPA's website at <http://www.sepa.org.uk/guidance/ppg/index.htm>. SEPA would look to see specific principles contained within PPG notes to be incorporated within mitigation measures identified within the ES rather than general reference to adherence to the notes.

Prevention and clean-up measures should also be considered for each of the following stages of the development;

- Construction.
- Operational.
- Decommissioning.

Construction contractors are often unaware of the potential for impacts such as these but, when proper consultation with the local fishery board is encouraged at an early stage, many of these problems can be averted or overcome.

- Increases in silt and sediment loads resulting from construction works.
- Point source pollution incidents during construction.
- Obstruction to upstream and downstream migration both during and after construction.
- Disturbance of spawning beds during construction - timing of works is critical.
- Drainage issues.

The ES should identify location of and protective/mitigation measures in relation to all private water supplies within the catchments impacted by the scheme, including modifications to site design and layout.

Developers should also be aware of available CIRIA guidance on the control of water pollution from construction sites and environmental good practice (www.ciria.org). Design guidance is also available on river crossings and migratory fish (SE

consultation paper, 2000) at <http://www.scotland.gov.uk/consultations/transport/rcmf-00.asp>.

Consultees should insert specific advice for the developer;

[We have no additional advice to add here](#)

10.1 Hydrology and Hydrogeology

The ES should contain detailed statements of the nature of the hydrology and hydrogeology of the site, and of the potential effects the development on these. Developers should be aware that wind farm developments will have considerable construction implications and these can be conducted without proper regard or understanding of the potential impacts on hydrology, water courses, water quality, water quantity and on aquatic flora and fauna. The assessment should include statements on the effects of the proposed development at all stages on;

- Hydrology.
- Water Quality and quantity.
- Flood Risk.

The high rainfall often experienced at proposed wind farm sites means that run-off, high flow in watercourses, and other hydrological and hydrogeological matters require proper consideration within the ES.

Hydrological and hydrogeological issues should be addressed within the ES, and the following hydrological baseline information should be included.

- Long term average monthly rainfall figures.

Where the project includes significant watercourse engineering works, then SEPA would expect the following information to be included within the ES for at least a typical watercourse within the development area:

- Flood flow statistics - the flows for the Mean Annual Flood, 1:100 and 1:200 year return period.
- From a flow duration curve, the mean daily flow and Q95 flow.
- Methods used to calculate these must be identified; if non-standard methods are used, these should be described in detail with rationale for use.

Impacts on watercourses, lochs, groundwater, other water features and sensitive receptors, such as water supplies, need to be assessed. Measures to prevent erosion,

sedimentation or discolouration will be required, along with monitoring proposals and contingency plans.

The applicant should refer to SEPA policy on groundwater which can be found at www.sepa.org.uk/pfd/policies/19/pfd which will assist in identifying potential risks. It should also be noted that 1:625000 groundwater vulnerability map of Scotland often referred to in Environmental Statements has been superseded by the digital groundwater vulnerability map of Scotland (2003) and the digital aquifer map of Scotland (2004) and it is the information used on these newer maps, available on request from SEPA, that should be used in any assessment.

If culverting should be proposed, either in relation to new or upgraded tracks, then it should be noted that SEPA has a policy against unnecessary culverting of watercourses. Schemes should be designed to avoid by preference crossing watercourses, and to bridge watercourses which cannot be avoided. Culverting is the least desirable option.

The ES must identify all water crossings and include a systematic table of watercourse crossings or channelising, with detailed justification for any such elements and design to minimise impact. The table should be accompanied by photography of each watercourse affected and include dimensions of the watercourse. It may be useful for the applicant to demonstrate choice of watercourse crossing by means of a decision tree, taking into account factors including catchment size (resultant flows), natural habitat and environmental concerns.

Culverts are a frequent cause of local flooding, particularly if the design or maintenance is inadequate. The size of culverts needs to be large enough to cope with sustained heavy precipitation, and allow for the impact of climate change. This must be taken into account by developers and planning authorities. SPP7 and PAN69 provide more information on this aspect.

Measures to avoid erosion of the hillside associated with discharge from road culverting need to be set out in the ES.

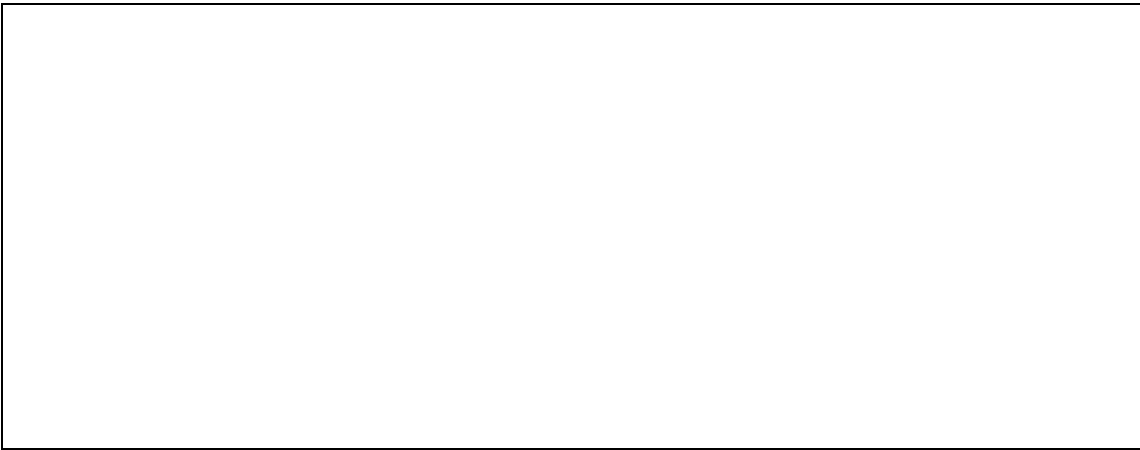
All culverts must be designed with full regard to natural habitat and environmental concerns. Where migratory fish may be present (such as trout, salmon or eels) the culvert should be designed in accordance with the Scottish Executive guidance on River Crossings and Migratory Fish. This guidance can be found on the Scottish Executive website at: www.scotland.gov.uk/consultations/transport/rcmf-06.asp

Where the watercourse is used as a pathway by otters and other small mammals, the design of culverts will need to be modified to accommodate this.

The need for, and information on, abstractions of water supplies for concrete works or other operations should also be identified in the ES.

Consultees should insert specific advice for the developer

We have no additional advice to add here



10.2 Geology and soils

The Environmental Statement should fully describe the likely significant effects of the development on the environment including direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary e.g. construction related impacts, positive and negative effects of the development which result from:

- The existence of the development.
- The use of natural resources (including borrow pits, the need for which and impact of which, including dust, blasting and pollution of the water environment, should be appraised as part of the overall impact of the scheme)
- The emission of pollutants, the creation of nuisances and the elimination of waste.

The ES should identify the intended source of any rock or fill material to be used for tracks or foundations, and should describe the environmental impacts associated with any new quarries or borrow pits or road or track cuttings.

Consultees should insert specific advice for the developer

[We have no additional advice here](#)

10.3 Assessment of Peat Slide Risk

If the proposed development is to take place on peatland habitats, the Environmental Statement should incorporate a comprehensive peat slide risk assessment in accordance with the Scottish Government Best Practice Guide for Developers.

<http://www.scotland.gov.uk/Topics/Business-Industry/infrastructure/19185/20804>

Particular attention should be paid to the risks of engineering instability relating to presence to peat on the site. Turbines locations should be identified in the light of survey work on peat depth and nature, and roads will need to be carefully aligned and designed with regard to peat habitats and depth. It is recommended that both engineers and ecologists are involved in the assessment and management of the risk of peat slide.

The peat slide risk assessment should also address pollution risks to and environmental sensitivities of the water environment. It should include a detailed map of peat depth and evidence that the scheme minimises impact on areas of deep peat. The ES should include outline construction method statements or the site-specific principles on which such construction method statements would be based for engineering works in peat land areas, including access roads, turbine bases and hard standing areas, and these should include particular reference to drainage impacts, dewatering and disposal of excavated peat.

Consultees should insert specific advice for the developer;

[We have no additional advice here](#)

10.4 Forestry

The EIA should indicate areas of forestry plantation which may be felled to accommodate new turbines. If timber is to be disposed of on site, details of the methodology for this should be submitted. Areas of retained forestry or tree groups should be clearly indicated and methods for their protection during construction clearly described.

Consultees should insert specific advice for the developer;

We have no additional advice here

11. Other Material Issues

11.1 Waste

Potential requirement for waste management licences or licensing exemptions in relation to waste disposed to or from borrow pits should be discussed at an early stage with SEPA as decisions on waste management are likely to affect site design and layout.

The ES should identify all of the waste streams (such as peat and other materials excavated in relation to infrastructure) associated with the works. It should demonstrate a) how the development can include construction practices to minimise the use of raw materials and maximise the use of secondary aggregates and recycled or renewable materials and b) how waste material generated by the proposal is to be reduced and re-used or recycled where appropriate on site (for example in landscaping not resulting in excessive earth moulding and mounding).

11.2 Telecommunications:

British Telecom will offer advice in respect of EMC and related problems, BT point to point microwave links and satellite. Any information on the likely interference to BT's current and presently planned radio networks should be enclosed.

Ofcom only comment in respect of microwave fixed links and does not include broadcast transmissions or scanning telemetry links that may be affected by your proposals. A copy of your scoping request has been sent to:

CSS Spectrum Management Services Ltd. David Tripp 01458 273 789
david.tripp@css.gb.com (for Scanning Telemetry)

Joint Radio Company (JRC). David Priestley 020 7953 7015
david.priestley@jrc.co.uk (for Scanning Telemetry)

With regard to assessing the affects to TV reception, the BBC now have an online tool available on their website, at <http://windfarms.kw.bbc.co.uk/>. Ofcom will no longer be forwarding enquiries received to the BBC or carrying out assessments. Developers are advised to access the online tool.

<http://windfarms.kw.bbc.co.uk/rd/projects/windfarms/>

Ofcom only comment in respect of fixed microwave links managed by the Ofcom, in addition you are obliged to do further checks of your proposals with the CAA, NATS, and the MOD. Further details may be obtained on the British Wind Energy Association (BWEA) website. The MoD Estates Safeguarding contact is Chris Evans on 0121 311 3847.

Consultees should insert specific advice for the developer;

[We have no additional advice here](#)

11.3 Noise

Wind farms have the potential to create noise through aerodynamic noise and mechanically generated noise. Noise predictions should be carried out to evaluate the likely impacts of airborne noise from the wind turbines and associated construction activities including noise from blasting or piling activities which may affect local residents, during construction, operational and decommissioning stages of the project. Advice should be sought from the relevant Council planning and/or environmental health departments in respect to the potential impacts on the local community.

You should be aware of the guidance produced by ETSU on behalf of the DTI titled “The Assessment and Rating of Noise from Wind Farms”. This publication provides developers with best practice noise monitoring and reporting techniques. Cumulative noise effects should also be considered in assessing the specific circumstances prevailing at the development site. Developers may also want refer to PAN56 in this respect.

Consultees should insert specific advice for the developer;

[We have no additional advice here](#)

11.4 Shadow Flicker

Information on the impact of shadow flicker on the local community should be enclosed within the ES. Developers should refer to PAN 45 for further information on this subject.

Consultees should insert specific advice for the developer;

[We have no additional advice here](#)

11.5 Traffic Management

The Environmental Statement should provide information relating to the preferred route options for delivering the turbines etc. via the trunk road network. The Environmental Impact Assessment should also address access issues, particularly those impacting upon the trunk road network, in particular, potential stress points at junctions, approach roads, borrow pits, bridges, site compound and batching areas etc.

Where potential environmental impacts have been fully investigated but found to be of little or no significance, it is sufficient to validate that part of the assessment by stating in the report:

- the work has been undertaken, e.g. transport assessment;
- what this has shown i.e. what impact if any has been identified, and
- why it is not significant.

Consultees should insert specific advice for the developer;

[We have no additional advice here](#)

11.6 Cumulative Impacts

Where a wind farm development might have cumulative impacts with other existing, approved or current wind farm applications, then the assessment of environmental impacts should include consideration of these cumulative effects. Visual or landscape cumulative effects may arise where more than one wind farm is visible from certain viewpoints, or along a journey by road or other route. Ecological cumulative effects may arise where more than one wind farm impacts upon a bird population, or on the hydrology of a wetland or peatland habitat.

SPP 6 introduces new requirements in relation to considering cumulative impacts through the development plan process. Where relevant, proposals should identify how they comply with development plans. We also refer to the SNH guidance note 'Cumulative Effect of Wind Farms' (version 2 revised 13.4.05²) for further guidance. A cumulative assessment should include other existing wind farms in the vicinity of the proposal, any wind farms which have been consented but are still to be constructed, and any which are the subject of undetermined consent applications. Inclusion within a cumulative assessment of other proposed wind farms which have not yet reached application stage is not required, unless in exceptional circumstances we advise otherwise.

<http://www.snh.org.uk/pdfs/strategy/Cumulativeeffectsonwindfarms.pdf>

Consultees should insert specific advice for the developer;

We note the above and the text in the draft scoping report and would be interested in seeing the outcomes of this cumulative assessment exercise

11.7 Other planning or environmental impact issues unique to the application.

The ES should include information on any other potential impacts connected with the project.

Consultees should insert specific advice for the developer;

We have no additional advice

12. General ES Issues

In the application for consent the applicant should confirm whether any proposals made within the Environmental Statement, eg for construction methods, mitigation, or decommissioning, form part of the application for consent.

12.1 Consultation

Developers should be aware that the ES should also be submitted in a user-friendly PDF format which can be placed on the Scottish Government website. Developers are asked to issue ESs directly to consultees. Consultee address lists can be obtained from the Energy Consents Unit. The Energy Consents Unit also requires **8 hardcopies** to be issued internally to Scottish Government consultees.

Where the developer has provided Scottish Ministers with an environmental statement, the developer must publish their proposals in accordance with part 4 of the Environmental Impact Assessment (Scotland) Regulations 2000. Energy consents information and guidance, including the specific details of the adverts to be placed in the press can be obtained from the Energy Consents website; <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energy-Consents>

12.2 Gaelic Language

Where s36 applications are located in areas where Gaelic is spoken, developers are encouraged to adopt best practice by publicising the project details in both English and Gaelic (see also Energy consents website above).

12.3 OS Mapping Records

Developers are requested at application stage to submit a detailed Ordinance Survey plan showing the site boundary and all turbines, anemometer masts, access tracks and supporting infrastructure in a format compatible with the Scottish Government's Spatial Data Management Environment (SDME), along with appropriate metadata. The SDME is based around Oracle RDBMS and ESRI ArcSDE and all incoming data should be supplied in ESRI shapefile format. The SDME also contains a metadata recording system based on the ISO template within ESRI ArcCatalog (agreed standard used by the Scottish Government), all metadata should be provided in this format.

12.4 Difficulties in Compiling Additional Information.

Developers are encouraged to outline their experiences or practical difficulties encountered when collating/recording additional information supporting the application. An explanation of any necessary information not included in the Environmental Statement should be provided, complete with an indication of when an addendum will be submitted.

12.5 Application and Environmental Statement

A developer checklist is enclosed with this report to help developers fully consider and collate the relevant ES information to support their application. In advance of publicising the application, developers should be aware this checklist will be used by government officials when considering acceptance of formal applications.

12.6 Consent Timescale and Application Quality

In December 2007, Scottish Ministers announced an aspirational target to process new section 36 applications within a 9 month period, provided a PLI is not held. This scoping opinion is specifically designed to improve the quality of advice provided to developers and thus reduce the risk of additional information being requested and subject to further publicity and consultation cycles.

Developers are advised to consider all aspects of this scoping opinion when preparing a formal application, to reduce the need to submit information in support of your application. The consultee comments presented in this opinion are designed to offer an opportunity to considered all material issues relating to the development proposals.

In assessing the quality and suitability of applications, Government officials will use the enclosed checklist and scoping opinion to scrutinise the application. Developers are encouraged to seek advice on the contents of ESs prior to applications being submitted, although this process does not involve a full analysis of the proposals. In the event of an application being void of essential information, officials reserve the right not to accept the application. Developers are advised not to publicise applications in the local or national press, until their application has been checked and accepted by SG officials.

Signed *Beryl Leatherland,*

Access and Conservation, Mountaineering Council of Scotland 11th March 2008

Authorised by the Scottish Ministers to sign in that behalf.

Enclosed - Developer Application Checklist

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**DEVELOPER APPLICATION AND ENVIRONMENTAL STATEMENT
CHECKLIST**

- | | Enclosed |
|--|--------------------------|
| 1. Developer cover letter and fee cheque | <input type="checkbox"/> |
| 2. Copies of ES and associated OS maps | <input type="checkbox"/> |
| 3. Copies of Non Technical Summary | <input type="checkbox"/> |
| 4. Confidential Bird Annexes | <input type="checkbox"/> |
| 5. Draft Adverts | <input type="checkbox"/> |
| 6. E Data – CDs, PDFs and SHAPE files | <input type="checkbox"/> |

-
- | Environmental Statement | Enclosed | ES Reference
(Section & Page No.) |
|---|--------------------------|--------------------------------------|
| 7. Development Description | <input type="checkbox"/> | |
| 8. OS co-ordinates for site and turbine layout | <input type="checkbox"/> | |
| 9. Planning Policies, Guidance and Agreements | <input type="checkbox"/> | |
| 10. Natural Heritage | <input type="checkbox"/> | |
| 11. Economic Benefits | <input type="checkbox"/> | |
| 12. Site Selection and Alternatives | <input type="checkbox"/> | |
| 13. Construction and Operations (outline methods) | <input type="checkbox"/> | |
| 14. Decommissioning | <input type="checkbox"/> | |
| 15. Grid Connection details | <input type="checkbox"/> | |
| 16. Baseline Assessment data – air emissions | <input type="checkbox"/> | |
| 17. Design, Landscape and Visual Amenity | <input type="checkbox"/> | |
| 18. Archaeology | <input type="checkbox"/> | |
| 19. Ecology, Biodiversity & Nature Conservation | <input type="checkbox"/> | |
| 20. Designated Sites | <input type="checkbox"/> | |
| 21. Habitat Management | <input type="checkbox"/> | |
| 22. Species, Plants and Animals | <input type="checkbox"/> | |
| 23. Water Environment - Hydrology | <input type="checkbox"/> | |
| 24. Geology - Peat survey data and risk register | <input type="checkbox"/> | |
| 25. Forestry | <input type="checkbox"/> | |
| 26. Waste | <input type="checkbox"/> | |
| 27. Aviation | <input type="checkbox"/> | |
| 28. Telecommunications | <input type="checkbox"/> | |
| 29. Noise | <input type="checkbox"/> | |
| 30. Shadow Flicker | <input type="checkbox"/> | |
| 31. Traffic Management | <input type="checkbox"/> | |
| 32. Cumulative Impacts | <input type="checkbox"/> | |

N.B. Developers are encouraged to use this checklist when progressing towards application stage and formulating their Environmental Statements. The checklist will also be used by officials when considering acceptance of formal applications. Developers should not publicise applications in the local or national press, until their application has been checked and accepted by officials.

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