mackenzie bradshaw environmental consulting

PROPOSED DORENELL WINDFARM

INQUIRY INTO AN APPLICATION UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 TO CONSTRUCT AND OPERATE A WIND FARM, NEAR DUFFTOWN, MORAY

Matters on which Further Representations/Information is Requested

Ecology & Nature Conservation (excluding Ornithology)

Response on behalf of the Applicant by
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1. QUALIFICATIONS AND EXPERIENCE

1.1 Qualifications

1.1.1 My full name is Andrew James Mackenzie, I prefer to be called Andy. I have been awarded an Honours degree in plant sciences (plant ecology) and a Doctor of Philosophy degree in applied ecological sciences. I am a Chartered Biologist, Full Member of the Society of Biology and Full Member of the Institute of Ecology and Environmental Management.

1.2 Overall Experience

1.2.1 I have twenty years experience as an environmental professional and have held full-time posts in ecological research, tertiary education and environmental consultancy. I have spent my career based in the UK, choosing to concentrate on the natural heritage of the British Isles.

1.2.2 My professional experience includes: participation in a range of public inquiries; coordination, auditing and technical input to environmental impact assessments; developer and competent authority work on appropriate assessment; practical construction and mitigation implementation; terrestrial, freshwater and marine ecological survey and research; and biodiversity and nature conservation management planning.

1.2.3 Some examples of my past project work include: Raeshaw high level estate road, Scottish Borders; Stonehenge World Heritage Site Management Plan for English Heritage; Penarth to Cardiff Bay Barrage Headland Link for Vale of Glamorgan Council; biodiversity planning and public inquiry work for the National Assembly of Wales, Highways Directorate; Sandwich Bay Strategic Environmental Assessment (tidal and coastal defences), Environment Agency; various historic conservation and restoration schemes including ecological work on Princes Street Gardens, Mavisbank and Dalkeith Country Park; the Heathland Conservation Initiative, Sussex Weald; planning and construction of the Channel Tunnel Rail Link, Amec & McAlpine JV; Environmental Project Manager for the construction of the Stirling-Alloa-Kincardine railway; Baglan Energy Park Redevelopment for BP, Neath Port Talbot; on-going advice and guidance on the updating of the Design Manual for Roads and Bridges, particularly in relation to ecology and nature conservation assessment, Scottish Government/Transport Scotland and the Highways Agency; representing and advising the Scottish Government/Transport Scotland as Competent Authority under the Habitats and Birds Directives for Scottish trunk roads (e.g. A830, A9, A77, A75 etc.); various projects for British Airports Authority including the River Mole Diversion at Gatwick Airport and bird hazard management at Heathrow Airport; and research work on opencast coal restoration, particularly primary ecosystem development work for the past British Coal Opencast Executive.

1.3 Recent Relevant Experience

1.3.1 I am currently a Partner in Mackenzie Bradshaw Environmental Consulting (MBEC), a professional environmental practice specialising in the ecological sciences. MBEC currently has 12 full-time staff (and additional specialist part-time associate consultants) who manage a range of environmental projects. I have been involved in working and managing MBEC since its inception over six

years ago. MBEC has a reputation for high quality environmental survey, assessment and management work by a consultant team who understand and appreciate both the importance of the planning system and the need to safeguard and use natural resources in a sustainable way.

1.3.2 MBEC are part of an on-going Environmental Commission for the Scottish Government/Transport Scotland to provide environmental and specialist ecological advice, and to audit a wide range of other external consultants' EIA work to ensure competence and completeness (both legal and best practice). Andy has been directly involved in this work for over 11 years now.

1.3.3 In addition to the examples given above which illustrate my overall ecological and environmental experience, the following recent/current examples of my and the Practice's work are of particular relevance to my assistance to this Inquiry.

Renewable Electricity Generation

1.3.4 I have been involved in the planning and ecological aspects of a variety of on-shore wind farm applications including the largest consented project in Scotland, Whitelee. MBEC are currently working on 9 on-shore wind farm development projects plus giving on-going advice/survey as necessary on others. Recently I have also been involved in the completion of the ecology EIA/ES chapters and other application related material for a range of small-scale hydroelectric schemes in Scotland, e.g. Chaorach, Chonais, Black Rock, River Lael and the River Braan. At the present time I am also involved in the ecological survey, EIA and mitigation for a further small-scale hydroelectric scheme near Loch Laggan called Corrour Forest. I am also an adviser to Scottish Power in relation to the changes required under the Water Framework Directive and its existing large hydro-electric schemes in Scotland.

Electricity Transmission / Distribution

1.3.5 I have been involved in ecological management, surveying, coordination, assessment and mitigation for various electricity cable and overhead line projects in the past. More recent examples are: the environmental scoping work for Sloy to Inveraray 132 kV OTL, Argyll; Bridgwater Generation Express Park 132kV wooden pole OTL, Somerset; and the Roseland Peninsula 33kV wooden pole distribution line in Devon. I became involved in the proposed Beauly to Denny 400kV Overhead Transmission Line and Associated Works in March 2004 when MBEC were commissioned by SHETL/SPT to give specialist ecological advice (initially related to surveying, Natura issues and auditing). I also gave evidence at the public inquiries (strategic and all the local sessions and hearings) on the ecological evidence, with the exception of ornithology which my MBEC colleague Paul Bradshaw covered.

1.4 Involvement in this Proposal

1.4.1 MBEC have managed all the ecological surveying, analysis and assessment for this proposed wind farm application. This has included the ecology related work for the published Environmental Statement (ES, Infinergy, 2008, CD-H 2-6) and the subsequent clarification and further information reporting (e.g. CD-H 7). Through my, and MBEC's, on-going role in this project and leading up to the

Public Inquiry, I have thoroughly scrutinised all the relevant ecological and related environmental work completed to date for this proposal. I am personally familiar with the access route and the whole of the proposed site area. I have also personally re-surveyed on the site in August 2010 to check that the key baseline conditions are still current and in line with those reported in the ES.

2. SCOPE AND STRUCTURE OF THESE FURTHER REPRESENTATIONS

2.1 Formatting

2.1.1 References included in this document are listed by the inquiry document number and are also listed in full in the Reference section.

2.2 Scope

2.2.1 This written submission is concerned with assisting the Reporter in his request for "further representations / information" specifically on "Wildlife and habitat issues (excluding ornithology)" contained within the "Further Written Submission Annex" of the Letter dated 29th July 2010 as a procedural notice from the Directorate for Planning and Environmental Appeals. Where it is necessary to mention ornithological aspects to fully answer the questions posed, I have checked this with my colleague, Paul Bradshaw who is providing evidence on Ornithological issues as a Hearing Session.

3. QUERIES AND THE APPLICANT'S ANSWERS

"(1) Representations on whether the proposals satisfy the 3 licensing tests for European Protected Species (such as otters, bats and wild cats) as set out in paragraphs 18-25 of European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements (Scottish Executive, October 2001). Representations should take account of the terms of paragraphs 26-33 of the interim guidance."

3.1.1 With regard to the provisions of the Habitats Directive, paragraphs 26-33 of the Interim Guidance set out the important considerations in relation to European protected species and the responsibilities of a competent authority in the exercise of its functions.. The 'competent authority' for the Dorenell Wind Farm proposal is the Scottish Ministers.

3.1.2 With regard to the qualifying interests and species of the River Spey Special Area of Conservation (SAC), SNH has already provided advice to the Scottish Ministers, as Annex A of their formal and full response to the Dorenell Wind Farm Project (CD-K 20). This advice will allow the Scottish Ministers to consider those species (Atlantic Salmon, Otters, Sea Lamprey and Fresh Water Mussels) using an Appropriate Assessment in accordance with the Habitats Regulations (48).

3.1.3 In terms of paragraph 28 of the Interim Guidance, the following questions must be addressed:

a) Are European protected species present on the site for which planning permission has been sought?

b) If European protected species are present, what implications do the proposals for the site have for the species in question? In particular, are the proposals for the site likely to lead to any action or overall outcome which would be contrary to Regulation 39 or 43, or which would otherwise conflict with obligations arising under Articles 12 or 13 of the Directive?

c) In the event that potentially negative effects are evident, to what extent can these be prevented by either a voluntary alteration of the project design or by appropriate conditions to any grant of planning permission? If negative effects are likely and cannot be prevented by planning conditions, does the planning authority consider that the proposed development is likely to meet the first two of the three tests prescribed in Regulation 44 (which derive from Article 16 of the Directive)?

d) In essence, does the planning authority believe that the development is (1) necessary for one of the purposes contained in Regulation 44(2) and Article 16 (most usually, for preserving public health or public safety or for some other imperative reason of overriding public interest), and (2) that there is no satisfactory alternative to derogating from the Directive?

e) Finally, if European protected species are present, planning authorities will also wish to seek advice from SNH on the likely consequences of any proposed development in relation to the conservation status of the species concerned. This is the third test prescribed in the Directive and the 1994 Regulations. A development which has a negative impact on the maintenance of the population of the species concerned in relation to its conservation status within its natural range would be in breach of the Directive. The granting of planning permission would therefore be in conflict with the duty placed on planning authorities by Regulation 3(4).

It should be noted that questions b) to e) above only need to be addressed if questions a) is answered in the affirmative. In that context, the relevant parts of the questions in paragraph 28 are addressed below specifically in relation to the Dorenell site:

3.1.4 The European Protected Species which have been noted as being of <u>potential</u> relevance in relation to this proposed wind farm site and access are: otter, bat species, wildcat and yellow marsh saxifrage (sometimes shortened to marsh saxifrage; *Saxifraga hirculus*).

3.1.5 The protected mammal surveys included searching for any evidence of wildcat that may be present within the site and/or the access track (methods summarised in Paragraphs 11.44 to 11.47 of the Environmental Statement, ES, CD-H 2-6). Wildcat are not mentioned in the text of the ES because no evidence of their presence was found. In Appendix 11.B (Table 11.B.III) of the ES historical records indicate presence of wildcat within the 10km^2 including the site in 1966 and 1969. From the information made available to MBEC and from our own searches, there are no recent records within the site or the access track area for

wildcat. On the basis of the surveys completed and the searches of records undertaken it can be stated that, for the purposes of any need for licensing, wildcat do not currently need to be considered.

3.1.6 Paragraphs 11.123 to 11.126 of the ES (CD-H 2-6) and Paragraph 4.47 of the Supplementary Environmental Information (SEI, CD-H 7) address the potential presence of yellow marsh saxifrage. In addition, a further survey was carried out over two days by the author in August 2010 of the flush areas, as a double check. No plants of this species or suitable higher pH flushes were found which confirms the outcome reported within the ES and the SEI. On this basis it can be stated that, for the purposes of any need for licensing yellow marsh saxifrage does not currently need to be considered.

3.1.7 Paragraph 11.138 to 11.140 within the ES (CD-H 2-6) reports the results of the surveys for otter resting up sites and presence. While evidence was seen of their presence within the site and it is likely that a territory is partly within the site, no otter resting up sites (couches, holts or similar) were found to be present within the site or the access track area. Licensing for European Protected Species is required when disturbance could occur and that is normally interpreted by the Scottish Government as being in relation to a resting up site (a holt or couch in the case of otter) or where there is a significant likelihood that large-scale engineering works within or adjacent to a watercourse could result in otter coming into conflict with live traffic or a similar higher level of risk (see APPW-E6). Such disturbance is not deemed likely in the situation of this proposed wind farm since, although otter may well pass through the site during construction there is currently no evidence that they would be significantly disturbed or put at risk. The use of best practice mitigation while working on the site, such as ensuring that no steep sided excavations are left without escape ramps will help to minimise all risks to otter. On the basis of the current level of use of the site and access track it can be stated that, for the purposes of any need for licensing this species does not need to be considered. It is also important to note that SNH have reported in their advice to Scottish Ministers, 'it is unlikely that otters will be impacted upon significantly' (Annex A – CD-K20).

3.1.8 Paragraph 11.133 to 11.137 of the ES (CD-H 2-6) and Paragraph 4.70 of the SEI (CD-H 7) report the results of the surveys for the presence of bat roosts and activity levels. Paragraphs 4.71 to 4.77 of the SEI also review the nature conservation evaluation and impact assessment for bats completed for the ES. No evidence of bat roosting was found within the site or the access track for the surveys included within the ES. The additional surveys reported in the SEI note that there is likely to be one or more small pipistrelle roost sites either in the trees behind or the adjacent derelict Blackwater Lodge (Paragraph 4.70 in the SEI). However, as noted in Paragraph 4.24 of the SEI, *"there are no proposals, as part of the wind farm planning application, that relate to this building"* and similarly there would be no disturbance to any of the trees behind the derelict house. The only proposed infrastructure in this area is to upgrade the existing track past the front of the lodge, as shown in Figure 7.1 of the ES. In summary, there are no known existing bat roosts that would be affected by any of the proposed works. Therefore, on the basis of the current level of use of the site and access track by bats it can be stated that, for the purposes of any need for licensing, these species do not need to be considered.

3.1.9 The conclusions drawn from this work on the possible presence of European Protected Species are in line with the advice given by the then Planning Division of the Scottish Executive to planning authorities in relation to the need to fully ascertain, prior to the determination of the planning application, whether a European Protected Species (EPS) is present on a site (APPW-E5). In addition, the SNH consultation letter to the Energy Consents Unit dated 18 June 2009 (CD-K 20), at Section 3.2 clearly states that,

"If the mitigation measures designed to minimise the impacts on species and habitats are fully implemented then there will be no adverse impact on any plant or animal species of EPS. Accordingly SNH has no objection with respect to EPS."

The same SNH letter does not mention any need for licensing in relation to European Protected Species, which accords with the Applicants existing survey and assessment outcomes.

3.1.10 Despite there being no current need for European Protected Species licensing for this proposed wind farm, in line with best ecological practice, pre-construction surveys have been recommended within the ES. This approach is used because it is fully recognised that the locations that animals use as resting sites can change over time, as noted with otter in Paragraph 11.291 of the ES. Similarly, this best practice approach will be taken with bats as noted in Paragraph 11.292 of the ES. While wildcat and yellow marsh saxifrage are not specifically mentioned in terms of pre-construction surveys because no evidence of any presence on the site or access track route was found, the further ecological work required on the site post consent will involve ecologists being present on the site prior to and during construction works and therefore, if any future presence of these species is found then, although thought unlikely, then there will be a requirement to ensure they are safeguarded in a lawful and nature conservation orientated manner. For example, the further micro-siting work required (e.g. Paragraph 11.274 of the ES and proposed planning condition) and site supervision by an ecological clerk of works (e.g. Paragraph 11.278 of the ES and proposed planning condition), indicates a commitment by the Applicants to further detailed ecological work, should consent be granted.

3.1.11 Despite it being clear that no European Protected Species licensing is currently required, the ES does include reference to this being a possible requirement in the future, should the baseline situation change from that reported in the ES (see Paragraph 11.292 of the ES). On this basis, hypothetically, the three licensing tests may require to be satisfied in the future (European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements (APPW-E4), as has been the case with a number of previously consented development-related projects. However, until the precise details of any such future need for licensing are known, it is not possible to speculate on the assessment outcomes of these three tests. For the present application, at the present time, there is therefore no need to consider the Interim Guidance further.

"(2) Responses to Scottish Natural Heritage's appraisal of the effects of the proposals on the River Spey Special Area of Conservation as set out in their letter of 18 June 2009."

3.1.12 SNH required further information and clarity on the proposals specifically in relation to the River Spey Special Area of Conservation (Spey SAC, SNH letter to the Energy Consents Unit dated 9 October 2008, CD-K 19). This holding objection is a common occurrence during on-going discussion/consultation, since SNH have to be certain regarding the details proposed in relation to designated and protected sites. The SNH letter to the Energy Consents Unit dated 18 June 2009 (CD-K 20) post dates the conclusion of that further consultation and information from the Applicant and gives their full and detailed response (a further response from SNH to the SEI dated 1 September 2010 (CD-K 21) confirms their previous position and does not offer any further comment). This response of 18 June 2009 from SNH includes definitive statements and an appraisal, in relation to the Spey SAC.

3.1.13 In Scotland, SNH are the appropriate nature conservation body under The Conservation (Natural Habitats, &c.) Regulations 1994 and amendments. As such, they have a duty to give advice to the competent authority in relation to European protected sites[1]. In this case the competent authority are the Scottish Ministers. SNH's letter to the Energy Consents Unit dated 18 June 2009 (CD-K 20) is their full advice to the Scottish Minister's on this proposed wind farm in relation to the Spey SAC.

3.1.14 Annex A of SNH's letter advises that there is the potential for a significant effect on the River Spey SAC (i.e. "likely significant effect"). In the absence of management for conservation aims, this is the key test as to whether an appropriate assessment is necessary. Further, SNH provided a completed appraisal of the implications for the SAC site in view of the site's Conservation Objectives. Such appraisal is often used by the competent authority as the basis of their final appropriate assessment. It is up to the competent authority to decide whether an appropriate assessment is necessary but given SNH's advice regarding the possibility of a likely significant effect then one would normally be expected to be completed.

3.1.15 To assist SNH and the competent authority the Applicant's also provided information to inform an appropriate assessment for the River Spey SAC (Paragraphs 12.138 to 12.212 of the ES, CD-H 2-6). Both the Applicants and SNH (CD-K 20) concluded that the proposed wind farm would not have an adverse effect on the River Spey SAC (including all relevant tributaries i.e. the River Fiddich and the Back Burn). Using the words of the legislation, it would not adversely affect the integrity of the European site with regard to the manner in which it is proposed to be carried out[2]. No further response was made by the Applicant because they agreed with the conclusion of SNH. The conclusion of this part of the assessment process now allows the competent authority to finalise their appropriate assessment and has clarified the position in terms of a

[1] Regulation 48 (3) of the Conservation (Natural Habitats &c.) Regulations 1994, as amended. (CD-A 11).
[2] Regulation 48 (5 & 6) of the Conservation (Natural Habitats &c.) Regulations 1994, as amended. (CD-A 11).

possible future consent. The competent authority may impose conditions or restrictions in relation to the protection of the River Spey SAC in relation to the proposal should they decide to grant consent[3].

"(3a) Further explanation (from the applicants) and responses to the nature conservation values given in the Environmental Statement to blanket bog, wet heath, dry heath, and wind clipped lichen/bryophyte heath, which are listed in Annex 1 of the EC Habitats Directive."

3.1.16 In the ES, Chapter 11 (CD-H 2-6), MBEC on behalf of the Applicants provided a standard nature conservation evaluation methodology which was used for the assessment (Paragraph 11.55 and Table 11.3). As noted in this paragraph, "These methods are based on professional judgement and best practice guidance". The best practice guidance includes the sources listed in Paragraph 11.8 and the Bibliography at the end of Chapter 11. In particular, SNH's Guidance for Competent Authorities, Consultees and Others Involved in the EIA Process in Scotland (APPW-E7) and the Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment in the United Kingdom (CD-J 2) were used and adjusted using MBEC's extensive ecological assessment experience. This methodology has been developed and used in numerous development related projects by MBEC and has been previously accepted by authorities in the UK, including Scotland; e.g. Whitelee wind farm and Lael hydro scheme.

3.1.17 The Table below is extracted from the ES information (Table 11.3, Table 11.9 and Paragraphs 11.170 to 11.175 and 11.179 to 11.183) and summarises the nature conservation value for these specific habitats. As can be seen from a comparison of the methodology (Table 11.3) with the evaluation for the site itself (Table 11.9), these habitats types have been given the same evaluation as the overall methodology suggests. The text which accompanies the evaluation for each habitat type is important because this explains the context of each habitat and relates to the final evaluation given.

Habitat Type	Initial Evaluation According to Table 11.3	Final Evaluation from Table 11.9	Status (EC Habitats Directive)
Blanket Bog	Medium	Medium	Annex 1 Priority Habitat, where active.
Wet Heath	Medium	Medium	Annex 1
Dry Heath	Medium	Medium	Annex 1
Wind Clipped Lichen/Bryophyte Heath	Medium	Medium	Annex 1

[3] Regulation 48 (6) of the Conservation (Natural Habitats &c.) Regulations 1994, as amended. (CD-A 11).

3.1.18 It may be assumed that because a habitat is listed within the EC Habitats Directive (CD-A 17) that it is of the highest conservation value and should therefore automatically be accorded a conservation value of very high. However, as can be seen from the examples given under each category in Table 11.3 of the ES, this is not necessarily the case. Further, as noted in the paragraph above, we have used our experience and professional judgement to assess the habitat quality in terms of the overall context and other relevant aspects such as the actual habitat condition. For example, quite large areas of the blanket bog on the site have significant erosion evident and secondary vegetation growth which fits within the nature conservation value of medium which has been accorded.

"(3b) Representations on any adjustments to be made to the assessment in the Environmental Statement if the habitats at (3a) were to be given a higher nature conservation value (eg high)."

3.1.19 I (Dr Andy Mackenzie) on behalf of the Applicants, have re-checked these evaluations (see answer to question 3(a) above) and also the assessment of them within the ES and the SEI and I am satisfied that these accurately match the actual ecological context of the site, access track proposed and the assessment of impacts with and without the mitigation proposed. Therefore, there is no adjustment to be made to the assessment in the ES (CD-H 2-6) and SEI (CD-H 7) and the residual impact assessment remains at up to slight adverse for these habitats and would not be likely to be significant (ES, Paragraphs 11.305 to 11.310 and SEI, Paragraph 4.69).

3.1.20 If, in contrast to my current professional judgement these habitats were given a higher nature conservation value, this would, in theory, raise the level of adverse potential impact. However, with suitable mitigation, this would not necessarily result in an adverse change or result in any difference to the existing residual impact assessment. The reason for this is because mitigation strategies, including iterative design, to minimise the amounts of particular habitats affected would always be applied to try to ensure that the minimum damage possible would be inflicted through the implementation of the development. This accords with best ecological practice. To re-iterate, I do not believe any adjustment is required to be made to the assessment previously completed for this project in relation to the habitats mentioned above.

"(3c) Clarification (from the applicants) on whether the nature conservation value given to the River Fiddich in chapter 11 of the Environmental Statement (paragraph 11.169) of "high" requires to be adjusted to reflect the nature conservation value given to the River Fiddich Catchment in chapter 12 of the Environmental Statement (table 12.5) of "very high.""

3.1.21 The River Fiddich should be consistently given a nature conservation value of very high within the ES because it is part of the SAC and a very important and valuable part of the catchment. I have checked the whole assessment (Chapters 11 and 12 of the ES, CD-H 2-6) and the inconsistency highlighted is a typing error in Paragraph 11.169 of the ES which omitted the word "very". This paragraph is the only direct reference to the River Spey SAC within this chapter

because the full assessment process is undertaken and included within Chapter 12 of the ES. This typing error does not affect any of the assessment stages undertaken in Chapter 12 of the ES, because these were all undertaken using a level of very high nature conservation value.

"(3d) Clarification (from the applicants) on whether the nature conservation value given to the Black Water Catchment in chapter 12 of the Environmental Statement is "medium" (tables 12.5 and 12.6) or "high" (tables 12.7, 12.8 and 12.9)."

3.1.22 The Black Water Catchment, as assessed in Chapter 12 of the ES (CD-H 2-6) should have a nature conservation value of high. Tables 12.5 and 12.6 and Paragraphs 12.98 and 12.99 include reference to a medium conservation value. These are errors and should all read as high conservation value for the Black Water Catchment.

"(3e) Representations on any adjustments to be made to the assessment in the Environmental Statement if the habitat at (3d) (the Black Water Catchment) was given a higher nature conservation value than "medium.""

3.1.23 It is acknowledged in the answer to question 3(d) that there is an error and the nature conservation value for the Black Water Catchment should be high. However, I have checked the whole assessment (Chapter 12 of the ES, CD-H 2-6) and this error does not affect any of the assessment stages undertaken in Chapter 12 of the ES because these were all undertaken using a level of high nature conservation value. Having liaised with my colleagues, I can confirm that this error occurred because the Black Water Catchment was initially assessed at a nature conservation value of medium. However, when it came to undertake the final stages of the impact assessment it was recognised that the nature conservation value should be high and the later parts of the assessment were updated accordingly. Unfortunately, the earlier occurrences of the nature conservation value were overlooked during the final editing process. The buffer distance of 150m provided for the Black Water tributaries during design, reflects the high conservation value.

"(3f) Further explanation (from the applicants) and responses to the site conservation value given, in the Environmental Statement to 2 European Protected Species, otters (medium value) and bats (low value)."

3.1.24 As noted in the answer to question 3(a) in Paragraph 3.2.15 of this document, professional judgement plays an important part in the nature conservation evaluation as well as using the standard table examples (Table 11.3, ES, CD-H 2-6).

3.1.25 In the case of otter, the amount of activity noted on the site was what would be expected for this situation (ES, Paragraphs 11.138 to 11.140, CD-H 2-6). While this is a very important species in nature conservation terms (a qualifying interest for the River Spey SAC and a European Protected Species), the Scottish context has been considered in relation to the relevant importance of the study area, the habitat suitability and the likely relative importance of the study area in comparison to overall territory use. Part of this consideration includes the fact

that otter are now common again in Scotland, they are doing very well and the rate of territory occupation is generally quite high. Generally, they are regarded as being at favourable conservation status in Scotland (APPW-E8). Also, no current resting-up sites were found within the study area which indicates that it is not very likely that otter are using the area as part of a core territory but rather that the area is towards the periphery of a territory. This accords, from an ecological perspective, with the evidence found, in that higher upland areas will be used less because the food sources are more limited and weather exposure, particularly out of the spring to autumn period, is greater than further down the valleys. The conservation value of up to medium used in the assessment for otter (ES, Paragraph 11.196 and Table 11.9) accords with the evidence found, given the extensive baseline surveying undertaken and our overall experience of otter ecology in a Scottish context.

3.1.26 The baseline situation for bats was also found to be what we would expect for such a site location in Scotland (ES, Paragraphs 11.133 to 11.137 and SEI, Paragraph 4.70). Bat species are very important from a nature conservation perspective being recognised as European Protected Species. However, in a Scottish context upland habitats do not offer the same opportunities for bats as lowland habitats, and limited bat use of the area was found. Bats would be expected where suitable roosting opportunities exist and/or where more sheltered valleys connect into upland habitats. The nature conservation evaluation of low (moderate local) is appropriate for this site location, the field survey results and the limited opportunities that are generally available for bat species (ES, Paragraph 11.195 and SEI, Paragraph 4.71).

"(3g) Representations on any adjustments to be made to the assessment in the Environmental Statement if the species at (3f) were to be given a higher site conservation value (eg high [otters] and medium [bats])."

3.1.27 I, on behalf of the Applicants, have re-checked these evaluations (see answer to question 3(f) above) and also the assessment of them within the ES and the SEI and I am satisfied that these accurately match the actual ecological context of the site and access track proposed and the assessment of impacts without and with the mitigation proposed. Therefore, there is no adjustment to be made to the assessment in the ES and SEI and the residual impact assessment remains at up to slight adverse for these species and would not be likely to be significant, as reported within the ES and the SEI (additional information for bats only but no change to the assessment resulted).

3.1.28 If, in contrast to my current professional judgement these species were given a higher nature conservation value, this would, in theory, raise the level of adverse potential impact. However, given the 200m buffer zones around watercourses the avoidance of Blackwater Lodge and the trees behind it, along with the other mitigation proposed for these species, the assessment of residual effect would remain the same as that reported in the ES.

"(3h) Clarification (from the applicants and council) on whether the site maintains its designation as part of the Glenlivet/Glenfiddich Site of Interest to Natural Science (a non-statutory designation) and, if so, representations on the effects of the proposals on the interests underpinning the designation."

3.1.29 The Glenlivet/Glenfiddich and Cabrach Site of Interest to Natural Science (a local non-statutory designation for nature conservation purposes) is a very large site which completely overlaps the proposed wind farm site and the access track (ES, Paragraph 11.80, CD-H 2-6). This site is very approximately seven times the size of the proposed wind farm site boundary. The Moray Council website showing the interactive Local Plan 2008 mapping (APPW-E2) indicates the substantial area that this local designation covers. The designation relates to its biological interest, specifically the presence of common gull breeding colonies, heather moorland and Annex 1 bird species.

3.1.30 In terms of heather moorland (a very general habitat term), the wind farm proposals will have a negligible effect on the area of designated land and will not be significant to the quality or quantity of this habitat. On the basis of an approximate calculation allowing for the directly affected wind farm area (infrastructure) plus a very precautionary 250m disturbance buffer related to the approximate boundaries of the local site designation the percentage of the designated site which could be affected is 3.9%. With a 100m precautionary buffer it equates to approximately 0.62% and even this is being very precautionary in reality for the likelihood of habitat damage and direct habitat loss.

3.1.31 There are no common gull breeding colonies within the wind farm site or access route area and there were no significant aggregations of this species recorded during the bird surveying within the study area. In terms of Annex 1 bird species there is no current evidence that impacts could be at a greater than local level in terms of the wind farm site and the access track route.

3.1.32 This designation has not been identified as a sensitive receptor in the ecological or ornithological assessments because it is a very general designation and there was not deemed to be any likely significant effects. Therefore it is my assessment, on behalf of the Applicants, that this non-statutory designated site would maintain its designation.

"(3i) Clarification on whether the proposals are judged to have an effect on any woodland included within the inventory of Ancient, Long Established and Semi Natural Woodland, including Dubhalit Wood and, if so, the extent of the effect."

3.1.33 As noted in the ES in Paragraph 11.81 and shown on Figure 11.1 (CD-H 2-6), Dubhalit Wood is the closest area of inventory woodland to the site (to the northwest at National Grid Reference NJ317337) at approximately 600m from the site boundary. This woodland would not be impacted directly or indirectly by any of the proposed site works. There is also a small area of inventory woodland to the northeast (Garbet Wood at National Grid Reference NJ360336) which is approximately 1.1km from the nearest part of the proposed access track route. Again this would not be directly or indirectly affected by the proposed access

track works (see Figure 11.1 in the ES for the location of the site, access route and these inventory woods).

"(4) Further details of the information provided to Scottish Natural Heritage and SEPA to deal with the points they raised in their consultation responses. This should include a response to paragraph 3.2.2 of SEPA's letter of 23 June 2008."

3.1.34 The Applicants provided written clarification of the key points SNH and SEPA raised in their own consultation responses. The further information given to SNH is provided in CD-K 19. For the SEPA consultation letter of 23 June 2008 (CD-K 15) the Applicants provided clarification to SEPA via a letter of 16 June 2009 with attachments (CD-K 16). A specific response to Paragraph 3.2.2 of SEPA's letter of 23 June 2008 is included within this clarification. However, having checked the SEPA River Basin Management Plan Interactive Mapping site (APPW-E3) the Back Burn is mapped as being part of the River Spey SAC. The Applicants have marked the Back Burn as being part of the River Spey SAC on Figures 7.2, 7.3 and 11.1 of the ES (CD-H 2-6), although it was outside of the site boundary. In terms of the aquatic ecology assessment and the assessment specifically of the River Spey SAC the Back Burn was not included because from studying the contours and localised catchment situation it was seen to be just outside of the catchment areas which could be impacted by the proposed wind farm infrastructure. Turbine 4 and the associated internal tracks are the closest to the watershed but it is important to note that micro-siting can be used during detailed laying-out to ensure that these are all within the Black Water catchment rather than the Back Burn catchment. Figure 7.1 shows the relative locations of infrastructure proposed in comparison to the location of the Back Burn and its tributaries. This is noted as being the case in the Applicant's clarification to SEPA via a letter of 16 June 2009 (CD-K 16).

"(5) Responses to the points raised in other consultations about the effects of the proposals on wildlife and habitats, including the consultation response from Fisheries Research Services (now part of Marine Scotland)."

3.1.35 A response to the Fisheries Research Services which addressed their comments in their emailed consultation response dated 30 June 2008 (CD-K 4) was sent as a memo dated 10 July 2009 by the Applicants (CD-K 5). This memo included a copy of the Applicants outline Fisheries Management Plan, as it was at that date. For brevity this information is not repeated here.

3.1.36 In addition to the Fisheries Research Services consultation response and those of SEPA and SNH, the Applicant is aware of consultation responses in relation to wildlife and habitats (with the exception of ornithology) from the following:

- Cairngorms National Park Authority Planning Paper 2, 19 September 2008 (CD-K 13);
- River Deveron District Salmon Fishery Board letter of 11 July 2008 (CD-K 3); and
- Mountaineering Council of Scotland letter of 26 June 2008 (CD-K 10).

3.1.37 The CNPA consultation response at Paragraph 11 quotes part of a sentence from NPPG 14 Natural Heritage (CD-B 3). This is not referenced by the CNPA but appears to be from Section 42 of this National Planning Policy Guidance. It is not clear what the purpose of this quote is but it is only of relevance to a European or Ramsar designated site and only if an adverse effect on integrity has been found during assessment. According to all the Applicants and SNH's work this could only apply to the River Spey SAC in relation to this proposal and since SNH have concluded that with certain conditions this will not occur it is not relevant to this proposed wind farm application.

3.1.38 The importance of complying with international and national conservation obligations is noted in Paragraph 14 of the CNPA consultation response, as is the need to carefully consider protected species and habitats (Paragraph 16). The ES (CD-H 2-6), subsequent ecological work (CD-H 7) and SNH's letter to the Energy Consents Unit dated 18 June 2009 (CD-K 20) all show that this has been fully considered and adhered to. In Paragraph 17, there is reference to the Cairngorms and its protection in terms of flora and fauna. This proposal is wholly outside of the National Park and in terms of habitats and species will have no effect on it.

3.1.39 In a letter dated 11 July 2008 The River Deveron District Salmon Fishery Board (CD-K 3) note that damage to the peat on the scale envisaged would, in their view, be in clear breach of European Habitats Directives and the ensuing impact on flows and water quality would clearly be in breach of The EC Water Framework Directive. From an ecological perspective, given the development of the detailed mitigation proposed, the Applicants do not believe this to be the case. It is clear that the proposed wind farm would not be in breach of the EC Habitats Directive (CD-A 17) and the provision of the Fisheries Management Plan (CD-H 8) along with the full implementation of the monitoring and pollution control measures detailed in the ES (CD-H 2-6) would ensure that the terms of the EC Water Framework Directive would not be breached.

3.1.40 A response from the Applicants which included a response on the terrestrial ecology comments made by the Mountaineering Council of Scotland (CD-K 10) was submitted to the Energy Consents Unit by Royal Haskoning as a Memo dated 8 September 2009 (CD-K 12). This response on ecology was short but indicated that SNH were then content regarding terrestrial ecology. The comments relating to blanket bog by the Mountaineering Council of Scotland do not take into consideration the condition of the blanket bog on the site and this is expanded on in the answer to questions 3(a) and 3(b) above.

3.1.41 There is also mention in the Mountaineering Council of Scotland response (CD-K 10) of the length of time that bog can take to recover after re-wetting. While it is true that bog can take a long time to fully recover after re-wetting (e.g. by blocking drains and allowing the water table to increase again), as a professional ecologist I still see this as a positive off-setting and habitat enhancement measure. Once the mechanisms for re-wetting are in place, positive benefits will start to accrue after a relatively short period (in the region of 3-6 years) but these will take a much longer period to be fully completed. My past experience in Wales has indicated that Sphagnum mosses can initially re-colonise and start to spread quite quickly after re-wetting.

"(6) Responses to the points raised in the letters of objection about the effects of the proposals on wildlife and habitats, including the e-mail from the Scottish Wildcat Association, dated 5 and 26 May 2009, in so far as they refer to wild cats in the area."

3.1.42 It is difficult to understand all the Scottish Wildcat Association's concerns from the first email (dated 5 May 2009), however, the points of relevance to ecology (excluding ornithology) are addressed by the Applicants in the following paragraphs for both the first and second email (5 and 26 May 2009, CD L 2 & 3).

3.1.43 In terms of the 5 May email from the Scottish Wildcat Association, the Applicants have made it clear in the ES that no evidence of wildcat presence was found within the site or study area for the proposed wind farm and access track route during all the surveying undertaken to date. Mr Piper offers no evidence that they are present within the study area but rather refers to a much larger general area in Scotland, indeed he himself has said recently, "It's really helpful to get photos of sightings because we really don't know too much about where they live" (APPW-E1). The statement above also adequately answers Mr Piper's email of 26 May 2009.

3.1.44 It is felt that other letters of objection which mention wildlife and habitats have been addressed through the ES (CD-H 2-6), the SEI (CD-H 7) and the answers given by me on behalf of the Applicants to the questions above. However, if the Reporter has any other specific points he wishes a response to on wildlife and habitat issues, I am, on behalf of the Applicants, happy to assist him in any way I can with this.

4. REFERENCES USED

APP	W	E1	BBC News Website. Scottish Wildcat seen on Mull may have swum to island. 2010 (http://news.bbc.co.uk/1/hi/scotland/glasgow and west/8657470.stm .
CD	K	13	CNPA: Consultation Response: Scottish Government on application Under Section 36 of Electricity Act 1989. Planning Paper 2: 19 September 2008.
CD	A	17	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). European Commission. 1992.
CD	K	4	FRS: Email from Alistair McCartney to Howard Steel (DPEA Ref: J145935./PDF).
CD	H	2 – 6	Dorenell Wind Farm Environmental Statement (2008): all volumes.
CD	K	19	SNH: Applicant's Response. 1 May 2009
CD	K	5	FRS: Applicant's response to FRS. (10th July 2009). (Email to Lorraine Brown ECU)
CD	K	12	Applicant's memo to Lorraine Brown ECU: Response to issues raised by Mountaineering Council for Scotland, RSPB, and Cairngorms National Park. 8 Septmeber 2010
CD	H	7	Supplementary Environmental Information (SEI) 2010
CD	J	2	Institute of Ecology and Environmental Management (IEEM). Guidelines for Ecological Impact Assessment in the United Kingdom. 2006
APP	W	E2	Moray Council Website. (2010). Interactive Local Plan 2008 mapping, http://webmap.moray.gov.uk/imf/imf.jsp?site=LocalPlan08 .
CD	K	10	Mountaineering Council of Scotland. Consultation response. 23 June 2008.
CD	K	3	Deveron District Salmon Fishery Board: Consultation response. 11 July 2008.
CD	A	11	The Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitat Regulations)
CD	K	15	SEPA: Consultation response. 23 June 2008 (Ref: PL13/IEC/3/91)
CD	K	16	SEPA: Applicant's response to SEPA. 16 June 2009 (Ref: DOR/SEPA/09)
APP	W	E3	SEPA Website. (2010). River Basin Management Plan (RBMP) Interactive Map. http://213.120.228.231/rbmp/
CD	B	3	National Planning Policy Guidance (NPPG) 14: Natural Heritage (to be forwarded)
APP	W	E4	Scottish Executive. European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements. October 2001.
APP	W	E5	Scottish Executive. Letter to all Heads of Planning in Scotland from John O'Brien. 16 May 2006
APP	W	E6	Scottish Executive. The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations: Explanatory guidance for species related activities. 2007.
CD	B	9	Scottish Planning Policy 2010

APP	W	E7	Scottish Natural Heritage. Guidance for Competent Authorities, Consultees and Others Involved in the EIA Process in Scotland. 2005.
CD	K	18	SNH: Consultation response. October 2008 (Ref:CNS/REN/WF/Dorenell).
CD	K	20	SNH: Conditions proposed by SNH. Letter from David Bale, SNH Area Manager, to Lorraine Brown, ECU, Scottish Government. 18 June 2009.
CD	K	21	SNH: Consultation response to SEI. Email from Jennifer Heatley, SNH Area Officer, Moray, to Lorraine Brown, ECU, Scottish Government. 1 September 2010.
CD	L	2	Scottish Wildcat Association. (5 May 2009). Email to the Energy Consents Unit
CD	L	3	Scottish Wildcat Association. (26 May 2009). Email to the Energy Consents Unit
CD	H	8	Dorenell Wind Farm Outline Fisheries Management Plan (oFMP). A document prepared by the Spey Research Trust, the Deveron, Bogie and Isla Fisheries Charitable Trust and Royal Haskoning (on behalf of Infinergy Ltd)