

Report to the Scottish Ministers

SECTION 36 OF THE ELECTRICITY ACT 1989 AND SECTION 57 OF TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

Report by Claire Milne and Sue Bell, reporters appointed by the Scottish Ministers

- Case reference: WIN-170-2003
- Site Address: Meaul Hill and Waterhead Hill, Carsphairn Forest, Carsphairn, Dumfries and Galloway DG7 3UP
- Application by Brockloch Rig III Ltd
- Application for consent (S36 Electricity Act 1989) and deemed planning permission (S57 Town and Country Planning (Scotland) Act 1997)
- The development proposed: construction and operation of Windy Standard 3 Wind Farm
- Dates of inquiry / hearing sessions: 3 to 5 December 2018

Date of this report and recommendation: 23 December 2019

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The construction and operation of Windy Standard 3 Wind Farm at Meaul Hill and Waterhead Hill, Carsphairn Forest, Carsphairn, Dumfries and Galloway, DG7 3UP

• Case reference	WIN-170-2003
• Case type	Application for consent (S36 Electricity Act 1989) and deemed planning permission (S57 Town and Country Planning (Scotland) Act 1997)
• Reporters	Claire Milne and Sue Bell
• Applicant	Brockloch Rig III Ltd
• Planning authority	Dumfries and Galloway Council
• Date of application	6 December 2016
• Date case received by DPEA	2 May 2018
• Method of consideration and date	Inquiry session on 3 and 4 December 2018 Hearing sessions on 3 and 5 December 2018
• Date of report	23 December 2019
• Reporter's recommendation	Grant S36 consent and deemed planning permission

The site

The application site is located within Carsphairn Forest, approximately 6.5 km north of Carsphairn village, in Dumfries and Galloway. It consists of two development areas; the Meaul Hill Cluster and the Waterhead Hill Cluster. The proposed development is an extension to the operational Windy Standard I and Windy Standard II Wind Farms.

Background to the proposal

Brockloch Rig III Ltd seeks consent under Section 36 of the Electricity Act 1989 and deemed planning permission under Section 57(2) of the Town and Country Planning

(Scotland) Act 1997 to construct and operate what would be the Windy Standard 3 Wind Farm. An application was submitted in December 2016. The application was accompanied by an Environmental Statement and Addendum, which reported the findings of the EIA.

Description of the development

The wind farm would have an installed capacity of around 67.5 MW. It would comprise a total of 20 turbines: 8 with a maximum height to blade tip of 125 metre; and 12 with a maximum height to blade tip of 177.5 metres. Hub height would be 84 metres and 121 metres respectively. The proposal also includes: the formation of approximately 9km of new access tracks (with watercourse crossings) and 6.6km of upgraded tracks within the site; the erection of two new permanent anemometry masts; the installation of underground electrical cables; and preparatory woodland felling within the site (around 30Ha); a 10 metre buffer around each item of infrastructure and a 50 metre corridor for access roads.

Consultations and Representations

Scottish Natural Heritage does not object but has raised similar concerns to Dumfries and Galloway Council in terms of landscape and visual impact. Aviation lighting concerns were also raised by SNH. Carsphairn Community Council objects on the grounds of cumulative visual impact, water and noise pollution and traffic disruption. John Muir Trust objects due to visual impacts, and impacts on walkers and tourists. Glasgow Prestwick Airport objects in terms of potential impacts on air traffic operations but would remove their objection if agreement can be reached.

No objections were received from A M Geomorphology, Transport Scotland, BT, Scottish Water, RSPB Scotland, Forestry Commission Scotland, Historic Environment Scotland, Marine Scotland, Civil Aviation Authority, NATs, Defence Infrastructure Organisation and Galloway Fisheries Trust subject in some cases to the imposition of suitable conditions.

East Ayrshire Council initially objected in terms of landscape and visual impact but following further clarifications has withdrawn its objection. SEPA initially objected but has since withdrawn their objection subject to the imposition of suitable conditions.

The applicant's case

The applicant considers the following:

- the need to achieve UK and Scottish Government renewable energy targets is a material consideration of great weight;
- the proposed scheme would provide a valuable contribution to the generation of renewable energy;
- Scottish Planning Policy establishes a 'tilted balance' in favour of development that contributes to sustainable development;
- the proposed development would be consistent with the relevant policies of the Development Plan when it is read as a whole insofar that is a relevant consideration in an Electricity Act case;
- the only residual significant effects that have been identified during the EIA process are as a result of visual and landscape impacts;
- the visual and landscape impacts would not 'significantly and demonstrably' outweigh the benefits when assessed against the wider policies in SPP.

The applicant considers that the key issues relate primarily to the matters raised by Dumfries and Galloway Council regarding landscape and visual impacts, including cumulative. The applicant considers that the proposal will not significantly contribute to a fundamental change to the landscapes in the area. Other wind farm proposals have been approved including South Kyle, Benbrack and Windy Rig and the council has already accepted and played a part in the creation of a landscape in this area which is notably influenced by wind turbines.

A detailed assessment is provided by the Environmental Impact Assessment (EIA) which gives reference to the council's guidance. Some significant effects on the landscape resource and visual amenity of the area is expected. However the proposal is likely to have a comparatively limited viewshed, resulting in a localised and a relatively limited number of significant effects additional to those of existing operational and consented development. The council's specific concerns regarding the impact of views to and from Cairnsmore of Carsphairn as a landmark hill, when viewed in the context of other wind farms would not be significant. There is considered to be capacity for the proposed development given the scale of the landscape and the existing prevalence of wind energy development.

Dumfries and Galloway Council's case

The council considers the following:

- the benefits of a renewable energy project need to be balanced against other considerations;
- Scottish Planning Policy remains current Scottish Government Policy;
- there is no evidence that Scottish Government Policy reduces the protection to be given to the environment in favour of windfarm development;
- the proposals would be a departure from the council's guidance;
- the current proposals would have significant and unacceptable cumulative visual and landscape impacts.

Dumfries and Galloway Council objects to the proposal in terms of landscape and visual impact. The grounds for objection are not considered to be narrowly drawn with the nature of the significant effects just as important to consider as the likely number and/or extent of receptors affected.

Reporters' conclusions

The proposal, subject to conditions, avoids significant effects on residential property in terms of visual impacts, noise and shadow flicker. Impacts in terms of ecology, ornithology, cultural heritage, hydrology, geology and hydrogeology, peat and carbon rich soils, roads and traffic, aviation and communications can also be adequately managed subject to suitable conditions.

We consider that there would be significant, but localised, adverse effects on landscape character and in terms of visual impact, affecting the application site and its near surroundings. However, we consider that the degree of harm from such effects would be acceptable overall.

The proposed development would contribute to renewable energy targets and is supported by national energy and planning policy. It would also be consistent with the recently adopted local development plan. We do not consider that there would be any other considerations that would justify refusing consent.

Recommendations

We recommend that section 36 consent be granted and that planning permission be deemed to be granted, subject to the conditions listed in Appendix 2.

Scottish Government
Planning and Environmental Appeals Division
4 The Courtyard
Callendar Business Park
Callendar Road
Falkirk
FK1 1XR

File reference: WIN-170-2003

The Scottish Ministers
Edinburgh

Ministers

In accordance with our minutes of appointment dated 24 May 2018, we conducted a public inquiry in connection with an application to construct and operate the Windy Standard 3 Wind Farm at Meaul Hill and Waterhead Hill, Carsphairn Forest, Carsphairn, Dumfries and Galloway. Dumfries and Galloway Council, as Planning Authority, lodged an objection to the proposal. Although the objection was submitted out of time, Scottish Ministers determined that a public inquiry be held.

We held a Pre-Examination Meeting pre-examination meeting on 2 August 2018 to consider the arrangements and procedures for the inquiry. It was agreed that the following issues would be addressed at an inquiry session: landscape and visual impacts. In addition it was agreed that there would be hearing sessions on the following issues: policy matters, socio-economic and tourism, and conditions. It was later agreed that socio-economic and tourism matters would be dealt with by further written submissions along with aviation lighting effects and radar.

The inquiry sessions were held on 3 and 4 December 2018, and the hearing sessions took place on 3 and 5 December 2018. Closing submissions were exchanged in writing, with the final closing submission (on behalf of the applicant) being lodged on 18 January 2019. Following the inquiry, we allowed the parties to lodge further written submissions to map the up-to-date cumulative wind farm position, to comment on the Pencloe Wind Farm decision (at the request of the applicant), and to reach agreement on conditional matters dealing with access tracks and noise. We also allowed further written submissions relating to recent policy matters.

We conducted unaccompanied inspections of the appeal site, its surroundings and other locations referred to in evidence during August and September 2018 and on 6 December 2018. We also carried out unaccompanied night time inspections (to view proposed aviation lighting) on 3 and 4 December 2018. An accompanied site inspection took place on 3 September 2018.

Our report, which is arranged on a topic basis, takes account of the precognitions, written statements, documents and closing submissions lodged by the parties, together with the oral evidence from the inquiry and hearing sessions. It also takes account of the Environmental Assessment, Addendum and other environmental information submitted by the parties, and the written representations made in connection with the proposal.

Abbreviations

AOD	Above Ordnance Datum
CEMP	Construction Environmental Management Plan
DGWLCS	Dumfries and Galloway Windfarm Landscape Capacity Study
ECoW	Ecological Clerk of Works
ECU	Energy Consents Unit (Scottish Government)
EIA	Environmental Impact Assessment
ES	Environmental Statement
ETSU	The Assessment & Rating of Noise from Wind Farms (ETSU-R-97)
ha	hectares
km	kilometres
LCA	landscape character assessment
LCT	landscape character type
LDP2	Dumfries and Galloway Local Development Plan 2
MW	Megawatts
m	metres
m/s	metres per second
NPF	National Planning Framework
RSPB	Royal Society for the Protection of Birds
SEPA	Scottish Environment Protection Agency
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SPP	Scottish Planning Policy
SSSI	Site of Special Scientific Interest
ZTV	zone of theoretical visibility

CHAPTER 1: BACKGROUND, CONSULTATIONS AND REPRESENTATIONS

Site location and description

1.1 The proposed development is located within Carsphairn Forest approximately 6.5 km north of Carsphairn village, in Dumfries and Galloway and is currently used as commercial forestry plantation. The proposed Development consists of two development areas, the Meaul Hill Cluster and the Waterhead Hill Cluster which together form the proposed development Area.

1.2 The proposed development is an extension to the operational Windy Standard Wind Farm and the under construction Windy Standard II Wind Farm. The existing Windy Standard Wind Farm is located in the hills above Carsphairn Forest and commenced operation in November 1996, consisting of 36 turbines with a maximum height from base to tip of 53.5 m and a rated output of 21.6 MW.

1.3 Within the Environmental Statement, the map at Figure 1.1 provides the regional context <http://www.dpea.scotland.gov.uk/Document.aspx?id=567010> and Figure 1.2 the proposed site layout <http://www.dpea.scotland.gov.uk/Document.aspx?id=567011>.

Description of the development

1.4 Brockloch Rig III Ltd submitted an application for consent under Section 36 of the Electricity Act 1989 and deemed planning permission under section 57(2) of the Town and Country Planning (Scotland) Act 1997 on 6 December 2016 to construct and operate a wind farm at the site. The main components of the development are:

- 8 turbines of a maximum height from base to tip not exceeding 125 m and a capacity of up to 3 MW
- 12 turbines of an overall height from base to tip not exceeding 177.5 m each with a capacity of up to 3.6 MW
- two permanent anemometer masts
- forestry felling
- external transformer housing
- widening of existing public road junction
- site tracks
- crane pads
- foundations
- underground electricity cables
- extension of use of consented operations and control building and temporary construction and storage compounds
- four borrow pits
- on-site concrete batching plant
- associated works/infrastructure Health and Safety sign posting.

1.5 The substation and control building at Dunhill which will be used by Windy Standard II, will be utilised by the proposed development. Some additional underground cabling within the proposed development area may also be required in order to connect the proposed turbines to the substation.

1.6 An Environmental Statement forms part of the application and comprises:

- Volume 1: Non-Technical Summary
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519701>
- Volume 2: Written Statement
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>
- Volume 3: Figures and visualisations
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519710>
- Volume 4: Technical appendices
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519712>

1.7 The application is accompanied by an Environmental Statement Addendum which followed pre-submission consultation

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>

1.8 The Environmental Statement is supplemented by accompanying documents including:

- Design Statement <http://www.dpea.scotland.gov.uk/Document.aspx?id=519760>
- Planning Statement <http://www.dpea.scotland.gov.uk/Document.aspx?id=519762>
- Pre-Application Consultation Report
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519763>

Consultations responses

1.9 A number of bodies commented on the application, the Environmental Statement and the Addendum. Their responses are summarised in this section.

1.10 A M Geomorphology identified a number of required minor revisions and clarification assumptions in relation to the applicant's Peat Landslide Hazard and Risk Assessment.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519730>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=563076>

Having received further clarification from the applicant, A M Geomorphology confirms that all matters have been addressed.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=564982>

1.11 BT confirms that the project is not likely to cause interference to their current and presently planned radio networks.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519750>

1.12 Carsphairn Community Council objects to the proposed development on the basis of the responses received to a survey conducted by the community council to the residents of Carsphairn. <http://www.dpea.scotland.gov.uk/Document.aspx?id=519731>

21 people were against the proposal with 4 people in favour. Those in support of the proposal consider it seems sensible to extend existing site further and for the community to benefit as much as possible. The key concerns raised in objection comprise the following:

- too many windfarms already in Carsphairn
- turbines scar the beautiful Galloway landscape
- too close to Cairnsmore of Carsphairn – destructive of the Bowburn and Deugh glens in atmosphere, visually and environmentally
- adverse effect on tourism

- unacceptable levels of water and noise pollution and traffic disruption
- too close to peoples' homes
- Galloway has already contributed it's fair share of renewable energy projects.
- there should be a thorough analysis of the capacity for windfarms in the area and a comprehensive review to identify those sites which will have least impact on the enjoyment of the countryside, properties, roads, wildlife and habitat during construction, operation and decommissioning
- community benefit has not been discussed with Carsphairn community, an oversight that needs to be addressed.

1.13 Civil Aviation Authority (CAA) advises that the site should be checked to confirm whether it falls within the range of an aerodrome. They also recommend that Emergency Service Helicopter Support Units should be consulted. CAA requires that all structures of 91.4 metres or more be charted on aeronautical charts and reported to the Defence Geographic Centre. For structures of 150 metres or more, there is a legal requirement to fit suitable lights to the turbines in accordance with the Air Navigation Order (ANO) 2016.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519732>

1.14 Defence Infrastructure Organisation request that the turbines should be fitted with MOD accredited aviation safety lighting given their potential to create a physical obstruction to air traffic movements and cause interference to Air Traffic Control and Air Defence radar installations. They also wish to be consulted and notified of the progression of planning applications and submissions relating to this proposal to verify that it will not adversely affect defence interests.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519733>

1.15 Galloway Fisheries Trust require mitigation measures to be installed in relation to tracks in order to protect watercourses from silt, run-off, aggregate ingress and pollution. Tracks and drainage channels should also be monitored periodically during the operational phase. All works to be overseen by the ECoW. Adequately sized buffers to be left around water courses. Fish surveys should be carried out to help inform the CEMP.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519734>

1.16 East Ayrshire Council initially objected on the grounds that the number of turbines proposed to be greater than 150 metres high have the potential to have an adverse landscape and visual impact. The cumulative impact on landscape character, impact on tourism and on the setting of Loch Doon was raised. The key concern was the impact of the proposed aviation lighting on Loch Doon and the Galloway Forest Dark Sky Park and the lack of information concerning these impacts. The council also raised concerns that the proposed development could have an extensive impact on the public road network and requires the applicant to enter into separate legal agreements under Section 96 of the Roads (Scotland) Act 1984 and Section 69 of the Local Government (Scotland) Act 1973 in order to recover any expenses of maintenance incurred by the councils.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519752>.
 Following further clarification provided by the applicant, East Ayrshire Council removed their objection relating to aviation lighting.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=527896>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=527897>

1.17 Forestry Commission Scotland is broadly content with the methodology and approach used within the Environmental Statement and largely agrees with the conclusions.

However, given the loss of woodland proposed, clarification is required over whether compensatory is being put forward.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519736>

1.18 Glasgow Prestwick Airport objects on the grounds that some of the turbines may be visible to the Primary Surveillance Radar and therefore will display as clutter on the radar displays. This will have a significant adverse operational impact on air traffic operations. They advise that if a satisfactory Radar Mitigation agreement can be concluded, they would be in a position to remove their objection.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519740>

1.19 Historic Environment Scotland did not object, however commented that there would be impacts on the setting of scheduled 'The King's Cairn'. Up to three wind farms would lie within views to the east of the scheduled monument over the Water of Deugh and toward the valley of the Shalloch Burn. Historic Environment Scotland does not consider that the impact reaches the threshold where national issues would be raised.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519737>

1.20 John Muir Trust objects on the grounds that the excessively tall proposed structures would be significantly higher than any other wind turbines in Dumfries and Galloway and possibly Scotland are inappropriate to the landscape of the area, will have a detrimental impact on the peat on site and will have a negative socio economic impact. Further concerns regarding the loss of peat is also raised.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519753>

1.21 Marine Scotland recommends site characterisation surveys are undertaken both within and downstream of the proposed development area to assess the presence and abundance of fish species within the Water of Deugh. They also consider that their advice on water quality monitoring is consulted and full details regarding proposed water quality monitoring programmes should be outlined.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519738>

1.22 National Air Traffic Services (NATs) has no safeguarding objection to the proposal and no impact is anticipated on NATs Radar, navigation aids or radio communications infrastructure.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519739>

1.23 RSPB Scotland agrees with the findings of the Environmental Statement that due to the low level of activity recorded through ornithological survey work that the risk to avian species from this development is not significant. However, they recommend that habitat enhancement is considered for black grouse as long as this could be achieved at a distance of at least 500 metres from the location of the turbines. Regarding deep peat habitat, they advise that micro-siting of certain turbines is considered in order to minimise impact.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519741>

1.24 Scottish Environmental Protection Agency (SEPA) initially objected due to lack of information in respect to waste management issues with peat, borrow pit specifications, forestry waste and pollution risks to the water environment. The applicant provided the clarification requested by SEPA allowing them to withdraw their objection, subject to planning conditions being attached for the submission and agreement of the Construction Environmental Management Plan and Site Monitoring Plan.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519746>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=533367>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519757>

1.25 Scottish Natural Heritage (SNH) did not object, however raised some concerns regarding cumulative effect from popular key summits, including from Cairnsmore of Carsphairn and the Merrick. SNH also recommended that the applicant provides clarifications in regard to aviation lighting requirements and the effects on birds and the nearby Dark Sky Park. To aid their appraisal of the effects, SNH agreed with the applicant that several existing daytime photos from key viewpoints would be manipulated with computer software to add the proposed lighting. In response to the clarifications provided, SNH recommended the consideration of radar activated lighting mitigation for the proposal due to the significant landscape and visual effects as the area has very little lighting in the baseline and the possible effects on birds.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519746>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=533356>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=527895>

1.26 Scottish Water indicates that the proposed turbines and infrastructure are located within the boundary for the Carsfad reservoir catchment therefore water quality and quantity should be protected and Scottish Water notified of any pollution incidents.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519743>

1.27 Transport Scotland did not object. They consider it acceptable that the Traffic Management Plan will detail the selected route for abnormal loads. However, they ask that a swept path analysis requires to be undertaken to identify any mitigation measures to deal with abnormal load movements. The level of traffic generation during construction does not trigger the need for further assessment. They advise two conditions dealing with the route of abnormal loads and relating to traffic control measures, should be attached to the consent.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519749>

1.28 Visit Scotland suggests that full consideration be given to the Scottish Government's 2008 research on the impact of wind farms on tourism and a tourism impact statement be provided.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519754>

Representations

1.29 In response to public consultation, no letters of objection were received.

Dumfries and Galloway Council's consideration

1.30 At its meeting of 15 February 2018,

<http://www.dpea.scotland.gov.uk/Document.aspx?id=563055> the Planning Applications Committee resolved to object to the application on the following grounds.

The proposal would be contrary to Local Development Plan Policy IN2 for the following reasons:

- a) the proposal would give rise to unacceptable adverse cumulative visual impact and landscape impact and would contribute to the creation of a wind farm landscape character in the locality;

- b) the proposal would be a departure from the revised Dumfries and Galloway Windfarm Landscape Capacity Study (DGWLCS) guidance relative to the Very Large typology turbines; and
- c) the proposed development would have an unduly adverse impact on the setting of and key views from Cairnsmore of Carsphairn, an important landmark hill within the region.

Statement of agreed matters

1.31 The applicant and council lodged a statement of agreed matters dated November 2018 which identified areas of agreement between the parties in order to assist the preparation of evidence for the inquiry and hearing sessions.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=563056>

CHAPTER 2: LEGISLATIVE AND POLICY CONTEXT

2.1 This chapter outlines the principal legislative and policy context relevant to the assessment of this application. Other more detailed, topic-specific policy matters are dealt with in the subsequent chapters where appropriate.

Legislative context

2.2 Section 36 of the Electricity Act 1989 requires that generating stations with a capacity of more than 50 MW shall not be constructed, extended or operated except in accordance with a consent granted by Scottish Ministers. Part (5) of the same section allows for the consent to include such conditions (including conditions as to the ownership or operation of the station) as appear to the Scottish Ministers to be appropriate and shall continue in force for such period as may be specified in or determined by or under the consent.

2.3 Schedule 8 (2) of the same Act requires Scottish Ministers to serve notice of any section 36 application on the relevant planning authority. Where the planning authority objects to the application, Ministers are obliged to hold a public inquiry and to consider the objection and the report of the inquiry prior to deciding to give consent.

2.4 Schedule 9 of the Electricity Act 1989 sets out those aspects that must be considered for the preservation of amenity and fisheries. Paragraph 3 (1) Part (a) requires the licence holder to consider the "...desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". Part (b) of the same paragraph also requires them to do what they reasonably can "... to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects".

2.5 In considering the application for the licence, paragraph 3 (2) of Schedule 9 requires Scottish Ministers to have regard to: (1) the desirability of the matters mentioned in paragraph 3(1)(a) of Schedule 9; and (2) the extent to which the person by whom the proposals were formulated has complied with his duty.

2.6 In addition, Schedule 9, paragraph 3 (3) of the Electricity Act 1989, requires that in exercising any relevant functions, the licence holder and the Scottish Ministers "shall avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters".

2.7 Section 57(2) of the Town and Country Planning (Scotland) Act 1997 states that "On granting or varying a consent under section 36 or 37 of the Electricity Act 1989, the Scottish Ministers may give a direction for planning permission to be deemed to be granted, subject to such conditions (if any) as may be specified in the direction."

2.8 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 came into force on 16 May 2017 and replaced the 2000 Regulations of the same name. Regulation 40(2) of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 set out the transitional arrangements, which apply to this application as a scoping opinion was sought and an Environmental Statement was submitted prior to 16 May 2017. These transitional arrangements allow the Environmental Statement to be treated as the Environmental Impact Assessment Report (EIA Report), for the purposes of the 2017 regulations. For the avoidance of doubt, where we have referred to the Environmental Statement produced in support of this scheme, this should be treated as the 'EIA report'.

Policy context

2.9 The policy context is set out in:

- Volume 2 of the Environmental Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>) (Chapter 2 – Planning and Policy Context; Chapter 9 – Cultural Heritage and archaeology; Chapter 10 – Hydrology, geology and hydrogeology; Chapter 11 – Noise; and Chapter 15 – Socio-economic and tourism assessment);
- Environmental Statement Addendum (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>);
- Environmental Statement Planning Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519762>);
- The Dumfries and Galloway Council Planning Committee Report (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560349>) (where the proposal is assessed against relevant policy provisions and guidance).
- Written statements on updates in policy since the production of the Environmental Statement from the applicant (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563145>) and responses to this by Dumfries and Galloway Council (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563151>);
- Hearing statements on policy from the applicant (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560336>) and Dumfries and Galloway Council (<http://www.dpea.scotland.gov.uk/Document.aspx?id=566903>);
- Statement of agreed matters, including policy issues (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563056>);
- Closing statements from the hearing on policy from the applicant (<http://www.dpea.scotland.gov.uk/Document.aspx?id=577467>) including comments in respect to relevant decisions (<http://www.dpea.scotland.gov.uk/Document.aspx?id=639732>) and Dumfries and Galloway Council (<http://www.dpea.scotland.gov.uk/Document.aspx?id=576487> and <http://www.dpea.scotland.gov.uk/Document.aspx?id=579004>) ;
- Further written submissions in response to a procedure notice issued 23 September 2019; requesting response to updated national energy policy position, declaration of climate emergency and adoption of Dumfries and Galloway Council Local Development Plan 2 from the applicant (<http://www.dpea.scotland.gov.uk/Document.aspx?id=639725>) and the Council (<http://www.dpea.scotland.gov.uk/Document.aspx?id=639719>).

2.10 The applicant's Environmental Statement included a planning statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>), which set out the policy and legislative context for the proposal, including reference to international agreements and obligations and targets for renewable energy generation. The report for the Dumfries and Galloway Planning Committee (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560349>) set out the policy position in relation to the local development plan.

2.11 An updated position statement in respect of policy was provided by the applicant (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519762>). Both parties also produced

updated positions on policy, hearing statements and closing submissions in relation to planning policy issues. In addition, the applicant and Dumfries and Galloway Council produced a statement on agreed matters relating to policy (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563056>).

2.12 In the statement of agreed matters, dated November 2018, the applicant and council agreed that European, UK and Scottish Government energy policy will not be contested on the basis of it being established policy. They also agreed the most relevant renewable energy policy documents at EU, UK and Scottish Government levels. We agree with this and our assessment takes account of the following:

- The EU Renewable Energy Directive, European Commission, (March 2009);
- The EU 2030 Energy and Climate Change Policy (January 2014);
- The UK Renewable Energy Strategy (2009);
- The UK Renewable Energy Roadmap (July 2011);
- The UK Renewable Energy Roadmap Update (2013);
- The 2020 Routemap for Renewable Energy in Scotland (2011);
- The Scottish Electricity Generation Policy Statement (2013);
- The 2020 Routemap for Renewable Energy in Scotland – Update (2015);
- Letter of 11 November 2015 from Chief Planner to all Heads of Planning in relation to energy targets and SPP;
- The UK Clean Growth Strategy (2017);
- The UK Industrial Strategy (2017);
- The Scottish Government: Scottish Energy Strategy (December 2017);
- The Scottish Government: Onshore Wind Policy Statement (December 2017);
- The Scottish Climate Change Plan (2018);
- The Climate Change (Emissions Reduction Targets) (Scotland (Bill) 2018;

2.13 Based on these documents, the applicant and the council agreed that the Scottish Government's 100% renewable electricity target for 2020 is not a cap (as confirmed in the Chief Planner's letter cited above). They also agreed that United Kingdom renewable energy and electricity targets are also of relevance.

2.14 In October 2019, in recognition of the First Minister announcing a Climate Emergency and that Dumfries and Galloway had formally adopted an updated local development plan, we invited the applicant and Dumfries and Galloway Council to provide further written submissions to take account of these updates in national and local policy linked to renewable energy.

2.15 In response, the applicant identified the following updated and new policy documents as important:

- The Committee on Climate Change Reports of May and July 2019;
- The Scottish Government's declared position in relation to the 'Climate Emergency';
- The latest UK position as expressed in the 'Green Finance Strategy – Transforming Finance for a Greener Future' of July 2019;
- The Scottish Government's 'Programme for Government' (2019); and
- The declared Climate Emergency in Dumfries and Galloway.

2.16 The applicant also referred to the position of Reporters in two recent s.36 and Appeal Decision Notices, in respect of energy policy (Pencloe, Hopsrig).

2.17 Dumfries and Galloway Council noted that there had been no changes in policy that would alter their previous comments with respect to the policy and approach to be applied in this application.

2.18 The Committee on Climate Change report 'Net Zero – UK's Contribution to Stopping Global Warming', which was published in May 2019 recommended new, stricter emissions targets of net zero greenhouse gasses by 2050 for the UK as a whole and by 2045 in Scotland. These targets would represent a strengthening of the previous targets of an 80% reduction by 2050 for the UK as a whole. They would also meet the UK's obligations under the Paris Agreement. Even so, the report notes that current policy is insufficient to meet the 80% targets. Possible scenarios to achieve the move to net zero would involve approximately doubling electricity demand, with all power produced from low carbon sources (compared to 50% today).

2.19 On 27 June 2019 the UK Government passed an amendment to the Climate Change Act 2008, putting into legislation its commitment to end the UK's contribution to global warming by 2050 by way of 100% reduction of greenhouse gases. Commitment to these targets was also set out in the UK's updated policy position in relation to Climate Change, which was set out in 'Green Finance Strategy – Transforming Finance for a Greener Future' in July 2019.

2.20 Within Scotland, the First Minister declared a 'Climate Emergency' in April 2019 and the Climate Change Secretary has stated (14 May 2019) that 'the next National Planning Framework and review of Scottish Planning Policy will include considerable focus on how the planning system can support our climate change goals'. The Scottish Government's programme for 2019-20 sets out proposals for moving towards net zero emissions. These include an updated Climate Change Plan and also amendments to The Climate Change (Emissions Reduction Targets) (Scotland) Bill.

2.21 A Climate Emergency Response Group has also been formed. Asks of this group include making regional land use plans for maximising the potential to contribute against the fight against climate change; and completion of plans for how Scotland generates the renewable electricity required to reach net zero emissions of greenhouse gases.

National Planning Policy

2.22 In their statement of agreed matters, the applicant and the council agreed that the relevant policy was set out in:

- National Planning Framework 3 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563058>); and
- Scottish Planning Policy, 2014 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563057>).

National Planning Framework 3

2.23 The National Planning Framework 3 (NPF3) is the spatial expression of the Scottish Government's Economic Strategy, and of Scottish Ministers' plans for development and

investment in infrastructure. It sets out a vision for Scotland as a successful, sustainable place; a low carbon place; a natural resilient place; and a connected place.

2.24 In relation to a low carbon place, NPF3 sets priorities that set a clear direction of travel consistent with climate change legislation. It supports the reduction of greenhouse gases through production of electricity from renewable resources, setting a target of a reduction in greenhouse gas emissions of at least 80% by 2050.

2.25 The document recognises Scotland's significant wind resource, and that electricity generation from wind continues to rise as part of a suite of renewable energy opportunities. It sets out the wish of the Scottish Government that at least 30% of overall energy demand should be met by renewables by 2020, which includes generating the equivalent of at least 100% of gross electricity consumption from renewables. Onshore wind generation is recognised as making a significant contribution towards meeting these targets.

2.26 In relation to a natural, resilient place, Scottish Ministers' set out their intention to respect, enhance and make responsible use of Scotland's natural and cultural assets. Landscape is seen as an important asset and the document sets out an intention to continue strong protection for Scotland's wildest landscapes. The document also notes the importance of landscapes closer to settlements in sustaining local distinctiveness and cultural identity, and in supporting health and well-being. NPF3 sets out that a planned approach to development helps to strike the right balance between safeguarding irreplaceable assets and enabling change in a sustainable way.

Scottish Planning Policy 2014

2.27 The purpose of Scottish Planning Policy (SPP) is to set out national planning policies which reflect Scottish Ministers' proprieties for operation of the planning system and for the development and use of land.

2.28 In evidence, the parties drew on paragraphs 13, 27, 28, 29, 32, 33, 161 – 166, 169 and 170 of Scottish Planning Policy. We agree that these are the relevant parts of the policy for consideration of this application. In summary, these paragraphs make the following provisions:

- Paragraph 13 sets out the four planning outcomes, which support the vision for planning in Scotland: (1) a successful, sustainable place; (2) a low carbon place; (3) a natural resilient place; and (4) a more connected place.
- Paragraph 27 introduces a presumption in favour of development that contributes to sustainable development.
- Paragraph 28 establishes that the planning system should support economically, environmentally and socially sustainable places by enabling development that balances the costs and benefits of a proposal over the longer term. The aim is to achieve the right development in the right place, not to allow development at any cost.
- Paragraph 29 sets out 23 principles which should be used to guide policies and decisions in determining the extent to which a development contributes to sustainable development.
- Paragraph 32 sets out the relationship between the presumption in favour of sustainable development and the statutory status of the development plan in decision-making.

- Paragraph 33 sets out the approach to decision making and the importance of the presumption in favour of development that contributes to sustainable development, where the development plan is out of date or does not contain policies relevant to the development.
- Paragraphs 161-166 set out policies specific to planning for onshore wind developments. Paragraph 161 requires planning authorities to establish a spatial framework to guide onshore wind developments using criteria set out in Table 1. These are identification of areas where wind farms will not be acceptable (Group 1), areas of significant protection (Group 2) and areas with potential for wind farm development (Group 3). Subsequent paragraphs provide further guidance on the identification and application of the framework.
- Paragraph 169 sets out the development management considerations that need to be taken into account when determining applications for windfarm development.
- Paragraph 170 notes that areas identified for wind farms should be suitable for use in perpetuity. Whilst consents may be time limited, windfarms should be sited and designed to minimise impacts and to protect and acceptable level of amenity for adjacent communities.

The development plan

2.29 The relevant statutory development plan at the time of the application and the hearing, comprised the Dumfries and Galloway Council Local Development Plan 2014 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563059>) and Part 1 Wind Energy Development: Development Management Considerations Supplementary Guidance (2017) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563061>).

2.30 The council's report to the planning committee (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560349>) set out the policies within the local development plan that were considered to be relevant to the proposed development as:

- OP1 – Development Considerations
- OP2 – Design Quality of New Development
- ED16 – Protection and Restoration of Peat Deposits as Carbon Sinks
- HE1 – Listed Buildings
- HE3 – Archaeology
- HE4 – Archaeologically Sensitive Areas
- HE6 – Gardens and Designed Landscapes
- NE2 – Regional Scenic Areas
- NE3 – Sites of International Importance for Biodiversity
- NE4 – Species of International Importance
- NE5 – Sites of National Importance for Biodiversity and Geodiversity
- NE7 – Trees and Development
- NE11 – Supporting the Water Environment
- NE13 – Agricultural Soil
- IN1 – Renewable Energy
- IN2 – Wind Energy
- IN8 – Surface Water Drainage & Sustainable Drainage Systems (SUDS)

- T2 – Location of Development / Accessibility

2.31 Since the hearing was conducted, the council has adopted the Dumfries and Galloway Council Local Development Plan 2 (LDP2). Updated Supplementary Guidance 'Wind Energy Development: Development Management Considerations' has also been prepared to accompany LDP2

(<http://www.dpea.scotland.gov.uk/Document.aspx?id=563063>), but is still in draft form.

Whilst this is a material consideration, it does not currently form part of the statutory development plan.

2.32 The adopted LDP2 includes many of the policies included within the previous plan, some of which have been modified in terms of their numbering. For example, the policy which deals with Sites of International Importance for Biodiversity is numbered Policy NE3 in the 2014 LDP, but is numbered NE4 in LDP2. NE3 within LDP2 is a new policy, which deals with protection of areas of Wild Land.

2.33 In its planning policy update, the applicant has identified the following policies as relevant:

- OP1 – Development Considerations
- OP2 – Design Quality and Placemaking
- IN1 – Renewable Energy
- IN2 – Wind Energy
- HE6 – Gardens and Designed Landscapes
- HE1 – Listed Buildings
- HE3 – Archaeology
- HE4 – Archaeologically Sensitive Areas
- NE4 – Sites of International Importance for Biodiversity
- NE5 – Species of International Importance
- NE6 – Sites of National Importance for Biodiversity
- NE11 – Supporting the Water Environment
- NE12 – Protection of Water Margins
- NE14 – Carbon Rich Soil
- NE15 – Protection and Restoration of Peat Deposits as Carbon Sinks
- T1 – Transport Infrastructure
- CF4 – Access Routes

2.34 The Council has not provided an updated list of policies within LDP2, which it considers relevant.

2.35 The discussions at the hearing included a consideration of both the statutory development plan and the evolving LDP2. Nevertheless, following examination of the proposed LDP2, there have been changes to certain key policies. Consequently, following adoption of LDP2, we invited parties to provide us with their updated positions in relation to the adopted plan.

2.36 It is a matter of agreement between the parties that policies IN1 and Policy IN2 are the principal policies against which the development should be assessed. In their further submissions both parties have confirmed that policies IN1 and IN2 within LDP2 remain the key policies for consideration of this application.

2.37 Policy IN1 sets a general framework for assessing all forms of renewable energy. It sets out the factors that will be considered in determining the acceptability of any proposal. These are:

- Landscape and visual impact;
- Cumulative impact;
- Impact on local communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker;
- The impact on natural and historic environment (including cultural heritage and biodiversity);
- The impact on forestry and woodlands;
- The impact on tourism, recreational interests and public access.

2.38 It also sets out the scope of information that will be required to enable the assessment of proposed developments for renewable energy and provides criteria for support for proposals for district heating systems.

2.39 Policy IN2 deals specifically with wind energy developments. It states that the Council will support wind energy developments that are located, sited and designed appropriately. It also sets out the factors that will be considered when determining the acceptability of a proposal. These are:

- Renewable energy benefits
- Socio-economic benefits
- Landscape and visual impacts
- Cumulative impact
- Impact on local communities and residential interests
- Impact on infrastructure
- Impact on aviation and defence interests
- Other impacts and considerations (including impacts on the natural environment, tourism and recreational interests and public access).

2.40 A Spatial Framework Map (Map 8) accompanies Policy IN2. This provides strategic guidance for the location of wind developments. The map shows the application site to lie within an 'area with potential for wind farm development'. At the hearing, it was common ground between the parties that the application site lies within an area that equates to a 'Group 3' area as defined in Table 1 of Scottish Planning Policy i.e. an area with potential for windfarm development.

Supplementary Guidance

2.41 Policy IN2 notes that the Spatial Framework Map must be read in conjunction with the supplementary guidance and its Appendix, the Dumfries and Galloway Wind Farm Landscape Capacity Study. As noted above, this supplementary guidance is currently in draft form and will replace similar Supplementary Guidance that supported Policy IN2 in the previous local development plan. As it is in draft form, it does not form part of the statutory development plan. Nevertheless, it has been approved by the Full Council for consultation purposes and is a material consideration

2.42 The Supplementary Guidance provides further details on the assessment process, including more detailed development management considerations and includes separate

mapping of the constraints relevant to the considerations. It sets out that assessments will be made by balancing all applicable factors and consideration of all relevant policies within LDP2. It notes that proposals that are detrimental in one or more factors would not automatically result in a proposal being recommended for refusal.

2.43 In relation to landscape and visual considerations, the guidance requires an assessment of “the extent to which the proposal addresses and takes into account the guidance contained in the Dumfries and Galloway Windfarm Landscape Capacity Study.”

2.44 The Dumfries and Galloway Windfarm Landscape Capacity Study forms an appendix to the draft Supplementary Guidance for windfarms. It is described as a supportive study, “the consideration of which does not replace the need to assess the landscape or visual impacts of individual proposals.”

2.45 The study provides an assessment of the sensitivity of landscape character types and character areas to different sizes of wind turbine development. The document states that the findings, conclusions and recommendations can be used to inform strategic planning for wind energy developments, with the detailed assessments providing more specific guidance to be used when considering development proposals. It also notes that landscape and visual sensitivity only comprise one of a number of issues that need to be considered in determining the acceptability of a particular development. The Dumfries and Galloway Windfarm Landscape Capacity Study also states that strategic guidance does not replace the need for individual landscape and visual impact assessments and/or Environmental Assessments for individual wind energy developments.

Eskdalemuir Seismic Array – Interim Guidance

2.46 The Eskdalemuir Seismic Array is one of 170 seismic stations across the globe, which is used to monitor compliance with the Comprehensive Nuclear Test Ban Treaty. Safeguard of the capabilities of the station is the responsibility of the Ministry of Defence. Interim guidance provides advice to planning authorities in considering proposals for wind energy development within a 50km Eskdalemuir Consultation Zone. Although the proposed scheme lies outwith the 50km area, the applicant provided details of the exclusion zone at the hearing on policy matters, to provide context for understanding landscape and visual issues.

CHAPTER 3: LANDSCAPE AND VISUAL EFFECTS INCLUDING AVIATION LIGHTING

3.1 A landscape and visual impact assessment is presented in Chapter 6 of the Environmental Statement <http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>. To reflect the changed cumulative baseline, an updated assessment was produced and contained within an Environmental Statement Addendum <http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>.

3.2 Landscape and visual impacts were considered at an inquiry session. Evidence was heard from witnesses on behalf of the applicant and Dumfries and Galloway Council. The applicant and council submitted the following documents expanding upon landscape and visual impact matters:

- Applicant inquiry statement <http://www.dpea.scotland.gov.uk/Document.aspx?id=560333>
- Applicant precognition <http://www.dpea.scotland.gov.uk/Document.aspx?id=565412>
- Applicant inquiry report <http://www.dpea.scotland.gov.uk/Document.aspx?id=563160>
- Council inquiry statement <http://www.dpea.scotland.gov.uk/Document.aspx?id=563940>
- Council precognition <http://www.dpea.scotland.gov.uk/Document.aspx?id=566830>
- Council supplementary visual material (Figures 1 to 5) <http://www.dpea.scotland.gov.uk/Document.aspx?id=560345>
- Applicant closing submission <http://www.dpea.scotland.gov.uk/Document.aspx?id=577467>
- Council closing submission <http://www.dpea.scotland.gov.uk/Document.aspx?id=576487>

Evidence on aviation lighting effects is contained in written submissions:

- Applicant written submission <http://www.dpea.scotland.gov.uk/Document.aspx?id=563955>
- Applicant position statements <http://www.dpea.scotland.gov.uk/Document.aspx?id=546130>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=546133><http://www.dpea.scotland.gov.uk/Document.aspx?id=547222>
- Civil Aviation Authority response <http://www.dpea.scotland.gov.uk/Document.aspx?id=519732>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=562247>
- Council written submission <http://www.dpea.scotland.gov.uk/Document.aspx?id=548155>
- SNH advice to applicant, March 2017 <http://www.dpea.scotland.gov.uk/Document.aspx?id=533356>
- SNH consultation response <http://www.dpea.scotland.gov.uk/Document.aspx?id=519747>
- SNH further advice, June 2017 <http://www.dpea.scotland.gov.uk/Document.aspx?id=563101>
- SNH further written submissions <http://www.dpea.scotland.gov.uk/Document.aspx?id=553541>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=558625>

Statement of agreed matters

3.3 A Statement of Agreed Matters was submitted jointly by the applicant and the council prior to the inquiry <http://www.dpea.scotland.gov.uk/Document.aspx?id=563056>.

The following points are worth summarising. It is agreed that:

- the visualisations were produced in general accordance with: SNH Good Practice Guide - Visual Representation of Windfarms; and the Landscape Institute Advice Note - Photography and Photomontage in Landscape and Visual Impact Assessment; or as otherwise agreed between the applicant and SNH.
- the selected viewpoints are representative of a broad range of receptors.
- the visualisations are only intended as an aid to assessment.
- Dumfries and Galloway Council has not objected on the basis of any impacts from aviation lighting and considers that this matter can be dealt with by condition.
- the cumulative assessment was based on an appropriate approach using SNH Guidance – Assessing the Cumulative Impact of Onshore Wind Energy Developments, 2012.
- some changes have arisen to the cumulative context since the Environmental Statement and Addendum was prepared (update provided).

3.4 A further update to the cumulative context was provided after the inquiry and agreed by the council <http://www.dpea.scotland.gov.uk/Document.aspx?id=573498>

The main points for Dumfries and Galloway Council on landscape and visual impacts

3.5 The council's concerns cover both landscape and visual effects. The grounds for objection are not considered to be narrowly drawn. Significant effects associated with wind farm developments are often limited in geographic extent and the nature of effects is as important to consider as the likely number and/or extent of receptors affected.

3.6 The proposal would have an adverse impact on two Landscape Character Types (LCT's) - the Carsphairn unit of the Southern Uplands with Forest LCT (19a) and the Southern Uplands LCT (19). It will also influence the character of the adjacent Carsphairn unit of the Southern Uplands LCT and the Upper Glenkens unit of the Upper Dales LCT. The council is critical generally of the judgements made on landscape sensitivity which are based on broader LCTs and not the more locally specific landscape units within them.

3.7 LCT 19a includes the proposed turbines on Meaul Hill and extends into neighbouring East Ayrshire. The council does not dispute the findings of the Environmental Statement and the localised adverse effects. The proposal would also generally fit with the scale and simple landform of the upland landscape. Although this LCT is classified as a 'wind farm landscape', good landscape design principles have not been adopted with the development proposal. The larger turbines at Meaul Hill would increase the diversity of turbines present and exacerbate the already cluttered and fragmented character. This would result in significant adverse effects on the landscape.

3.8 LCT 19 would be subject to significant but localised cumulative effects. Within the Carsphairn Unit, contrary to the Environmental Statement findings, only a few operational turbines from Windy Standard I and II are present although the consented Windy Rig wind farm sits wholly within it. With reference to the Dumfries & Galloway Windfarm Landscape Capacity Study (DGWLCS), the council notes that this character type has a high sensitivity

to turbines higher than 50 metres. The proposed Waterhead Hill turbines would, when seen alone or in combination with Windy Standard II and Windy Rig wind farms, impact on the setting of Cairnsmore of Carsphairn, detracting from its distinctive sculptural form and the experience of naturalness. The council disputes the applicant's assertions that the proposal would comprise 'infill' development – the Waterhead Hill turbines would be located on the outer edge of existing and consented developments and introduce turbines closer to Cairnsmore of Carsphairn leading to a major, adverse and significant effect.

3.9 The council agrees that the impact of the proposal on the Upper Dales LCT – Upper Glenkens unit would be unlikely to be significant due to the relative limited visibility, particularly from lower within the valley.

3.10 The council is less concerned about distant views of the proposed wind farm as there is a degree of containment offered by the local topography, a lack of nearby roads and settlements, and a visual overlap with other wind farms present. Its key concerns relate to the visual impact in the local area with significant adverse effects likely to affect well-used recreational routes.

3.11 The council produced additional visualisations (A and B) and Zone of Theoretical Visibility (ZTV) maps from the Green Well Core Path leading up to the summit of Cairnsmore of Carsphairn (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560345>). The planned felling of forestry on Dodd Hill could result in up to seven proposed turbines on Waterhead Hill (four seen above hub height) at just over 3km distance coming into view. The turbines would displace the focus provided by the steep-sided bulky form of Cairnsmore of Carsphairn and appear to encroach on its setting. This would have a major adverse effect on views and the experience of walking this route, although this effect is likely to be only temporary given the proposed replanting.

3.12 Along the route further up Cairnsmore of Carsphairn the proposed turbines would form dominant moving features in very close proximity. This would significantly diminish the sense of naturalness and seclusion experienced by walkers. The Waterhead Hill grouping would contribute to the increased extent of turbines (along with Windy Standard II and Windy Rig) located in a concentrated arc very close to the summit. Development would extend around and occupy more of the foreground and the immediate setting of the hill, with substantial and adverse effects.

3.13 At the summit of Cairnsmore of Carsphairn and at the northern extent of the plateau (Viewpoint 1), Windy Standard II appears prominent in the foreground with the noticeably smaller Windy Standard I turbines behind. The taller turbines at Afton wind farm are also evident, along with Hare Hill and Blackcraig Hill wind farms. The council considers there to be a fragmented and cluttered character in the view north. The proposed Meaul Hill turbines would contribute to the visual clutter of different sizes of turbines and the variations in blade rotation speed, thickness of towers and design would be evident. This would exacerbate the already detractive scene to the north.

3.14 The summit of Cairnsmore of Carsphairn is very open, elevated and has a sense of space and openness. This also allows the structural form of the hill to be appreciated contributing to its overall setting. The proposed Waterhead Hill turbines would appear very large and prominent and encroach upon the setting of the hill and would appear to shrink the expanse. While this effect already occurs in relation to Windy Standard and will be

exacerbated by the consented Windy Rig wind farm, the proposed development will contribute further to this change.

3.15 To the east, towards the Southern Uplands LCT, there are attractive views from the summit of the open uplands. Windy Rig will extend turbines into this area and contribute to the perceived erosion of the landscape setting of Cairnsmore of Carsphairn.

3.16 Within the Water of Deugh Valley, the Waterhead Hill turbines (in addition to those at South Kyle and Benbrack) would have an increased influence and detract from the views and visual amenity of the valley. Although the proposal would not give rise to significant effects at Knockengoroch (represented by Viewpoint 2), with the removal of the forestry the turbines would feature in the immediate setting affecting the amenity of residents (using access roads), walkers and other visitors to the valley and the heritage trail.

3.17 The Environmental Statement focuses on views from the west and from other hills in the Dumfries and Galloway Hills Regional Scenic Area; it does not acknowledge the more dramatic views of Cairnsmore of Carsphairn from Bardennoch Hill (Viewpoint 8) and the adverse effect on the setting of this landmark hill.

3.18 The proposal is considered contrary to Policies IN1 and IN2 of the local development plan as it would have an unacceptable impact on landscape and the amenity of the surrounding area. The design (in terms of the siting and size of turbines) does not respect the main features of the site or the wider environment resulting in significant detrimental impacts on landscape character and on visual amenity. It is also considered contrary to the guidance for the Carsphairn unit in DGWLCS by affecting the character, setting and views to and from Cairnsmore of Carsphairn and the resulting contrast with smaller turbines close-by. Similar reasons are submitted with regard to cumulative effects.

The main points for Scottish Natural Heritage (SNH) on landscape and visual impacts

3.19 SNH did not object and did not take part in the inquiry. <http://www.dpea.scotland.gov.uk/Document.aspx?id=563100>. However, they did express concern that the proposal would cause significant and adverse visual, landscape and cumulative effects. While some of these effects are considered localised in extent and largely contained, views from elevated locations are more widespread.

3.20 SNH considers the main adverse effects would be on views from summits and from Loch Doon and parts of the Glen Kens. The disparity in size between the proposed turbines within the separate clusters at Meaul Hill and Waterhead Hill will be evident on Cairnsmore of Carsphairn and from the Merrick. This would add to the horizontal spread of wind development in these views. SNH are critical of the lack of comparative ZTV in relation to the two separate clusters. At some elevated locations and at lower levels, particularly from the area of Loch Doon, the proposed turbines on Waterhead Hill would often be visible due to their more prominent location on the enclosing landform to the east which would detract from the focal nature of the loch and diminish the scale of the hills. From the west, the Waterhead Hill turbines would be very noticeable, sky-lined features with Meaul Hill turbine blade tips and some entire blade lengths also visible.

3.21 The proposal would have a significant effect upon LCT 19a, an area where the effects of wind farm development is well established. From key summits, including Cairnsmore of Carsphairn and Merrick (Viewpoint 15), the turbines would dominate the

panoramic northward views in combination with Benbrack, South Kyle and Windy Standard, giving the impression of a very developed horizon. The proposal would also add to the multiple developments on the hills that contain Loch Doon. From this area and from parts of the Glen Kens, the proposal would be seen to consolidate and thicken the band of development linking Benbrack, South Kyle and Windy Standard. The Waterhead Hill turbines, particularly, would contribute to the effect of Benbrack and South Kyle dispersing development down toward the lower edge hills where it would dominate the skyline.

The main points for Carsphairn Community Council on landscape and visual impacts

3.22 Carsphairn Community Council objects to the proposal. <http://www.dpea.scotland.gov.uk/Document.aspx?id=519731>. The basis for the objection relates to a survey of residents. The community council is concerned that the proposal would contribute to around 200 turbines in total in the area which is considered too many. The proposal would lead to industrialisation of the landscape and encroachment on Cairnsmore of Carsphairn, an iconic and significant landmark. Adverse impacts on the Bowburn and Deugh glens are specifically referred to. The community council considers that localised effects and local opinion should not be dismissed in favour of national or regional perspectives.

The main points for John Muir Trust on landscape and visual impacts

3.23 John Muir Trust objects to the proposal on the grounds of visual impact. <http://www.dpea.scotland.gov.uk/Document.aspx?id=519753>. The height of the tallest proposed turbines is considered to have a significant visual impact on the qualities of the wild land area (WLA1 Merrick). It is considered that the proposal would have a significant and detrimental effect both in terms of combined visibility and sequential impact with other wind farms and would make a major contribution to cumulative overload in the area.

The main points for the applicant on landscape and visual impacts

3.24 The proposed development is not considered to cause a significant effect on the Regional Scenic Area. The proposal would be visible from the open summits of the Merrick range and Meikle Milyea at distances of between 17km and 20km and would appear in the background views as a single group of turbines within an extensive forested upland landscape. Windy Standard and Whether Hill would also be visible. From Croignit, Cairnsgarroch and Meaul Hills, all 20 turbines would be seen at distances of between 8km and 11km and in conjunction with existing Windy Standard wind farm.

3.25 From Cairnsmore of Carsphairn, the proposed development would represent a notable extension to the cluster of wind farms. This would further diversify the typologies of turbines in the view, bringing large scale wind energy development closer to receptors. However, from this viewpoint, the strong characterisation of the landscape by wind energy development is very clear. The proposed development would be seen as an extension to the Windy Standard and would simply consolidate the pattern of development. Once the numerous proposed wind farms are taken into account, including Benbrack and South Kyle, the residual cumulative effect on this part of the Regional Scenic Area would be moderate and not significant. The conclusions reached by SNH are in agreement with this assessment.

3.26 Within the Southern Uplands, from the elevated position of Blackcraig Hill (Viewpoint 7), all 20 proposed turbines would be visible below the skyline. Due to the variation in turbine geometry with existing wind farms present, and also its proximity and prominence on an exposed ridgeline, the proposed development would have a major residual effect. It would however be entirely overlapped by Afton and Windy Standard wind farms in these views. Seen in the context of existing and consented wind farms, the residual cumulative effect on this part of the East Ayrshire Sensitive Landscape would be moderate/minor.

3.27 There would be potential views of the proposed development within the Doon Valley. A relatively limited viewshed exists from the Craigengillan Garden and Designed Landscape, which would be mostly overlapped by the Benbrack array. To the west of Loch Doon up to 20 turbines would be visible on the skyline although there would be considerable variation in visibility due to existing topography and landscape features. The proposed development would appear of larger scale than the Windy Standard and Afton wind farms, however the introduction of Windy Rig, Benbrack and South Kyle would reduce its overall prominence. From Viewpoint 10 (Loch Doon), the Benbrack turbines would be seen on a prominent edge and more noticeable than the proposed development.

3.28 On the whole, there would be no significant effects on the designated areas. Similarly, there would be no significant effects on the special qualities of the designations within the South Lanarkshire Special Landscape Areas.

3.29 The proposed development is not considered to significantly affect the wild land area (WLA1 Merrick). All 20 turbines would be visible from the elevated summits in the Merrick range and would appear as a single group within an extensive forested landscape. Within this view, there would be partial overlapping with the existing Windy Standard wind farm and Whether Hill developments. There would also be consistency with the existing pattern of development and the cumulative effect with existing and consented wind farms would be similar. Overall, the proposal would have a moderate cumulative effect but not significant effect on the wild land area.

3.30 The proposal is located within the LCT 19a. An established characteristic of this landscape is the presence of both forestry (and large scale felling) and wind turbines. The proposed turbines would be consistent with the position of existing turbines along the top of pronounced ridges and within forested areas. The proposal would be positioned at the centre of the upland between Glen Afton and incised landscape of the A713 corridor and Doon Valley with minimal significant effects outwith the LCT. While it would contribute to a wind farm landscape between Waterhead Hill and Gallow Rig, it would also form part of the clustering of development and avoid the dispersal of turbines.

3.31 The council's evidence at the inquiry focused on additional effects rather than, more appropriately, in-combination effects. The consented Benbrack and South Kyle wind farms, once constructed, will represent a considerable focusing of development within and adjoining this LCT. When comparing the different AOD heights between the turbines proposed at Meaul Hill (627 metres) with South Kyle (671 metres), Windy Standard II (711 metres) and Afton (706 metres), those on Meaul Hill would be enclosed by higher wind turbines in AOD terms. Although Benbrack (575 metres AOD) would be lower than Meaul Hill, it would be perceivably more prominent in views from Loch Doon. Wind farms are already a defining characteristic of this landscape unit and the proposal would consolidate an existing pattern of development (not create it) and represent a logical rounding-off of

development in this area. Therefore, although the proposal would have a major localised effect, it would have a moderate/minor residual cumulative effect on this LCT.

3.32 Within the LCT 19 – Carsphairn unit, which includes Cairnsmore of Carsphairn, up to 20 turbines would be seen from elevated summits on the northern side of this unit. There are already a number of wind farms including Windy Standard and the consented Whiteside Hill within this LCT. The proposal would be perceived as part of a broader developed context and have a geographically limited viewshed, resulting in significant, but localised major/moderate cumulative effect. Consequently, the proposal would not undermine the overall integrity of this LCT, with the majority not subject to cumulative effects.

3.33 Within the Rugged Granite Uplands LCT, all 20 of the proposed turbines would be visible from elevated summits and seen in conjunction with the existing Hare Hill and Windy Standard wind farms. Significant major/moderate residual effect would be localised to a small number of elevated positions at the northern end of the Rhinns of Kells unit; at Black Craig and Knockower. From further away at the summits Meaul and Meikle Milyea, the residual cumulative effect would be moderate reducing to moderate/minor once the consented wind farms are taken into account.

3.34 Elsewhere, significant effects on the Foothills LCT, the Southern Uplands LCT at Blackcraig Hill and the South Uplands with Forest LCT at Hillend Hill would be confined to particular locations and not have a wider effect. With the consented wind farms taken into account, the proposal would form a relatively limited contributor to the overall cumulative effect on these LCT's.

3.35 The effect on the visual amenity of settlements would be limited. This is due to the restriction on visibility by existing topography and vegetation and/or by distance. No significant cumulative effects are identified in respect of settlements.

3.36 Key transportation routes include the A70 and A76 roads where there would be intermittent views of the turbines along with views of other wind farms representing a moderate/minor cumulative effect. From other transportation routes, there would either be no views of the turbines or limited views in conjunction with other wind farms, resulting in no significant cumulative effects.

3.37 No significant effects including cumulative effects are anticipated for nationally or regionally important recreational routes. Localised significant cumulative effects are predicted on a number of local Core Paths including Carsphairn Forest and Knockgorroch. From more open areas of the forest, up to 16 turbines would be seen on the skyline at close proximity, equating to a major residual effect. Localised cumulative effects would arise and the difference in turbine geometry would be apparent. However, given the few locations where views of the proposed development would be possible, the overall effect on the amenity of this route would not be significant. From Knockgorroch, a greater number of turbines would be visible from more elevated parts of this route and occupy prominent skyline positions. Again, there would be localised major/moderate cumulative effects but from only a few locations where visibility is possible.

3.38 Viewed from Garryhorn Mine Core Path (Viewpoint 6), the proposed development would not represent a wholly new element in the landscape. It would however occupy a prominent skyline position and seen in conjunction with the existing/consented developments, would represent a significant cumulative effect on the perceived character of

the landscape at this viewpoint. This would remain the case in the event of the other proposed wind farms being constructed resulting in a major/moderate cumulative effect.

3.39 The proposal would be visible from around 5km of the route of the Southern Upland Way. A view from this route is represented by Viewpoint 11 (Benbrack Hill). The proposed wind farm would be seen overlapping with and extending westwards from the Windy Standard II array, but would represent a relatively modest addition to the cumulative loading. Seen in the context of the existing and consented wind farms, the proposed development would result in a moderate/minor effect due to its relative recessive appearance compared to the intervening approved Windy Rig wind farm.

3.40 The Green Well Core Path leads to Cairnsmore of Carsphairn. Walkers are likely to experience views of up to eight proposed turbines from the elevated sections of this route, forming prominent elements in the view. The applicant is critical of the council's visual material presented at the inquiry in that the wireframes for Viewpoint B have been truncated. This has the effect of excluding South Kyle and exaggerating the effect of the proposed turbines at Benbrack and on Waterhead Hill. Further, none of the turbines on Meaul Hill would be visible and most of three turbines and the blades of two others are all that would be visible on Waterhead Hill. Seen in the context of existing and consented wind farms, the proposed development would have a moderate/minor cumulative effect from this route.

3.41 In understanding the 'setting' of Cairnsmore of Carsphairn, it was agreed at the inquiry that this denotes places from which its relevant qualities can be appreciated. In this case, it is not possible to experience the hill in its setting from the council Viewpoints A and B. All that can be experienced is a view from a hill.

3.42 In considering the likelihood of significant adverse effects on the form, prominence, scale and landmark status of Cairnsmore of Carsphairn, only from Bardennoch Hill (Viewpoint 8) would it be possible to see the hill in its landscape context with turbines in the view. From this viewpoint, the proposed development would occupy a prominent skyline position and result in significant (including cumulative) effects on amenity and the perceived landscape character at this point. However, once the proposed South Kyle and Windy Rig developments are taken into account the comparative prominence would be reduced and it would appear broadly consistent with what would be a continuous line of development on the horizon.

3.43 From the summit of Cairnsmore of Carsphairn and Viewpoint 1 there are extensive views. The applicant acknowledges that there is little difference in the distance between the summit and the proposed turbines, and those at Windy Standard I and II. In views north, the proposed development would not draw development closer to the hill. It would also not introduce turbines to an aspect currently without wind farms or significantly increase the influence of wind energy development. Views would overlap with the concentration of other developments and would not be anomalous in the context of the existing or consented wind farms. The proposed development would be seen as an extension to Windy Standard and broadly consistent with the scale of the landscape.

3.44 The effect of proposed different turbine geometry and rotational speeds would add further complexity to the landscape. The proposed development would be consistent with South Kyle turbines at 114 metres. Rotational speeds will also vary from moment to

moment even within a single wind farm. The only noticeable effects in terms of rotational speeds will be with regard to Windy Standard I.

3.45 DGWLCS is considered to be a strategic study of relative sensitivity which gives useful initial locational guidance, but is subordinate to detailed site-specific assessment. The definition of capacity is considered unhelpful as it effectively states that if a development would have any significant impact then there could be no capacity in the landscape to accept it. LCT 19a is regarded as having an overall High-Medium sensitivity in respect of Very Large turbine typology (150 metres+) and no capacity for very large turbines. However the study does not mention the now consented Benbrack and South Kyle wind farms. The potential effects upon Loch Doon and Cairnsmore of Carsphairn are given as the primary reasons for this classification. The ES concludes no significant effects of the proposed development anticipated at these locations when considered in the context of existing/consented wind farms.

3.46 The scope of objection in terms of landscape and visual effects is considered to be extraordinarily narrow and very local, primarily focusing on the height of the Meaul Hill turbines and the location of the Waterhead Hill turbines. There is an intensive cumulative baseline where the landscape is characterised by wind farm development. The proposed development can therefore be accommodated without significant additional cumulative effects. It would not impact on any national landscape designations or on nationally or regionally important recreational routes and it is within a Group 3 area for the purposes of Scottish Planning Policy.

Reporters' conclusions on landscape and visual impacts

Landscape impacts

3.47 Direct effects on the landscape would arise as a result of physical disturbance while indirect effects would occur through consequential changes. We are aware that the proposal would utilise some existing infrastructure from the Windy Standard II site, thereby minimising the additional land take and disturbance. Overall, a total of 16.1 hectares would be subject to long term change with the remainder of the site returned to moorland or forestry. As is likely to be the case with any commercial-scale wind energy development, the proposed works would significantly affect the landscape fabric of the application site itself. However, when judged in the wider landscape context, we are satisfied that the scale of the effect on landscape fabric would not be significant.

3.48 In our assessment of landscape character, we have had regard to the effect on particular landscape designations, other classified landscapes and landscape assessments. There are no national landscape designations within the study area however there are several relevant regional and local landscape designations.

3.49 The Galloway Hills Regional Scenic Area is located approximately 1.8km south of the proposed development and was designated in order to protect the dramatic and scenic qualities of the landscape including much of the Galloway Forest Park. It was extended to include Cairnsmore of Carsphairn and associated peaks within the southern uplands. The effects of the proposed development would be limited in extent and would not diminish the varied character of the uplands or detract from its particular landscape features or undermine the designation's integrity. This area is already characterised as containing wind

farm developments and the proposal would fit with the established and emerging development pattern.

3.50 We find that there would be no significant effects on the local landscape designations, most notably East Ayrshire Sensitive Landscape Area and South Lanarkshire Special Landscape Area.

3.51 The Craigengillan Garden and Designed Landscape is located 9km to the west of the site. The main focus of the designed landscape is along the River Doon. There would be potential visibility of the proposed development but not prominent views from the principal features and ornamental gardens. Overall visibility would also be substantially reduced by the introduction of consented wind farms, particularly Benbrack as represented by Viewpoint A2 (Addendum Figure 1.28)
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>.

3.52 The study area contains the wild land area WLA1 Merrick located approximately 14.1km south west of the site. The wild land area contains the Merrick range. The scope for adverse landscape effects is in respect of the Merrick summit only. The proposed development would be seen in the background of an extensive forested upland landscape, overlapping with other wind farms. Given this context and the overall distances involved, we do not consider the proposed development would significantly affect the wild land area.

3.53 The DGWLCS is a guide to the relative sensitivity of landscapes to wind turbines and is a material consideration to be taken into account. This is further discussed in Chapter 2.

3.54 The study largely adopts the landscape types within the SNH Dumfries and Galloway Landscape Assessment (Review No. 94).
<http://www.dpea.scotland.gov.uk/Document.aspx?id=639724>. The Southern Uplands with Forest LCT (19a) is described as generally comprising an expansive, gently undulating upland plateau of smoothly rounded hills which extends into neighbouring Scottish Borders in the Craik Forest area and into East Ayrshire north of the Carsphairn unit. Extensive coniferous forest covers much of the landscape which tends to mask the underlying landform. Wind farm development is a key feature within the Carsphairn unit of this landscape character type. We note that the consented South Kyle and Benbrack wind farms would also feature in this area. Sensitivity is assessed as High-medium for Very Large turbines (150m+). Cumulative effects are evident among the more elevated locations, from the sensitive Loch Doon area and on the setting and views to the landmark hill Cairnsmore of Carsphairn, which is seen as a key constraint to this turbine typology.

3.55 The applicant clarified at the inquiry that they regard the emerging situation in the vicinity of the site as one of 'landscape accommodation' in terms of the approaches set out in Annex 1 of SNH's 2015 guidance Spatial Planning for Onshore Wind turbines
<http://www.dpea.scotland.gov.uk/Document.aspx?id=563114>
In such circumstances, the aim is to retain the overall character of the landscape, while accepting that development may be allowed which will have an impact on the landscape at the local scale. Suitably designed wind farms therefore can be compatible with this objective.

3.56 The council and applicant are agreeable that significant adverse effects would be localised, principally affecting the Carsphairn unit of this LCT, and that the proposal would not introduce a new feature. It would therefore reinforce the defining characteristic of this

wind farm landscape. We note the council's concerns that the proposal would contribute to a landscape already characterised by disparate wind turbine development. However we also acknowledge the cumulative position as set out in Figures P1 and P2 of the applicant's submission <http://www.dpea.scotland.gov.uk/Document.aspx?id=566800>. In our view, the proposal would consolidate the emerging pattern, infilling the gap between Windy Standard, Benbrack and South Kyle.

3.57 The Southern Uplands LCT (19) has an open character with little woodland or commercial forestry apart from within narrow valleys. This LCT contains more pronounced hills, including the landmark hill of Cairnsmore of Carsphairn and we appreciate the role that the hills play in back-dropping other more settled landscapes. Sensitivity is assessed as High for Very Large turbines (150m+). While we accept the general absence of built development in this area gives it a strong sense of naturalness and degree of seclusion, it is apparent that the immediate area around the proposed site contains part of the built Windy Standard wind farm and would contain the consented Windy Rig.

3.58 The proposed Waterhead group of turbines would feature in views, of varying degrees, from the Carsphairn unit of the Southern Uplands LCT. The council's concerns from this aspect relate to the impact of the Waterhead turbines on the setting of Cairnsmore of Carsphairn and the further complexity that would be added to the landscape. At the northern extents of the Carsphairn unit of the Southern Uplands, the proposed turbines would not constitute a new feature and we agree with the applicant that they would generally be perceived as part of a broader developed context.

Visual amenity impacts

3.59 The proposed development would be located around 2.5km north west of Cairnsmore of Carsphairn, a recognised Corbett at 797 metres AOD. The summit contains a broad plateau with a number of cairns. Panoramic views are possible across the surrounding hills, forested landscape and more open moorland.

3.60 Although the parties agreed at the inquiry with regard to the 'setting' of Cairnsmore of Carsphairn that this concerns the places from which its relevant qualities could be appreciated, they did not agree the relative positions for these places. The council's witness described setting in this instance as about appreciating the character, form and qualities of the landscape feature. This involves consideration of the views to and from it. As a general principle, we agree with the council that views from the plateau, views of the hill and on the route up the hill are important. A sense of space and openness at the summit should also be part of the experience.

3.61 We note the council's earlier recommendations in terms of mitigation measures which include maintaining turbine proportions between Waterhead and Meaul Hills and re-positioning turbines to maximise separation. We accept, however, that overlapping and stacking are an inevitable consequence where such multiple developments are close together. We also acknowledge that there is a lack of consistency amongst existing and consented developments within the area, especially in respect of rotor size, as described by the applicant.

3.62 Our site visits included a visit to the Green Well Core Path that leads to Cairnsmore of Carsphairn. The walk commences at the A713 and then proceeds along a stone track with the hill approached up grassy slopes to the summit. No views of existing turbines are

currently visible along the route up the hill. We agree therefore that there is a sense of tranquillity along this route.

3.63 Once the elevated slopes of Willieanna are reached, we note that there would be visibility of the consented Benbrack wind farm and some visibility of the turbines on Waterhead Hill. It is also likely that South Kyle would be visible from this elevation. As represented by the council's visualisations for Viewpoint A, up to seven of the Waterhead Hill turbines would be visible. In our experience, the focus of views by a walker going up this route would be uphill and not towards Waterhead Hill. From this aspect there would also be no actual views of the summit or the ability to appreciate the overall shape and character of the hill. When resting on the route up the hill and consequently turning around to sit down, we consider that the main views would be more towards the Galloway Hills RSA, the Merrick and Loch Doon.

3.64 In our view, the council's wireframes for Viewpoint B do not reflect the true picture from this aspect; the image having been shortened so that the more distant Dersalloch wind farm is not shown. South Kyle wind farm is also missing from these images. While we accept that the turbines on Waterhead Hill would appear somewhat larger and closer than those at Benbrack, we consider this would be only a peripheral and transitory effect. Furthermore, once South Kyle is introduced into this aspect, along with potential visibility of the consented Enoch Hill wind farm, a more developed cumulative picture emerges. We are also aware again of the focus of view of the walker at this point which would be uphill. The ability to appreciate the form and character of the hill is limited by the steep slopes facing the walker. On returning from the summit via Black Shoulder and Dunool, while there would be glimpse views of the turbines on Waterhead Hill, the natural focus of view would be to the south and south west.

3.65 Overall, while acknowledging that this is a well-recognised route and popular hill, we consider that the sense of space and openness at the summit is already substantially compromised by the presence of the existing wind farm development. Although the Waterhead Hill turbines would be viewed in combination with those at Windy Standard and Windy Rig, we do not consider that this would contribute to the visual enclosure of Cairnsmore of Carsphairn. The proposal would add to the existing and consented development pattern bringing development close to the Cairnsmore summit. However we do not agree that this perceived effect would be any more visually dominating than the current situation. We agree with the applicant that the key attractive views are to the south west, west and south (although less so to the south east given the consent for Windy Rig). These alternative views would remain available to receptors at the summit.

3.66 The applicant considers that only from Viewpoint 8 (Bardennoch Hill) would it be possible to see the hill in its landscape context with turbines also in the view. The council also considers the hill is seen at its best from this viewpoint where its curvaceous form can be appreciated.

3.67 Viewpoint 8 represents a view of the proposed development from the Carsphairn Heritage Trail at around 8km distant. Walkers at this viewpoint are considered to have a high sensitivity to the type of development proposed. The Environmental Statement acknowledges that the proposal would introduce large scale engineered elements and movement to a section of the horizon currently devoid of such factors. Significant effects are anticipated.

3.68 The council refers to the withdrawal of Quantan's Hill wind farm, which would no longer represent a close and prominent feature in this view. Benbrack and South Kyle wind farms, also seen in this view, would be sited away from the hill and on lower ground reducing their influence to some degree. The proposed turbines would therefore appear very close to the rising western slope which would have an adverse effect on the setting of this landmark hill and represent a significant distraction.

3.69 Environmental Statement Figure 6.38(a) provides a view of Cairnsmore of Carsphairn. We note the removal of Quantan's Hill wind farm which is shown in the cumulative picture. We also note that the proposed development would be positioned below the slopes of the hill and set back. Eight turbines would be visible to hub height on the skyline. In the context of other consented turbines (South Kyle and Benbrack wind farms), we accept that the proposed turbines would be positioned slightly higher and closer to the western slopes. However, in our opinion the turbines would remain subordinate to the hill and would not represent a significant distraction to the walker. Consequently, we do not consider that the proposed development would cause the overall scale of the hill to be diminished or affect its landmark presence.

3.70 Elevated views of the proposal would be possible from more distant hills. This includes Meikle Milyea (Viewpoint 13) and the Merrick (Viewpoint 15) at distances of between 17km and 20km. All twenty of the proposed turbines would be visible from these aspects but seen in the context of and overlapping with the existing Windy Standard, Hare Hill, Afton and Whether Hill wind farms. Views generally would be panoramic with Cairnsmore of Carsphairn part of the overall scene. With the consented South Kyle and Benbrack wind farms extending development across the area of view and the introduction of Pencloe wind farm, the proposed development would be less apparent. At Blackcraig Hill (Viewpoint 7), significant effects are predicted. Similarly, once the consented developments are taken into account, the proposed development would form a less prominent feature in the view.

3.71 We note SNH's concerns, particularly regarding views from the Loch Doon. Visualisations provided for Viewpoint 10, which represent views from the Loch Doon area, give an indication of the cumulative effect. Cairnsmore of Carsphairn, as a landscape feature, does not have particular visual presence from this aspect. The Waterhead Hill turbines would be visible, with the Meaul Hill turbines mostly screened at this point. We agree that the Waterhead Hill turbines would contribute to the band of development visible on the skyline but they would have a limited expanse compared with the visual prominence of the Benbrack turbines. They would also be viewed overlapping Windy Standard I and II.

3.72 Due to existing topography and the relative distances between residential properties and the proposed development, no residential visual amenity assessment was produced. There are likely to be short range views of the turbines from approach roads to residential properties, for hill walkers to summits along core paths and for visitors to the local heritage trails within the Water of Deugh Valley. This would particularly be the case with the proposed felling in the area and intensified by the introduction of Benbrack wind farm. Consequently, these north/north westerly views are likely to be dominated by wind turbine development. We accept that this would result in adverse visual effects, however such views would be limited to the more open sections and where visibility was possible.

3.73 There are a number of locations where there are views of the existing overhead power line alongside the A713 road. The applicant has assessed the existing line as a

baseline feature present before the introduction of the proposed development. It is only considered in the Environmental Statement in relation to Viewpoint 9 (A713 – southern approach to Carsphairn). The upgrading of this line with larger overhead lines was taking place at the time of our site inspection. The applicant's further written submissions on this matter acknowledges that part of the line, in the vicinity of the proposed development, entails the use of steel lattice towers that are larger than the pre-existing line construction. While we consider that views of the new line would also be evident from other locations including Garryhorn Mine Core Path (Viewpoint 6), we accept that the changes would be of insufficient scale and prominence to materially alter the outcome of the assessment.

Cumulative landscape and visual effects

3.74 Cumulative landscape and visual effects are considered in the context of our conclusions above and consider both additional and in-combination effects. We have taken into account the cumulative position known at the time of the inquiry and that submitted immediately afterwards as written submissions. The known position of the baseline plus any consented proposals is the main consideration in our assessment.

3.75 We note that the DGWLCS identifies the potential for cumulative landscape and visual effects to arise with other operational and consented wind farm development. We accept that the proposal would give rise to some significant cumulative effects. The great majority of cumulative effects would be with the other existing and consented turbines. However, given the distances involved, the cumulative effects would be limited in extent and the proposed development would be absorbed into an established cluster of wind farms.

Reporters' conclusions on landscape and visual effects

3.76 The proposal lies within an area identified as with potential for windfarm development. This is subject to an assessment of the detail of the proposal. We find that significant effects on landscape character would be mostly limited to the site and its immediate surroundings. Overall, we do not consider that these effects would change the intrinsic characteristics of the relevant LCT's studied. Given that effects would be localised, or only visible in distant views as contributing to the existing turbine assemblage, we do not consider that the proposals would have a significant effect on the Galloway Hills Regional Scenic Area, the East Ayrshire Sensitive Landscape Area, South Lanarkshire Special Landscape Area, Craigengillan Garden and Designed Landscape or the Merrick Wild Land Area.

3.77 We also find that significant visual effects would be mostly localised and from particular limited locations. There would be no significant effects from settlements or individual residential properties. There would be no significant adverse effects for travellers using local transport routes. Cumulative visual effects would be experienced from certain walking routes and summits. However we find the proposed development would be seen as a constituent part of the complex of wind farms present and consented in this area.

The main points for the Civil Aviation Authority (CAA) on aviation lighting

3.78 The CAA consultation response states that any structure of 150 metres or more (measured to the blade tip in the case of turbines) must be lit in accordance with the Air Navigation Order (ANO) 2016. One medium intensity (200 candela) red light is to be fitted

on the nacelle of the turbine with a second 2000 candela red light serving as an alternate in case of failure. At least three (to provide 360 degree coverage) low-intensity (32 candela) red lights are also to be fitted at an intermediate level of half the nacelle height. If visibility in all directions is more than 5km the light intensity for any light required to be fitted to any generator and displayed may be reduced to less than 10% of the minimum peak intensity specified for a light of this type.

The main points for Dumfries and Galloway Council on aviation lighting effects

3.79 The council has not objected to the proposed aviation lighting on the Meaul Hill turbines although it shares the concerns of SNH with regard to the Galloway Forest Dark Sky Park. It does not consider it likely that the lighting would cause significant effects in relation to the park but it would exacerbate the significance of effects from Cairnsmore of Carsphairn.

The main points for SNH on aviation lighting effects

3.80 SNH recommended that the applicant provide clarifications in regard to aviation lighting requirements and the effects on birds and the nearby Dark Sky Park. In response to the production of photos from key viewpoints to show the proposed lighting, SNH recommends the consideration of radar activated lighting mitigation or failing this, low intensity lighting. Their reasons for this are due to the significant landscape and visual effects as the area has very little lighting in the baseline, and the possible effects on birds. While not objecting, SNH predict there would be significant and adverse visual effects from Cairnsmore of Carsphairn, Blackcraig Hill, Loch Doon and Carrick Lane, and significant and adverse landscape effect upon LCT 19a and on the setting of Loch Doon.

The main points for East Ayrshire Council on aviation lighting effects

3.81 East Ayrshire Council originally objected on the grounds of potential landscape and visual impacts on the Dark Sky Park and Loch Doon area from the required aviation lighting. Following the submission of further visualisations and clarifications by the applicant, the council withdrew its objection.

The main points for the applicant on aviation lighting effects

3.82 Infra-red lighting is to be used on the Waterhead Hill turbines which negates any potential visual impacts as such lighting is not visible to the naked eye. Visible red aviation lighting (2000 candelas) is to be placed on top of the nacelle of the Meaul Hill turbines to meet the requirements of the CAA. An assessment of the effects of the CAA lighting requirements on the Dark Sky Park is contained within the Environmental Statement Addendum <http://www.dpea.scotland.gov.uk/Document.aspx?id=519713> and further explained in the written submissions, clarifications and visualisations:

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519726>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519719>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519720>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519721>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519722>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519723>

3.83 When viewed from a location that is lower than the elevation of the light, the intensity of the light reduces significantly. Further minimisation of the light's illumination at angles below -1 degrees can be achieved using shielding. A reduction of the intensity of the 2000 candela light is also applied when visible at distances greater than 5km or when atmospheric conditions are affecting visibility. The particular scheme adopted for this site will depend on the technical lighting specification set out in the relevant CAA guidance at the time. This can be determined in consultation with the council and the CAA, and is appropriate to deal with by suspensive condition.

3.84 There would be theoretical visibility (Addendum Figure 1.26) of the proposed lighting on Meaul Hill turbines from the northern parts of the Dark Sky Park area. From Loch Doon (Viewpoint 10) a single nacelle light would be visible although backclothed and set in a dip of landform. The light would occupy an elevated position in the view which is currently largely dark but would appear relatively dim and seen in the context of other light sources such as vehicle headlights, aircraft navigation lights and lights from scattered dwellings on the loch side. Further into the park, at Viewpoint 12 (Forest Drive), visibility would be restricted to two turbines through thin, intervening coniferous planting. At both these locations, views of the lights would be over 10km away and only visible at reduced lighting intensity.

3.85 The proposed development is located on the outermost edge of the transition zone of the Dark Sky Park, over 9km from the buffer area and 15km from the core area. Council guidance regarding friendly lighting in the park is considered to have limited relevance and concerned more with direct interruption of views, light spill and sky glow effects. The lit turbines would be located outwith and distant from the park and obscured from the majority of the park, including the Observatory at Craigengillan.

3.86 At the summit of Cairnsmore of Carsphairn (Viewpoint 1), which lies outside the park, all 12 nacelles would be visible. From within the park at Viewpoints 13 (Meikle Milyea) and 15 (Merrick), all 12 nacelles would be theoretically visible but at distances of between 17km and 20km it is unlikely that the lighting would be discernible as an array of 12 lights. From Viewpoint 14 (Minor Road to Glentool), 10 of the 12 turbines would be visible but backclothed and represent a very small viewing angle. The applicant regards the effect presented in all these locations to be a worst case scenario as visitors to these remote summits is less likely at night. Any star gazing activities within the park itself would also be directed skyward.

3.87 The few road users and residential receptors with views of the turbine lights would be seeing the lights at below 750 candelas. The majority of receptors are located outwith 5km and therefore the turbine lights would be dimmed to 10% of maximum peak intensity levels. On the whole, the twilight / night time environment would not experience any overall magnitude of change and no significant effects are anticipated on the Dark Sky Park. Daytime effects of the lighting is also judged not be significant.

Reporters' conclusions on aviation lighting effects

3.88 The applicant accepts the requirements of the CAA in terms of aviation lighting although they acknowledge some shortcomings in the presentation material submitted as part of the Environmental Statement. The visualisations are based on daytime photography manipulated to resemble night time views and therefore do not contain existing artificial lighting sources. SNH also commented on the technique adopted but accepted a

compromise approach in this case. The presentation material showing the brightness of lighting modelled is also based on a 2,000 candela light source, the intensity of which varies when viewed from different angles and in different climatic conditions.

3.89 The applicant therefore advised us to view an actual test example of the light source. A light was placed on turbine 16 of the existing Windy Standard development which was equivalent to that on turbine 12 of the Meaul Hill cluster. We visited the site on two consecutive occasions to view the test light from the road at Viewpoint 10 (Loch Doon) and Viewpoint 12 (Forest Drive). We visited in early December on a clear night with no low cloud cover. We did not therefore experience any 'halo' effect nor was it possible to experience the 'blinking' effect caused by moving turbine blades. However, we are satisfied that the test light adequately demonstrated the potential effect on the night sky from these locations.

3.90 In considering views of the landscape, key elements were obscured with only the outline of the surrounding forest and hills silhouetted against the night sky. At both viewpoints the test light was visible in the sky but we did not consider it obviously so. Given the particular angle it was viewed from and at a distance of over 10km, the light was not particularly bright or distinct. We were also aware of other light sources such as car headlights on the A713 road, lights on overflying aircraft and those associated with dwellings, all of which were brighter light sources and diminished the visual effect.

3.91 The Galloway Forest Park was conferred Dark Sky Park status in 2009 in order to combat light pollution and protect the exceptional quality of the night sky in this area. The park boundary extends as far as the edge of Loch Doon and includes a core area and buffer which occupies most of Galloway Forest Park. Outwith the park, a transition zone is identified within a radius of 10km of the boundary. The development proposal is located on the outer most edge of this zone. The council's supplementary guidance - Dark Skies Friendly Lighting <http://www.dpea.scotland.gov.uk/Document.aspx?id=563070> advises that lighting within this zone should be 'dark sky friendly' where possible, with the effects of artificial lighting needing to be carefully assessed.

3.92 In our view, a key characteristic in the experience of visitors to the park and those who choose to drive along the forest drive relates to the perception of darkness and remoteness. Maintaining clear views of the night sky, uninterrupted by artificial light sources would be the primary aim. New development should therefore ensure that this characteristic is protected.

3.93 Within this particular part of the transition zone, given the influence of other artificial light sources in the area, the sensitivity of both road users and residents on the loch side and further into the park is likely to be reduced. We also take into account the overall distances at which the turbine lights would be seen and the transitory nature of the visitor experience on the drive through the forest. Overall we do not consider that the lighting as intended would have an adverse effect on the landscape and visual amenity of the area.

3.94 In order to meet CAA requirements and ensure that appropriate lighting is provided on the proposed Meaul Hill turbines, we have suggested a suitable condition as set out in Appendix 2. With regard to the effects of the proposed lighting on birds, we have responded to this in Chapter 5: Other Matters – Ornithology.

CHAPTER 4: SOCIO-ECONOMIC AND TOURISM

4.1 Socio-economic and tourism effects are considered in Chapter 15 of the Environmental Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>). During the Pre-examination meeting, the applicant indicated that there were more recent relevant research publications, which post-dated those dating from 2012 which were referenced in the Environmental Statement. Although it was not considered that these documents would give rise to any changes to the assessment set out in the Environmental Statement, the applicant considered it relevant to bring key points to the attention of the Reporters. Carsphairn Community Council also indicated that it had new evidence relating to socio-economic matters. It was therefore agreed, at the pre-examination meeting, that a Hearing session on socio-economic matters may be required.

4.2 The applicant provided a list of the relevant updated research documents within a written statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563148>) and expanded upon these documents in its Hearing Statement on policy and planning and socio - economics (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563158>). Carsphairn Community Council also produced a Hearing Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=565367>), which drew on a questionnaire survey of local residents. Following this exchange of information, Carsphairn Community Council declined to participate in an oral session, relying on its written representation. Accordingly, we did not consider it necessary to hold a Hearing session dedicated to socio-economic issues, and relevant policy elements were incorporated into the Policy Hearing.

The main points for the applicant on socio-economic and tourism

4.3 The applicant has identified a number of socio-economic benefits of the proposal:

- A capital expenditure estimated at £83 million resulting in direct and indirect economic effects;
- During the construction phase, creation of an anticipated 163 jobs at the Scottish level, contributing £9.45 million in GVA, and 36 jobs and £2.11 million at the Dumfries and Galloway level;
- During the operation phase, creation of an anticipated 12 jobs and £1.17 in GVA at the Scottish level and five jobs and £520 k in GVA at the Dumfries and Galloway level;
- Community Benefit Fund, based on £5,000 per MW of installed capacity per annum for the local communities.

4.4 In addition to these economic benefits, the applicant has identified a number of additional sources of economic impact arising from: local supply chain opportunities; pre-development opportunities; decommissioning opportunities; income effects; and exchange effects. Although the applicant considers there to be insufficient information to enable quantification of the scale of these impacts, it is considered that they would have positive effects on the regional and national economies. In particular, the applicant notes that Natural Power, a locally-based company which employs approximately 90 people locally, has managed the production of the Environmental Statement and is already carrying out non-warranty related work on the existing Windy Standard Wind Farm.

4.5 The applicant also considers that the scheme offers benefits in terms of meeting policy objectives in relation to renewable energy. These are considered in Chapter 2.

4.6 The Environmental Statement also assesses the likely effects of the proposal on the region's main tourist attractions. It concludes that given that the majority of the tourism assets within the region are located further south, beyond the influence of the proposed development; that Carsphairn Forest is a large commercial forest, not actively promoted for access or recreational purposes in its own right; there are no long distance footpaths or cycle paths within the development site or close by; and that the footpaths nearby already provide views of existing turbines, there are not expected to be any detrimental effects on the local tourism and recreational assets.

4.7 The applicant also refers to research published since the production of the Environmental Statement: '*Wind Farms and Tourism Trends in Scotland*' (BiGGAR Economics, 2017) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563134>). This concludes that whilst the capacity of wind farms has more than doubled between 2009 and 2015, employment in tourism related sectors has increased by more than 15%. The report finds that there is no correlation between tourism employment and the number of turbines at the local authority level. The study also fails to find a link between the development of a wind farm and tourism related development more locally (within 15km from developments). Overall, the conclusion of the study is that published national statistics on employment in sustainable tourism demonstrate that there is no relationship between the development of onshore wind farms and tourism employment at the level of the Scottish economy, at the local authority level, nor in the areas immediately surrounding wind farm development.

4.8 The applicant expects there to be open access to the tracks associated with the development, which would be available for a variety of recreational users, leading to a positive impact.

4.9 We note that the applicant is proposing to establish a community benefit fund, based on £5,000 per MW of installed capacity per annum. However, this is not a material planning matter and has not formed part of our consideration of the socio-economic effects of the proposal.

The main points for Carsphairn Community Council on socio-economic and tourism

4.10 Carsphairn Community Council sought views of residents concerning the proposed Windy Standard 3 windfarm and received 25 responses of whom 84% are not in favour of the proposed development. In relation to socio-economic issues, individual points of concern are:

- The visual impact including infrastructure and damage to tourism and disruption during the construction phase;
- The proposal is too close to Cairnsmore and would be very destructive to the atmosphere of the Bowburn and Deugh glens. The experience of walking on Cairnsmore, a popular hillwalking destination would be hugely undermined by the turbines on Meaul and Waterhead Hill;
- The cumulative effect of so many approved and proposed turbines some of which may line the tourist route from Carsphairn to Ayr;
- Public access should be actively improved: on foot, bike, horses and vehicle.

4.11 In summary, the community council considers that if consented, the proposal would "support a 'no-go' area for any kind of development such as the building of new homes, new buildings and new business e.g. pony trekking or walking centre." It considers the upland

landscape to be an asset and that the turbines would encroach on the approach from the north west of Cairnsmore of Carsphairn and greatly spoil the view from the summit. If consented, the community council would wish to see open access to the area proposed for the development to encourage visitors to enjoy hillwalking and views from the hills.

4.12 In its hearing statement, the community council also refers to the campaign for a national park for the Kingdom of Galloway and notes that although no boundary has yet been proposed, the presence of windfarms north of Carsphairn Parish would act to exclude this area from consideration for inclusion.

The main points for other parties on socio-economic and tourism

4.13 Socio-economic issues were raised by four consultees during the scoping exercise for the Environmental Statement: East Ayrshire Council; The Scottish Rights of Way and Access Society; Mountaineering Council of Scotland; and visitScotland. In summary, the consultees request that the Environmental Statement should address the consequences of the proposals for users of the countryside, including local residents and visitors. This is to include direct and indirect effects on tourism and recreational users and users of core paths and hills, and effects on the Dark Sky Park, particularly from lighting. Both the Mountaineering Council of Scotland and visitScotland request that the assessment gives full consideration to research commissioned by the Scottish Government into the impact of wind farms on tourism (2007).

Reporters' conclusions on socio-economic and tourism

4.14 Paragraph 169 of Scottish Planning Policy (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563057>) sets out that the net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities, is a relevant factor in considering proposals for energy infrastructure developments.

4.15 The applicant has clearly set out the expected economic effects of the proposals in terms of employment and GVA generation. We accept that for the reasons set out by the applicant in the Environmental Statement, these are under-estimates of the total economic effects and that there would also be wider benefits, particularly in terms of supporting local business through the local supply chain.

4.16 Carsphairn Community Council has raised concerns about the effects of the proposals on public access, enjoyment of the hills and footpaths, and tourism. Whilst these are legitimate concerns, we note that the community council's response, which draws on a questionnaire survey of residents, is based on the qualitative views and opinions of individual respondents rather than any objective or empirical evidence.

4.17 The applicant has provided empirical evidence (albeit with some gaps based on inadequacy of source data) of tourism resources in the area and the importance and scale of the tourism industry locally. These figures, which have not been contested, demonstrate that there are relatively few tourism businesses within the immediate area of the proposal.

4.18 With reference to our findings in Chapter 3, we accept that the proposals would result in changes to views from certain key viewpoints, and would alter the experience of the approach of Cairnsmore of Carsphairn from the north west. Based on our observations,

the lighting would be visible from limited locations along the eastern boundary of the Dark Sky Park. Turbines are already a feature of the landscape, and the current proposal would be viewed in combination with other operational turbines. Based on the evidence presented from the BiGGAR, 2017 report, that wind farms do not have an adverse effect on tourism and that turbines are already a feature of the local landscape, we do not consider that the current proposal would have a significant adverse impact on socio-economics, tourism or recreation.

CHAPTER 5: OTHER MATTERS

ECOLOGY

5.1 The predicted effects on ecological features (excluding birds) are set out in Chapter 7 of the Environmental Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>) and Section 1.6 of the Environmental Statement Addendum (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>) and written responses to consultation responses from SNH, Galloway Fisheries Trust, Marine Scotland, and the John Muir Trust. Effects on peatland habitats are considered later on in this chapter dealing with other matters.

The main points for the applicant on ecology

5.2 The assessment follows guidance for ecological impact assessment published by CIEEM. It considers the direct and indirect impacts on habitats and species arising during the construction, maintenance, operation and decommissioning phases of the proposed development. Effects on Ground Water Dependent Terrestrial Ecosystems, which are specifically protected under the Water Framework Directive (2000/60/EC), have been determined in accordance with guidance published by SEPA (Land Use Planning System Guidance Notes 4 and 31).

5.3 Mitigation measures have been incorporated into the design and are outlined in the Environmental Statement. The detail of several of these measures would be finalised through a Construction Environmental Management Plan (CEMP), which would be overseen by an Ecological Clerk of Works. A pollution response plan would also be prepared.

5.4 With the incorporation of the mitigation measures, the applicant has concluded that the proposed development would not have significant effects on any of the valued ecological receptors. Nor, when considered with other schemes within 10 km of Windy Standard III, would there be significant cumulative effects on any (non-avian) ecological feature. In relation to wet modified bog, the applicant concluded that given the low amount of this habitat within the proposed development site; the degraded nature of this habitat; the widespread nature of the habitat; and habitat improvement measures for this habitat included within other schemes; there was the potential for an overall positive effect.

The main points for Scottish Natural Heritage (SNH) on ecology

5.5 SNH agrees with most of the assessment of ecological impacts set out in the Environmental Statement and recommends that the full range of mitigation and enhancement measures identified in the Environmental Statement are implemented. It also identifies some additional or enhanced measures to reduce the impacts on natural heritage, but does not require these to be conditions to any permission that is granted.

The main points for the Galloway Fisheries Trust (GFT) on ecology

5.6 The GFT welcomes the intention to carry out fish surveys pre, during and post construction of the proposed development, but wishes to be reassured that these would take place and that they would inform the Construction Environmental Management Plan. It

is relatively content with the mitigation included within the Environmental Statement; provided it is implemented, adequately monitored and remedial measures are carried out as soon as any problems or breaches in the mitigation have been identified.

The main points for Marine Scotland on ecology

5.7 Marine Scotland's comments are documented in its response to the Environmental Statement (letter dated 24th January 2017) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563089>) and response to the public inquiry (letter dated 28th June 2018) (www.dpea.scotland.gov.uk/Document.aspx?id=563090). It recommends and sets out the scope for an integrated water quality, macroinvertebrate and fish population monitoring programme to be implemented pre, during and post construction. The scope includes advice about the selection of monitoring sites in order to assess any effects arising from acidification of soils following felling as well as pollution incidents. It also recommends the implementation of precautionary measures to prevent the accidental spread of signal crayfish in the River Dee catchment.

The main points for SEPA on ecology

5.8 SEPA notes that GWDTE have been identified at the site. In its view these vegetation communities are not dependent on groundwater but rather near surface fracture flow and surface water. SEPA is content that the mitigation measures proposed to maintain hydrological connectivity should prevent or minimise any impacts on these areas.

Reporters' conclusions on ecology

5.9 We are satisfied that the applicant's investigations cover all relevant ecological issues in sufficient depth for us to assess the proposal in accordance with the requirements of Schedule 9 of The Electricity Act 1989.

5.10 Whilst both the Galloway Fisheries Trust and Marine Scotland have raised concerns about possible effects on fish populations, they are content that these concerns could be addressed through a programme of surveys and ameliorative measures to be set out within the Construction Environment Management Plan.

5.11 We are not aware of any outstanding objections to the scheme based on impacts on ecological features. Having considered the information within the Environmental Statement and the proposed additional mitigation measures in relation to pre-construction surveys and the Construction Environmental Management Plan, we are satisfied that, subject to appropriate conditions, there would be no unacceptable adverse effects upon habitat quality, watercourses or protected species.

ORNITHOLOGY

5.12 Chapter 8 of the Environmental Statement considers the effects of the proposals on birds <http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>. This section of our report is also based on additional comments provided in Section 1.7 of the Environmental Statement Addendum <http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>, responses to comments raised during the consultation <http://www.dpea.scotland.gov.uk/Document.aspx?id=563108> and our further requests for

clarification. It also draws on a number of consultation responses from SNH in response to the Environmental Statement

(<http://www.dpea.scotland.gov.uk/Document.aspx?id=519746>,

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519747>,

<http://www.dpea.scotland.gov.uk/Document.aspx?id=533356> and

<http://www.dpea.scotland.gov.uk/Document.aspx?id=527895>) and from RSPB Scotland

(<http://www.dpea.scotland.gov.uk/Document.aspx?id=519741>).

SNH also sent written responses following the pre-examination meeting

<http://www.dpea.scotland.gov.uk/Document.aspx?id=553541> and

<http://www.dpea.scotland.gov.uk/Document.aspx?id=558625>).

The main points for the applicant on ornithology

5.13 The Environmental Statement and its Addendum considered all potentially significant effects associated with construction, operation and decommissioning of the proposed windfarm. The main effects arising from the scheme were summarised as:

- habitat loss and/or disturbance of breeding and foraging birds during construction;
- displacement of birds away from turbines during operation (caused by human disturbance during maintenance activities); and
- collision with turbines.

Effects arising during decommissioning were considered to be similar to those during construction, although they would result in habitat restoration rather than habitat loss.

5.14 Bogton Loch Site of Special Scientific Interest (SSSI), is within 20 km of the proposed development. It is of importance for its breeding bird assemblage. The Environmental Statement concludes that there would be no significant effects on this statutory site as it is considered too distant for any regular connectivity to exist between the qualifying features and the proposed development area.

5.15 Loch Ken and River Dee Marshes Special Protection Area (SPA)/ Ramsar site is located approximately 22.6 km to the south of the proposed development area. The applicant has provided information to allow the competent authority to undertake a screening, and if necessary, appropriate assessment of the proposals upon this European site, which supports internationally important overwintering populations of Greenland white-fronted goose and Icelandic greylag goose. Greylag geese were recorded on one occasion, flying in an area to the south of the proposed development. These were not within the collision risk zone, and the effects of collision on this species were considered to be negligible. The applicant therefore considers that the proposals would not have a likely significant effect upon the SPA goose populations.

5.16 Whilst the Environmental Statement does not identify any significant effects on any ornithological receptors as a result of the proposed development, specific mitigation is proposed for black grouse, merlin, barn owl and kestrel to reduce the potential effects of disturbance and to ensure compliance with relevant protective legislation for these species (Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004). The Environmental Statement also identifies various additional measures to ensure compliance with legislation and best practice guidelines.

5.17 No significant cumulative effects were identified for greylag goose, merlin and peregrine. An overall significant positive effect on black grouse was identified as a result of the cumulative effects of habitat improvements arising from schemes.

Birds and lighting

5.18 The applicant has assessed the likely effects of the lighting on the Meaul Hill turbines. Research suggests that solid and pulsating red lights are more attractive to birds at night during inclement weather than white lights. However, due to the low likelihood of large numbers of birds passing over the proposed development, the applicant has concluded that it is highly unlikely that the lighting would result in a significant effect in EIA terms.

The main points for Scottish Natural Heritage (SNH) on ornithology

5.19 SNH notes that some of the survey data within the Environmental Statement are more than five years old, but confirms that given the fairly low level of bird interest; the existence of other, more recent survey information collected at the site; and data provided by other interest groups, it is content that there is adequate information to identify any issues. However, given the age of the data, it advises that pre-construction bird surveys are conducted. It also agrees that collision risk modelling is not needed, given the low level of flight activity.

5.20 Black grouse are a notable species at the site. Whilst it does not appear there are any leks particularly close to the proposed turbines, SNH's standard advice is that a 750 m buffer should be maintained around any identified black grouse lek during the breeding season, where no construction activity is allowed before 9 am (including vehicle movements along tracks). It also notes that the stated generic buffer zones might not be suitable for breeding raptors such as goshawk.

Birds and lighting

5.21 SNH is not convinced that there is sufficient knowledge about the effects of lighting on birds to support the applicant's view of no significant effects. It considers that the steady red lights required by the CAA are likely to be the worst lighting option in relation to birds. In addition, SNH questions the applicant's assertion that migrant birds will be flying well above potential collision height, particularly in bad weather. It concludes that turbine lighting could be a potential problem.

5.22 Given the uncertainties, SNH considers it would be sensible to consider mitigation at a broader scale through the use of radar activated lighting. If this is not possible, it recommends the use of reduced intensity lighting. It would welcome a condition related to post construction ornithological monitoring.

The case for RSPB Scotland

5.23 RSPB Scotland agrees with the findings of the Environmental Statement that due to the low-level ornithological activity recorded during surveys, the risk to bird species from the proposed development is not significant.

5.24 Whilst supporting the proposed mitigation measures for black grouse, RSPB Scotland recommends additional measures relating to the proposed buffer distance and timing limitations around lekking sites. It also proposes enhancement of forest edge habitat

and open hill ground to encourage black grouse and recommends that this should be secured by condition.

Reporters' conclusions on ornithology

5.25 We are conscious that further time has elapsed since the surveys underpinning the Environmental Statement were conducted, meaning that some of those data were collected over 9 years ago. Nevertheless, we note that SNH is content to accept conclusions based on older survey data for this site, given the low level of bird activity. We therefore conclude that adequate data have been used in the assessment.

5.26 These data have been analysed to produce an overall assessment of the predicted effects of the development, both alone and cumulatively with other windfarm developments. Based on the information provided, it appears that there are relatively low levels of bird activity at the proposed development site and no significant effects have been identified.

5.27 Whilst there have been no objections to the proposals on ornithological grounds, a number of potential adverse effects on bird receptors have been identified. These include, in particular, disturbance of black grouse during the breeding season; and the risk of bird collision resulting from the proposed lighting.

5.28 We are satisfied that the enhanced mitigation proposed by SNH in relation to black grouse, incorporates and expands upon the concerns raised by RSPB and that it mitigate any adverse effects on populations of this species to acceptable levels. We therefore conclude that it should be secured by condition to any permission that is granted (see Chapter 6).

5.29 We note that whilst SNH is generally content with the mitigation measures proposed to ensure compliance with statutory obligations relating to protected bird species, it has indicated that modifications to these buffer zones are required and should be informed by pre-construction surveys. We consider that this is a matter that could be the subject of a condition to any permission that is granted (see Chapter 6).

5.30 The applicant has highlighted the presence of one European site; Loch Ken and River Dee Marshes SPA/ Ramsar site, with the potential to have connectivity to the proposed development. Under the Conservation (Natural Habitats, &c) Regulations 1994, as amended (the Habitats Regulations) any development which has a likely significant effect on a European site (including an SPA) either alone or in combination with other projects, should be subject to an appropriate assessment of the implications for the site in light of that site's conservation objectives. The responsibility for considering whether an appropriate assessment is required lies with the competent authority, in this case Scottish Ministers.

5.31 Having considered the information provided by the applicant, we agree that the proposed development is located at too great a distance to be used by most of the qualifying species of the SPA. However, it is located within the maximum distance travelled by wildfowl between roosting and foraging areas. Greenland white-fronted goose and Icelandic greylag goose are both qualifying interests of the Loch Ken and River Dee Marshes SPA/ Ramsar site. We note that the survey work generated only a single record of one flock of 18 greylag geese, which were flying south of the proposed development area and outwith the collision risk zone. Based on this information, we agree that the proposed

development, either alone or in combination with other projects and plans, would not have a likely significant effect upon any of the qualifying interests of the Loch Ken and River Dee Marshes SPA/ Ramsar site in view of that site's conservation objectives. Hence, we conclude that an appropriate assessment is not required. In reaching this view, we are also aware that SNH, who is the statutory consultee for appropriate assessment, has not raised any concerns about the effects of the proposals upon this or any European site.

Birds and lighting

5.32 It appears that there is little empirical evidence generally and within the UK specifically, relating to how lighting of structures affects bird behaviour. Whilst we agree with SNH that the installation of radar-activated lighting would remove the uncertainty over effects, it is by no means certain that such technology would be accepted by the Civil Aviation Authority, or that sufficiently robust equipment currently exists.

5.33 At the hearing, the applicant suggested there may need to be a delay in commencing construction of the scheme, dependent on grid capacity. As it is possible that improvements to lighting technology will be made before then, we conclude that the form of lighting should be agreed at a later point, once construction dates are finalised, in order to benefit from the best available technology (see Chapter 6).

5.34 Nevertheless, based on the accepted low level of ornithological activity in the area and that the site does not support important populations of bird species, we conclude that any individual mortality of birds as a result of the proposed lighting would not have an impact upon the populations of the relevant species, and hence would not have unacceptable effects.

CULTURAL HERITAGE

5.35 Chapter 9 of the Environmental Statement covers effects on cultural heritage assets including archaeological features

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519737>. Designated and undesignated heritage assets are identified in the study areas of 2km and 10km set out in Figures 9.1 and 9.2 of the Environmental Statement.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=567077>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=567078>

The main points for the Dumfries and Galloway Council on cultural heritage

5.36 Dumfries and Galloway Council and Historic Environment Scotland (HES) involvement at the Environmental Statement scoping stage culminated in the production of additional visualisations:

- wireframes from The King's Cairn (Figures 9.3a-d)
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567079>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567080>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567081>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567082>
- photomontages from the Water of Deugh (Figures 6.33a-f)
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567138>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567139>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567140>

<http://www.dpea.scotland.gov.uk/Document.aspx?id=567141>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567142>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567143>

- photomontage from the Garryhorn core path (Figures 6.36a-f)
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567154>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567155>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567156>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567157>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567158>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567159>
- photomontage from Bardennoch Hill (figures 6.38a-f)
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567170>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567171>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567172>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567173>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567174>
<http://www.dpea.scotland.gov.uk/Document.aspx?id=567175>

5.37 Dumfries and Galloway Council has not raised objections concerning cultural heritage matters, subject to conditions.

The main points for the Historic Environment Scotland on cultural heritage

5.38 HES is satisfied that sufficient information and assessment has been provided and has not objected to the proposed development but considers there would be impacts on the setting of a scheduled monument, The King's Cairn. Although the proposed development would have an adverse impact on its setting, HES do not consider that this reaches the threshold where national issues would be raised.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519737>

The main points for the applicant on cultural heritage

5.39 No designated assets lie within the proposed construction footprint and it lies in an area with low archaeological potential where the possibility for previously unrecorded assets to be present is considered to be negligible. Due to the presence of commercial forestry, it is assumed that any archaeological features present would have been heavily disturbed.

5.40 The Kings Cairn comprises two cairns. Both are located in clearings in commercial forestry and only seen from short distances. Due to their degraded condition they are not inter-visible. Following the proposed felling of trees, the proposed turbines will be visible from the cairns to the south-east and north-east at between 1.7km and 2.5km. After restocking, the turbines will be screened from view by the trees. The intrinsic value of the cairns will be unchanged by the proposed development but their contextual value, as a result of tree felling and restocking, will change greatly. However, the impact will be short-lived and not significant.

5.41 Figure 9.2 sets out where turbines would be theoretically visible (ZTV) from heritage assets. A number are outwith the ZTV, which limits views relevant to their significance and they will be unaffected by the proposed development.

5.42 Once operational, there will be an impact on other scheduled monuments although the effect would not be significant. This includes Cairn Avel with views at a distance of 7.5km, Holm of Daltallochan cross slab affected by intervening woodland, Holm of Daltallochan stone circle and standing stone at a distance of 5.8km and Woodhead lead mines and smelter at a distance of around 7km.

5.43 The listed Craigengillan and Craigengillan stables, located outwith the ZTV, will be unaffected by the proposed development. While up to 18 turbines would be visible from parts of the Craigengillan Garden and Designed Landscape designated area, at minimum distances of 10km they would not affect its contribution to the local landscape.

5.44 Water of Deugh Archaeologically Sensitive Area (ASA) contains a range of unrelated features. Although up to 20 proposed turbines would be visible in addition to Windy Standard 2, this will not affect the appreciation of these assets. Bardennoch ASA includes a number of scheduled monuments as well as a range of undesigned features which are relatively well-preserved. The ASA takes in a landscape that has intrinsic value. Visibility would be restricted to the turbine blades sweeping over the skyline at distances of between 5.4 to 7km and would not interfere with the appreciation of the ASA's significance.

5.45 In terms of cumulative impacts from The King's Cairn, the windfarms at South Kyle and Benbrack, together with the proposed development would increase the proportion of view containing turbines. However the current sense of place is considered to be greatly compromised by on-going forestry operations and the turbines would ultimately be screened from view by replacement woodland.

5.46 South Kyle and Benbrack wind farms also feature in views from Cairn Avel. Together with the proposed development this would not result in a greater cumulative effect on the cairn's significance than the proposed development in isolation.

Reporters' conclusions on cultural heritage

5.47 Schedule 9 of the Electricity Act 1989 requires regard to be had to the desirability of protecting sites, buildings and objects of architectural, historic or archaeological interest. It also requires the applicant to undertake reasonable mitigation of any effect on such assets.

5.48 From the conclusions reached within the Environmental Statement, we are satisfied that there would be no direct impacts on archaeological and cultural heritage features.

5.49 HES' concerns over the scheduled The King's Cairn are directed at the cairns' relationship with the Water of Deugh and its surrounding valley, along with the surrounding topographic features including Meaul and Waterhead Hills. We agree that these are important and contribute to their cultural significance. Along with HES we recognise that the programmed felling of trees (which has already commenced in this area) and further replanting would result in views becoming progressively constrained. In a cumulative context, we accept that the proportion of view containing turbines would increase. However we do not consider that this would have a significant adverse effect given the changing landscape context.

5.50 There are other scheduled monuments in the wider area outwith the development site. Due to a combination of the distances involved and limited visibility of the turbines, we do not consider that the intrinsic value of these assets would suffer a significant adverse

effect. No mitigation is proposed to deal with effects on heritage assets. We consider this to be acceptable given the conclusions reached in the Environmental Statement.

HYDROLOGY, GEOLOGY AND HYDROGEOLOGY

5.51 Effects on hydrology, geology and hydrogeology are considered on the basis of written submissions. Chapter 10 of the Environmental Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>) and Section 1.8 of the Environmental Statement addendum (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>) set out the applicant's assessment of the potential effects of the scheme on ground water and surface water resources within the proposed development site and on their downstream catchments. Chapter 10 of the Environmental Statement also addresses effects on soils including peat. This aspect is addressed later on in this chapter dealing with other matters.

5.52 SEPA initially objected to the proposed scheme, partly on the grounds of effects on water quality. It set out the measures necessary for it to remove its objection in letters dated 27 January 2017 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519745>) and 24 May 2017 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=527894>). Carsphairn Community Council also voiced concerns about effects on water quality and flood risk generally (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519731>). Scottish Water raised issues in relation to drinking water supplies (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563104>). Concerns raised by Marine Scotland in relation to effects on water quality in relation to fish populations are addressed in the ecology section of this report.

The main points for the applicant on hydrology, geology and hydrogeology

5.53 The proposed development is located within the Water of Deugh catchment, and its tributary burns including the Polwhat Burn, Lone Stand, Shalloch Burn, Bow Burn and several unnamed tributaries. The Water of Deugh flows south to Kendoon Loch and then Carsfad Loch, which is a back-up water supply.

5.54 The Water of Deugh and Bow Burn are classified for protection or improvement within SEPA's River Basin Management Plan. They are assessed as having poor ecological potential and moderate ecological potential respectively.

5.55 The upper reaches of the Water of Deugh support good populations of wild brown trout and coarse fish. Effects on fish populations are considered within the ecology section of this report.

5.56 There are no Scottish Water abstraction sources and there are no records of any Private Water Supplies within the Planning Application Boundary. However, there are 17 registered private water supplies within a 3 km search area, of which five are located within the same catchment as the proposed windfarm. The proposed development is predicted to have no greater than negligible/ minor significant effects on private water supplies.

5.57 The principal effects on the hydrological regime would occur during construction. The Environmental Statement includes a package of mitigation measures including application of best practice to avoid or reduce effects on flooding and water quality. These measures include maintaining a 50 m buffer zone around watercourses, development of a

Construction Method Statement and monitoring of water quality. With the implementation of these measures, the proposals are assessed as having effects no greater than negligible/minor significance on hydrology and hydrogeological resources.

5.58 In response to SEPA's concerns relating to potential pollution of watercourses arising from the condition of tracks, the applicant has proposed pre-construction surveys to ensure the suitability of the existing tracks; the use of continuous monitors at sensitive locations throughout construction to ensure constant monitoring of water quality; and a site-specific rain gauge to provide daily rainfall totals to facilitate interpretation of water quality results.

5.59 Overall, the applicant concludes that the effects of the proposed development on hydrology, hydrogeology and geology are not significant under the governing EIA regulations.

The main points for Scottish Environment Protection Agency (SEPA) on hydrology, geology and hydrogeology

5.60 SEPA initially objected on a number of grounds including a lack of information about the suitability of borrow pit material for creating access tracks and potential pollution risks to the water environment. It notes that there have been surface water pollution runoff issues associated with the existing forestry tracks and tracks constructed as part of the Windy Standard II development, which it attributes to use of poor-quality materials and break-up of the surface under the high traffic volumes.

5.61 To address its concerns, SEPA's letters of 27 January 2017 and 24 May 2017 set out measures, which should be secured by condition. These include the need for a detailed engineering survey of existing tracks, which should identify any repairs necessary to ensure that the tracks are capable of meeting the requirements of the conditions of General Binding Rule (GBR) 22 of CAR. A Traffic Management Group should be formed to discuss and agree on the design, use and maintenance of roads on site and a suitably qualified Environmental Consultant should be appointed to liaise directly with SEPA's local regulatory services team. New tracks should be constructed of a suitable durable material.

5.62 In addition, a Site Monitoring Plan & Sampling Plan and a Construction Environmental Management Plan should be finalised and agreed with SEPA prior to any works commencing on site.

5.63 SEPA did not raise any concerns in relation to flood risk.

The main points for Scottish Water on hydrology, geology and hydrogeology

5.64 The turbines and infrastructure are located within the catchment boundary for the Carsfad reservoir, which is an emergency source for Lochinvar Water Treatment Works. Scottish Water drinking water abstraction sources are designated as Drinking Water Protected Areas (DWPA) under Article 7 of the Water Framework Directive.

5.65 Whilst the emergency abstraction is considerable distance downstream, and hence the risk to water quality should be low, Scottish Water requires that water quality and quantity are protected and has provided advice in that respect.

The main points for Carsphairn Community Council on hydrology, geology and hydrogeology

5.66 Residents have raised general concerns relating to effects of the proposals on water quality and flood risk.

Reporters' conclusions on hydrology, geology and hydrogeology

5.67 The applicant has identified potential sources of impacts on hydrological and hydrogeological resources including pollution of ground and surface water resources and effects on water supplies.

5.68 The scheme is not identified as generating a flood risk. We agree that the risk of pollution is greatest during the construction phase of the proposed works. However, we are content that the application of the proposed mitigation measures combined with the monitoring of their implementation, would result in no unacceptable risks to the water environment and could be secured by condition.

PEAT AND CARBON RICH SOILS

5.69 Chapter 10 of the Environmental Statement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704> supported by Technical Appendix 10 (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519712>) and Section 1.8 of the Environmental Statement addendum (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519713>) set out the applicant's assessment of the potential impacts of the scheme on soils including peat. Following questions raised by the specialist advisers to the Energy Consents Unit (A M Geomorphology) concerning the stability of peat soils and objection from SEPA concerning use and management of peat, the applicant has provided further written clarifications on these issues.

5.70 The John Muir Trust also objects to the proposals in terms of their impacts on peat (letter dated 21/12/2016) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563088>) and RSPB Scotland raises concerns about the effects of turbines and tracks on deep peat habitats (>0.5m) (letter 25/12/2016) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519741>). SNH has also made a number of observations and recommendations about effects on peat.

5.71 Effects on hydrology and hydrogeological resources, which are also addressed by Chapter 10 of the Environmental Statement, have been considered elsewhere in this chapter dealing with other matters.

The main points for the applicant on peat and carbon rich soils

5.72 Peat (blanket and hill peat) is the dominant soil type within the proposed development area. The mean depth of peat recorded across the proposed development area is 0.75 metres and is 0.70 metres for the proposed wind turbine locations. The findings of the peat depth and Peat Stability Assessment show that the infrastructure has as far as possible, taking into account other constraints, been sited outside areas of deeper peat.

5.73 The Environmental Statement identified effects of the proposals as degradation of peat or peat dominated soils as a result of interrupting surface and sub-surface drainage pathways during construction; increased risk of peat slide as a result of poor construction and management of peat stockpiles; and increased risk of peat slide as a result of desiccation or wetting of peat during operation of the proposed windfarm. The risk of these effects would be minimised through measures included within the Construction Environment Management Plan and development of a geotechnical risk register.

5.74 The applicant also carried out a Peat Landslide Hazard and Risk Assessment, as required for applications which exceed 50 MW in generating capacity, on sites with blanket peat where the slope angles exceed 2°. Overall it was concluded that there would be no significant effects from the proposed development on the geological environment.

The main points for A M Geomorphology on peat and carbon rich soils

5.75 A M Geomorphology undertook a technical review of the Peat Landslide Hazard and Risk Assessment on behalf of The Energy Consents Unit of the Scottish Government. It identified a number of required minor revisions and clarification of assumptions to ensure the Assessment was robust (letter 27/01/2017) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519741>). Whilst the applicant responded to these queries (Appendix C of response dated 02 May 2017 <http://www.dpea.scotland.gov.uk/Document.aspx?id=563108>, A M Geomorphology identified three areas where further clarification was still required including the efficacy of mitigation (letter dated 22 May 2017) (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563076>). Having received further clarification from the applicant, A M Geomorphology confirmed to ECU that all matters had been addressed (email dated 1st August 2017 <http://www.dpea.scotland.gov.uk/Document.aspx?id=564982>).

The main points for SEPA on peat and carbon rich soils

5.76 SEPA initially objected to the proposals because of a lack of information on 'waste management issues' including the reuse of peat (SEPA response 27/01/2017, <http://www.dpea.scotland.gov.uk/Document.aspx?id=519745>). Its concerns related to a lack of certainty about where peat would be re-used and how excess peat would be dealt with. It was also concerned about the proposal to use unconsolidated peat to restore borrow pits, questioning whether there were suitable hydrological conditions adjoining borrow pits to enable restoration of a wetland or whether the use of peat for restoration should be considered a disposal operation, requiring a license from SEPA.

5.77 Following meetings between SEPA, Energy Consents Unit and the applicant, it was agreed that the applicant had initially misinterpreted Scottish Government guidance on peat surveys. Following the applicant's submission of revised calculations, which followed this guidance (<http://www.dpea.scotland.gov.uk/Document.aspx?id=533366>) SEPA was able to remove its objection (letter dated 14th March 2018, <http://www.dpea.scotland.gov.uk/Document.aspx?id=519757>).

The main points for SNH on peat and carbon rich soils

5.78 SNH recommends that the full range of mitigation and enhancement measures identified in the Environmental Statement are implemented, including those set out in the

Peat Stability Assessment of the Construction Method Statement. It also recommends some additional mitigation measures including revision of the assessment of probability of failure of peat, preparation of a revised Geotechnical Risk Register and development of a Habitat Management Plan to improve the carbon sequestration capacity of degraded peatland habitats and safeguard populations of Tall Bog Sedge.

Reporters' conclusions on peat and carbon rich soils

5.79 The applicant has considered the effects of the proposals on peat and peaty soils, including the production of a Peat Landslide Hazard and Risk Assessment. We note that A M Geomorphology was content with the clarifications provided by the applicant of its assessment of peat slide risk and how these could be managed. Accordingly, we conclude that the consideration of peat slide risk is robust and that the risks are acceptable.

5.80 We note the objections from the John Muir Trust and concerns from RPSB concerning effects on deep peat habitats. The applicant's proposals have taken account of the presence of and depth of peat. Following revision of the peat balance calculations, SEPA was able to withdraw its objection relating to effects on peat soils. We therefore conclude that effects on peat soils are acceptable.

NOISE AND SHADOW FLICKER

5.81 Chapters 11 and 13 of the Environmental Statement deal with noise and shadow flicker <http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>.

5.82 There is the potential for noise to be created during the construction, operation and decommissioning phases. Background noise levels were monitored at five nearby residential properties. Given the proximity of a number of operational, consented and proposed wind farms a cumulative noise assessment was also undertaken. No significant adverse effects were identified, with predicted noise levels not exceeding the acceptable guidelines.

5.83 In order to protect the amenity of nearby residents, the council and applicant agreed a noise condition to monitor and control the levels of noise. Having regard to the technical evidence submitted in respect of noise impacts <http://www.dpea.scotland.gov.uk/Document.aspx?id=579544>, we are satisfied that these would not be significant.

5.84 Based on the recommendations in a cited technical paper by A D Clarke 'A Case of Shadow Flicker/Flashing: Assessment and Solution', Technology Policy Unit, Open University, Walton Hall, Milton Keynes, UK, the applicant considers a separation distance of at least 1,130 metres between the proposed turbines and a residential property is suitable to prevent shadow flicker. This is consistent with the general rule set out in Scottish Government advice on onshore wind turbines. The closest dwellings are beyond this distance and no further assessment has been undertaken. We consider this to be acceptable and that no significant effects in terms of shadow flicker are expected.

FORESTRY

5.85 Effects on forestry were considered on the basis of written submissions, comprising, Chapter 12 of the Environmental Statement

(<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>), responses to the Environmental Statement received from Forestry Commission Scotland (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519736>) and SEPA (<http://www.dpea.scotland.gov.uk/Document.aspx?id=519745>, <http://www.dpea.scotland.gov.uk/Document.aspx?id=527894>, <http://www.dpea.scotland.gov.uk/Document.aspx?id=533345> and <http://www.dpea.scotland.gov.uk/Document.aspx?id=533367>) and further clarification relating to these responses provided by the applicant, following requests from Energy Consents Unit and a meeting to provide clarification of various statements within the Environmental Statement.

The main points for the applicant on forestry

5.86 The proposed development lies mainly within the existing commercial forestry plantations of the Carsphairn Forest Block. The Forestry Study Area covers 3,478.83 ha, and is privately owned and managed. The majority of the woodlands within this area were planted in the early 1970's, and comprise mainly Sitka spruce and other commercial conifers, with small areas of broadleaf woodland and unplanted land. The first rotation crops are mature and there is an ongoing felling and restock programme.

5.87 The Environmental Statement compares the proposed felling and restocking programme required for the development against the existing (baseline) proposals for felling and restocking the commercial forest. It considers the species to be felled, age of trees at felling, volume of timber to be harvested and species composition and density at restocking. The proposed methods of both felling and restocking are also addressed.

5.88 Felling is required: to accommodate the construction of infrastructure (turbines, access roads or other infrastructure such as control buildings); for turbine technical considerations and turbine performance (e.g. wind yield); for environmental considerations (such as forest landscape design); and for forest management purposes (e.g. to reduce the risk of subsequent windblow, to reduce coupe fragmentation, to ensure access for future forest operations or to integrate with the existing Forestry Plan). All felling is proposed during the construction period.

5.89 Irrespective of whether or not the proposed development proceeds, it is expected that there would be a restructuring of the age class and species composition of the woodland over the next 30. Nevertheless, the total volume of timber to be harvested over the period as a result of the proposal would decrease by 11.809 m² (0.8%) compared to the baseline.

5.90 Whilst there would be restocking of the felled areas, the proposals would result in a reduction of 28.87 ha (equivalent to 0.83% of the Forest Study Area). Following a request for clarification from Forestry Commission Scotland (see below), the applicant has confirmed that it would provide compensatory planting for this net loss, in line with the requirements of the Scottish Government's Control of Woodland Removal Policy and the applicant would be happy for this to be conditioned and details to be confirmed pre-construction.

5.91 There would be a small decrease in the proportion of primary conifer crops and a small increase in the proportion of broadleaf native woodland compared to the proposed restocking in the absence of the proposal. There would also be an increase in the total

proportion of unplanted land, including open ground, other land and windfarm open land. The applicant has confirmed that a total area of 34.53 ha would be retained as wind farm open ground.

5.92 In response to queries from SEPA concerning waste arising from forestry operations, the applicant has confirmed that it anticipates that the majority of the crops would be harvested using conventional methods, which it sets out in Chapter 12 of the Environmental Statement. Most of the crop (99.3%) would be over 30 years old and therefore capable of being cleared by conventional harvesting methods and the timber sold into the market. There are a variety of approaches for removing the remaining 0.7% of unmerchantable crops and the appropriate approach would be agreed nearer the time.

5.93 The applicant's proposed approach for dealing with forestry residues generated from the felling and construction activities has been informed by SEPA's guidance document WST-G-027 '*Management of Forestry Waste*' and the waste hierarchy set out in the Waste (Scotland) Regulations 2011 amendment to Section 34 of the EPA 1990. A hierarchy of uses for forestry materials is set out in chapter 12 of the Environmental Statement.

5.94 Where no valid on or off-site use or other disposal method can be found, the material will be regarded as waste. The applicant notes that disposal of timber residues as waste in or on land requires a landfill permit or a waste exemption licence and should be considered an option of last resort. It proposes that the Construction Environmental Management Plan (CEMP) should include a section that addresses the handling, storage and disposal of forestry waste and that it should be prepared in accordance with recommended guidance and be covered by an appropriate planning condition.

5.95 Restocking of the majority of the areas felled during construction would be carried out using normal forestry practice and would not result in the generation of forest residues.

5.96 In summary, the forestry that is proposed to be felled as a result of the proposed development was planned to be felled as part of baseline felling plan and the proposed felling timescales have not greatly changed from that of the baseline. There is not expected to be a significant change in the level of forestry waste or the timing of that waste compared to that would have been expected as part of the baseline forestry operations. Further waste management information would be provided pre-construction as part of the CEMP and can be dealt with by condition.

The main points for Forestry Commission Scotland (note: now Forest & Land Scotland) on forestry

5.97 The Forestry Commission is broadly content with the methodology and approach used within the Environmental Statement, and largely agrees with the conclusions. However, it notes that the proposals would result in a net loss of 28.87 ha of woodland. In line with Scottish Government Policy it requests that appropriate arrangements are made for compensatory planting.

The main points for Scottish Environment Protection Agency (SEPA) on forestry

5.98 SEPA initially objected to the application on the grounds of lack of information on 'waste management issues' (reuse of peat, borrow pit specifications and forestry wastes) and the pollution risks to the water environment.

5.99 SEPA considers the submitted documentation to be lacking in detail and non-committal in regard to the waste management issues associated with forestry activities. In relation to the applicant's proposal to include a section regarding handling, storage and disposal of forestry waste in the Construction Method Statement, this should include reference to the SEPA publication GU27 Guidance Note '*Use of Trees Cleared to Facilitate Development on Afforested Land*' and SEPA's guidance on the management of forestry waste (WST-G-027).

5.100 SEPA objected pending submission of a revised plan, which fully satisfies its requirements, and which takes into account SEPA's guidance notes. Aspects to be addressed were identified as: the likely volumes of material for which no economic off-site use can be found; any valid on-site uses for unmarketable material to minimise the amount of waste that must be dealt with; and plans depicting areas where material will be used on site.

5.101 SEPA also commented on the proposal set out in Section 12.7.5 of the Environmental Statement concerning creation of brash mats, advising that these should be removed, as far as is practicable, in areas to be occupied by windfarm infrastructure and not replanted, to avoid nutrient release during the breakdown of the mats.

5.102 SEPA subsequently raised concerns that there was insufficient information to satisfy them that the development was capable of complying with waste regulations in relation to forestry wastes and peat waste. Further, SEPA did not agree with the applicant's interpretation of the production of waste from forestry operations and its classification under the European Union Waste Framework Directive, noting that forestry waste generated when clearing land for the purpose of development falls within the scope of the Waste Management Licensing (Scotland) Regulations 2011.

5.103 In addition, SEPA has commented on the proposed restocking plans and felling proposals in relation to water quality. It does not consider that Chapter 12 section 12.2.10 of the Environmental Statement acknowledges the obligation placed on forestry and SEPA to meet Water Framework Directive obligations with regard to the protection and improvement of overall water quality. It considers that restocking proposals should go beyond the *de minimus* UK Forest Standard Guidelines and Forest Water Guidelines 5 standards regarding open space and broadleaved planting.

5.104 Following receipt of further written clarification regarding harvesting and forest residues produced from felling and the Forest Plan, SEPA confirmed that it was satisfied that its concerns had been addressed and removed its objections

Reporters' conclusions on forestry

5.105 Although the proposals would result in an advancement of the felling programme compared with the baseline, the woodland that would be felled for the proposal has been identified for felling irrespective of whether or not the scheme proceeds.

5.106 The proposals include plans for re-stocking. However, we note that in the absence of mitigation, the proposal would result in a net loss of woodland area of 28.87 ha, equivalent to 0.83% of the Forestry Study Area. Whilst this represents a relatively small decrease in area, any net loss is not in accordance with the requirements of the Scottish

Government's Control of Woodland Removal Policy. We are content that this could adequately be addressed by a requirement for compensatory planting. Whilst the applicant has not supplied details of where and when this compensatory planting would be provided, we are content that this could adequately be addressed by condition.

5.107 The restocking proposals would result in some changes in species composition; representing a modest decrease in the proportion of primary conifer species, and a smaller increase in the area of broadleaf species. Whilst the projected increase in broadleaf species is relatively small, and is perhaps less than that which SEPA would wish to see, we note that it has not been raised as an issue of concern by Forestry Commission Scotland. We note that the increase in open ground is required to accommodate infrastructure associated with the proposal, or for operation reasons, and hence is unavailable for stocking by broadleaved species. Overall, we consider that the proposed restocking proposals are acceptable.

5.108 Much of the material to be felled is mature forestry and is scheduled for harvesting, irrespective of the proposals. The applicant intends to follow FCS and industry best practice during harvesting operations and it has set out how these may be varied, depending on local circumstances. The proposals include a hierarchy for the use of forestry materials, including consideration of how the generation of forestry waste material will be avoided or minimised. Following confirmation of the approaches, SEPA has withdrawn its objection in relation to forestry wastes. We are therefore satisfied that the proposal is acceptable in this respect.

5.109 Subject to the requirement for conditions set out above, we do not consider that the proposal would have unacceptable effects on forestry resources.

AVIATION RADAR AND COMMUNICATIONS

5.110 Chapter 13 of the Environmental Statement covers aviation, MOD interests and communication operations <http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>.

5.111 There were no objections to the proposal from the Civil Aviation Authority, NATS Safeguarding or the Defence Infrastructure Organisation, subject to suitable conditions to ensure appropriate notification and consultations. Specific comments received regarding aviation lighting are dealt with in Chapter 3 of this report.

5.112 There are no fixed microwave links within the proposed development area. It is not expected that the proposed infrastructure would directly impact microwave links present in the area and it is not expected to interfere with TV reception. The Joint Radio Company confirms that there are no issues with respect to radio link infrastructure operated by Scottish Power and Scotia Gas Networks. BT also confirms that the project is not likely to cause interference to their current and presently planned radio networks. There is not considered to be significant impacts with respect to radio communication networks.

The main points for Glasgow Prestwick Airport on aviation matters (not lighting)

5.113 Glasgow Prestwick Airport raised an objection to the proposed development on the basis that it is located underneath airspace aircraft fly to route inbound to runway 30. Some of the turbines may be visible to the Primary Surveillance Radar and therefore will display

as clutter on the radar displays. This would present a significant impact on the safety and efficiency on provision of Air Traffic Services to aircraft.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519740>

As confirmed in Technical Appendix 13.4, the airport is prepared to remove their objection on the satisfactory conclusion of an agreed mitigation scheme

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519712>.

The main points for the applicant on aviation matters (not lighting)

5.114 The applicant agrees that technical mitigation is required to resolve the likely impacts on airport flight operations. In a report produced in November 2018, the applicant outlines the technical mitigation to resolve the likely impacts on the airport's flight operations.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=562753>

5.115 Point-to-point Line of Sight analysis has been used to model the terrain elevation profile between the airport Terma PSR system and the proposed turbines. The results indicate that nine turbines are highly unlikely to be detected by radar and a further seven turbines are considered unlikely to be routinely detected by the system but occasional detection cannot be ruled out. Consequently only four turbines (numbers 4, 13, 17 and 19) are considered theoretically detectable by the system and therefore likely to require system optimisation to remove them from air traffic control radar data display systems.

5.116 The applicant considers that a radar mitigation scheme can be implemented within the lifetime of the consent. A solution is more than merely theoretical available, namely the Terma Scanner 4002 single channel Primary Surveillance Radar and AviBit AIRMAX Air Situation Display, as integrated in to GPA's Air Traffic Control system. A suspensive condition is suggested to safeguard Glasgow Prestwick Airport's position.

Reporters' conclusions on aviation matters (not lighting)

5.117 We note the concerns of Glasgow Prestwick Airport and that they would remove their objection on the satisfactory conclusion of an agreed mitigation scheme. An agreed position has not been reached at the time of writing this report. However, based on the information submitted we are satisfied that a suitable mitigation scheme could be concluded and an agreement with the airport operator reached. In line with other section 36 consents, we are prepared to accept the applicant's suggestion of a suspensive condition to deal with such matters. A suitable recommended condition is outlined in Appendix 2.

ROADS AND TRAFFIC

5.118 Chapter 14 of the Environmental Statement covers traffic and transport issues

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519704>.

5.119 Traffic generated would almost entirely be limited to vehicle movements relating to the construction phase and decommissioning phases. Access to the site from the public road would be gained via the A713 to the north of Carsphairn and would continue along an existing private track into Carsphairn Forest. This utilises the same route for existing developments within the wider Windy Standard wind farms. Environmental Statement Figure 14.1 shows the intended route

<http://www.dpea.scotland.gov.uk/Document.aspx?id=567036>.

5.120 In order to reduce the need for the construction of new tracks, the proposed development would be accessed using a combination of the existing access tracks into the site and the approved forestry and Windy Standard II tracks. The proposal includes 9km of proposed new on-site tracks and 6.6km of upgraded track which would link the turbines and associated infrastructure to the existing road network. The track running width is expected to be 5 metres wide with localised increases to allow for passing places or bends.

5.121 The construction of the proposed development is estimated to comprise around 6,418 movements by HGVs and 8,630 movements of light personnel and delivery vehicles over the proposed 15 month period. The Environmental Statement concludes that the impact of construction traffic associated with the proposed development would be temporary and not significant.

The main points for East Ayrshire Council on roads and traffic impacts

5.122 East Ayrshire council is concerned that there will be impacts on the A713 as a result of an increased volume of construction traffic, particularly the movement of abnormal loads. The Ayrshire Roads Alliance should be consulted on the traffic management plan. The council requires the applicant to enter into separate legal agreements with East Ayrshire Council and South Ayrshire Council under section 96 of the Roads (Scotland) Act 1984 and section 69 of the Local Government (Scotland) Act 1973 in order to recover any expenses of maintenance incurred by the relevant councils.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=519752>

The main points for Dumfries and Galloway Council on roads and traffic impacts

5.123 The council does not object on roads and traffic grounds and requests certain conditions be included.

5.124 A construction traffic management plan should be agreed with the council, Transport Scotland and the police which should detail the following: abnormal load access routes; any access works required including reinstatement; any aggregate transportation; and a programme of delivery and mitigation measures.

5.125 The developer will be held responsible for the immediate execution of any repairs and meet the cost of maintenance to the public road network arising from the development. This to be secured by legal agreement.

5.126 Consultation should be undertaken with nearby forestry managers and timber hauliers to coordinate timber haulage operations.

The main points for Transport Scotland on roads and traffic impacts

5.127 Transport Scotland acknowledges that a Traffic Management Plan will be prepared which will detail the selected route. This is considered acceptable however, a swept path analysis is also required in order to identify any mitigation measures necessary to accommodate the passage of abnormal load movements. The final route will require to be agreed with Transport Scotland prior to deliveries commencing. In terms of additional traffic movements, Transport Scotland acknowledges that there will be a small increase in daily traffic on the A77 which will equate to less than a 1% impact on the A77. This does not trigger the need for any further detailed assessment of environmental impacts.

5.128 Transport Scotland does not object to the proposed development and recommends two conditions be attached to grant of consent concerning the proposed route for abnormal loads and requires any additional signing or traffic control measures as necessary.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=519749>

Main points for the applicant on road and traffic impacts

5.129 The applicant is agreeable to the matters specified by the council and the conditions suggested by Transport Scotland.

5.130 The Environmental Statement assesses the effects due to transport and access resulting from the construction, operation and decommissioning of the proposed Development. No significant effects with regards to impact on the A713 as a result of construction traffic are predicted. The impact during the construction phase is deemed to be Negligible/Minor and Negligible during the operational and decommissioning phase.

5.131 The applicant is amenable for a Traffic Management Plan to be agreed with East Ayrshire Council and South Ayrshire Council pre-construction and is potentially willing to sign up to a section 96 agreement. However, they query the requirement under a section 69 agreement to pay £1/tonne levy to both East Ayrshire Council and South Ayrshire Council for import of bulk material.

5.132 Under a section 96 agreement it is usual that there is a bond in place between the developer and the roads authority so that any damage on the public road caused by the wind farm can be repaired at the developer's expense. If a section 69 agreement is to seek additional monies for 'maintenance' of the road, East Ayrshire Council are essentially asking that the developer pays twice for the same thing or even three times if this is to be paid to South Ayrshire Council too. The applicant queries this proposed approach and questions whether a condition to this effect would meet the necessary tests.

Reporters' conclusions on roads and traffic impacts

5.133 Dumfries and Galloway Council and the applicant are generally in agreement with regard to roads and traffic impacts. Transport Scotland confirms that there would be no significant impacts on the trunk road network subject to conditions dealing with the arrangements for abnormal loads and accommodation works. We find that suitable conditions could be put in place to deal with such matters.

5.134 At the hearing session on conditions, parties were also in agreement that a legal agreement under section 96 of the Roads (Scotland) Act 1984 with associated financial guarantee would be used to recover and meet the costs of maintenance to the public road network arising from the development. It is open to the council to seek a section 96 agreement at any time and to involve the two affected Ayrshire councils as necessary.

5.135 We note the request for an agreement under section 69 of the Local Government (Scotland) Act 1973 regarding contributions for imported bulk materials. This is separate to the requirement to recoup maintenance costs in relation to abnormal loads, other extraordinary traffic or accidental damage. The requested contribution appears to be a form of levy on imported bulk materials and we can see no specific justification for it in this case or that it would not meet the tests sets out in Circular 4/1998: The use of conditions in

planning permissions or Circular 3/2012: Planning Obligations and Good Neighbour Agreements. Consequently we do not recommend its inclusion.

CHAPTER 6: SUGGESTED CONDITIONS

6.1 The Planning Authority recommended a set of conditions in its report to committee on 15 February 2018 <http://www.dpea.scotland.gov.uk/Document.aspx?id=563055>. The minutes of the committee confirm that there was an error in relation to condition 1 which should refer to '35 years' <http://www.dpea.scotland.gov.uk/Document.aspx?id=563054>. An updated list of conditions was submitted by the Planning Authority in its submission to Scottish Government Energy Consents Unit in February 2018 <http://www.dpea.scotland.gov.uk/Document.aspx?id=563109>

6.2 Prior to the hearing the applicant and the Planning Authority discussed the wording of conditions in an attempt to reach agreement where possible. No heads of terms were discussed. Draft conditions containing the applicant's and the Planning Authority comments were produced in schedules dated 6 November 2018 and 19 November 2018; the latter forming the basis of the discussion at the hearing session.

<http://www.dpea.scotland.gov.uk/Document.aspx?id=566819>

The schedule contains suggested:

- conditions to attach to any consent under section 36 of the Electricity Act 1989;
- conditions relating to a deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997 (the 1997 Act).

6.3 At the close of the hearing session the parties were still in negotiation to resolve outstanding issues in relation to noise and access tracks. Any disputes were satisfactorily resolved:

- draft conditions as at 16 January 2019
<http://www.dpea.scotland.gov.uk/Document.aspx?id=579547>
- applicant's technical note on noise
<http://www.dpea.scotland.gov.uk/Document.aspx?id=579544>
- revised noise condition and flowchart
<http://www.dpea.scotland.gov.uk/Document.aspx?id=571130>
- Planning Authority agreement to revised noise condition
<http://www.dpea.scotland.gov.uk/Document.aspx?id=579538>
- applicant's suggested wording dealing with access tracks
<http://www.dpea.scotland.gov.uk/Document.aspx?id=573481>

Outstanding matters regarding conditions

Commencement of development

6.4 The applicant requests five years for commencement given the scale of the development, the number of pre-commencement conditions and the present uncertainties in relation to likely subsidy/funding mechanisms. They indicate that more recent S36 cases have tended to use 5 years. The Planning Authority accepts that a 2023 grid connection could form the basis for an increase from three to five years.

Aviation radar

6.5 In response to the objection raised by Glasgow Prestwick Airport, the applicant has suggested the introduction of a new condition to deal with this matter.

Implementation in accordance with approved plans and requirements of this consent

6.6 The applicant considers this condition to be unnecessary as it will not provide clarity over and above that already provided by the consenting process. The Planning Authority considers the condition would provide transparency and clarity to all interested parties, particularly the public. It refers to decisions by Scottish Ministers (Chirmorie Wind Farm and South Kyle Wind Farm) <http://www.dpea.scotland.gov.uk/Document.aspx?id=562210> <http://www.dpea.scotland.gov.uk/Document.aspx?id=566809> where a similar condition is used.

Design and operation

6.7 The applicant opposes the reference to the power rating as it is irrelevant and there is no prospect of the scheme delivering less than 50 MW. The noise condition will provide the necessary control in terms of sound power level therefore it is not necessary to repeat it in this condition. References to maintaining the turbines free from rust is not considered necessary and would encounter problems in terms of enforcement.

6.8 The Planning Authority considers the reference to the power rating is useful information but possibly not essential. It would not want to approve a turbine type without knowing its noise characteristics and that it fits with the candidate turbine 'envelope' set out in the ES. The reference to keep the turbines free from external rust is not considered onerous and is designed to protect visual amenity. A similar requirement was used by Scottish Ministers in the Chirmorie Wind Farm and South Kyle Wind Farm decisions (see links above).

Micro-siting

6.9 The principle of micro-siting is agreed, together with the circumstances where prior consent is required from the Planning Authority. Nevertheless, there is a difference of opinion as whether or not there is a need to specify that the Planning Authority will consult with SEPA and SNH prior to giving permission for micro-siting. The Authority considers that specifying this requirement would retain transparency. The applicant disagrees that this is necessary, stating there is nothing to prevent the Authority from consulting with whichever statutory body they consider necessary, prior to making its decision.

Borrow Pits

6.10 The Planning Authority wishes to see a separate, stand-alone condition, which deals with the methods for working the borrow pits and their restoration. It suggests the use of the specimen Energy Consents Unit condition on this matter. The applicant does not consider that a separate condition, which deals specifically with the borrow pit, is necessary, as this would be addressed as part of the Construction and Environmental Management Plan (CEMP), required under condition 8.

Planning Monitoring Officer

6.11 There a dispute between parties about the duration of appointment of the Planning Monitoring Officer (PMO). The Planning Authority would wish to see the PMO in place for the full life-span of the development and refers to decisions by Scottish Ministers (Chirmorie Wind Farm, South Kyle Wind Farm). The applicant considers that there is no planning

purpose for the appointment of a monitoring officer post final commissioning and that it is unreasonable to require this for the proposed 35-year operational period.

Ecological Clerk of Works (ECoW)

6.12 The applicant has suggested that the duty to monitor compliance should refer to the requirements established by the CEMP as part of condition 8. As that refers to the requirements set out in the Environmental Statement, there is no need to reference this document separately within this condition.

6.13 In addition, the applicant has suggested that the ECoW should report any breaches in conditions either to the PMO or to the Planning Authority.

Construction Environmental Management Plan

6.14 In its consultation responses, SEPA raised concerns about the treatment of forestry wastes <http://www.dpea.scotland.gov.uk/Document.aspx?id=568921>. As the forestry would be felled pre-construction, the Planning Authority has reservations that it would not be considered development and hence be captured by clause a) of the condition.

6.15 The applicant agrees that forestry operations may not be considered as development, but indicates that the effects of the required development have been considered as an integral part of the Environmental Statement for the proposal. It therefore considers it would be appropriate to include a condition relating to forestry as part of the deemed planning permission, either as a separate condition or a new clause within the CEMP requirements.

6.16 In response to comments made by SNH in relation to the content of the proposed Peat Management Plan, the applicant has suggested that the condition should refer to requirements set out and agreed in Technical Appendix 10.1 to the Environmental Statement. The Planning Authority agrees that this would be an appropriate approach.

6.17 Requirements in relation to drainage and water quality including the monitoring regime requested by the Galloway Fisheries Trust; and the role of Scottish Water were discussed at the hearing. The Planning Authority expressed a wish to separate drainage issues from water quality aspects, including monitoring, to enable consultation with the Galloways Fisheries Trust and Scottish Water. The applicant did not object to this, but was unclear about the purpose of the proposed monitoring.

6.18 Scottish Water requests that they be consulted on the CEMP and be party to its agreement, to ensure that drinking water quality is protected.
<http://www.dpea.scotland.gov.uk/Document.aspx?id=563104>

6.19 In response to SEPA's concerns regarding the repair and maintenance of access tracks, the applicant proposes the following provision be added to the CEMP condition: "an existing track condition report which shall identify the lengths of existing track and the condition of them. It shall include the details of works required to bring the identified tracks to a standard which is consistent with that of the new access tracks under (b) of this condition to include the details of siltration run off and the maintenance of them during the construction and post construction works of the proposed development."

Traffic management

6.20 The Planning Authority is concerned that heavy vehicles used in the construction of the wind farm will damage local roads and there should be a method to ensure the cost of repair is covered. It suggests the inclusion of a condition which secures an agreement under section 96 of the Roads (Scotland) Act 1984. The applicant agrees that the need to make good any road repairs would be covered under the Act.

Archaeological works

6.21 The applicant considers this condition to be unnecessary as the required level of protection is included in the CEMP. They highlight the council Archaeologist's consultation response which refers to the use of an appropriately worded directive as follows: "The applicant should be advised that the historical marker cairns on Waterhead Hill identified during the archaeological walkover survey should be marked on operational maps to avoid the chance of accidental damage. In addition a toolbox talk and documentation about how to recognise archaeological features, who to notify and how to proceed in the event of unexpected archaeological remains should be provided to operators within the development area."

6.22 The Planning Authority considers there to be merit in having a stand-alone condition dealing with archaeology. While it accepts the consultation response outlined above and asks for a suitable directive to be provided, a specific condition is also suggested.

Decommissioning, restoration and aftercare

6.23 For clarity, the Planning Authority seeks the inclusion of a list of those matters that will be included within the detailed decommissioning, restoration and aftercare method statement. The applicant considers such matters do not require to be specified within the condition as consultation will be undertaken with appropriate bodies and all matters to be covered will have been included in the method statement.

Financial guarantee

6.24 The Planning Authority does not agree that scrappage (or salvage) value of the development infrastructure should be included when considering the value of the financial guarantee. The applicant considers that scrappage value can be looked at as part of the guarantee assessment and reviewed every five years. They have also developed a method for calculating the scrappage value which was used in relation to Windy Standard II.

Replanting of forestry

6.25 In response to comments from the Forestry Commission (now Forest and Land Scotland), the applicant has suggested inclusion of a condition requiring it to undertake planting of forestry to compensate for the 28.87 ha of woodland that would be lost as a result of the scheme. The Planning Authority is not opposed to the applicant making arrangements with the Forestry Commission on this matter, but is not convinced that a condition is necessary.

Television Reception

6.26 The Planning Authority advises that a precautionary approach should be taken with regard to ensuring television reception and suggests a suitable condition. The applicant does not consider that such a condition is necessary given the conclusions reached in the Environmental Statement which find that there is no likelihood of interference occurring.

Black Grouse

6.27 The Planning Authority has recommended adopting SNH's advice concerning pre-construction surveys and protective measures for black grouse. It wishes to see this as a stand-alone condition. Whilst the applicant is not opposed to the principle of the requirement, it would wish to see this incorporated within the requirements for the CEMP.

Redundant turbines

6.28 Parties are agreeable to the inclusion of a condition dealing with the removal of redundant turbine(s). However the applicant would prefer a continuous period of one year over which the turbine fails to generate electricity to be the trigger.

Reporters conclusions on conditions and legal agreement

Commencement of development (S36 condition 2)

6.29 We acknowledge the applicant's position and agree that availability of grid capacity would in this instance be sufficient reason to suggest five years for commencement of development.

Aviation radar (S36 condition 5)

6.30 We are agreeable to the suggested inclusion of this condition to meet the requirements of Glasgow Prestwick Airport, the rationale for which is discussed in Chapter 5: Other Matters.

Implementation in accordance with approved plans and requirements of this consent

6.31 We support the suggested inclusion of this condition which is consistent with the specimen Energy Consents Unit conditions.

Design and operation

6.32 We agree that a reference to the power rating is not necessary. We also agree that the sound power level would be controlled by the noise condition and is not necessary to specify in advance. We understand that the Planning Authority wants to avoid discolouration of the turbines as has been experienced at Windy Standard I. However without specific details on what level of maintenance would be required to prevent rusting and staining, we consider that this would be difficult to enforce.

Micro-siting

6.33 We agree with the principle of micro-siting within agreed limits and that requiring prior approval for deviation beyond these agreed limits is desirable to safeguard environmental resources.

6.34 We accept that there would be nothing to prevent the Planning Authority from consulting with any statutory body concerning requests to amend the location of infrastructure. However, we are aware that this site has a number of environmental sensitivities, including the presence of protected species and proximity to water courses. We therefore agree with the Planning Authority that requiring consultation with SNH and SEPA within the condition would remove any potential ambiguity about the need to consult with these statutory bodies.

Borrow Pits

6.35 The Construction Environment Management Plan (CEMP) will bring together a wide range of environmental issues, including borrow pits, to ensure that these are addressed in a comprehensive and co-ordinated manner. Nevertheless, we recognise that the Planning Authority and other consultees, including SEPA, have raised legitimate concerns about the location of borrow pits, the suitability of the material that they would generate, and methods for restoration of the worked borrow pits. We agree with the Authority that the purpose and objectives for environmental management set out by the conditions need to be precise and capable of being implemented and assessed satisfactorily by individuals who may have no background knowledge of the evolution of the development. We have therefore concluded, that it is appropriate to include a condition, specific to the borrow pits. This allows for further detail and clarity on the requirements in relation to borrow pits to be set down and acknowledges the particular importance of this issue.

Planning Monitoring Officer (PMO)

6.36 It is standard practice to require developers to appoint a PMO to report on compliance with conditions for wind farm developments.

6.37 We agree with the applicant that the requirement to retain a PMO throughout the full 35-year lifespan of the project is unreasonable and not justified by the conditions or the nature of the issues that these seek to control. Separate monitoring arrangements are likely to be required as part of the decommissioning plan, which would be drawn up under condition 17.

6.38 The model conditions produced by the Energy Consents Unit suggest that the PMO should be appointed prior to commencement of development and be retained until completion of post-construction restoration works, rather than the date of Final Commissioning. This coincides with the period of greatest disturbance and groundworks, where there is the greatest potential for impacts, which are to be controlled by condition. A similar approach is recommended in previous decisions by Scottish Ministers (Chirmorie Wind Farm and South Kyle Wind Farm).

6.39 Therefore, we conclude that the PMO should be appointed for the period when most disturbance and activity will take place on the site i.e. during the period of construction and post-construction restoration works.

Ecological Clerk of Works (ECoW)

6.40 In addition to the Environmental Statement, a number of supporting environmental documents and clarifications have been produced in support of the proposed development.

6.41 We are content that the condition refers only to the CEMP as this will be based on and incorporate the mitigation requirements set out in the Environmental Statement and its subsequent supporting documents.

6.42 We agree with the applicant that there should be a clear line of reporting for the ECoW and that this should either be to the PMO or the Planning Authority. Whilst we are content that the condition, as drafted, would mean that the construction project manager would be aware of any incidences of non-compliance, we are not satisfied that this would provide the appropriate route for recording any instances of non-compliance. The specimen conditions prepared by the Energy Consents Unit also require the ECoW to submit reports to the Planning Authority. We have therefore included this requirement within the condition.

Construction Environmental Management Plan

6.43 We agree that effects of felling have been considered as part of the effects of the overall scheme, which are reported in the Environmental Statement. Therefore, we are agreeable to the applicant's suggestion of including a new clause within the CEMP to address this issue.

6.44 We are agreeable to the applicant's suggested clarifications in relation to the scope of the Peat Management Plan.

6.45 We agree with the Planning Authority that greater clarity can be achieved by making separate provisions in respect of drainage and water quality and that assessments of water quality should include measurements of effects on macro-invertebrate and fish populations and include a mechanism for responding to the findings of such surveys.

6.46 We agree with Scottish Water that they should be consulted on aspects of the CEMP and development that could potentially give rise to effects on drinking water supplies.

6.47 We are agreeable to the applicant's suggested addition to this condition regarding the repair and maintenance of access tracks.

Traffic management

6.48 While the provision of pre and post construction surveys of the local road network could be added to this condition, parties are agreeable for an agreement to be drawn up under section 96 of the Roads (Scotland) Act 1984 with respect to extraordinary expenses in repairing roads damaged. It is open to the council to seek a section 96 agreement at any time and to involve the two affected Ayrshire councils as necessary. Chapter 5 of this report discusses this in more detail. A specific condition requiring an applicant to enter into such an agreement would not be consistent with Circular 4/1998: the use of conditions in planning permissions.

Archaeological works

6.49 We consider that the use of a directive attached to the consent would not be enforceable. Therefore we consider that the wording suggested for the directive should be contained within the CEMP condition.

6.50 We also consider that a stand-alone archaeological condition is necessary, as suggested by the council, to account for the uncovering of any unknown features.

Decommissioning, restoration and aftercare

6.51 The specimen Energy Consents Unit condition includes a detailed list of matters and we agree with the council that for clarity, a similar list should be included.

Financial guarantee

6.52 We understand the applicant wants some certainty as to value of any financial guarantee that takes account of current scrappage value. However we appreciate that the Planning Authority would want to understand the costs at the appropriate stage at the risk of any potential financial shortfall. Given this and on the basis that the specimen Energy Consents Unit condition does not include any reference to scrappage value, we do not suggest it should be referred to here.

Replanting of forestry

6.53 We agree with the applicant, that in line with the Scottish Government's Policy on the Control of Woodland removal, there requires to be replacement planting to compensate for this loss of woodland. To provide the certainty that the Forestry Commission (now Forest and Land Scotland) requires, we agree that this requirement should be the subject of a suitable condition.

Black Grouse

6.54 Given the sensitivity of this species, we agree with the Planning Authority that it should be the subject of a stand-alone condition.

Television Reception

6.55 The specimen Energy Consents Unit conditions indicate that this condition should be applied only where appropriate in the circumstances on the case and will not be relevant to all applications. The ES states that the proposed infrastructure does not directly impact microwave links present in the area and is not expected to interfere with TV reception. This is not conclusive and we accept the Planning Authority's argument that a precautionary approach should be taken.

Redundant turbines

6.56 We consider a one year period is reasonable to apply in relation to this condition.

CHAPTER 7: POLICY ASSESSMENT OF THE PROPOSAL

7.1 The applicant and the council have set out their position on policy matters in a number of documents, which reflect the changing energy policy context. These were listed in Chapter 2 of this report.

The main points for the applicant on policy matters

Energy Policy

7.2 Government renewable energy policy and associated renewable energy and electricity targets are important material considerations.

7.3 The applicant references reports by the Committee on Climate Change and amendments to the Climate Change Bill, which set stricter emissions targets to address climate change. They also refer to the scale of challenge presented by the new targets, which require net zero greenhouse gas emissions by 2045 in Scotland, and an interim of 75% reduction by 2030. The applicant argues that to meet these targets will require very substantial increases in renewable generation and they note that the Committee on Climate Change has stated that current policy is insufficient to meet existing targets. The applicant concludes that against this background *“it cannot be the case therefore that it is ‘business as usual’ for decision makers.”*

7.4 Scottish Government’s policy position on renewable energy as set out in the Onshore Wind Policy Statement and the Scottish Energy Strategy are important material considerations. The language of the role of onshore wind within the Onshore Wind Policy Statement is demonstrably stronger than that used in Scottish Planning Policy and the National Planning Framework 3. The applicant argues, that even if the language is considered to be no different, the context within which the National Planning Framework 3 and Scottish Planning Policy statements are viewed is different by way of more stretching targets and no subsidy or certainty on route to market.

7.5 In addition, the applicant points to the reference in the Onshore Wind Policy Statement of the need to move *“towards larger and more powerful (i.e. higher capacity) turbines and that these by necessity – will mean taller towers and blade tip heights.”*

7.6 In determining the application, the applicant stresses the importance of the presumption in favour of development that contributes to sustainable development, which is set out in paragraph 27 of Scottish Planning Policy. The applicant considers whether the presumption applies will depend on the fit of a proposed development with the principles set out in paragraph 29 of Scottish Planning Policy and perhaps the Scottish Planning Policy outcomes. Where development is considered to be sustainable development, the applicant argues that there is a ‘tilted balance’ or ‘enhanced presumption’ in favour of that development and there would need to be adverse impacts which would *“significantly and demonstrably”* outweigh the benefits in order not to proceed.

7.7 In terms of the spatial framework for wind farm developments set out in Table 1 of Scottish Planning Policy, the applicant refers to it being common ground with the council that the application site lies within a ‘Group 3’ area. These are areas where wind farms are likely to be acceptable *“subject to detailed consideration against identified policy criteria.”*

7.8 The applicant considers that the proposed development does not give rise to material concern for many of the development management considerations for determining

energy infrastructure developments, which are set out in paragraph 169 of Scottish Planning Policy. In their view, the key issues for the current application are very narrow.

Local Development Plan

7.9 The key policies within the Dumfries and Galloway Local Development Plan 2 for the purposes of the application are IN1 and IN2. Whilst there are other relevant policies within the local development plan, these are not the subject of dispute between the applicant and the Council.

7.10 As the proposed development would make a valuable contribution to unmet Government renewables targets, it can draw considerable support from Policy IN1.

7.11 In terms of residual significant effects reported within the Environmental Statement, the development would only result in significant effects in terms of landscape issues and these relate, in particular, to the height of some of the turbines and the precise location of the remainder.

7.12 The applicant considers that the supporting Supplementary Guidance and Dumfries and Galloway Windfarm Landscape Character Study (DGWLCS) should only be afforded limited weight at this stage as they are draft documents. In addition, the applicant considers that capacity studies cannot replace proposal-specific detailed assessments. In their view, the DGWLCS is a supportive study. To consider the extent to which a proposal addresses and takes into account the DGWLCS would overstate the role of a capacity study.

Eskdalemuir Seismic Array

7.13 The proposal lies outwith the 50km zone around the monitoring station. However, the applicant considers that it is relevant in so far as the consultation and exclusion areas overlap with landscape types identified within the DGWLCS as able to accommodate the Very Large and Large turbine typologies. The capacity study concluded that capacity for Very Large turbines within Dumfries and Galloway was limited to the Eskdalemuir unit of the Southern Uplands with Forest (19a) Landscape Character Type and that there was increased scope for large turbines to be accommodated in this same unit. In the applicant's view, this potential is restricted as some of this area lies within the Eskdalemuir exclusion zone.

7.14 In summary, the applicant considers that:

- the need to achieve UK and Scottish Government renewable energy targets is a material consideration of great weight;
- the proposed scheme would provide a valuable contribution to the generation of renewable energy;
- SPP establishes a 'tilted balance' in favour of development that contributes to sustainable development;
- the proposed development would be consistent with the relevant policies of the Development Plan when it is read as a whole insofar that is a relevant consideration in an Electricity Act case;
- the only residual significant effects that have been identified during the EIA process are as a result of visual and landscape impacts;
- the visual and landscape impacts would not 'significantly and demonstrably' outweigh the benefits when assessed against the wider policies in SPP.

The main points for Dumfries and Galloway Council on policy matters

7.15 In its letter of 20 February 2019

(<http://www.dpea.scotland.gov.uk/Document.aspx?id=563109>), the council set out its three objections to the proposal:

- a) the proposal would give rise to unacceptable adverse cumulative visual impact and landscape impact and would contribute to the creation of a wind farm landscape character in the locality;
- b) the proposal would be a departure from the revised Dumfries & Galloway Windfarm Landscape Capacity Study (DGWLCS) guidance relative to the Very Large typology turbines; and
- c) the proposed development would have an unduly adverse impact on the setting of and key views from Cairnsmore of Carsphairn, an important landmark hill within the region.

7.16 The general support for renewable energy developments provided within Scottish Planning Policy has to be balanced against other considerations. These include the requirements of paragraph 170, that wind farms should be sited and designed to ensure impacts are “*minimised and to protect an acceptable level of amenity for adjacent communities.*” The provisions of paragraph 28 are also relevant, including the aim to achieve the right development in the right place; and not to allow development at any cost.

7.17 The Energy Policy documents presented by the applicant do not alter the considerations and weight applied in the balancing exercise that requires to be taken between protection of the environment and support for renewable energy. There is no reasonable basis within these documents that either less protection is to be afforded to the environment or more weight given to a proposal for renewable energy.

7.18 The council does not agree with the applicant that the ‘tilted balance’ applies to this application. In policy terms, Scottish Planning Policy tilts the balance away from the presumption in favour of the development plan in certain situations. As there is no presumption in favour of the development plan in the Electricity Act, the mechanism provided for by paragraph 33 of the Scottish Planning Policy cannot operate.

7.19 The introduction to the infrastructure section of LDP2 identifies that the council has been supportive of development of renewable energy and continues to support a range of renewable energy sources. However, this support needs to be balanced against their impacts on the environment and communities. As noted in the reasons for objection, the council considers the proposals would have significant adverse cumulative visual impact and landscape impact. It would also have an adverse impact on the setting and key views from Cairnsmore of Carsphairn. The proposal would be a departure from the DGWLCS.

7.20 In summary, the Council considers that:

- The benefits of a renewable energy project need to be balanced against other considerations;
- Scottish Planning Policy remains current Scottish Government Policy;
- There is no evidence that Scottish Government Policy reduces the protection to be given to the environment in favour of windfarm development;
- The proposals would be a departure from the Dumfries and Galloway Windfarm Landscape Capacity Study;

- The current proposals would have significant and unacceptable cumulative visual and landscape impacts, particularly on the setting and key views from Cairnsmore of Carsphairn.

Statement of Agreement

7.21 Prior to the hearing, parties submitted a Statement of Agreement (<http://www.dpea.scotland.gov.uk/Document.aspx?id=563056>). Points of agreement on policy matters are:

- As this is an application under section 36 of the Electricity Act 1989, section 25 of the Town and Country Planning (Scotland) Act 1997 (as amended) does not apply.
- The development plan is an important consideration.
- The relevant policies within the local development plan were listed at the start of Section 4 of the report to the Planning Committee (<http://www.dpea.scotland.gov.uk/Document.aspx?id=560349>).
- Policies IN1 and IN2 of the local development plan are the principal policies against which the application should be assessed.
- The proposed turbines fall within the 'Large' typology defined for the purposes of Policy IN2.
- A list of relevant European, UK and Scottish Government energy policy documents (see Chapter 2).
- Scottish Government's 100% renewable electricity target for 2020 is not a cap.
- UK renewable energy and electricity targets are of relevance.
- The agreement also dealt with other matters related to the local development plan, which have now been superseded by the adoption of Local Development Plan 2.

Reporters' analysis and conclusions on policy matters

7.22 Our policy assessment is applied in the context of section 36 of the Electricity Act. Whilst the development plan is a consideration, section 25 of the Town and Country Planning (Scotland) Act 1997 (as amended) does not apply.

National Energy Policy Context

7.23 There have been a number of changes in the wider legislative and policy context relating to renewable energy since the application was first submitted. Relevant documents, which were listed in Chapter 2 of this report, include publication of updated statistics for the proportion of energy generated from renewable resources and amended targets for renewable energy generation, which have been passed into legislation.

7.24 Considered together, these initiatives and supporting reports demonstrate an increasing commitment towards stricter targets for reducing the generation of greenhouse gases. The declaration, by the First Minister, of a 'Climate Emergency' reinforces the importance ascribed by Scottish Ministers to meeting the target of net zero greenhouse gas emissions in Scotland by 2045.

7.25 Meeting targets for reduction in greenhouse gas emissions will require an increase in the supply of energy from renewable resources. Figures published by the Committee on Climate Change show that there is already a substantial shortfall in terms of meeting UK legally binding renewable energy targets and in terms of renewable energy and electricity

targets in relation to 2020. **Thus, we conclude that there is clear policy support for an increase in supply of energy from renewable resources.**

7.26 Taken together, the current guidance in the National Planning Framework 3 and Scottish Planning Policy is explicit in its support for renewable energy generally and wind farm development in particular. The current proposals will contribute to meeting the demand for energy generated without the production of greenhouse gases. Thus, whilst the development is not a national development it would contribute towards the overall aims of the National Planning Framework 3.

7.27 Support for renewable energy has to be considered within the overall vision and ethos of published Scottish Policy. Scottish Planning Policy is supportive of development that contributes to sustainable development and of allowing the right development in the right place. Thus, by implication, the right type of development but in the wrong place would not be considered sustainable development and would not benefit from the presumption.

7.28 The applicant has argued that given the wider policy context of tighter emissions targets and greater demand for energy from renewables, the policy position set out in Scottish Planning Policy and the National Planning Framework 3 may no longer represent the most up-to-date position of Scottish Ministers. It has referred us to recent decisions in respect of wind farms, which it considers add support to this position. We do not agree with this view. Whilst we accept there is a clear direction of travel towards further, significant reductions in the emission of greenhouse gases coupled with increases in energy generated using renewable, low carbon, resources(including wind), we have seen no evidence that this should be at the expense of adverse impacts on environmental resources.

7.29 The Climate Change Secretary has indicated that the review of the National Planning Framework 3 and Scottish Planning Policy will consider how the planning system can support climate change goals, but this has not yet been completed. In the absence of that review, or any indication of the nature of any new policy initiatives to promote renewable energy generation, **we consider that it would be premature to consider the current guidance to be out of date and that Scottish Planning Policy and the National Planning Framework 3 continue to set the policy framework.**

7.30 Paragraph 169 of Scottish Planning Policy sets out the considerations for assessment of wind farm proposals. In respect of those considerations, and drawing on our findings elsewhere in this report we conclude:

- There would be some socio-economic benefits arising from both the construction and to a lesser degree the operation of the wind farm. These benefits include employment and supply chain opportunities (see Chapter 4);
- The proposal would generate 67 MW and hence make a valuable contribution to renewable energy generation targets and reducing greenhouse gas emissions (see Chapter 1);
- There would be no significant impact on residential amenity, noise levels or impacts arising from shadow flicker (see Chapter 5);
- There would be significant landscape and visual impacts, including cumulative effects. However, these would be limited in their extent (see Chapter 3);
- There would be no unacceptable ecological or ornithological impacts subject to the appropriate mitigation (see Chapters 5 and 6);

- There would be no unacceptable impacts on carbon rich soils, subject to appropriate mitigation (see Chapters 5 and 6);
- There would be no significant effects including cumulative effects on nationally or regionally important recreational routes. However, there would be localised significant cumulative effects on a number of local Core Paths (see Chapter 3);
- There would be no adverse effects on the landscape or visual amenity of the area as a result of the proposed lighting on turbines (see Chapter 3);
- There would be no unacceptable significant impacts on any items of archaeological or cultural heritage interest (see Chapter 5);
- There would be no significant impact on tourism or recreation (see Chapter 4);
- Subject to appropriate mitigation, there would be no unacceptable impacts on aviation and defence interests (see Chapters 3, 4 and 6);
- There would be no impacts on telecommunications, broadcasting and transmission links (see Chapter 5);
- Impacts on road traffic and the trunk road network would be adequately controlled (see Chapter 5);
- Subject to appropriate mitigation, there would be no significant effects on hydrology or the water environment or flood risk (see Chapter 5); and
- Suitable conditions could be imposed to control and monitor the proposed development and to ensure the decommissioning of the works (see Chapter 6 and Appendix 2).

7.31 In summary, we agree with the views of the applicant that the proposal is acceptable when considered against many of these considerations, however it would result in significant, but localised effects, including cumulative effects, on landscape character and visual receptors.

7.32 We have considered the applicant's views that paragraph 33 of Scottish Planning Policy introduces a 'tilted balance' or 'enhanced presumption' in favour of sustainable development. In these circumstances, the applicant considers that the adverse effects of a development would need to 'significantly and demonstrably outweigh the benefits' of the development in order for the development not to receive consent. These discussions were held within the context of a local development plan, which the applicant considered to be out-of-date, in respect of Part II Policy IN2 as the spatial map did not conform to the requirements set out in Scottish Planning Policy. However, the adoption, by Dumfries and Galloway Council, of its replacement local development plan makes redundant many of the arguments raised at the hearing in this respect. Furthermore, in light of the non-application of section 25 of the Town and Country Planning (Scotland) Act 1997 (as amended), we are unable to express a settled view on the inter-action of paragraph 33 of Scottish Planning Policy with section 36 applications.

Dumfries and Galloway Local Development Plan 2

7.33 The hearing focussed upon policies IN1 and IN2 of the local development plan, together with supporting supplementary guidance (Part 1 Wind Energy Development: Development Management Considerations, 2017). This included discussion about whether Policy IN2 of the local development plan and its supporting supplementary guidance represented up-to-date policy compliant with the requirements of Scottish Planning Policy. As noted above, the adoption of LDP2 has made much of this argument redundant.

7.34 The replacement local development plan (LDP2) also contains a Policy IN2. However, the wording of this policy has been modified from that in the previous plan, to achieve compliance with Scottish Planning Policy. We therefore consider that it is up-to-date and a material factor in consideration of this proposed development.

7.35 As yet, there is no adopted supplementary guidance to support Policy IN2. We consider the previous supplementary guidance to be obsolete, as the parent policy and local development plan has been superseded. There is, however, draft replacement supplementary guidance to support Policy IN2. Whilst we accept that this is draft policy, we consider it has some relevance in the assessment of this proposal.

7.36 Our assessment of the proposals against the relevant policies within LDP2 is set out below. Of these, parties are agreed that the main policies of relevance to this appeal are Policies IN1 and IN2.

7.37 Policy OP1 sets out the general considerations for all developments, whilst Policy OP2 provides guidance on design quality. Whilst these policies are relevant to all developments, we consider that more relevant detail is provided in other policies within LDP2, and in particular Policies IN1 and IN2.

7.38 The proposal would not affect any Gardens and Designed Landscapes including the Craigenkillan Garden Designed Landscape. It would not have any impacts on Listed Buildings or agricultural soil. It would not affect the performance or safety of the strategic transport network nor would it reduce the level of service of the regional network.

7.39 The scheme has considered surface water drainage requirements, which would be secured through the imposition of conditions. The effects on hydrological resources and effects on water quality and status would be acceptable and would be managed through condition as would any effects on Drinking Water Protection Areas. The proposals would result in some culverting of water courses, but the proposal includes adequate measures to protect habitats, passage of fauna and river form and flow, which would be secured by condition.

7.40 The proposal would not result in adverse effects on any sites of national or International importance for biodiversity or geodiversity. Effects on species of international importance and biodiversity resources would be avoided and measures to achieve this would be secured by condition. The scheme would result in the loss of some woodland, but this loss would be mitigated through replanting, which would be secured by condition.

7.41 Effects on peat soils have also been considered. The carbon calculator for the site shows that the balance of advantage in terms of climate change mitigation lies with the development proposal.

7.42 We have concluded in Chapter 3 that the proposals would not have a significant adverse effect on factors that contribute to the Galloway Hills Regional Scenic Area, the East Ayrshire Sensitive Landscape Area, the South Lanarkshire Sensitive Landscape Area or the Merrick Wild Land Area. The proposed development would not block or obstruct any existing public access routes. The assessment has also concluded that there would be no direct impacts on archaeological resources and that there would not be significant effects on the setting of the King's Cairn Scheduled Ancient Monument.

7.43 We therefore conclude that the proposal would accord with LDP2 policies HE6 – Gardens and Designed Landscapes; HE1 – Listed Buildings; HE3 – Archaeology; HE4 – Archaeologically Sensitive Areas; NE2 – Regional Scenic Areas; NE3 – Areas of Wild Land; NE4 – Sites of International Importance for Biodiversity; NE5 – Species of

International Importance; NE6 – Sites of National Importance for Biodiversity and Geodiversity; NE7 – Forestry and Woodland; NE11 – Supporting the Water Environment; NE12 – Protection of Water Margins; NE13 – Agricultural Soil; NE14 - Carbon Rich Soil; NE15 – Protection and Restoration of Peat Deposits as Carbon Sinks; T1 – Transport Infrastructure; T2 – Location of Development/ Accessibility; CF4 – Access Routes and IN8 – Surface Water Drainage and Sustainable Drainage Systems (SuDS).

7.44 Policy IN1 – Renewable Energy provides support for renewable energy projects generally, subject to their acceptability in terms of the benefits of the proposal and the extent to which its environmental and cumulative impacts can be satisfactorily addressed. Further requirements in respect of wind energy projects in particular is set out in Policy IN2 – Wind Energy. This also sets out the considerations that will be applied in determining the acceptability of any proposed wind energy development. These considerations reflect those set out at paragraph 169 of Scottish Planning Policy, comprising renewable energy benefits, socio-economic benefits, landscape and visual impacts, cumulative impact, impact on local communities and residential interests, impact on infrastructure, impact on aviation and defence interests, and other considerations including effects on the natural environment and recreational interests.

7.45 A key difference between the wording of policies IN1 and IN2 in LDP2 and the previous local development plan is the increased range of considerations against which proposals must be assessed. In particular, the policies now require consideration of the effects of the proposal on greenhouse gas emissions and their net economic impact – both factors that add support to the current proposal.

7.46 Policy IN2 also refers to a Spatial Framework Map, which provides strategic guidance for the location of windfarms. The policy cautions that this strategic guidance must be read in conjunction with supplementary guidance and its Appendix, the Dumfries and Galloway Wind Farm Landscape Capacity Study. At the time of writing, the supplementary guidance is in draft form.

7.47 As discussed within the landscape and visual effects chapter of this report (Chapter 3), the proposal lies within an ‘Area Identified with Potential for Windfarm development’. Thus, whilst the development is proposed for an area where in principle wind developments are acceptable; the individual effects of the proposal need to be considered in more detail.

7.48 We have considered the points raised by the applicant in relation to the distribution of Landscape Character Type 19a and in particular the Eskdalemuir unit and how this relates to the Eskdalemuir Seismic Array exclusion areas. However, we do not see that this alters our conclusions that this application needs to be considered on its individual merits in relation to effects on landscape.

Draft Supplementary Guidance

7.49 Supplementary guidance in support of Policy IN2 is still in draft form, albeit it has been approved by Full Council for consultation. It provides further clarification of the assessment of the considerations set out in Policy IN2, which we listed at paragraph 7.41 above. In considering the landscape and visual impacts, including cumulative impacts, of a proposal, reference is made to Appendix C, which is the Dumfries and Galloway Windfarm Landscape Capacity Study.

7.50 As discussed in Chapter 3, we note that the proposal site lies within Landscape Character Type 19a, which is assessed as having High – Medium sensitivity to the Very Large turbines. In our view, this is an indication that the landscape and visual effects of the

proposals would need particular consideration on an individual basis and balanced against other factors to determine the overall acceptability of the proposal.

7.51 The extent to which the landscape is capable of accommodating the development without significant detrimental landscape or visual impacts, is assessed in Chapter 3. The conclusions reached, including our assessment of the effects on wild land and any cumulative impacts, is that there would be capacity for the proposed development given the existing and proposed wind farm context. Significant effects would be mostly limited to the site and its immediate surroundings with the design and scale of the proposal appropriate to the scale and character of its setting. These aspects of the proposal are considered to be consistent with the Policy IN2.

7.52 Our assessment concludes that the overall character of this particular landscape is becoming more defined by wind farms. Despite the sensitivity expressed with regard to turbine typology, we consider that the proposal would fit with the established and emerging development pattern without detracting from the landscape character. The proposal would not conflict with the specific aims of the guidance for this particular area.

Reporters' overall conclusions on policy matters

7.53 Based on our analysis above, our overall conclusions in relation to policy are:

- there is considerable support from national energy policy and national planning policy for renewable energy developments. This includes support for larger, more efficient turbines (see Chapter 3);
- the proposals would result in generation of around 67 MW, which would make a valuable contribution to unmet targets for renewable energy generation;
- the proposals would be consistent with many of the considerations set out in Scottish Planning Policy on contributing to sustainable economic development and with many of the considerations in paragraph 169 (see Chapters 3, 5 and 6);
- the proposal is not within and does not impact on any international or nationally natural heritage area;
- the spatial framework map of LDP2 identifies the proposal site as lying within an area with potential for some wind farm development (but must be read in conjunction with Supplementary Guidance); and
- the proposal would be consistent with Policies IN1 and IN2 of LDP2 and would not be contrary to the objectives set out in the draft Dumfries and Galloway Windfarm Landscape Capacity Study.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

8.1 Schedule 9 of the Electricity Act 1989 requires Scottish Ministers to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological and physiographical features of special interest and of protecting sites, buildings and other objects of architectural, historic or archaeological interest. It is also necessary to have regard to the extent to which the applicant has sought to mitigate the effects of development on those interests.

8.2 We are required to consider the above in the context of relevant national climate change and energy policy, national planning policy and other relevant policy and guidance. We acknowledge that section 25 of the Town and Country Planning (Scotland) Act 1997 (as amended) is not engaged under the Electricity Act 1989 and as such the development plan does not have primacy in decision making. Nevertheless, the development plan is capable of being a significant material consideration.

8.3 We are satisfied, on the basis of current knowledge and methods of assessment, that the conclusions reached within the applicant's EIA report (including the Addendum) are up to date and address the likely direct and indirect significant effects of the development. Whilst we note the age of some of the ecological survey data, we are content that these are sufficient for the purposes of the assessment.

8.4 We have considered the proposed development in relation to European sites identified under the Habitats and Birds Directives. One site, Loch Ken and River Dee Marshes SPA/ Ramsar site has been identified with the potential to have connectivity to the proposed development.

8.5 Under the Conservation (Natural Habitats, &c) Regulations 1994, as amended (the Habitats Regulations) any development which has a likely significant effect on a European site (including an SPA) either alone or in combination with other projects, should be subject to an appropriate assessment of the implications for the site in light of that site's conservation objectives. Our consideration of the potential for the proposal to give rise to likely significant effects has been considered as part of our discussion of ornithology issues. Based on the information provided by the applicant, we conclude that the proposed development, either alone or in combination with other projects and plans, would not have a likely significant effect upon any of the qualifying interests of the Loch Ken and River Dee Marshes SPA/ Ramsar site in view of that site's conservation objectives. Hence, we conclude that an appropriate assessment is not required. In reaching this view, we are also aware that SNH, who is the statutory consultee for appropriate assessment, has not raised any concerns about the effects of the proposals upon this or any European site.

8.6 We have considered all the topics referred to in the Environmental Statement and Addendum, and set out our conclusions in relation to these in the preceding chapters of this report. We have given careful regard to all parties' submissions, consultation responses and representations, together with oral evidence presented during the inquiry and hearing sessions. Based on our findings and conclusions, we consider the main issues in this case to be:

- the landscape and visual impact of the development;
- the benefits of the development, including its renewable energy generation, greenhouse gas emissions savings and net economic impact; and

- the degree to which it would be in conformity with national planning policy, the local development plan and other relevant guidance.

National energy policy and planning policy

8.7 Based on our analysis in Chapter 2 and conclusions reached in Chapter 7, we consider there to be clear and compelling policy support for an increase in supply of energy from renewable sources. We maintain the view that national planning policy continues to require the right development should be in the right place and in order to benefit from a presumption in favour, the development must contribute to sustainable development. We acknowledge that this requires the costs and benefits of a development proposal to be carefully balanced in coming to a final view.

8.8 The proposed development would provide 20 larger wind turbines as an extension to an existing wind farm development and contribute around 67 MW, which would be subsidy free. We have concluded in Chapter 7 how the proposal would meet the majority of the range of considerations set out in Scottish Planning Policy. The only exception is with regard to landscape and visual impacts. We accept that the proposal will give rise to some significant landscape and visual effects, including cumulative effects, but we find that these effects would be relatively localised and limited in scope.

8.9 We consider it reasonable to describe the proposed development as contributing to sustainable development as it is located within an area which has potential for wind farm development and it compares well against the principles of sustainable development set out in Scottish Planning Policy. The proposal is likely to have a positive, although modest beneficial effect on the economy. It would support national energy targets and contribute to reducing greenhouse emissions. While significant effects are predicted with regard to landscape and visual impacts, we consider that the degree of harm from such effects would be acceptable overall.

The development plan and council guidance

8.10 As set out in Chapter 7, we consider that the proposal would comply with the recently adopted local development plan and the council's draft guidance on wind energy development.

Overall conclusions

8.11 We conclude that the proposed development is supported by national energy and planning policy. It would be consistent with the recently adopted Dumfries and Galloway Local Development Plan 2 and other relevant council guidance. The environmental effects of the proposal can be adequately controlled by planning conditions, or are otherwise limited in extent and outweighed by the renewable energy and climate change benefits which would occur.

Recommendations

8.12 We recommend that consent should be granted under section 36 of the Electricity Act 1989 and that planning permission shall be deemed to be granted under section 57 of the Town and Country Planning (Scotland) Act 1997 (as amended), subject to the conditions listed in Appendix 2 of this report.

Claire Milne and Sue Bell
Reporters

APPENDIX 1: APPEARANCES – INQUIRY SESSIONS, HEARING SESSIONS

For the applicant:

- Marcus Trinick QC
- Fraser Gillies of Wright, Johnston & Mackenzie
- David Bell of Jones Lang LaSalle
- Robert Bainsfair of Ramboll Environ

For Dumfries and Galloway Council:

- Douglas Armstrong QC
- Laura Whitelaw of Dumfries and Galloway Council
- Robert Duncan of Dumfries and Galloway Council
- Carol Anderson, consultant for Dumfries and Galloway Council

APPENDIX 2: SUGGESTED CONDITIONS

Section 36 conditions

1. Duration of the consent

(1) The consent is for a period of 35 years from the date of Final Commissioning. Written confirmation of the date of Final Commissioning shall be provided to the Planning Authority and Scottish Ministers no later than one calendar month after that date.

(2) Written confirmation of the date of First Commissioning shall be provided to the Planning Authority and the Scottish Ministers no later than one calendar month after that date.

Reason: To define the duration of the consent.

2. Commencement of development

(1) The Commencement of the Development shall be no later than five years from the date of this consent, or in substitution, such other period as the Scottish Ministers may hereafter direct in writing.

(2) Written confirmation of the intended date of Commencement of Development shall be provided to the Planning Authority and Scottish Ministers no later than one calendar month before that date.

Reason: To avoid uncertainty and to ensure that consent is implemented within a reasonable period.

3. Non-assignment

(1) The applicant shall not be permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may authorise the assignment of the consent (with or without conditions) or refuse assignment as they may, in their own discretion, see fit. The consent shall not be capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

(2) The applicant shall notify the local Planning Authority in writing of the name of the assignee, principal named contact and contact details within 14 days of written confirmation from the Scottish Ministers of an assignment having been granted.

Reason: To safeguard the obligations of the consent if transferred to another company.

4. Serious incident reporting

(1) In the event of any breach of health and safety or environmental obligations relating to the Development during the period of this consent, the Company will provide written notification of the nature and timing of the incident to the Planning Authority, including confirmation of remedial measures taken and/ or to be taken to rectify the breach, within 24 hours of the incident occurring.

Reason: To keep the Scottish Ministers informed of any such incidents which may be in the public interest.

5. Aviation radar

(1) There shall be no Commencement of Development until such time as the Scottish Ministers receives written confirmation from the airport operator that:

- (i) a radar mitigation scheme has been identified; and
- (ii) the radar mitigation scheme can be implemented and maintained for the lifetime of the development.

(2) No blade shall be fitted to any turbine or turbines forming part of the development and no such turbine shall operate, save as provided for and in accordance with the testing protocol, to be submitted to the airport operator, and the Scottish Ministers for its information, unless and until such time as the Scottish Ministers receives confirmation from the airport operator that the radar mitigation scheme is acceptable mitigation for the Development and has been satisfactorily implemented by the airport operator.

(3) No turbine shall operate other than in accordance with the terms of the radar mitigation scheme.

Reason: In the interests of aviation safety.

Definitions for the purposes of Condition 5:

“Airport Operator” means Glasgow Prestwick Airport Limited or any successor as holder of a licence under the Air Navigation Order 2000 from the Civil Aviation Authority to operate Glasgow Prestwick Airport.

“Radar Mitigation Scheme” means such equipment, procedural or technological measures, as the Airport Operator identifies as necessary and sufficient to prevent the operation of the development or of any turbines forming part of the Development impacting adversely on radar performance or on the performance of other navigational aids at Glasgow Prestwick Airport or on maintaining safe and efficient air traffic control services or procedures or airspace and which the Airport Operator is willing and able to implement and maintain for the lifetime of the Development or for such shorter period as may be agreed in consultation with the Airport Operator as necessary to mitigate any such adverse impact.

“Testing Protocol” means the protocol to control the operation of any turbine or turbines forming part of the Development for the purposes of testing of the Radar Mitigation Solution.

Deemed consent conditions

1. Implementation in accordance with approved plans and requirements of this consent

Except as otherwise required by the terms of this consent and deemed planning permission, the Development shall be undertaken in accordance with the application (including the approved drawings) environmental statement (as supplemented or amended by any further or additional environmental information) and other documentation lodged in support of the application.

Reason: To ensure that the Development is carried out in accordance with the approved details.

2. Design and operation

(1) There shall be no Commencement of Development until full details of the proposed wind turbines any anemometry masts and all associated apparatus have been submitted to and approved in writing by the Planning Authority. The turbines shall be consistent with the candidate turbine or range assessed in the environmental statement, in terms of their dimensions from base to tip.

(2) The Development shall be constructed and operated in accordance with the approved details and maintained in the approved colour, until such time as the wind farm is decommissioned.

(3) All wind turbine blades shall rotate in the same direction.

(4) No part of the Development shall display any name, logo, sign or other advertisement unless otherwise approved in advance in writing by the Planning Authority or required by law.

Reason: To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts of the candidate turbine assessed in the environmental statement and in the interests of the visual amenity of the area

3. Other buildings and facilities

There shall be no Commencement of Development until details of the external appearance, dimensions, and surface materials of the substation building, associated compounds, any construction compound boundary fencing, external lighting and parking areas have been submitted to and approved in writing by the Planning Authority. The approved details shall be implemented.

Reason: To ensure that the environmental impacts of the sub-station and ancillary development forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.

4. Micro-siting

All wind turbines, buildings, anemometry masts, areas of hardstanding and tracks shall be constructed in the location shown on plan reference Figure 3.6 (Site Layout). Wind turbines, buildings, anemometry masts, areas of hardstanding and tracks may be adjusted by micro-siting within the site. However, unless otherwise approved in advance in writing by the Planning Authority (in consultation with SEPA and SNH), micro-siting within the site subject to the following restrictions:

- No wind turbine foundation shall be positioned higher, when measured in metres Above Ordinance Datum (Newlyn), than the position shown on plan reference ES Volume 3 Figure 3.6 (Site Layout) and as noted at Table 4.2 of Volume 1: Main Report;
- No wind turbine, building, mast or hardstanding shall be moved more than 50m from the position shown on the original approved plans;

- No access track shall be moved more than 10m from the position shown on the original approved plans (but up to 50m where required to account for any realignment necessary to connect to micro-sited turbines and crane pads);
- All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works (ECoW).

No later than one month after the date of First Commissioning, an updated site plan shall be submitted to the Planning Authority showing the final position of all wind turbines, masts, anemometry, areas of hardstanding, tracks and associated infrastructure forming part of the Development. The plan should also specify areas where micro-siting has taken place and, for each instance, be accompanied by copies of the ECoW or Planning Authority's approval, as applicable.

Reason: To control environmental impacts while taking account of local ground conditions.

5. Borrow Pits

There shall be no Commencement of Development until a scheme for the working of the borrow pit forming part of the Development has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The scheme shall include:

- a) a detailed working method statement;
- b) details of the handling of any overburden (including peat, soil and rock);
- c) drainage details, including measures to prevent surround areas of peatland water dependent sensitive habitats and Ground Water Dependent Terrestrial Ecosystems (GWDTE) from drying out;
- d) a programme of implementation of the works described in the scheme;
- e) full details of the reinstatement, restoration and aftercare of the borrow pit at the end of the construction period; and
- f) analytical testing of stone.

The approved scheme shall thereafter be implemented in full.

Reason: To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented. To secure the restoration of borrow pit(s) at the end of the construction period.

6. Planning Monitoring Officer

There shall be no Commencement of Development until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant as a Planning Monitoring Officer (PMO) to assist the Planning Authority in the monitoring of compliance with conditions attached to this deemed planning permission during the period from Commencement of Development to completion of post-construction restoration works.

Reason: To enable the Development to be suitably monitored to ensure compliance with the consent issued.

7. Ecological Clerk of Works

There shall be no Commencement of Development until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified Ecological Clerk of Works (ECoW) in consultation with SNH and SEPA as necessary. The terms of appointment shall:

- a) Impose a duty to monitor compliance with the ecological and hydrological commitments set out in the Environmental Statement and any other information lodged in support of the application, the Construction and Environmental Management Plan approved under condition 8 and any other plans approved under condition 8;
- b) Require the ECoW to report to the Company's nominated construction project manager any incidences of non-compliance with the ECoW works at the earliest practical opportunity;
- c) Require the ECoW to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- d) Require the ECoW to report to the Planning Authority any incidences of non-compliance with the ECoW Works at the earliest practical opportunity.

The ECoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post construction restoration works approved in terms of condition 8.

No later than 18 months prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier), the Company shall submit details of the terms of appointment by the Company of an independent ECoW throughout the decommissioning, restoration and aftercare phases of the Development to the Planning Authority for approval in consultation with SNH and SEPA. The ECoW shall be appointed on the approved terms throughout the decommissioning, restoration and aftercare phases of the Development.

Reason: To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development

8. Construction Environmental Management Plan

There shall be no Commencement of Development until a Construction and Environmental Management Plan (CEMP) detailing the matters set out in this condition with information on their timetabling, has been submitted to and approved in writing by the Planning Authority in consultation with SNH, SEPA and Scottish Water. The CEMP shall include (but shall not be limited to):

- a) a site waste management plan (dealing with all aspects of waste produced during the construction period other than peat), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment;
- b) details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;

- c) a felling and tree management plan, which includes details of how wastes and arisings will be dealt with;
- d) details of borrow pit excavation and restoration, including analytical testing of stone to ensure its suitability;
- e) a dust management plan;
- f) details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;
- g) a pollution prevention and control method statement, including arrangements for the storage of oil and fuel on the site;
- h) soil storage and management;
- i) a peat management plan, which incorporates the measures set out in Section A.10.6 of Technical Appendix 10.1 to the Environmental Statement;
- j) a species protection plan based on surveys for protected species (including birds) carried out no longer than 8 months prior to submission of the plan;
- k) a drainage management strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources;
- l) sewage disposal and treatment;
- m) temporary site illumination;
- n) the construction of the access into the site and the creation and maintenance of associated visibility splays;
- o) the method of construction of the crane pads;
- p) the method of construction of the turbine foundations;
- q) the method of working cable trenches;
- r) the method of construction and erection of the wind turbines and meteorological masts;
- s) details of watercourse crossings;
- t) post-construction restoration / reinstatement of the working areas not required during the operation of the Development, including construction access tracks, borrow pits, construction compound and other construction areas. Wherever possible, reinstatement is to be achieved by the careful use of turfs removed prior to construction works. Details should include all seed mixes to be used for the reinstatement of vegetation;

- u) a wetland ecosystems (Ground Water Dependent Terrestrial Systems) survey and mitigation plan;
- v) pre-construction surveys for protected species and the development of any required mitigation, to be agreed with SNH;
- w) an integrated water quality, macroinvertebrate and fish population monitoring programme. This should include a baseline electro-fishing and water quality survey which shall be carried out at such locations as are agreed in writing with the planning authority in consultation with the Galloway Fisheries Trust, SEPA and Scottish Water, to determine the presence of any migratory fish and the water quality of watercourses. Electro-fishing check surveys shall be undertaken at those same locations throughout the construction and operation stages at agreed intervals. The results of the surveys shall be submitted to the planning authority. Should migratory fish or water quality be likely to be adversely affected by the proposed works, mitigation measures to avoid those adverse impacts shall be submitted for the written approval of the planning authority and implemented thereafter.
- x) during the archaeological walkover survey, the marking on operational maps the historical marker cairns on Waterhead Hill to avoid the chance of accidental damage and the provision of a toolbox talk and documentation about how to recognise archaeological features, who to notify and how to proceed in the event of unexpected archaeological remains.
- y) a Construction Noise Management Plan (CNMP) which includes an assessment of noise from the proposed construction activities (including, amongst other things, noise created during night time hours (23:00 – 07:00) as a result of operations, construction and deliveries at the site, the selection of plant used with reference to noise created by the plant, and noise created by bleeping type warning devices on the plant), details of noise mitigation measures where required and includes a site complaint investigation procedure.
- z) a protocol for the measurement and assessment of ground borne vibration from blast activities; and
- aa) measures for the protection of Drinking Water Protected Areas and private water supplies, to be agreed in advance with Scottish Water.
- bb) an existing track condition report which shall identify the lengths of existing track and the condition of them. It shall include the details of works required to bring the identified tracks to a standard which is consistent with that of the new access tracks under (b) of this condition to include the details of siltration run off and the maintenance of them during the construction and post construction works of the proposed development.

The Development shall be implemented thereafter in accordance with the approved CEMP unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH, SEPA and Scottish Water.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on amenity and the environment, and that the mitigation measures

contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented.

9. Traffic management

There shall be no Commencement of Development until a Traffic Management (and enabling works) Plan has been submitted to and approved in writing by the Planning Authority. The Traffic Management Plan shall include:

- a) the routing of all traffic associated with the Development on the local road network;
- b) the method of construction for the overrun areas and how the existing public road network will be stabilised adjacent to the overrun areas;
- c) measures to ensure that the specified routes are adhered to, including monitoring procedures;
- d) details of all signage and lining arrangements to be put in place;
- e) provisions for emergency vehicle access;
- f) identification of a nominated person to whom any road safety issues can be referred; and
- g) a plan for access by vehicles carrying abnormal loads, including the number and timing of deliveries, the length, width, axle configuration of all extraordinary traffic accessing the site.

The approved Traffic Management (and enabling works) Plan shall thereafter be implemented in full, unless otherwise agreed in advance in writing with the Planning Authority.

Reason: In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.

10. Transport of abnormal loads

(1) Prior to commencement of deliveries to site, the proposed route for any abnormal loads on the trunk road network must be approved by the trunk roads authority prior to the movement of any abnormal load. Any accommodation measures required including the removal of street furniture, junction widening, traffic management must similarly be approved.

(2) During the delivery period of the wind turbine construction materials any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland before delivery commences.

Reason: To minimise interference and maintain the safety and free flow of traffic on the Trunk Road as a result of the traffic moving to and from the development. To ensure that the transportation will not have any detrimental effect on the road and structures along the route.

11. Programme of Archaeological Works

There shall be no Commencement of Development until the Planning Authority has approved the terms of a programme of archaeological works to be observed during construction of the Development, to include measures to be taken to protect and preserve any features of archaeological interest in situ and the recording and recovery of archaeological features which cannot be so preserved. The approved scheme of archaeological works shall thereafter be implemented in full.

12. Noise

The rating level of noise immission from the combined effects of the wind turbines hereby permitted (including the application of any tonal penalty), when determined in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speeds set out in or derived from Tables 1 and 2 attached to these conditions.

At Moor Cottage only, the rating level of noise immissions from the combined effects of the wind turbines hereby permitted, operating in conjunction with the consented or operational turbines of Windy Standard I and II Wind Farms (APP 02/N/2/0001) and South Kyle Wind Farm (APP 13/0001/S36) (including the application of any tonal penalty), when determined in accordance with the attached Guidance Notes shall not exceed the values for the relevant integer wind speed set out in Tables 3 and 4 attached to these conditions. Following complaint, in the event that the level of noise immissions (including the application of any tonal penalty) exceeds the values in Tables 3 and 4, the operator of Windy Standard III Wind Farm shall undertake appropriate mitigation to reduce turbine noise immissions such that the limits in Tables 3 and 4 are met, or such that noise from the turbines hereby permitted (including the application of any tonal penalty) meets the levels set out in Tables 5 and 6, and:

A) Prior to the operation of the wind turbines, the wind farm operator shall submit to the Local Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Authority.

B) Within 21 days from receipt of a written request of the Local Authority, following a complaint to it alleging noise disturbance at a dwelling, the wind farm operator shall, at its expense, employ an independent consultant approved by the Local Authority to assess the level of noise immission from the wind farm at the complainant's property (or a suitable alternative location agreed in writing with the Local Authority) in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Authority shall set out at least the date, time and location that the complaint relates to. Within 14 days of receipt of the written request of the Local Authority made under this paragraph (B), the wind farm operator shall provide the information relevant to the complaint logged in accordance with paragraph (H) to the Local Authority in the format set out in Guidance Note 1(e).

C) Where there is more than one property at a location specified in Tables 1 and 2 attached to this condition, the noise limits set for that location shall apply to all dwellings at that location. Where a dwelling to which a complaint is related is not identified by name or location in the Tables attached to these conditions, the wind farm operator shall submit to the Local Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's

dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The submission of the proposed noise limits to the Local Authority shall include a written justification of the choice of the representative background noise environment provided by the independent consultant. The rating level of noise immission resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Authority for the complainant's dwelling.

D) Prior to the commencement of any measurements by the independent consultant to be undertaken in accordance with these conditions, the wind farm operator shall submit to the Local Authority for written approval the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken. Where the proposed measurement location is close to the wind turbines, rather than at the complainant's property (to improve the signal to noise ratio), then the operator's submission shall include a method to determine compliance with the limits at the complainant's property based on the noise levels measured at the agreed location (the Alternative Method). Details of the Alternative Method together with any associated guidance notes deemed necessary, shall be submitted to and agreed in writing by the Local Authority prior to the commencement of any measurements. Measurements to assess compliance with the noise limits set out in the Tables attached to these conditions or approved by the Local Authority pursuant to paragraph (C) of this condition shall be undertaken at the measurement location approved in writing by the Local Authority.

E) Prior to the submission of the independent consultant's assessment of the rating level of noise immission pursuant to paragraph (F) of this condition, the wind farm operator shall submit to the Local Authority for written approval a proposed assessment protocol setting out the following:

i) the range of meteorological and operational conditions (the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immission.

ii) a reasoned assessment as to whether the noise giving rise to the complaint contains or is likely to contain a tonal component.

The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the information provided in the written request of the Local Authority under paragraph (B), and such others as the independent consultant considers necessary to fully assess the noise at the complainant's property. The assessment of the rating level of noise immission shall be undertaken in accordance with the assessment protocol approved in writing by the Local Authority and the attached Guidance Notes.

F) The wind farm operator shall provide to the Local Authority the independent consultant's assessment of the rating level of noise immission undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Authority made under paragraph (B) of this condition unless the

time limit is extended in writing by the Local Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Authority with the independent consultant's assessment of the rating level of noise immission.

G) Where a further assessment of the rating level of noise immission from the wind farm is required pursuant to Guidance Note 4(c) of the attached Guidance Notes, the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (F) above unless the time limit for the submission of the further assessment has been extended in writing by the Local Authority.

H) The wind farm operator shall continuously log power production, turbine rotor revolutions per minute, wind speed and wind direction, all in accordance with Guidance Note 1(d) of the attached Guidance Notes. The data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) of the attached Guidance Notes to the Local Authority on its request within 14 days of receipt in writing of such a request.

Note: For the purposes of this condition, a "dwelling" is a building within Use Classes 7, 8 and 9 of the Town and Country Planning (Use Classes) (Scotland) Order 1997 which lawfully exists or had planning permission at the date of this consent.

Table 1 - Between 07:00 and 23:00 - Noise level dB $L_{A90, 10\text{-minute}}$

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L_{A90} Decibel Levels												
Waterhead (254530,599230)	30	30	30	30	30	30	30	30	30	30	30	30
Knockengoroch (255533,597111)	40	40	40	40	40	39.1	38.6	38.3	38.3	38.3	38.3	38.3
Netherbow (255465,597861)	40	40	40	40	39.5	38.6	37.4	36.9	36.9	36.9	36.9	36.9
Brownhill (255900,602600)	35	35	35	35	35	35	35	35	35	35	35	35

Table 2 - Between 23:00 and 07:00 - Noise level dB $L_{A90, 10\text{-minute}}$

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L_{A90} Decibel Levels												
Waterhead (254530,599230)	33	33	33	33	33	33	33	33	33	33	33	33
Knockengoroch (255533,597111)	43	43	43	43	43	43	42.4	42.3	42.3	42.3	42.3	42.3
Netherbow (255465,597861)	43	43	43	43	43	42.3	41.9	41.7	41.7	41.7	41.7	41.7
Brownhill (255900,602600)	35	35	35	35	35	35	35	35	35	35	35	35

Table 3 - Between 07:00 and 23:00 - Noise level dB $L_{A90, 10\text{-minute}}$

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L_{A90} Decibel Levels												
Moor Cottage (256963,603528)	45	45	45	45	45	45	45	45	45	45	45	45

Table 4 - Between 23:00 and 07:00 - Noise level dB $L_{A90, 10\text{-minute}}$

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L_{A90} Decibel Levels												
Moor Cottage (256963,603528)	45	45	45	45	45	45	45	45	45	45	45	45

Table 5 - Between 07:00 and 23:00 - Noise level dB L_{A90, 10-minute}

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L _{A90} Decibel Levels												
Moor Cottage (256963,603528)	35	35	35	35	35	35	35	35	35	35	35	35

Table 6 - Between 23:00 and 07:00 - Noise level dB L_{A90, 10-minute}

Location (easting, northing grid coordinates)	Standardised wind speed at 10 metres height (m/s) within the site averaged over 10-minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
L _{A90} Decibel Levels												
Moor Cottage (256963,603528)	35	35	35	35	35	35	35	35	35	35	35	35

Note to Tables 1 - 6: The geographical coordinates references set out in these tables are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

The standardised wind speed at 10 metres height within the site refers to wind speed at 10 metres height derived from those measured at hub height, calculated in accordance with the method given in the Guidance Notes.

Note to Tables 5 and 6: The noise limits detailed in Tables 5 and 6 assume that South Kyle Wind Farm is built and operated in accordance with its consent (APP 13/0001/S36). The noise limits detailed in Tables 5 and 6 can be recalculated, if necessary, to consider any consented variations to that consent. Any update to the noise limits shall be submitted to, and approved in writing by, the Local Authority.

The development shall operate in accordance with the limits contained in this condition unless the Local Authority gives its written consent to an updated set of noise limits, in which case the updated noise limits shall apply.

Guidance Notes for Noise Condition

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immission from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Note 3 with any necessary correction for residual background noise levels in accordance with Note 4. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997)

published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Note 1

(a) Values of the LA_{90,10-minute} noise statistic should be measured at the complainant's property (or an approved alternative representative location), using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated before and after each set of measurements, using a calibrator meeting BS EN 60945:2003 "Electroacoustics – sound calibrators" Class 1 with PTB Type Approval (or the equivalent UK adopted standard in force at the time of the measurements) and the results shall be recorded. Measurements shall be undertaken in such a manner to enable a tonal penalty to be calculated and applied in accordance with Guidance Note 3.

(b) The microphone shall be mounted at 1.2 - 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone shall be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The LA_{90,10-minute} measurements should be synchronised with measurements of the 10-minute arithmetic mean wind speed and wind direction data and with operational data logged in accordance with Guidance Note 1(d) and rain data logged in accordance with Note 1(f).

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second (m/s) and arithmetic mean wind direction in degrees from north in each successive 10-minute period in a manner to be agreed in writing with the planning authority. Each 10 minute arithmetic average mean wind speed data as measured or calculated at turbine hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements determined as valid in accordance with Note 2(b), such correlation to be undertaken in the manner described in Note 2(c). All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary.

(e) Data provided to the Local Authority in accordance with paragraphs (E) (F) (G) and (H) of the noise condition shall be provided in comma separated values in electronic format with

the exception of data collected to assess tonal noise (if required) which shall be provided in a format to be agreed in writing with the Local Authority.

(f) A data logging rain gauge shall be installed in the course of the independent consultant undertaking an assessment of the level of noise immission. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Note 2

(a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b).

(b) Valid data points are those measured during the conditions set out in the assessment protocol approved by the Local Authority under paragraph (E) of the noise condition but excluding any periods of rainfall measured in accordance with Note 1(f).

(c) Values of the LA_{90,10-minute} noise measurements and corresponding values of the 10-minute standardised ten metre height wind speed for those data points considered valid in accordance with Note 2(b) shall be plotted on an XY chart with noise level on the Y-axis and wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) shall be fitted to the data points to define the wind farm noise level at each integer speed.

Note 3

(a) Where, in accordance with the approved assessment protocol under paragraph (E) of the noise condition, noise immission at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty shall be calculated and applied using the following rating procedure.

(b) For each 10-minute interval for which LA_{90,10-minute} data have been determined as valid in accordance with Note 2, a tonal assessment shall be performed on noise immission during 2-minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure shall be reported.

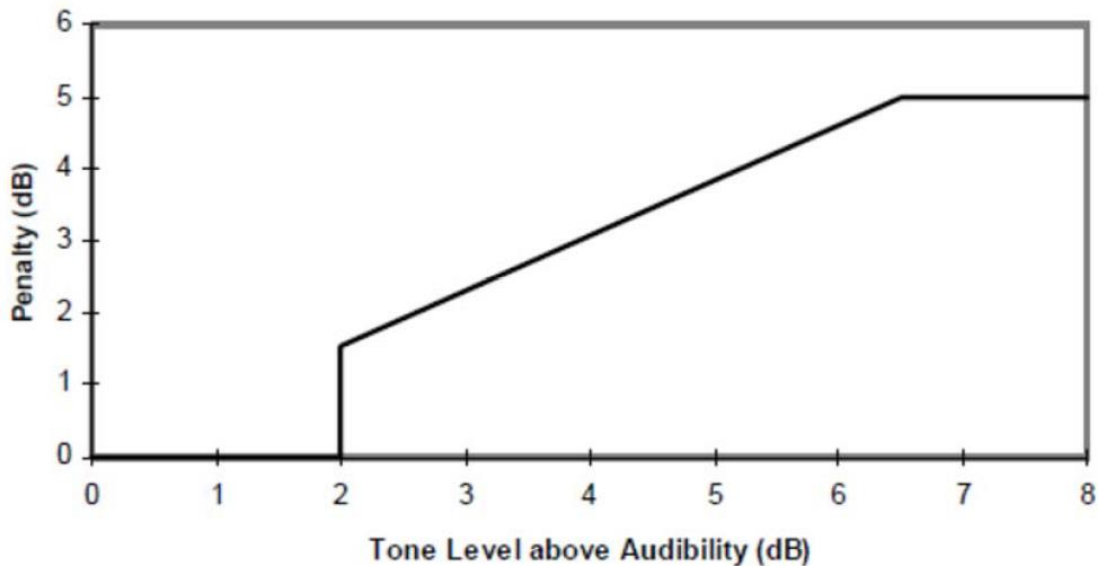
(c) For each of the 2-minute samples the tone level above audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.

(d) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(e) A least squares "best fit" linear regression shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line fitted to values within $\pm 0.5\text{m/s}$ of each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process

shall be repeated for each integer wind speed for which there is an assessment of overall levels in Note 2.

(f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below derived from the average tone level above audibility for each integer wind speed.



Note 4

(a) If a tonal penalty is to be applied in accordance with Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Note 3 at each integer wind speed within the range set out in the approved assessment protocol under paragraph (E) of the noise condition.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Note 2.

(c) If the rating level at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Authority for a complainant's dwelling in accordance with paragraph (C) of the noise condition then no further action is necessary. In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (C) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further

assessment. The further assessment shall be undertaken in accordance with the following steps:

- i. Repeating the steps in Note 2, with the wind farm switched off, and determining the background noise (L_3) at each integer wind speed within the range set out in the approved noise assessment protocol under paragraph (E) of this condition.
- ii. The wind farm noise (L_1) at this speed shall then be calculated as follows where L_2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left[10^{L_2/10} - 10^{L_3/10} \right]$$

- iii. The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L_1 at that integer wind speed.

iv. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note (iii) above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Authority for a complainant's dwelling in accordance with paragraph (C) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Authority for a complainant's dwelling in accordance with paragraph (C) of the noise condition then the development fails to comply with the conditions.

Reason: Reason: to protect nearby residents from undue noise and disturbance. To ensure that noise limits are not exceeded and to enable prompt investigation of complaints.

13. Construction hours

Construction work which is audible from any noise-sensitive receptor shall only take place on the site between the hours of 07.00 to 19.00 on Monday to Friday inclusive and 07.00 to 16.00 on Saturdays, with no construction work taking place on a Sunday or on Bank Holidays or Public Holidays. Outwith these specified hours, development on the site shall be limited to turbine erection, maintenance, emergency works, dust suppression, and the testing of plant and equipment, unless otherwise approved in advance in writing by the planning authority.

HGV movements to and from the site (excluding abnormal loads) during construction of the wind farm shall be limited to 07.00 to 19.00 Monday to Friday, and 07.00 to 16.00 on Saturdays, with no HGV movements to for from site taking place on a Sunday or on Bank Holidays or Public Holidays.

Reason: In the interests of local amenity

14. Aviation information

Prior to the Commencement of Development, the Company shall provide the Planning Authority, Ministry of Defence, Defence Geographic Centre and NATS with the following information:

- a) the date of the expected commencement of each stage of construction;
- b) the height above ground level of the tallest structure forming part of the Development;
- c) the maximum extension height of any construction equipment; and
- d) the position of the turbines and masts in latitude and longitude.

Reason: In the interests of aviation safety.

15. Aviation lighting – Waterhead Hill

Prior to the erection of the first wind turbine the Company shall submit a scheme for aviation lighting for the wind farm to the Planning Authority for written approval. The scheme shall include details of infra-red aviation lighting to be applied. No lighting other than that described in the scheme may be applied at the site, other than as required by law.

No turbines shall be erected on site until the scheme has been approved in writing. The Development shall thereafter be operated fully in accordance with the approved scheme.

Reason: In the interests of aviation safety.

16. Aviation lighting – Meaul Hill

No turbines within the Meaul Hill Cluster shall be erected until a scheme for aviation lighting has been submitted to and approved by the Planning Authority, in consultation with the Civil Aviation Authority. The scheme shall thereafter be implemented as approved.

Reason: In the interests of aviation safety.

17. Decommissioning, restoration and aftercare

The Development will be decommissioned and will cease to generate electricity by no later than the date falling 35 years from the date of Final Commissioning. The total period for restoration of the Site in accordance with this condition shall not exceed three years after the date of decommissioning without prior written approval of the Scottish Ministers in consultation with the Planning Authority.

There shall be no Commencement of Development until a decommissioning, restoration and aftercare method statement has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA. The method statement shall include measures for the decommissioning of the Development, restoration and aftercare of the site and will include, without limitation, proposals for the removal of the above ground elements of the Development, the treatment of ground surfaces, the management and timing of the works and environmental management provisions.

No later than three years prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier) a detailed decommissioning, restoration and aftercare method statement, based upon the principles of the approved decommissioning, restoration and aftercare method statement, shall be submitted to the Planning Authority for written approval in consultation with SNH and SEPA. The detailed decommissioning, restoration

and aftercare method statement will provide updated and detailed proposals for the removal of above ground elements of the Development, the treatment of ground surfaces, the management and timing of the works and environment management provisions. It should include (but shall not be limited to):

- (a) a site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases);
- (b) details of the formation of new features required to facilitate the decommissioning and restoration including but not limited to: the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;
- (c) a dust management plan;
- (d) details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;
- (e) a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;
- (f) soil storage and management;
- (g) a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water;
- (h) sewage disposal and treatment;
- (i) temporary site illumination;
- (j) the construction of any temporary access into the site and the creation and maintenance of associated visibility splays;
- (k) details of watercourse crossings;
- (l) a species protection plan based on surveys for protected species (including birds) carried out no longer than 18 months prior to submission of the plan).

The Development shall be decommissioned, site restored and aftercare thereafter undertaken in accordance with the detailed decommissioning, restoration and aftercare method statement as approved, unless otherwise agreed in writing in advance with the Planning Authority in consultation with SNH and SEPA.

Reason: To ensure the decommissioning and removal of the Development in an appropriate and environmentally acceptable manner and the restoration and aftercare of the site, in the interests of safety, amenity and environmental protection.

18. Financial guarantee

There shall be no Commencement of Development until the Company has delivered a bond or other form of financial guarantee, in terms acceptable to the Planning Authority which secures the cost of performance of all decommissioning, restoration and aftercare obligations as contained in the decommissioning, restoration and aftercare method statement, to the Planning Authority. The financial guarantee shall thereafter be maintained in favour of the Planning Authority until the date of completion of all restoration and aftercare obligations.

The value of the financial guarantee shall be determined by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning, restoration and aftercare obligations contained in the decommissioning, restoration and aftercare method statement. The value of the financial guarantee shall be reviewed by a suitably qualified independent professional no less than every five years and increased or decreased to take account of any variation in costs of compliance with restoration and aftercare obligations and best practice prevailing at the time of each review.

Reason: To ensure that there are sufficient funds to secure performance of the decommissioning, restoration and aftercare conditions attached to this deemed planning permission in the event of default by the Company.

19. Replanting of forestry

Prior to Commencement of Development a scheme to compensate for the removal of up to 28.87 hectares of existing woodland ("the Scheme") shall be submitted to the Planning Authority and thereafter the Scheme shall be implemented as approved in writing by the Planning Authority in consultation with Forestry and Land Scotland.

Reason: To secure replanting to mitigate against effects of deforestation arising from the Development.

20. Black Grouse

Pre-construction surveys for bird species should be carried out, in the appropriate season, as proposed in the Environmental Statement (8.5.20). These surveys should include (but not necessarily be limited to) surveys for black grouse and their leks. During construction a 750m buffer should be applied around any identified black grouse lek(s). No construction activity shall be allowed within these buffer areas (including vehicle movements along tracks) before 9am in the months of April and May.

Reason: To avoid causing disturbance to lekking (displaying) birds during the sensitive breeding season.

21. Television reception

There shall be no Commencement of Development until a Television Reception Mitigation Plan has been submitted to, and approved in writing by, the Planning Authority. The Television Reception Mitigation Plan shall provide for a baseline television reception survey to be carried out prior to the installation of any turbine forming part of the Development, the results of which shall be submitted to the Planning Authority.

The approved Television Reception Mitigation Plan shall thereafter be implemented in full.

Any claim by any individual person regarding television picture loss or interference at their house, business premises or other building, made during the period from installation of any turbine forming part of the Development to the date falling twelve months after the date of Final Commissioning, shall be investigated by a qualified engineer appointed by the windfarm operator and the results shall be submitted to the Planning Authority. Should any impairment to the television signal be attributable to the Development, the Company shall remedy such impairment so that the standard of reception at the affected property is equivalent to the baseline television reception.

Reason: To ensure local television services are sustained during the construction and operation of this development.

22. Redundant turbines

If one or more turbine fails to generate electricity for a continuous period of 6 months, then unless otherwise agreed in writing by the Planning Authority, the Company shall, no later than 14 days after the date of expiry of the 6 month period, submit a scheme to the Planning Authority for its written approval setting out how the relevant turbine(s) and associated infrastructure will be removed from the site and the ground restored including a timetable for its full implementation. The scheme shall have regard to the decommissioning, restoration and aftercare method statement approved under condition 17. The approved scheme shall be implemented in accordance with the approved timetable.

Reason: To ensure that any redundant wind turbine is removed from the site, in the interests of safety, amenity and environmental protection.

Definitions used in conditions:

Bank holiday	<p>Means:</p> <ul style="list-style-type: none"> • New Year's Day, if it is not a Sunday or, if it is a Sunday, 3rd January; • 2nd January, if it is not a Sunday or, if it is a Sunday, 3rd January; • Good Friday; • The first Monday in May; • The first Monday in August; • 30th November, if it is not a Saturday or Sunday or, if it is a Saturday or Sunday, the first Monday following that day; • Christmas Day, if it is not a Sunday or if it is a Sunday, 27th December; and • Boxing Day, if it is not a Sunday or, if it is a Sunday, the 27th December.
Commencement of Development	Means the date on which Development shall be taken as begun in accordance with section 27 of the Town and Country Planning (Scotland) Act 1997.

Company	Means Brockloch Rig III Ltd, company registration number SC295868 and registered address C/o Harper Macleod LLP, The Ca'd'oro, Glasgow, G1 3PE or such other person for the time being entitled to the benefit of the consent under section 36 of the Electricity Act 1989.
Development	Means Windy Standard III Wind Farm authorised by this consent and deemed planning permission.
Dwelling	Means a building within Use Class 9 of the Town and Country Planning (Use Classes) (Scotland) Order 1997 which lawfully exists or had planning permission at the date of this consent and deemed planning permission.
Final Commissioning	Means the earlier of (a) the date on which electricity is exported to the grid on a commercial basis from the last of the wind turbines forming part of the Development erected in accordance with this consent; or (b) the date falling 18 months from the date of First Commissioning unless a longer period is agreed in writing in advance with the Planning Authority.
First Commissioning	Means the date on which electricity is first exported to the grid network on a commercial basis from any of the wind turbines forming part of the Development.
Meaul Hill Cluster	Means the turbines identified in ES Figure 1.2 as 177.5 m tip height
Public holiday	Means Easter Monday and the third Monday in September.
The application	Means the application submitted by the Company on 9 December 2016.

SCHEDULE OF DOCUMENTS

Core documents

<http://www.dpea.scotland.gov.uk/Document.aspx?id=575325>

List of documents for applicant

FORL1.1	Draft Third Report on Policies and Proposals 2017 – 2032 (RPP3)
FORL1.2	Climate Change (Emissions Reduction Targets) (Scotland) Bill
FORL1.3	DECC, The UK Renewable Energy Strategy (2009)
FORL1.4	DECC, Digest of UK Energy Statistics Report Chapter 6 (July 2018)
FORL1.5	UK Government, Clean Growth Strategy 'Leading the Way to a Low Carbon Future' (October 2017)
FORL1.6	DECC, UK Renewable Energy Roadmap (July 2011) FORL1.7 Inter-Governmental Panel on Climate Change (IPPC), SR1.5 Report, FAQ and Press Release
FORL1.7	Inter-Governmental Panel on Climate Change (IPPC), SR1.5 Report, FAQ and Press Release
FORL1.8	UK Government, The Industrial Strategy White Paper 'Building a Britain fit for the Future' (November 2017)
FORL1.9	Climate Change Plan, The Third Report on Proposals and Policies 2018-2032, February 2018
FORL2.1	Caplich s.36 Inquiry Report 29 November 2017
FORL2.2	Caplich, Ministers Decision Letter 27 April 2018
FORL2.3	Fauch Hill Decision Notice (PPA-400-2084) 13 June 2018
FORL2.4	Afton Wind Farm s.36 Decision Letter 17 October 2014
FORL2.5	Pines Burn Decision Notice (PPA-140-2069) 17 August 2018
FORL2.6	Larbrax Decision Notice (PPA 170-2105) 21 October 2016
FORL2.7	Chirmorie s.36 Decision Letter 16 March 2018
FORL2.8	Corlic Hill Wind Farm Decision Notice (PPA-280-2022) 17 May 2016
FORL2.9	<i>Suffolk Coastal DC v Hopkins Homes and Richborough Estates vCheshire East BC</i> [2017] UKSC 37
FORL2.10	Cogle Moss Decision Notice (PPA-270-2166) 29 August 2017
FORL2.11	South Kyle Wind Farm PLI Report (WIN-190-3) 24 November 2016
FORL2.12	South Kyle Wind Farm Decision Letter (WIN-190-3) 30 June 2017
FORL2.13	Pencloe Wind Farm Decision Letter (WIN-190-4)
FORL3.1	Letter from CAA to Malcolm Spaven dated 2 November 2018
FORL3.2(i)	Letter to CAA from Malcolm Spaven 23 October 2018
FORL3.2(ii)	Letter to CAA aviation lighting map, 16 October 2018
FORL3.2(iii)	Letter to CAA Cumulative Plan, September 2018
FORL3.2(iv)	Letter to CAA Cumulative Map
FORL3.2(v)	Letter to CAA Cross Sections Showing Turbine Height AOD
FORL4.1	Windy Standard III Mitigation Capability Study November 2018, Osprey Consulting Services (<i>submitted 08112018</i>)
FORL5.1	Lorg FEI fig 1.2
FORL5.2	Eskdalemuir Interim Guidance, 22 May 2014 and Exclusion and Consultation Zones Map
FORL5.3	Eskdalemuir & Landscape Capacity, 3 December 2018

List of documents for Dumfries and Galloway Council

DGC1.1	Planning Application Committee Presentation – 15 February 2018
DGC2.1	Proposed Dumfries and Galloway Local Development Plan 2
DGC4.1	SNH Planning for Development – Our Service Statement (April 2015)
DGC4.2	The Corbetts and Other Scottish Hills, Scottish Mountaineering Club Hillwalkers' Guide, reprinted with amendments 2017
DGC4.3	Land Use Consultants 1998, The Dumfries and Galloway Landscape Assessment, Scottish Natural Heritage Review no 94
8.1	Council Landscape Architect consultation response regarding Windy Rig wind farm (Our Ref 15/P/2/0155) dated 11 September 2017
8.2	Planning Applications Committee Report for Windy Rig wind farm 7 December 2017
8.3	Report to the Places Committee in relation to the Onshore Wind Energy Supplementary Guidance – Landscape Sensitivity Appraisals (16 August 2017)
DGC9.1	Land 1810 metres south of Blairmore Farm, Kiltarlity, Inverness (PPA-270-2147) 28 June 2018
DGC9.2	Planning Applications Committee Report in respect of Planning Application Ref 15/P/2/0337, erection of wind farm comprising 9 wind turbines etc at land encompassing Lorg and others
DGC9.3	Planning Applications Committee Plan in respect of Planning Application Ref 15/P/2/0337, erection of wind farm comprising 9 wind turbines etc at land encompassing Lorg and others