

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 Frances M McChlery and Dannie Onn, reporters appointed by the Scottish Ministers

Case reference: WIN-190-1

- Site Address: Land immediately north west of Whitelee Wind Farm, south of the B764, Eaglesham Moor
- Application by Scottish Power Renewables(UK) 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 Whitelee Wind Farm Extension Phase 3
- Dates of inquiry and hearing sessions: 16 to 24 June 2015
- Date of accompanied site visits: 30 June 2015

Date of this report and recommendation: 27 July 2016

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The construction and operation of Whitelee Wind Farm Extension Phase 3 on land immediately north west of Whitelee Wind Farm, south of the B764, Eaglesham Moor

• Case reference	WIN-190-1
• Case type	Application for consent (S36 Electricity Act 1989) and deemed planning permission (S57 Town and Country Planning (Scotland) Act 1997)
• Reporters	Frances McChlery and Dannie Onn
• Applicant	Scottish Power Renewables (UK) Ltd
• Planning authority	East Ayrshire Council
• Other parties	Fenwick Community Council Moscow and Waterside Community council Mr and Mrs T Harrison, Cauldstanes Dr R Connor, East Collarie, (with Mr Harrison and Mr Davis as the Protect Our Water (POW) group, and then as the CH Group following Mr Davis leaving the POW group) Mr Elliot Davis, Kingswell Ms Greta Roberts Mr Hugh Hendry
• Date of application	10 August 2012
• Date case received by DPEA	30 October 2014
• Method of consideration and date	Inquiry session: 16- 18 and 24 June 2015 Hearing sessions: 22 and 24 June 2015 Site visits: 23 and 30 June 2015
• Date of report	27 July 2016
• Reporters' recommendation	That the application be refused

The Site:

The application site is a proposed extension of the existing Whitelee Wind Farm, which lies to its west and south-west. It is currently commercial forestry and plateau moorland. It is alongside the B764 to the north and around 800 metres from the M77 / A77 corridor to the west. The nearest settlements are Eaglesham to the north-east, Fenwick and Waterside broadly to the south-east and Moscow to the south.

The site lies mainly within East Ayrshire, except that part of the access road is in East Renfrewshire.

Background to the Proposal:

The existing Whitelee wind farm, built in stages since an initial consent in 2006, extends to about 83 square kilometres and has 215 turbines at 110 metres and 140 metres high to blade tip. The generating capacity is 539 megawatts (MW). The existing site includes an extensive network of access tracks and roads, quarries and borrow pits. It includes a recently built control centre. There is an attractive visitor centre and café, public parking and a network of public paths over part of the site.

A previous application for a wind farm on (essentially) the application site was submitted in May 2010 as a planning application to East Ayrshire Council (EAC). This is referred to as East Kingswell. The application was refused by EAC, contrary to the recommendations of the head of planning. The decision was appealed to the Scottish Ministers. The appeal was dismissed by a reporter appointed by Ministers (PLEA ref. P/PPA/190/2012).

Description of the Development

The application is to add 5 three-blade wind turbines to Whitelee, each at 64.5 metres to hub height and with a 93 metre rotor diameter, giving a maximum height to blade tip of 111 metres. There would be a hardstanding area and transformer at each turbine base and about 3 kilometres of additional access tracks. There would be a substation building and compound and one communication mast. Cabling would be underground. The turbines would have a rating of 2.3 megawatts each, providing a total maximum output of around 12 megawatts.

The application seeks a 25 year operational period but a 28 year consent to allow for construction and decommissioning.

The construction of the extension would include keyhole clearance of 37 hectares of forestry, temporary construction compounds and areas, two temporary power performance masts and a borrow pit.

The application proposals include the demolition of Moor Farm, a traditional farm cottage and steading beside the B764.

There are no statutory landscape conservation designations, scheduled monuments or listed buildings within the application site.

Consultations and Representations

Scottish Natural Heritage (SNH) has confirmed that no European Special Areas of Control, European Special Areas of Conservation or Sites of Special Scientific Interest would be affected by the proposals. There is some potential for European Protected Species to be affected, but SNH are satisfied that the proposed monitoring and mitigation measures would provide sufficient safeguards. These and other natural heritage concerns could be addressed by suitable conditions.

SNH concludes that there would be localised, but significant and adverse landscape and visual impacts, but did not object to the application.

SEPA, Historic Scotland (now Historic Environment Scotland), Transport Scotland and Forestry Commission Scotland did not object to the proposed extension.

Marine Scotland, the Association of Salmon Fishery Boards and Ayrshire Rivers Trust all noted potential impacts on watercourses. However, no objection is raised subject to adequate protection and monitoring arrangements being secured by condition.

The Civil Aviation Authority, NATS safeguarding and Strathaven Airport raised no objection. BAA Glasgow Airport had no objection subject to a condition to secure radar mitigation.

No impacts have been identified by consultees on radio systems or other forms of communication.

East Renfrewshire Council raises no objection to the application subject to certain matters being addressed through conditions or legal agreements. These include contributions to a community trust fund, maintaining recreational access and environmental improvement and management.

The community councils of Fenwick and of Moscow and Waterside object to the application on visual grounds, particularly the local impacts on residents and at public roads. They were also concerned at the potential shadow flicker, noise, cumulative impacts with other windfarms, adverse effects on the local economy and potential impacts on public and private water supplies.

There were 8 objections to the proposed extension to Whitelee wind farm and 46 representations in support. Objections reflect some of the points raised by EAC and community councils. Other matters include the impacts on public and private water supplies; the lack of community benefit; loss of trees and peat; that Moor Farm should not be demolished; and the shortcomings of wind energy. Those in support of the application cite the benefits in terms of combatting climate change; additional jobs and boost to the local economy; community benefits; and the positive visual impacts.

In response to representations made in relation to water quality, we sought the views of SEPA, Scottish Water, EAC, East Renfrewshire Council and the Drinking Water Quality regulator for Scotland. The gist of responses are set out in the following paragraphs.

SEPA had no evidence of a significant environmental impact on the water environment arising from activity at Whitelee Wind Farm. They commented that the risk of sewage effluent affecting downstream potable water extraction is relatively low in this case. In respect of pollution incidents at Whitelee, SEPA said that of the ten investigated during the construction period 2007 to 2011, none caused significant pollution of watercourses as a result of construction.

Scottish Water recognises the potential for wind farm construction to impact on water sources, but has no evidence to suggest that construction of Whitelee so far has affected raw water quality. There have been problems with Amlaird WTW, but these are related to the nature of the water supply, and are being addressed by further investment. They do not consider they are related to the construction or operation of Whitelee Windfarm.

East Renfrewshire Council was unaware of any incidents affecting private supplies in their area.

East Ayrshire Council set out the arrangements for management of ground water during the various previous phases of construction at Whitelee. A Planning Monitoring Officer had been appointed for the original Whitelee windfarm with the adjoining authorities, to monitor compliance with the conditions on the deemed planning permission. (For extensions 1 and 2 no external Planning Monitoring Officer was appointed by EAC) For each phase, as required by the relevant permission conditions, a report on ground water monitoring had been prepared on the risk to private water supplies, and monitoring of water supplies had taken place. The results of the monitoring of PWS during the construction of extensions 1 and 2 had not been passed to the council until 2013, after construction had been completed. EAC considered that high levels of coliforms that were reported were likely to be a result of other factors than the wind farm and had been unaware of private supplies running dry in 2007. If they had been aware that high coliform levels had been found at the time they would have been likely to have issued boil water notices for the affected supplies.

The Drinking Water Quality Regulator is aware that the supply from Scottish Water's Amlaird water treatment works has not always met the regulatory standards, although guideline values set by the World Health Organisation had not been breached. No measures were considered necessary to protect consumers. There has been no dangerous contamination. Scottish Water is taking steps to address the problems with the Amlaird WTW. The regulator also confirms that for type B private supplies, it is the owners who are responsible for maintenance and the cost of risk assessment and monitoring, with the local authority providing an advisory function. The regulator was unable to comment on the specific instances referred to by objectors to the application.

The Applicant's Case:

Landscape and visual

The applicant (SPR) has adopted a tried and tested methodology for the assessment of landscape and visual impact in the Environmental Statement and used professional judgement to determine the likely impacts of the proposed development. They accept that commercial wind farms cannot be concealed and are likely to give rise to significant landscape and visual effects, but they have used the site selection and layout design to mitigate the impacts to an acceptable level. They have had regard to the desirability of preserving the natural beauty of the countryside and have done all they can to mitigate the effects in this case. This includes removing blanket monoculture forestry, replacing with forestry containing 30% native deciduous woodland and restoring blanket mire.

The applicant says that under SNH guidelines, the managed and man-modified habitats put the site within a zone of lowest natural heritage sensitivity. The value of the landscape has not led to national or local designation. This landscape zone is strategically preferable to many existing on-shore wind farms. The applicant says it would be acceptable to change this landscape character to meet the need for renewable energy generation.

The Ayrshire Joint Structure Plan (AJSP) identifies Eaglesham Moor as an area of potential constraint, but that is not necessarily a bar to development. In terms of distance from

sensitive receptors, there are no towns or villages within 2 kilometres and no dwellings within 930 metres except for Moor Farm - which is unoccupied, in the control of the applicant and proposed to be demolished. These separation distances comply with the limits set out in the AJSP.

The proposed turbines would be considered large 70m+ typology in the East Ayrshire Landscape Wind Capacity Study (EAWLCS) of 2013. The study includes that there is some scope for development of the large typology where it identifies a medium or lower sensitivity landscape, but subject to constraints being taken into account in siting and design. The application site is within landscape character type (LCT) 18b: East Ayrshire Plateau Moorlands with Forestry and Wind Farms. This confirms that Whitelee wind farm is a key characteristic of the area. This LCT is of lower sensitivity where the existing turbines have reduced the sense of wildness. The large scale and simple landform could relate in principle to larger turbine typologies. The applicant argues that the proposed extension therefore closely represents the opportunities set out in EAWLCS for limited numbers of the large typology within the upland core of this character type. It would be some distance from and would not closely relate to the smaller scale landscapes of the lower hill slopes and valleys.

The applicant based the assessment of visual impacts on 19 viewpoints agreed with EAC. The closer viewpoints have a higher potential for significant effects because of the higher magnitude of change resulting from their close proximity to the site. These represent the residents, visitors, communities and travellers who would be likely to see the turbines. In this case the higher sensitivity receptors are all residential. Fourteen individual properties were assessed. The assessment had regard to the existing experience, which includes wind turbines. Only Moor Farm is predicted to have a high magnitude of change. One property was predicted to have a medium-low magnitude of change and all others would be in the low category. None of these would lead to an overbearing or dominant effect on residents. It is generally accepted that a change which is significant is not necessarily unacceptable. Altering the view from a property is not usually a key issue unless it would have a deleterious effect on the living conditions. The properties would not become unattractive places to live.

The cumulative effects would be increased as a result of the Soame and Blair wind farms to the north / north-west of Whitelee. There would then be a slight increase in the visual link between these as a result of the proposed extension and the increased impression of an extensive wind farm landscape. However, these other wind farms are not yet approved. At near hand, the environmental information found no significant cumulative impacts at representative viewpoints. Of the residential receptors, only Cauldstanes was found to have significant cumulative effects.

Noise

The applicant maintains that the proposed extension would comply with the requirements of ETSU-R-97 on the assessment and rating of noise from wind farms. A condition has been agreed with EAC.

Water supplies

The applicant maintains that it has fulfilled its obligations to monitor and report on water quality. They firmly deny that the construction of the wind farm to date has been the cause

of any drinking water contamination. The applicant points out that there is a fully comprehensive legal framework for the environmental protection of public and private water supplies. The responsibility for private water supplies in particular rests primarily with the individual consumer with advice and assistance from the local authority. In terms of the research on previous phases of the wind farm presented by Dr Connor (see below) the applicant says there should be no assumption that a contaminant found by on site testing must necessarily have caused contamination of private or public supplies. She has failed to acknowledge the pre-existing state of the water environment at this location, which regularly shows the effects of bacterial contamination, metals, and hydrocarbons from the peat. They say that Dr Connor has jumped to conclusions and grossly exaggerated the implications of contaminants found on site. The applicant's witness at the inquiry provided a detailed background introduction to the contamination of land and hydrological transfer of contaminants. His approach sought to establish whether a potential pathway exists between the substances found and a potential receptor.

Some test results on surface and ground water during construction of the existing Whitelee wind farm, had indicated high concentrations of potentially harmful substances. However, the applicant argues that in some instances an occasional or unexpected level may have been caused by errors with equipment on site or in the laboratory, which is a widely recognised factor in unexpected test results. The testing regime had to be understood in the context of the site conditions at the time. There is no consistent pattern of test results that link pollution of supplies to past wind farm activity at Whitelee. Unexpected variations appear to be spatially limited or in concentrations too low to be harmful. There is no pattern or evidence of long term irreversible change that may be attributed to the past phases of construction. Dilution would be likely to reduce the potential risk to water supplies. Biological contamination of the private water supply at Airtnoch to the south was unlikely because there is no realistic pathway. Thus, the evidence from previous phases of construction does not indicate that contamination would be likely with the proposed development. The applicant's position is that the ES for this application provides adequate information to assess the potential for water pollution from this proposal.

Only a small section of the application site is within the catchment used for public water supply and that is an access road where additional impacts are unlikely to be significant. Importantly, the private supplies with holding tanks are not sufficiently protected from surface run off and the potential for bacteria from livestock at pasture. They will already be affected by background levels of bacterial contamination, some metals and hydrocarbons from peat irrespective of the wind farm.

The applicant says that the objectors fail to recognise that there is an existing comprehensive legal framework to protect drinking water and that with private water supplies the primary responsibility rests with the owner. The applicant is entitled to assume that the supplies are being kept in good order with tanks maintained and supplies filtered and treated as necessary.

East Ayrshire Council's Case:

East Ayrshire Council (EAC) objects on the basis of unacceptable visual and landscape impacts and cumulative impacts with the existing Whitelee and other wind farms. These include the setting of the wind farm in the wider landscape and the significant adverse impacts on residential amenity. EAC recognises that the proposed would contribute, along

with other wind farms, to the Scottish Government's renewable energy 2020 target and would provide some economic and environmental benefits. However, they do not consider that this would outweigh the significant and unacceptable adverse visual impacts on the landscape and residential amenity.

Landscape and visual impacts

No issue was taken with much of the Environmental Statement findings on this matter. However, the assessment carried out on behalf of EAC found significant effects at 5 of the local viewpoints. There is already an extensive array of turbines visible from these places, but the proposed would be closer and appear larger or would increase the horizontal extent.

The current landscape guidance linked with the development plan shows that there is very limited scope for large typology turbines in this landscape character type, particularly on the margins of the Whitelee plateau. Very small extensions may be accommodated within the simpler core of the upland plateau if set well back from smaller scale settled fringes to avoid exacerbation of visual intrusion associated with the operational Whitelee and Sneddon Law. The development plan guidance suggests a buffer around these existing developments. EAC considers the distinction between the simple core of the plateau and the settled farmland of the margins to be crucial. In this case the proposed turbines would exceed the capacity of the landscape by extending too far towards the more settled areas. Although the extension would be a relatively limited addition to the existing situation, incremental effects should not be permitted to become overwhelming as the outcome of a progression of development.

Cumulatively, EAC's assessment found more significant effects than the ES. This is due to a different interpretation of the factors leading to cumulative impacts. EAC takes the view that the cumulative effect of adding 5 turbines would add to the jumble, create a more uneven skyline and increase the overlapping of blades and towers in the view. In some views this would involve an increase in the vertical and horizontal extent of turbines. In wider views there would be increased coalescence. Acknowledging that 5 turbines would be a small increment on the large numbers existing and proposed elsewhere, EAC nevertheless considers that there would be significant localised cumulative impacts.

Residential amenity

There is a strong link between the cumulative impacts outlined above and the impacts at nearby properties. EAC has assessed the proximity and the number of turbines, as well as the views available and the proportion of the view taken by the turbines. In this case, the extension turbines add to the exceptional number and horizontal extent of Whitelee as a whole. EAC says that the FEI studies show that there would be unacceptable effects at 3 of the properties nearby. EAC agrees that significant does not necessarily mean unacceptable, but in this case, the overall impact of the cumulative scale would lead to unacceptable impacts despite the separation distances being greater than the minimum in current guidance.

Noise

Subject to the condition agreed with the applicant, EAC raises no objection on the grounds of noise.

Other Parties' Cases:

Those taking part in the inquiry made the following cases.

Dr Rachel Connor objects on the grounds of overwhelming visual impact; flicker effect; contamination of public and private water supplies; noise; and the loss of Moor Farm. Dr Connor says that the applicant has failed to comply with the conditions imposed on the existing Whitelee wind farm and its extensions in relation to protection of the private water supply to her and her neighbours. Water monitoring had only been for a limited set of parameters and for a limited period. They had not carried out the full range of tests and when contamination was found they did not tell consumers nor the relevant authorities. There have been illnesses amongst those relying on the private water supplies. This was a serious public health issue. Similar concerns exist at other private water supplies. The implication of this is that the proposed monitoring and protection for the application in this case could not be relied upon to protect the health of local residents. Dr Connor wanted the environmental information to include mapping of all private water supplies. By the time of the inquiry sessions, Dr Connor, in conjunction with Mr Harrison, had expanded her research to include her understanding of what had happened to public and private water supplies during the various period of construction at Whitelee. In her investigation of the problem she had contacted EAC, SEPA and other water quality authorities. She sought further information from the applicant about construction of the existing wind farm. She concluded that a number of supplies had encountered contamination issues during wind farm construction. She was also critical of the monitoring and risk assessment. In particular, a failure to investigate the true sources of private water led to ill-informed decisions about risk. Even so, high levels of contamination were found, but no action had been taken.

She considers that she has found out that construction activity for the previous phases of Whitelee wind farm had caused problems. Each phase of construction was accompanied by an ES, but each of these repeated the flawed assessments which led to the contamination issues and resulted in similar inadequate conditions. The ES for the current application was not materially different in this regard. The objectors have no confidence in a regime that had been so ineffective in the past or in the ability of EAC to meet their responsibilities as planning and environmental health authority.

Mr Elliot Davis objects on the grounds of cumulative visual impact; noise; contamination of his private water supply; and impact on Kingswell, a listed building.

Mr Davis says that the true source of his water supply is not known for sure by anyone. He says that the applicant has not made the effort to investigate and the assumptions made for the purposes of the ES are flawed. He says the application should not be considered further until the source of his water is known. He maintains that construction of the existing Whitelee must be responsible for his supply being turbid, contaminated and unsafe to drink. The quality of his water has changed since construction at Whitelee began and this coincided with periods of ill-health. He too shares the concerns and findings of Dr Connor.

Mr and Mrs Tim Harrison object on the grounds of noise and visual impact as well as the effect on private water supplies.

The Harrisons live at Cauldstanes and since moving there have become almost surrounded by turbines. They rely on the evidence of EAC and agree that the ES fails accurately to assess the likely impacts. They say that the reality is that the extension will significantly increase the cumulative visibility of the wind farm.

The water supply at Cauldstanes stopped without warning during construction of Whitelee. They did not suspect the wind farm was the cause, but later found that there were multiple incidents with private water supplies at about the same time. They were unable to re-establish supply and installed a borehole. They now consider this to be at risk. They are concerned at the lack of consideration for those living close by such large developments. They share the concerns of Dr Connor. They say there is no sure way to mitigate the potential for contamination and the consequent health risk. Mr Harrison would like any consent conditioned to require independent baseline investigation, publication of results, consultation with owners of private water supplies, continuous monitoring and agreed mitigation if there are contamination events.

In terms of noise, Mr Harrison is concerned that local residents would not be adequately protected from cumulative noise impacts. He suggests that permanent noise monitoring should be in place at the nearest residential receptor (Kingswell) and temporary monitoring at Cauldstanes and an independent expert should be appointed by EAC at the developer's expense to monitor and report noise. In the event of excessive noise suitable mitigation must be in place to avoid recurrence.

Mr and Mrs Harrison are also concerned that the flood-lighting, noise and disruption from construction will be severe, significant and adverse.

Mrs Greta Roberts objects on the basis of landscape and visual impacts. She disagrees with the applicant's assessment of low landscape sensitivity and says that the magnitude of change is already high and significant and 5 more turbines will add to the visual distress. She says that the successive extensions to Whitelee have begun to intrude on the settled landscape of the Ayrshire Basin. The landscape description including wind farms should not be taken as a presumption that there is capacity for further exploitation. She supports the EAC study which is more balanced and adds that ecology and cultural meaning should be part of the landscape assessment.

In visual terms, Mrs Roberts highlights the impacts on residents, communities and tourists. She considers that the impact of more layers of turbines in the view increasing the impact of the whole of Whitelee. She adds that the wider spread of consented and proposed wind farms would damage the landscape and ecology.

Mrs Roberts also objects to the loss of Moor Farm. In terms of ecology, she considers that further peat loss is inevitable and that the wind farm is no substitute for renewal of the post commercial forestry landscape.

Fenwick Community Council acknowledges that the wind farm is a divisive issue, but supports the concerns about noise, water purity, and the loss of Moor Farm. The turbines would have a massively detrimental visual impact. The development of Whitelee has affected people's confidence in living in the area in addition to the physical impacts from noise, water problems and deterioration of the environment. The highly visible area has been subject to development on an industrial scale in a soft and settled landscape. The extension is unacceptable and unnecessary.

Moscow and Waterside Community Council agrees with Fenwick Community Council and highlights the dramatic changes to what was once a peaceful moorland, with farms and forestry. The established and attractive feature of forests is being lost. The cumulative landscape and visual capacity has been reached without the proposed extension. The community has been badly affected.

Reporters' Conclusions:

Landscape, and visual impacts including residential

In landscape terms the reporters share EAC's reservations about the influence of the existing turbines on the assessment of effects. The application is for an extension and the reporters have looked at the impacts of the entire wind farm as extended.

The reporters note the distinction in the development plan landscape guidance between the core of the landscape character type (LCT) and its more settled fringes, in relation to the key constraint of limiting intrusion of wind farm development. The general thrust of the guidance is an important material consideration. The reporters find that the area to the west and the south of the application site boundaries are more accurately described as the settled margin of the LCT. Although the site itself is on the plateau moorland, the proposed turbines would be experienced as a part of the marginal area, unlike the sense of containment and confinement of the existing Whitelee wind farm on the plateau. The Whitelee wind farm would appear to encroach upon the more settled valley to the west. The reporters therefore find that the development plan landscape guidance does not support the use of the application site as a wind farm.

Residential receptors, those living nearby, would see the turbines as spilling over from the plateau towards them. The reporters note that a number of properties would be affected, but the significant change in the experience of the wind farm would be for those at Kingswell, Bestfriends Cottage, and Cauldstanes. In their view the amenity of those places would be damaged. In particular, Cauldstanes has a relatively open outlook in most directions and views of the turbines would not be partially screened by forestry. The proposed turbines would add to the busy clutter of the existing and bring them closer to the house. In cumulative terms, the house and grounds at Cauldstanes have turbines visible in almost every direction. That sense of being surrounded would be made worse by the proposed extension.

Further afield, for those travelling or touring in the A77 / M77 corridor, the impact would be slight and barely noticeable. However, users of the B794 would share the experience of local residents. The turbines would loom large, albeit in fleeting views. The reporters consider that this adds to the unacceptable impacts of the proposed turbines.

Noise

The reporters note the agreement reached between the applicant and EAC that there would be no noise issue subject to an agreed condition being imposed. They have based their assessment on the guidance in ETSU-R-97 on the assessment and rating of noise from wind farms, together with the good practice guide issued by the Institute of Acoustics. The proposed condition accords with that advice and would ensure an appropriate response if

noise levels are thought to exceed the limits set. The reporters do not consider that the concerns raised by other parties would be reason enough to depart from the noise control measures promoted by ETSU-R-97. The conditions proposed by Mr Harrison would be met in part by the agreed condition. Other parts of the regime he suggests would not be enforceable in any event. Overall, the reporters find that the risk of noise nuisance would not be a reason to recommend refusal of the application.

Water supplies

The regulation of water quality in Scotland is the responsibility of more than one authority. SEPA is responsible for the protection of the water environment, including supply reservoirs and their sources. SEPA licenses works which may affect the water environment and is the primary enforcement authority for pollution incidents. In support of these functions, SEPA provides advice and support to developers. Scottish Water is the public water supply provider and their duties include that they must provide a supply of wholesome water for domestic purposes.

Local authorities have a duty to oversee private water supplies in their area, including assessment of risk; monitoring compliance with drinking water standards; investigating failure of water treatment and advising on improvement. The Drinking Water Quality Regulator is responsible for public and private water supplies. The Regulator's general function is to ensure that drinking water quality duties of Scottish Water are complied with and to supervise local authorities' duties in respect of private water supplies. The Regulator can enforce failures by Scottish Water or local authorities. The Regulator only has an advisory function for private water supplies.

Drinking water throughout Scotland is governed by regulation (derived from the EC Drinking Water Directives) to ensure appropriate bacteriological, chemical and aesthetic standards. Scottish Ministers have designated Drinking Water Protected Areas within which abstraction from surface and ground water must be protected. Part of the application site is in such an area, but the majority is outside the area used for public water supplies. The Private Water Supplies (Scotland) Regulations 2006 aim for clean and wholesome drinking water at each dwelling. Supplies serving 50 or more people are 'Type A' and the rest are 'Type B'. In the assessments relevant to this application, all private supplies are type B. The local authority should identify the relevant person who is responsible for complying with the regulations. That may be the provider of the supply, the occupier of the land where the supply is, or someone who manages or controls the supply. Where unsatisfactory water is identified, the local authority can serve a notice requiring improvements. In type B supplies, the property owners themselves must organise their own maintenance and testing, with advice from the local authority, who can step in to identify and rectify a failure if necessary.

In the earlier phases of construction at Whitelee Wind Farm, the consents and deemed planning permissions included conditions which sought to manage the design and construction of the development but which indirectly involved protection of the water environment. There were also specific conditions for drainage management and protection of groundwater, the monitoring of effects on private water supplies and mitigation of any adverse effects to ensure an adequate supply. In the current application, the ES considers the potential effects of the proposal on groundwater and proposes mitigation. The mitigation would be refined within a pollution prevention plan and construction environmental management plan, including a pollution incident plan, which would be

secured by planning conditions. With these in place, the ES concludes that the development would not result in any significant residual effects.

The reporters find that the risks to the water environment have been adequately recognised and assessed in the application ES and that the Scottish Ministers have been provided with adequate information. The proposed mitigation has been adequately specified and would be monitored under the auspices of SEPA. The pollution prevention plan and construction environmental management plan will be developed by the applicant in consultation with EAC and SEPA. Further survey and detailed monitoring of private water supplies will be included, as should responsibilities for communicating information.

The reporters note some failings in the handling of monitoring data in previous phases of Whitelee development. The reporters also note a possible link between work at Whitelee and suspended solids, coliforms and other pollutants in private water supplies, but did not consider that there was sufficient evidence on the balance of probabilities to establish a causal link. They recognise that the condition of some of these supplies leaves them open to pollution from other sources. However, on the balance of probabilities, taking into account the expert evidence on hydrology and hydrogeology, the reporters find that there was very unlikely to be a pollution-pathway-receptor link between the work on previous phases of Whitelee and private water supplies. There remains a properly recognised risk that some private water supplies may be affected by the application works, and this can and should be addressed by conditions in terms of pollution prevention and appropriate monitoring. The conditions regimes for the previous extensions to Whitelee provided adequate safeguards but were not properly implemented, in that information was not promptly passed by the developer to the council. Some lessons should be learned from this. However, in considering this issue the reporters should proceed on the basis that the regime laid out in any conditions of consent for this application will be followed properly. The reporters are satisfied that such conditions can and should work to mitigate the recognised risk. Some additional clarity about the appointment, role and resourcing of a planning monitoring officer in the conditions for this application should assist with ensuring that the previous problems of non-implementation do not recur. On that basis, the reporters are satisfied that any risks to private water supplies from this application can be controlled by the suggested conditions.

Other matters

The removal of trees would involve planted forestry and would be limited to forming cleared areas for turbines and access. The applicant is committed to habitat improvement across the wider Whitelee site, including replacement native tree planting. The forestry operation would comply with government guidance. The reporters consider that there would be no natural heritage, conservation or visual significance to this operation.

The demolition of Moor Farm would remove an uninhabited building. Although it is of some heritage interest, it is not listed. The applicant owns the building and says that its location and condition means it is not suitable for residential re-use. It is not associated with an agricultural holding. It is not suitable for conversion for use in conjunction with the wind farm. However, the building appears to be intact and has value as an element of the history and sense of place in which it stands. The reporters consider that it should be regarded as an undesignated feature of cultural significance. It can be experienced as a typical landscape feature by passers-by on the B764. The reporters suggest that further consideration should be given to a less destructive solution. Should the Scottish Ministers

determine to grant consent, the reporters suggest a condition should be attached to exclude demolition. Should Ministers disagree with that, a condition requiring a detailed survey and record of the building prior to demolition would be appropriate.

Some objectors are concerned at the likely loss of peat. SEPA has addressed the carbon balance of the application, taking peat into account, and concluded that the effect on peat should not prevent consent. The assessment of peat stability carried out for ECDU concludes that there is a low risk of peat slide. The reporters agree that the impacts in relation to peat would not justify refusing consent.

The reporters have considered all other matters raised, including the socio-economic effects on tourism and the potential benefits to communities. The reporters note the popularity of Whitelee with visitors. The reporters do not find any other grounds to support refusal.

Conditions and legal obligations

Conditions

The applicant and East Ayrshire Council reached a broad agreement on the scope of conditions which ought to be applied to any consent. There was some disagreement and objectors also made suggestions for conditions. The reporters also take into account the model wind farm conditions prepared for ECDU. Their suggested conditions are attached as an Appendix to the main report. In considering the various conditions, the reporters have followed the advice in Circular 4/1998, making modifications as necessary to meet the tests set out therein. The reporters resolve areas of dispute as follows.

- Given the current uncertainty in the fiscal and financial climate for renewable energy, the reporters agree that the permission should be implemented within a five year period as opposed to three years.
- The reporters accept that East Ayrshire Council should be consulted if the applicant proposes to assign the consent.
- For the reasons set out in their main report the reporters recommend no modification of suggested conditions relating to micro-siting; borrow pits; the planning monitoring officer; the ecological clerk of works; the construction environmental management plan; construction hours; television reception; private water supplies; or noise.

Obligations

The reporters agree with the applicant and EAC that, in principle, certain aspects of the planning monitoring role, particularly the funding of an appointment, would best be dealt with by planning obligation. The reporters consider that agreement can be reached between the applicant and EAC. An agreement might also usefully secure restoration funding. The reporters note that this is a matter for a condition in the ECDU list of model conditions, but recognise the benefits of an obligation. If the Scottish Ministers determine to grant consent and accept that an obligation is necessary, there would be no need to attach the suggested condition on restoration.

The applicant proposes to contribute to a renewable energy fund intended to benefit the local community. They recognise that this would not comply with Circular 3/2012 on

planning obligations and good neighbour agreements, although it is supported by national policy. The reporters suggest that the determination of the application should not depend on having an agreement in place. The reporters therefore agree with the applicant that a planning obligation would not be appropriate in this matter. It would be a matter for the ministers should they wish to obtain evidence of how the community might benefit from the proposed contribution.

The reporters disagree with the objectors that the applicant should become responsible for private water supplies because that would attempt to re-write the law.

Overall conclusions and recommendations

Conclusions

The reporters have found that:

- the substantial adverse landscape and visual effects would be unacceptable
- the noise from the wind farm with the extension proposed would not be beyond the limits derived using the ETSU guidance and that subject to conditions those living and working nearby would not be subject to unacceptable levels of noise
- the mitigation proposed would minimise the likelihood of pollution of private water supplies and provide a means of identifying and addressing any pollution incidents
- the redundant Moor Farm buildings should not be demolished
- all other matters put before us do not justify refusing consent
- the proposed development would contribute to the output of one of the largest wind farms in Europe and contribute towards the generation of electricity from renewable sources.

However, the reporters consider on balance that the landscape and visual impacts are overriding in this case and that the proposed turbines would be an unacceptable addition to the Whitelee wind farm.

Recommendations

The reporters recommend that the Scottish Ministers refuse consent.

The reporters further recommend that should Ministers determine to grant consent and deemed planning permission, that they do so only following the signing and registering or recording as the case may be of an obligation under S75 of the Planning Act or such other agreement as may be suitable and that they then attach the conditions at Appendix 1.

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

File reference: WIN-190-1

The Scottish Ministers
Edinburgh

Ministers

In accordance with our minutes of appointment dated 10 November 2014 and 6 January 2015 we conducted a public inquiry in connection with an application to construct and operate an extension to the Whitelee Wind Farm on land immediately to the north west of the existing Whitelee Wind Farm, south of the B764 on Eaglesham Moor, East Ayrshire. East Ayrshire Council as Planning Authority has lodged an objection to the proposal, which has not been withdrawn.

Following the reference of the application to the DPEA a further objection from an existing objector, Dr Rachel Connor, raising potentially significant matters that had not been raised before was referred to us. Her new objection said that the environmental statement was fundamentally flawed in that it provided insufficient information about the possible effect on water supplies, and that these would be put at risk as a result of the proposal. Mr Elliot Davis of Kingswell had also made representations to Ministers about the possible contamination of his water supply. We decided to accept her representation as an objection and include it in the inquiry. Other persons joined with her in supporting the objection on the risk to water supplies as the inquiry progressed.

We held a pre-examination meeting on 23 January 2015 to consider the arrangements and procedures for the inquiry¹.

Following these discussions we decided that the following issues would be best addressed at inquiry sessions:

- The risk of contamination to water supplies as a result of the proposed development, and
- Noise emissions, including any cumulative effects.

In the event, differences of view on noise between the applicants and EAC were substantially resolved between them, so that we were then able to decide that it was unnecessary to hold an inquiry session on noise. The other objections relating to noise were able to be dealt with on the basis of the information available and the written

¹ Note of pre inquiry meeting: Appendix 5

submissions which had been made, and as an element of the hearing session on conditions.²

The pre-examination meeting also determined that there would be hearing sessions on the following topics:

- Visual and landscape impact, including cumulative impact and impact on residential amenity, and
- Any conditions and any planning obligations, or other legal agreements, which should be considered by Ministers if they are minded to grant permission.

Further written submissions would be invited on:

- updates to the development plan, the emerging development plan, and any other relevant policy frameworks.

The inquiry session was held between 16 to 18, and on 24 June 2015, and the hearing sessions took place on the 22 and 24 June³. There were written exchanges after the close of the oral sessions on the relevance of a late production, and on conditions and planning obligations. Closing submissions were exchanged in writing, with the final closing submission (on behalf of the applicant) being lodged on 17 August. There were a number of post inquiry exchanges seeking to respond to points made in written concluding submissions⁴. We did not find it necessary to formalise any of these exchanges and where any points of potential relevance were raised in these we have subsumed them into the report.

We conducted unaccompanied inspections of the application site, its surroundings and other locations referred to in evidence prior to the inquiry and on the 23 June 2015 with some further inspections from more distant viewpoints mentioned in evidence taking place in early September. Accompanied site inspections to various viewpoints and residences, and locations mentioned in the water supplies sessions took place on 30 June 2015.

Prior to the commencement of the inquiry, and thereafter, the objectors concerned about the risk to water supplies moved that we should rule at the outset that the environmental statement was so inadequate that Ministers could not lawfully proceed to make a determination on the application, because they would not have sufficient environmental information to do so without contravention of the obligation to take prescribed environmental information into account. In the event, after hearing the evidence and considering the submissions we have decided to advise Ministers that in our view the environmental information provided by the applicant in the ES was and is sufficient to allow Ministers to determine the application in compliance with requirements to take environmental information into account. Of course, it remains open to Ministers to take a different view and require additional information to be supplied by the applicants before determining the application. The evidence on this point and our reasoned conclusions are explained in Chapter 5 on water supplies.

² See Chapter 4 below

³ all appearances listed in Appendix 4

⁴ Appendix 6 – concluding submissions

Our report, which is arranged on a topic basis, takes account of the objections originally made to the application, together with the precognitions, written statements, documents, and closing submissions⁵ lodged by the parties to the examination, as well as the evidence taken at the inquiry and hearing sessions. It also takes account of the Environmental Statement, and the updated and further environmental information prepared in support of the application, all other environmental information submitted by the parties, and the written representations made in connection with the proposal. Our reasoned conclusions on each topic are given at the end of each chapter and then summarised in Chapter 8.

⁵ concluding submissions are listed in Appendix 6

Abbreviations used in the report

AA	Appropriate Assessment
AJSP	Ayrshire Joint Structure Plan
BGS	British Geological Survey
CAR	The Water Environment (Controlled Activities) (Scotland) Regulations 2011
CD	Core Document
CEMP	Construction Environmental Management Plan
CH group	Objectors group: Connor /Harrison, originally POW (Protect Our Water)
CLR	Contaminated Land Regime
CLVIA	Cumulative Landscape and Visual Impact Assessment
CMS	Construction Method Statement
DWQRS	Drinking Water Quality Regulator for Scotland
EA	Electricity Act 1989
EAC	East Ayrshire Council
EALP	East Ayrshire Local Plan 2010
EALDP	East Ayrshire Local Development Plan – (proposed plan)
EALWCS	East Ayrshire Landscape Wind Capacity Study (CD 040) see also Appendix Report SPR-L026
EALWCSApp	East Ayrshire Landscape Wind Capacity Study Appendix report SPR-L040
ECDU	(Scottish Government) Energy Consents and Deployment Unit
ECW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
ERC	East Renfrewshire Council
ES	Environmental Statement
ETSU-R-97	Publication - Energy Technology Support Unit Report - The Assessment & Rating of Noise from Wind Farms (ETSU-R-97)
FCC	Fenwick Community Council
FEI	Further Environmental Information (supplied to update the ES)
HS	Historic Scotland, now Historic Environment Scotland
HOPS	Heads of Planning Scotland
GLVIA	'Guidelines for Landscape and Visual Impact Assessment' published by Landscape Institute and Institute of Environmental Management and Assessment. See applicant's productions SPR-L003/4/5.
GPG	Good Practice Guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise (Institute of Acoustics May 2013)
GWDTE	Groundwater Dependent Terrestrial Ecosystems
Ha	hectares
IoA	Institute of Acoustics
LCA	Landscape character assessment
LVI	Landscape and visual impact
LVIA	Landscape and Visual Impact Assessment
MW	Megawatts
m/s	metres per second
NATS	National Air Traffic Service
NPF	National Planning Framework
PMO	Planning Monitoring Officer
PMP	Peat Management Plan
POW	Protect Our Water objectors group, reconstituted as CH group.
PPG	Pollution Prevention Guideline (SEPA)

PPP	Pollution Prevention Plan
PWS	Private Water Supplies
PWSR	Private Water Supplies (Scotland) Regulations 2006
RVAA	Residential Visual Amenity Assessment
SAC	Special Area of Conservation
SDP	Strategic Development Plan
SEPA	Scottish Environment Protection Agency
SINC	Site of Importance for Nature Conservation
SNH	Scottish Natural Heritage
SPP	Scottish Planning Policy
SPR	ScottishPower Renewables (UK) Ltd: (applicant)
SW	Scottish Water
SWS	'Scottish Water' supplies – used to refer to public water supplies- c.f. Private water supplies/PWS
TCPSA	Town and Country Planning (Scotland) Act 1997, as amended
VP	Viewpoint
WLWF	Whitelee Wind Farm as operational at present, comprising: <ul style="list-style-type: none"> ▪ Whitelee Wind Farm as originally consented 5 May 2006 together with ▪ Whitelee Wind Farm extension 1 consented 20 May 2009 and ▪ Whitelee Wind Farm extension 2 consented 12 December 2009.
WLWFO	Whitelee Wind Farm Original; the initial development as consented in 2006.
WLWF X1	Whitelee Wind Farm Extension 1 consented in May 2009
WLWF X2	Whitelee Wind Farm Extension 2 consented in December 2009
WLWF X3	Whitelee Wind Farm Extension 3; the current application
WTW	Water Treatment Works
ZTV	Zone of theoretical visibility

Note on references

Throughout this report footnotes indicate the source of the information in the submissions and documents produced by the parties. At the end of each chapter a table provides the hyperlink to the relevant document on the DPEA website. These links will remain usable while the documents are on the website. All documents and submissions are also listed in Appendix 3 to the report.

CHAPTER 1 BACKGROUND

1.1 The application is for a third extension of the existing Whitelee Wind Farm (WLWF).⁶

Whitelee Wind Farm at present

1.2 The Whitelee Wind Farm site currently extends to approximately 83 km², with 215 turbines.⁷ It is located on Whitelee moorland plateau, sometimes called Eaglesham Moor, or Whitelee Forest, lying to the south of the B764 and to the south of Eaglesham, East Renfrewshire. The wind farm site at present straddles the areas of East Renfrewshire Council (ERC), South Lanarkshire Council, and East Ayrshire Council (EAC) with about half the turbines lying within East Ayrshire.⁸ WLWF is the largest wind farm in the UK, and one of the largest in Europe. It is operated by the applicant, and this application is premised on the operation of the application proposals as an integrated element of the existing wind farm.

1.3 The original wind farm was given consent for 140 Turbines of 110 metres tip height in April 2006 and became operational in summer 2009. It has 322 MW installed capacity. It has had two extensions: Whitelee phases 1 (WLWF X1) and 2 (WLWF X2)⁹. These were consented in 2009, and their construction was completed during 2012 while the application ES was being prepared. These extensions are both now operational. The extensions entail 69 turbines of the larger typology of 140 metres tip height, and 6 at 110 metres, with an additional generating capacity of 217 MW.

1.4 The WLWF site includes ancillary development such various substations, an extensive network of access tracks, and various quarries or borrow pits. It hosts a recently constructed Control Centre from which SPR manages all operational aspects of its renewable assets across the UK. There is also a well-designed visitor centre with a café, an exhibition space and parking, and a network of public paths over part of the site. Public access is managed and encouraged under the Whitelee Access Action Plan. There is a Habitat Management Plan as required under the consents for the wind farm, which is

⁶ In this report the following abbreviations will be used to distinguish the respective phases of the windfarm:

- 'WLWF' will be used for the whole wind farm as in operation at present, including the two consented extensions;
- 'WLWFO' will be used to refer to the original wind farm consented 5 May 2006;
- 'WLWF X1' for Extension Phase 1 consented 20 May 2009; and
- 'WLWF X2' for Extension Phase 2 consented 12 December 2009
- 'WLWF X3' for the current application

⁷ CD 023 ES Volume 1 figure 1.1 for application site location and relationship to existing WLWF.

⁸ CD 023 ES figure 1.2 for council areas.

⁹ For previous permissions – see SPR-W012, WLWFO; SPR-W013, WLWFX1 and SPR-W014, WLWFX2

overseen by the Whitelee Habitat Management Group (comprised of members from SPR, the Royal Society for the Protection of Birds (RSPB), Scottish Natural Heritage (SNH), the relevant local authorities and landowners). The habitat management area extends over 25 square kilometres of WLWF.

1.5 The wind farm is visible across a wide area of Ayrshire and Glasgow and attracts many leisure and educational visits from the public.

Predecessor application – East Kingswell Extension

1.6 Between May 2010 and April 2011 there was a previous proposal by the applicants for the extension of Whitelees Wind Farm, on essentially the same site, which was considered as a planning application made to EAC as opposed to a section 36 application under the Electricity Act¹⁰. This proposed the erection of 7 wind turbines to a maximum tip height of 140 metres, (i.e the larger typology of those used on the site at present) and associated infrastructure, and is referred to as East Kingswell¹¹. The Head of Planning at EAC recommended approval of the application subject to conditions and a planning agreement¹², but it was refused planning permission by EAC's Northern Local Planning Committee in November 2010. This was appealed by the applicants to the Scottish Ministers and was considered by a reporter from the DPEA, (reference P/PPA/190/2012). The appeal was dismissed and planning permission refused on 28 April 2011¹³.

1.7 The reporter on the East Kingswell proposal noted that policy ECON 6 of the Ayrshire Joint Structure Plan 2007 (AJSP) was supportive of proposals for the generation and utilisation of renewable energy, where there would be no significant adverse impact, including adverse cumulative impact. He accepted that the 7 turbine East Kingswell proposal was a relatively small addition to the baseline situation. He agreed with EAC's planning officer that when considering the WLWF and its approved extensions, together with the proposed development, the cumulative visual impact of the proposal at distance was likely to be minimal. Whilst it was not in dispute that the East Kingswell planning application might achieve an element of coherence with the existing WLWF in terms of layout and spacing he did not agree that it could be seen as a simple extension of the existing pattern of developments. His reasons for this were that the proposed 7 turbines would be some 30 metres higher than the nearest existing turbines and some 2.2 kilometres from the larger 140 metre turbines in the central wind farm. In particular, the 1.7 kilometre separation distance then in place between the wind farm turbines and the nearest residential properties would be dramatically reduced. The edge of the development would also be brought much closer to the houses and would include much larger turbines, resulting in an increase in cumulative visual impact on those properties, such that the proposal would have a very significant adverse visual impact on the occupiers of these houses.

¹⁰ Some correspondence took place between EAC and the ECDU in relation to the reason why this application under the EA was competent, when a previous application had been submitted through the planning system. The ECDU explained why it considered that this was in fact a further extension to WLWF, and that a section 36 application was competent and appropriate.

¹¹ EAC application reference 10/0485/PP:

¹² CD 041

¹³ SPR L-018 East Kingswell appeal decision.

1.8 In addition, the reporter found that the proposal would reinforce the wind farm as a highly dominant feature in the landscape, particularly in views from parts of the M77 and A77 to the west of the site and from the B764 and the 3 properties referred to above.

1.9 The reporter accepted that the site was located in an area of search identified in the development plan as where wind farm development should be guided. However, he found that the proposal would have an unacceptable adverse visual impact on the landscape when viewed from parts of the M77, A77, and B764, and the three nearest properties.

1.10 The reporter concluded that because of its localised but dominant visual impact, the application was inconsistent both with the development plan, and with the Scottish Planning Policy¹⁴ then in force. He considered that developments should not be permitted where they would have a significant long term detrimental impact on the amenity of people living nearby, and that the protection of local communities and individuals is an important consideration in weighing up the arguments for and against developments. He found that the adverse visual impact of the turbines on the occupiers of the nearest properties outweighed the benefit that would be derived from the contribution that the proposal would make to the Scottish Government's renewable energy targets. To that extent he considered that the East Kingswell proposal was not consistent with Scottish Government policy and advice.

The application – Whitelee Wind Farm Extension phase 3

1.11 A detailed description of the components of this application is given in the accompanying environmental statement (ES)¹⁵ Chapter 4 and is summarised here.

1.12 This application is for 5 three-bladed, computer controlled wind turbines of up to 111 metres to tip height, 64.5 metres to hub height, a 93 metre rotor diameter and a hard standing area and transformer at each turbine base. The turbines would have an individual rating of up to 2.3 MW (providing a maximum total capacity of 12 MW).

1.13 The application site lies mainly within the area of EAC, except for a linear extension of the site boundary to the south east to order to include the site access roads, and which includes the use of the existing access roads at Lochgoin. Some of this falls within the area of ERC.

1.14 The proposed turbine locations are identified in the ES,¹⁶ although the various elements of the application are intended to be micro-sited in due course having regard to natural heritage protection, and within the terms of any consent¹⁷.

1.15 The application site is to the west and north west and immediately adjacent to the existing edge of WLWF and extends to around 2.11 square kilometres (303 hectares). At present the site comprises commercial forestry and plateau moorland. It is bounded to the north-west by the B764, to the north-east by moorland and the WLWF, to the south-west, by commercial forestry and moorland, and WLWF. The M77 and A77 corridor is approximately

¹⁴ Paragraph 190 of the previous SPP; for present SPP 2014 see CD 002

¹⁵ CD 023 Chapter 4

¹⁶ CD 023 ES Chapter 3 figure 3.1

¹⁷ see Chapter 7 and appendix 7 of this report for objections relating to micro-siting as an issue and proposed condition on micro-siting.

775 metres distant from the north-west. The nearest settlements are Eaglesham to the north, and Fenwick, Waterside and Moscow to the south and south-west.¹⁸

1.16 Associated with the turbines there would be

- Hard standing areas at each turbine base
- Approximately 3 kilometres of new site access tracks linked to the spine road of the existing wind farm.
- Various watercourse crossings
- A substation building and substation compound
- One communication mast
- On site underground cabling.

1.17 The construction phase would include the following works:

- 37 hectares of forestry clearance on a 'keyhole' basis around the site of each turbine
- Temporary construction compounds and laydown area
- Two temporary power performance masts
- One borrow pit.

1.18 Approximately 76,000 cubic metres of stone is estimated to be required for construction of the wind farm, and an additional 3,700 cubic metres of material will also be required on site for access track surfaces. The foundations for the turbines will require the excavation of any underlying peat and subsoil to expose the bedrock, with the excavated area subsequently capped with peat or soil.

1.19 The principal access for construction and the delivery of the turbines would be the same as been previously used, with the turbine components delivered either to Ayr harbour or King George V Dock in Glasgow. The construction period is estimated to be about 8.5 months.

1.20 The application seeks a 25 year operational period and a six months decommissioning period thus consent overall for 28 years to account for construction and decommissioning¹⁹.

1.21 The application site includes Moor Farm, a traditional farm cottage and steading situated beside the B764. The application includes permission to demolish this on the basis that it is owned by the applicant but is uninhabited at present. It is said to have been subject to vandalism, and would be better removed.

1.22 The proposed development will connect to the Electricity National Grid at WLWF either by being connected to the Whitelee X1 sub-station, or a sub-station compound within the current application site boundary. The grid connection does not form part of this application and will be subject to a separate design and consent process undertaken by the national grid service provider.

¹⁸ CD 023 Chapter 3 figure 1.1

¹⁹ See also Chapter 7 of this report on conditions and legal obligations, for the applicant's representations requesting an extension of the duration of the consent for 5 rather than 3 years. See also Appendix 7 for recommended conditions.

1.23 There are no statutory landscape conservation designations and no Scheduled Ancient Monuments or Listed Buildings within the application site.

1.24 Scottish Natural Heritage (SNH) has confirmed that no European Special Areas of Conservation or European Special Protection Areas, or Sites of Special Scientific Interest would be affected by the application proposals. There is some potential for European Protected Species to be affected by the proposals, but SNH are satisfied that monitoring and mitigation measures have been proposed which would provide sufficient safeguards.

The environmental statement²⁰

1.25 An environmental statement (ES) was prepared in support of the application which was completed and publicised in August 2012. This is required by the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 as amended²¹.

1.26 The ES comprises a non-technical summary, a planning statement, and two volumes. The main statement, including supporting and illustrative figures is in Volume 1 and contains chapters on

- Site selection and alternatives, (Chapter 3)
- The content of the proposal, (Chapter 4)
- The legal and policy framework, (Chapter 5)
- Scoping and consultation, (Chapter 6)
- Landscape and visual, (Chapter 7)
- Ornithology, (Chapter 8)
- Geology, soils and hydrogeology, (Chapter 9)
- Surface water, (Chapter 10)
- Ecology and nature conservation, (Chapter 11)
- Cultural heritage, (Chapter 12)
- Noise, (Chapter 13)
- Access, traffic, and transport. (Chapter 14)
- Land use, socio-economics, and recreation. (Chapter 15)

1.27 Other issues dealt with include telecommunications, television, and radio communication, shadow flicker, safety and security, ice throw, air and climate (Chapter 16). The ES also contains a schedule of mitigation measures.

1.28 Given the lapse of time between the preparation of the ES and our inquiry, further environmental information (FEI)²² was prepared, advertised, and re-consulted on. We required that this should supplement and update the information in the landscape and visual impact chapter of the ES to include the updated cumulative impact position on wind farm proposals now constructed or in the application system. A cut-off date for other wind farm applications of 9 March 2015 was stipulated for this, but in fact the applicant included in its considerations a windfarm at Blair for which an application was expected by EAC, but had not been submitted by the time of the cut-off date.

²⁰ CD 021: ES Non Technical Summary ; CD 022: ES Planning Statement : CD 023: ES volume 1 CD 024: ES volume 2 CD 025: ES volume 3

²¹ CD007 : Guidance on the Electricity works EIA Regs and CD 008 – SG Guidance on the EW(EIA) amendment Regulations

²² SPR-L002 Updated Cumulative Assessment produced 13 April 2015 ('FEI')

Consultations²³

1.29 The following summaries of the responses to consultations include any responses from consultees to the FEI.

Scottish Natural Heritage

1.30 SNH were satisfied that the ES chapters relating to natural heritage and to landscape impacts were well presented and reasonably thorough, using accepted methodologies. They concluded that there would be significant adverse landscape and visual impacts, which were considered to be localised in nature. The concerns raised by SNH in relation to the East Kingswell proposal had been addressed by the revised turbine height and layout design.

1.31 As regards natural heritage, SNH took the view that concerns about peat could be addressed by suitable conditions. Impacts on other natural heritage interests could all be sufficiently addressed through conditions and legal agreements, if these incorporated the full range of ecological mitigation and enhancement measures detailed in the ES section 11.7²⁴. These should include pre-construction checks for species. In particular, the conditions should provide for the appointment of an Ecological Clerk of Works (ECoW) by EAC in consultation with SNH, prior to any on site commencement. There must be both a habitat management plan and a peat management plan. A detailed plan for habitat restoration should be developed in consultation with the Whitelee Habitat Management Group in order to secure an integrated approach with existing habitat management.

1.32 In response to a request to consider the FEI, SNH said that since they last commented on the landscape and visual impacts of this proposal in 2012 there had been a degree of change to the local wind farm development scenario - principally that two large-scale proposals in the vicinity were refused, to be replaced by two much smaller proposals in roughly similar locations - both currently at application stage. In the SNH view, these changes will have very little impact on the cumulative landscape and visual impacts of the proposal as already established. Having considered the applicant's updated assessment the SNH advice remains unchanged.

Scottish Environment Protection Agency

1.33 SEPA explored the various matters within their remit including a carbon assessment, and these were regarded as satisfactory addressed. They had no objection to the application.

Historic Scotland

1.34 Historic Scotland does not object to this application. There are no nationally important assets within the development site. They had considered the potential impact on nationally important heritage assets which could be indirectly affected. Where there were effects these

²³ CD 028 – for statutory consultees responses to application

²⁴ CD 023

would not be significant against the background of the existing WLWF, and the magnitude of impact was negligible.

Roads and Transportation

1.35 Transport Scotland said that the development may result in some intensification of the use of the site but is unlikely to result in any environmental impact on the trunk road network. No comment is made.

1.36 EAC roads services had no objections to the intensification of use, as the existing access off Moor Road (B764) was to be used. Prior to the delivery of any turbines the applicant must provide a statement to demonstrate that the delivery route can accommodate the delivery vehicles.

1.37 ERC roads requested that construction traffic not be directed through Eaglesham.

Forestry Commission Scotland (FSC)

1.38 FSC are content with the proposal and satisfied that it complies with the Scottish government's policy on the control of woodland removal.

River Fisheries Interests

1.39 Marine Scotland fresh water laboratory said that there was potential for forestry clearance to result in the contamination of watercourses, but they were satisfied with the applicant's awareness of this issue, subject to a need to establish a robust baseline of water quality throughout the development area.

1.40 The Association of Salmon Fishery Boards responded that the development would fall within the local coverage of the Ayrshire Rivers Trust, who should be consulted. There was some potential for such developments to impact on migratory fish species. The development should be carried out in accordance with the guidance on fishery protection developed by the fishing trusts.

1.41 Ayrshire Rivers Trust responded to the FEI, reaffirming their comments given to the applicant at the time of compilation of the ES, on the water environment and riparian habitat. They considered that the application proposals have the potential to impact on the water environment due to close proximity to the Drumtee Burn, the Collorybog Burn and the Greenfield Burn. These three burns all meet to form the Fenwick Water which then joins with the Craufurdlland Water becoming the Kilmarnock Water further downstream. The Kilmarnock Water is an important salmonid river that has recently had barriers to fish migration eased and further improvements are planned. It is not unreasonable to expect salmon may migrate into the upper reaches of the Fenwick Water where water quality is currently of good status. The Trust would not object to the development taking place, so long as adequate measures are taken to protect and maintain the water quality of these burns. Thus it would be essential that any road crossings are designed to allow fish passage and that adequate protection is in place before and during the construction phases of the development to prevent pollution from reaching the burns. There should be an adequate monitoring programme in place to allow any adverse effects to the riparian ecology and habitat to be identified and mitigation measures implemented. This should entail monitoring fish populations and fish habitat to SFCC standards before work

commences to establish a baseline and also to monitor after the work to assess the impact of the development. Such before and after monitoring should also apply to other riparian animals such as water voles and otters at appropriate times of the year.

Air traffic control, communications, and defence consultees.

1.42 The Civil Aviation Authority confirmed that the ES showed that the appropriate aviation consultees had been identified and approached. There would be no requirement for the turbines to be lit, although an appropriate aviation stakeholder may make such a request in future.

1.43 NATS safeguarding was satisfied that mitigation for the proposed development is in place. Strathaven Airport did not consider that the application proposals would affect their operations and had no objection. BAA Glasgow Airport said that the application could conflict with safeguarding criteria, unless conditions were imposed to secure the agreement of a radar mitigation scheme, but on that basis they would have no objection. Glasgow Prestwick Airport advised that the turbines would be detected by primary surveillance and would generate clutter. However, this would not be sufficient in degree to have a significant impact on the airport, and they had no objection. The Defence Infrastructure Organisation had no objections.

1.44 The Joint Radio Company (JRC) monitors the potential of wind farms to interfere with the radio systems operated by the utility companies. No problems from the proposals were envisaged. No other telecommunications interests had any objections.

Local authorities

1.45 East Ayrshire Council considered the application at a meeting of the 13 June 2014 and resolved to object to the application. EAC considered that:

- The application proposal would not comply with policies ECON6, ECON7 parts (A), (O) & (G) and ENV1 (A) and ENV1 (E) of the Ayrshire Joint Structure Plan 2007 (AJSP).
- The proposal would not comply with policies SD1 (I), (ii) and (Hi), CS12 (ii) and (IV), CS 14 (A)(O) and (G); CS17 and ENV15 (I) and (VI), and ENV16 (I) and (ii) of the East Ayrshire Local Plan 2010. (EALP)

1.46 This was because assessing the proposals against the development plan it was considered that the proposal:

- presented unacceptable visual and landscape impacts in terms of the setting of the proposed wind farm within the immediate wider landscape and the significant adverse impacts on residential amenity, in particular the effect on the properties Cauldstanes, Drumtee, Kingswell and Kingswell Bridge
- presented unacceptable adverse cumulative impacts when considered by itself and in conjunction with the existing, authorised and proposed wind farms within the vicinity of the site resulting in significant adverse impacts on the amenity of nearby residential properties and on the landscape: and
- that the implementation of EAC's required noise limit levels would result in the loss of gross output of energy generation from the wind farm.

1.47 EAC added that they considered that if the application were to be granted, any planning condition in relation to noise should provide for the continuous monitoring of noise

to keep emission levels 10 dB lower than the levels prescribed for WLWF, in order to safeguard residential amenity against the possibility of cumulative noise effects.

1.48 Further, if Ministers were minded to grant the application, the applicant should enter into a legal agreement with EAC to provide for developer contributions towards EAC's renewable energy fund in terms of EALP policy CS 15. There must also be a sufficient aftercare bond to secure the decommissioning and restoration of the site.

1.49 East Renfrewshire Council considered the application in November 2012. They have no objection to the application subject to certain matters being addressed through conditions or legal agreements. These included financial contributions to a community trust fund for the communities most affected by the proposal, the maintenance of recreational access, and an environmental improvement and management scheme.

Objections and representations

Fenwick Community Council (FCC)

1.50 FCC objected to the application.²⁵ In their view the proposals would contravene AJSP policy ECON 6 because of the visual impact of the turbines on Fenwick as the nearest settlement, and the surrounding country properties. They considered the destruction of Moor Farm to be unnecessary. The visual impact from public roads, namely the M77, old A77, A719, and the B764 is unacceptable due to the separation distances to these receptors in relation to the height of the turbines. It would also be contrary to EALP policy CS 12(ii) (iii)(iv) and ENV17 (ii) because it would visually dominate nearby residential properties and the surrounding villages, notably the adverse visual impact on the historic village of Fenwick, and the wider area. They did not consider that shadow flicker or noise assessment had been carried out at all the properties which might be affected. There would be significant cumulative effects, which would be adverse. There were far too many turbines locally, including the recent approval of Sneddon's Law. Enough is enough. The previous decision to refuse was being ignored. Whitelee is the largest on shore wind farm in Europe, and seems to be a scheme with no definable limits. Where would it stop?

Moscow and Waterside Community Council (MWCC)²⁶

1.51 MWCC did not respond to the original consultation but decided to object in March 2015 in support of the objection submitted by FCC, adding that they wished to add an objection on the grounds on potential impact to public and private water supplies, and the development should not take place on a statutory protected drinking water catchment area

1.52 The objectors to the application who went on to participate in the inquiry were:-

Mr Elliot Davis, Kingswell²⁷

1.53 Mr Davis said that his house was about to be surrounded with turbines, particularly if the applications known as Moorhouse Farmers (now renamed as Soame), or the Blair applications were granted. The countryside is saturated. He is concerned about wind farm noise. He has a young child and there is evidence from the World Health Organisation that

²⁵ CD 029- Fenwick CC- letter of 26 September 2012

²⁶ CD 031

²⁷ The house "Kingswell" was also known as Kingswell Farm and is referred to by both names in the evidence.

noise is damaging to the health of children. Kingswell is a listed building with a significant history and should be protected by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 section 66. He later added to this with concerns about his private water supply. He says this was perfectly clear until WLWF was built and then became cloudy, contaminated, and undrinkable. He has had episodes of ill health himself and he fears for the health of his family.

Mr and Mrs Tim Harrison, Cauldstanes.

1.54 Mr and Mrs Harrison are concerned about being ringed by turbines on almost all points of the compass. They did not consider that noise from wind farms is properly understood or effectively regulated. In any case the Scottish government guidelines are likely to be breached during construction. They lost their private water supply during the construction of WLWF and had to install a borehole. They continue to be concerned that that supply will be affected if the application is constructed.

Dr Rachel Connor, East Collarie Farm, Waterside

1.55 Dr Connor originally objected on the basis of overwhelming visual saturation and visual impact which produces loss of amenity within and without the home. There would be flicker effect, particularly in winter. She objected to the loss of Moor Farm as an unnecessary loss of an original local building. She considered that the development would exacerbate noise nuisance, where there is increasing evidence that noise for the windfarm is causing ill health among neighbours. Later Dr Connor enhanced her objection to include a contention that the construction of WLWF had caused contamination to public and private water supplies and the application should be refused because of the risk that the same thing would happen again.

1.56 Other objectors who did not participate directly in the inquiry raised the following matters

- Serious adverse visual effect on properties in Newmilns. The turbines have become a defining feature of the landscape and are intrusive and out of scale
- The blades will cause shadow flicker
- The proposals will result in more noise related disturbance which is leading to ill health
- There has been no direct community benefit from any fund or indirect socio-economic benefit received by the local community
- Cumulative impact – gaps between other wind farms would become closed
- It would result in more tree felling and peat removal from a sensitive upland area
- Approval would be contrary to the development plan policies which are designed to protect the countryside and residential amenity
- Moor Farm is an important feature in the landscape and should not be demolished. It will outlast the wind farm
- The wind farm now totally dominates the Ayrshire skyline, and more turbines will add to the devastating visual impact
- East Ayrshire already has more than its fair share of these industrial structures and further expansion must be halted now
- Wind turbines serve no commercial purpose and do not replace conventional power.

- They are only erected as a moneymaking exercise and are paid for by all electricity consumers by continual increases in energy bills.

Other representations

1.57 A number of representations were made in support of the application, some of which were on pre-printed forms. Common themes in these representations were

- The application will help in the fight against climate change
- The wind farm extension will help us reach our renewable energy targets
- It will help our country produce its own electricity
- It will help reduce our carbon footprint
- This is the best way forward for future generations
- This is a good location for wind turbines
- The wind farm extension will bring additional jobs to the area and boost the local economy
- It will provide further community benefit fund to support local initiatives
- Wind turbines are fascinating and not a blot on the landscape
- Eaglesham Moor is the right place for windfarms.

1.58 The owners of the residential property currently known as Bestfriends Cottage, but also referred to as 'Kingswell Bridge', or 'Veyatie', emailed the ECDU in December 2012 to advise that they had no objections to the application.

Hyperlinks to the documents referred to in this chapter

Doc ref	Description	Hyperlink to the DPEA website
Application documents		
	Original representations and objections , including Dr Connor, Mr Harrison , Mr Davis, Mr Hendry, Ms Roberts and Fenwick Community council , and representations in support	https://www.dpea.scotland.gov.uk/Document.aspx?id=230443
	Consultation Response - Non-Statutory - Forestry Commission Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230683
	Consultation response: Glasgow Prestwick Airport	https://www.dpea.scotland.gov.uk/Document.aspx?id=230684
	Halcrow, SPR, Jacobs and ECDU peat stability study for ECDU	https://www.dpea.scotland.gov.uk/Document.aspx?id=230685
	Historic Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230686
	Joint Radio Company	https://www.dpea.scotland.gov.uk/Document.aspx?id=230687
	Marine Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230688
	NATS Safeguarding	https://www.dpea.scotland.gov.uk/Document.aspx?id=230689
	Strathaven Airfield	https://www.dpea.scotland.gov.uk/Document.aspx?id=230690
	The Crown Estate	https://www.dpea.scotland.gov.uk/Document.aspx?id=230691
	Transport Scotland TRBO	https://www.dpea.scotland.gov.uk/Document.aspx?id=230692
	Consultation Response – and objection to the application - East Ayrshire Council	https://www.dpea.scotland.gov.uk/Document.aspx?id=230693
	East Renfrewshire Council	https://www.dpea.scotland.gov.uk/Document.aspx?id=230694
	- - Scottish Environment Protection Agency & subsequent correspondence - SEPA-SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=230695
	Consultation Response - Statutory - Scottish Natural Heritage & subsequent correspondence - SNH-SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=230696
	Consultation Response - Non-Statutory - Associated of Salmon Fishery Boards	https://www.dpea.scotland.gov.uk/Document.aspx?id=230697
	Consultation Response - Non-Statutory - BAA Glasgow Airport	https://www.dpea.scotland.gov.uk/Document.aspx?id=230698
	Civil Aviation Authority	https://www.dpea.scotland.gov.uk/Document.aspx?id=230699
	Defense Infrastructure Organisation	https://www.dpea.scotland.gov.uk/Document.aspx?id=230700
	EE Orange	https://www.dpea.scotland.gov.uk/Document.aspx?id=230701

Core documents		
CD 002	SPP 2014	https://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD007	Guidance on the Electricity works EIA Regs	https://www.dpea.scotland.gov.uk/Document.aspx?id=276480
CD 008	SG Guidance on the EW(EIA) amendment Regulations ;	https://www.dpea.scotland.gov.uk/Document.aspx?id=276481
CD 021:	ES Non Technical Summary ;	https://www.dpea.scotland.gov.uk/Document.aspx?id=230441
CD 022	ES Planning Statement :	https://www.dpea.scotland.gov.uk/Document.aspx?id=230442
CD 023 ES	Environmental Statement Chapters 01-06 & Chapters 09, 10, 12-17	https://www.dpea.scotland.gov.uk/Document.aspx?id=230461
CD 024	ES technical appendices	https://www.dpea.scotland.gov.uk/Document.aspx?id=276480
CD 028	statutory consultees responses to application :	https://www.dpea.scotland.gov.uk/Document.aspx?id=276500
CD 031	Moscow and Waterside CC representation	https://www.dpea.scotland.gov.uk/Document.aspx?id=276503
CD 041	EAC – report to committee on East Kingswell application	http://www.dpea.scotland.gov.uk/Document.aspx?id=276493
Applicant's documents		
SPR-L002	Further environmental information Updated Cumulative Assessment produced 13 April 2015 ('FEI')	https://www.dpea.scotland.gov.uk/Document.aspx?id=276481
SPR L-018.	East Kingswell appeal decision	https://www.dpea.scotland.gov.uk/Document.aspx?id=272194
SPR-W012	Consent for WLWFO	https://www.dpea.scotland.gov.uk/Document.aspx?id=271993
SPR-W013	Consent for WLWFX1	https://www.dpea.scotland.gov.uk/Document.aspx?id=271994
SPR-W014	Consent for WLWFX2	https://www.dpea.scotland.gov.uk/Document.aspx?id=271995

CHAPTER 2

Legal and policy context

Introduction

2.1 The applicant had prepared a planning statement on the spatial policies in force at the time of compilation of the ES in 2012.²⁸ The parties were invited to update their remarks by way of further written submissions.²⁹

Legal Framework

The Electricity Act 1989³⁰

2.2 Among other matters required by the Act which are not directly relevant to the scope of this report, Schedule 9 requires the Scottish Ministers, in considering any proposals for which their consent is required, to have regard to:

- the desirability of preserving natural beauty,
- conserving flora, fauna and geological or physiographical features of special interest and
- protecting sites, buildings and objects of architectural, historical or archaeological interest.

Ministers should further have regard to the extent to which an applicant has complied with the duty to do what he reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.³¹

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended)³²

2.3 Regulation 3 states that the Scottish Ministers shall not grant a Section 36 consent that relates to an environmental impact assessment development as defined by the regulations unless the requirements of Regulation 4 have been satisfied. Regulation 4(1) requires an applicant to submit an environmental statement. Regulation 4(2) provides that the Ministers shall not grant consent unless an environmental statement has been provided, and that they have taken into consideration the environmental information and stated in their decision that they have done so, and that the appropriate procedures for publicity have been followed³³.

2.4 In this case objectors have argued that the ES submitted by the applicant is deficient because of lack of environmental information in relation to the water environment and the potential effect on water supplies³⁴. We deal with this question in Chapter 5 below.

²⁸ CD022 ES planning statement

²⁹ see further written submissions on planning policy from the applicant, the council, and CH group.

³⁰ CD 018; Electricity Act 1989(extracts)

³¹ CD 018 as above Schedule 9

³² CD 017; Electricity Works (EIA)(S) Regulations 2000 as amended

³³ CD 007 and CD 008 Guidance on the Electricity Works (EIA) (S) regulations

³⁴ Concluding submissions for the CH group

Town and Country Planning (Scotland) Act 1997 (TCPA) as amended

2.5 Section 57 (2) of the TCPA empowers Ministers to direct that planning permission for that development and any ancillary development shall be deemed to be granted on granting a consent under section 36 or 37 of the Electricity Act 1989 in respect of any operation or development. Regard should therefore be had to the provisions of the approved development plan and any material considerations relevant to the question of whether planning permission should be granted.

Policy context

European and national policy on climate change and renewable energy

2.6 In recent years, European, United Kingdom and Scottish Government policies have set targets for the reduction of greenhouse gas emissions in response to concerns about global warming and consequential climate change. The targets set for the United Kingdom by the European Commission under the EU Renewables Directive (2009/28/EC) include a 16% reduction in United Kingdom greenhouse gas emissions by 2020, and for 15% of all energy consumed in the United Kingdom to come from renewable resources by 2020.

2.7 The Scottish Government has published a number of policy documents and has set out its own goals within a legal framework. These are intended to be ambitious. The Climate Change (Scotland) Act 2009 sets out the long-term targets for reducing greenhouse gas emissions which require a reduction of 80% by 2050 with an interim milestone of 42% by 2020.

2.8 It is recognised that a shift in power generation to renewable sources will be a key factor in reaching these targets. Scottish Government policy is that the equivalent of 100% of gross electricity consumption should be generated from renewable sources by 2020. This target equates to approximately 16 GW. Onshore wind generation would be a significant component of the electricity generated to meet this target.³⁵

2.9 The Scottish Government's Scottish Renewables Action Plan 2009 sets out a short term framework for action. The 'Routemap for Renewable Energy in Scotland', (2011) updates the Action Plan and set the target of meeting an equivalent of 100% demand for electricity from renewable sources by 2020. The Routemap was updated in December 2013³⁶, and further in 2015³⁷. and confirms that Scotland is on track to meet the targets. The interim target of providing the equivalent of 31% of electricity demand through generation from renewables by the end of 2011 has been met. A further target was set whereby the equivalent of 50% of Scottish demand should be met by 2015. It is envisaged that the majority of the target will be met by hydropower and onshore wind.

National planning policy

2.10 The spatial implications of Scottish Government policy on climate change and energy policy are reflected in National Planning Framework 3 and Scottish Planning Policy, both approved in 2014, after the application was considered by EAC.

³⁵ CD 004 Electricity Generation Policy statement 2013

³⁶ CD 003 2020 Renewable Routemap

³⁷ update issued 15 September 2015

The Third National Planning Framework (NPF3)³⁸

2.11 The NPF3 is the statement of the Government's spatial strategy for the way in which Scotland could and should develop.

2.12 In terms of Scotland as 'a low carbon place' the NPF embeds the ambition to achieve at least an 80% reduction in greenhouse gas emissions by 2050 in the spatial vision for Scotland.³⁹ Land use planning policy and decisions are to play a key role in delivering both a successful low carbon economy and the government's targets for carbon reduction. At present the energy sector accounts for a significant share of Scotland's greenhouse gas emissions.

2.13 The stated objective is to meet at least 30% of overall energy demand from renewables by 2020. This includes generating the equivalent of at least 100% of gross electricity consumption from renewables, with an interim target of 50% by 2015. NPF3 emphasises the importance of the wind resource in achieving these.

2.14 In progressing the low carbon agenda development plans are required to promote a positive, planned approach to providing low carbon infrastructure across Scotland, which should recognise the need to protect certain spatial assets, and direct development to the right place.

2.15 The NPF also defines Scotland as a place where natural and cultural assets, including landscapes, are respected, and are improving in condition. These represent a sustainable economic, environmental and social resource for the nation. High landscape quality is found across Scotland and this supports place making. National Parks, National Scenic Areas and Wild Land require strong protection, with landscapes closer to settlements having an important role to play in sustaining local distinctiveness and cultural identity⁴⁰. However, landscape is seen as "a dynamic resource, rather than a fixed asset". A balance is to be struck between "*safeguarding assets which are irreplaceable, and facilitating change in a sustainable way*"⁴¹.

Scottish Planning Policy (SPP)⁴²

2.16 The SPP is a statement of Scottish Government policy on how nationally important land use planning matters should be addressed across the country. It has been framed to correlate with the spatial vision expressed in NPF3, and the same themes can be read across both documents. It deals with both forward planning through development plans and also gives guidance on how applications are to be considered.

2.17 As a central policy principle, the SPP introduces a presumption in favour of development that contributes to sustainable development.⁴³ Whether a development makes such a contribution is to be considered against a number of factors.⁴⁴ This is set

³⁸ CD 001: NPF 3

³⁹ as above Chapter 3

⁴⁰ CD 001 NPF3 parag 4.4

⁴¹ as above parag 4.7

⁴² CD 002 SPP

⁴³ as above page 9

⁴⁴ as above parag 169.

alongside the aim to achieve the right development in the right place; and is not to be understood as allowing development at any cost.

2.18 In seeking to realise Scotland as ‘a low carbon place’ the planning system is to support the transformational change to a low carbon economy, consistent with national objectives and targets. Development plans should seek to ensure that an area’s full potential for electricity and heat from renewable sources is achieved, in line with national climate change targets, giving due regard to relevant environmental, community and cumulative impact considerations.⁴⁵

2.19 Referring specifically to onshore wind,⁴⁶ planning authorities should set out in development plans a spatial framework identifying those areas that are likely to be most appropriate for onshore wind farms as a guide for developers and communities.⁴⁷ These spatial frameworks are to identify three categories or groups of areas within development plans, in accordance with the following principles

- Group 1: Areas where wind farms will not be acceptable, which are National Parks and National Scenic Areas.
- Group 2: Areas of significant protection. In these areas, while the need for significant protection should be recognised. Wind farms may be appropriate in some circumstances, so long as any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation. These areas will include
 - National and international designations
 - Other nationally important mapped environmental interests -this includes carbon rich soils, deep peat and priority peatland habitats
 - Areas providing a measure of community separation in consideration of visual impact. Authorities may define an area in the local development plan, not exceeding 2 km, around cities, towns and villages which have an identified settlement edge - the extent of any such separation area is to be determined based on landform and other features which restrict views out of the settlement.

In other areas which do not fall within Groups 1 and 2, SPP anticipates that wind farms are likely to be acceptable subject to detailed consideration against appropriate policy criteria to be set in development plans.

2.20 SPP requires that local development plans are to set out the criteria for assessing all applications for wind farms of different scales, including extensions, taking account of defined considerations.⁴⁸ The considerations applicable will vary relative to the scale of the proposal and characteristics of the location but are likely to include:

- net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities;
- the scale of contribution to renewable energy generation targets;

⁴⁵ as above parag 155- 157

⁴⁶ as above parag 161

⁴⁷ as above page 39 Table 1.

⁴⁸ CD 002 SPP parag 169.

- effect on greenhouse gas emissions;
- cumulative impacts - planning authorities should be clear about likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of existing and consented energy development may limit the capacity for further development;
- impacts on communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker;
- landscape and visual impacts, including effects on wind land;
- effects on the natural heritage, including birds;
- impacts on carbon rich soils, using the carbon calculator;
- public access, including impact on long distance walking and cycling routes and scenic routes identified in the NPF;
- impacts on the historic environment, including scheduled monuments, listed buildings and their settings;
- impacts on tourism and recreation;
- opportunities for energy storage; and
- the need for a robust planning obligation to ensure that operators achieve site restoration.

2.21 Beyond the spatial strategy, SPP stipulates that individual properties, and those settlements not identified within the development plan as requiring a separation area, are to be safeguarded by local development plan policy criteria for determining individual applications for onshore wind farms.

2.22 In terms of maintaining landscape quality in pursuit of Scotland as “a natural, resilient place” the SPP broadly aims to “*facilitate positive change while maintaining and enhancing distinctive landscape character*.”⁴⁹ Thus, in all development management decisions the siting and design of development should take account of local landscape character, the effects on landscapes, and the natural and water environment, including cumulative effects. Developers should seek to minimise adverse impacts through careful planning and design.⁵⁰

Development Plan policy

2.23 The development plan applicable at the time of consideration by EAC consisted of the **Ayrshire Joint Structure Plan**⁵¹ (AJSP), approved 22 November 2010, and the **East Ayrshire Local Plan (EALP)**⁵² adopted 26 October 2010. Both of these documents remain in force at the time of this report. They were also in force at the time of the East Kingswell application and appeal.

2.24 The emerging development plan is the **East Ayrshire Local Development Plan (proposed)**⁵³ (EALDP), which was approved by EAC in September 2016 and has been submitted to Ministers for consideration. The draft plan is currently with the DPEA for examination.

⁴⁹ CD 002 SPP parag 194

⁵⁰ as above parag 202

⁵¹ CD 038 Ayrshire Joint Structure Plan (AJSP)

⁵² CD 036- East Ayrshire Local Plan (EALP):

⁵³ CD 037 : East Ayrshire Local Development Plan (EALDP)

The Ayrshire Joint Structure Plan

2.25 The AJSP identifies an indicative Area of Search⁵⁴ for large scale wind energy development, the exact boundaries of which were to be refined through the EALP. The application site in question lies within the AJSP area of search, although it is recalled that structure plan maps are intended to be indicative and not site specific. Proposals within the AJSP area of search also require be assessed against further policy criteria.

2.26 AJSP Policy ECON 6 (Renewable Energy)⁵⁵ provides that renewable energy proposals will be in accordance with the plan where it can be demonstrated there will be no significant adverse impact, including adverse cumulative impact and where the design of the development is sensitive to landscape character, biodiversity and cultural heritage.

2.27 AJSP Policy ECON7 (Wind Farms);⁵⁶ will judge proposals are against a list of criteria, of which those relevant to WLWFX3 are

- Criterion A - which provides that large and small wind farm developments will be supported in the Area of Search, subject to other material considerations being satisfactorily addressed
- Criterion D states that where the limit of acceptable cumulative impact has been reached the area will be affected significant protection
- Criteria G requires that in all cases applications should be assessed in relation to a list of locational issues including impacts on the landscape and historic environment, the water environment, communities, noise, and shadow flicker.

AJSP Policy ENV1 (Landscape Quality)

2.28 The policy seeks to maintain and enhance Ayrshire's landscape quality, protecting local distinctiveness including

- A) settings of communities and buildings within the landscape*
- B) patterns of woodland, fields, hedgerows and tree features;*
- C) special qualities of rivers, estuaries and coasts;*
- D) historic landscapes*
- E) skylines and hill features, including prominent views;*

2.29 Local plans are to provide criteria for the assessment of future proposals in the context of the particular local landscape type within which the development is proposed.

⁵⁴ CD 038 AJSP key diagram

⁵⁵ CD 038 page 18.

⁵⁶ Note: The plan text says that this policy is for wind farm proposals coming forward outwith the identified key diagram Area of Search⁵⁶, However, the policy includes a specific reference to the search areas, so we interpret it as extending to both the search area and areas outwith this.

The East Ayrshire Local Plan (EALP)⁵⁷

2.30 Overarching policy SD1 is a general policy committing the council to the principles of sustainability, and to the principle that all new development should contribute positively to the environmental quality of the area. New development should not have any unacceptable adverse impact on:

- (i) the character and appearance of the particular location in which it is proposed;
- (ii) the environment and amenity of local communities and residents of the area;
- (iii) landscape character and quality; and
- (iv) natural or built heritage resources;

2.31 EALP Policy ENV16 (Landscape & Rural Environment) seeks to ensure that the landscape character and quality of the countryside is maintained and enhanced.

2.32 EALP Policy ENV17 (Landscape & Rural Environment) is intended to safeguard those features and elements of the rural environment which are regarded as of prime importance to the economy and appearance of the area. Where a location has not been identified for specific development, any proposals must have minimum impact on the rural environment. Among other considerations, there is a presumption against development which would have significant unacceptable adverse visual impact or cause irreparable damage to the landscape character and scenic quality of the area within which it is proposed; or adversely affect the quality of water resources, water catchment areas, land drainage or flood protection interests, or create water pollution problems;

2.33 EALP Policy CS12 Renewable Energy Developments General Policy is a subject-specific policy providing support for the development of sympathetic renewable energy proposals, both in stand-alone locations and as integral parts of new and existing developments, where it can be demonstrated that there will be no significant, unacceptable adverse impact, including adverse cumulative impact with other existing renewable energy developments or other renewable energy developments which are consented or under construction. The protection of the landscape is emphasised.

2.34 The other EALP wind energy specific local plan policies which would apply to the application are

- Policy CS14, which provides for compliance with structure plan policy ECON7 mentioned above.
- Policy CS15, which requires projects to contribute to the council's Renewable Energy Fund, and provides some detail about how such funds will be deployed.
- Policy CS16 provides for the removal of redundant machinery at the end of the life of the wind farm.
- Policy CS17 protects existing wind farms from development which would compromise their effective operation.

⁵⁷ CD 036

Emerging Development plan- the East Ayrshire Local Development Plan (proposed) (EALDP)⁵⁸

2.35 The EALDP proposed plan was published for consultation in March 2015, with the consultation period finishing in April 2015. It was approved by EAC during September 2015 and referred to the Ministers. It has therefore been subjected to the early stages of strategic environmental assessment and has been exposed to publication and public consultation.

2.36 EALDP Overarching Policy OP1 provides that all development proposals must meet a number of detailed quality standards. Those relevant to this application are that any development must

- (ii) Be fully compatible with surrounding established uses and have a positive impact on the environmental quality of the area;*
- (iii) Ensure that the size, scale, layout, and design enhances the character and amenity of the area and creates a clear sense of place;...*
- (x) Ensure that there are no detrimental impacts on the landscape character or tourism offer of the area...*

2.37 EALDP Chapter 6 Energy and Infrastructure develops the spatial framework required by SPP, and refers specifically to WLWF. It is said that

“In terms of wind energy, East Ayrshire already contributes significantly to Scotland’s renewable energy output, primarily through Whitelee, with 100 of its 215 turbines constructed within East Ayrshire. There have also been several consents granted in the southern part of East Ayrshire, including Afton and the Harehill Extension, together providing a further 65 turbines. It is recognised, however, that further opportunities to support the renewable energy agenda must be explored and that the Local Development Plan should continue to support wind energy proposals in suitable locations.”⁵⁹

2.38 The proposed plan lays out a spatial framework for the location of wind farms⁶⁰ based on the requirements of the SPP. This provides for the classification of the LDP area into the SPP⁶¹ based Groups 1, 2 and 3 areas. Group 1 areas receive the highest level of protection and are not relevant to this application. Maps illustrate the areas which EAC considers to be Group 2 with the remaining area of East Ayrshire is classified as Group 3. The application site is on the boundary between the two areas with most of the site within the Group 2 area.

2.39 The draft plan considers that there should still be policy constraints over some of the Group 3 classified land in East Ayrshire. The plan text explains

“ According to SPP, land falling within Group 3 should be defined as areas of Strategic Capacity for wind energy. However, on reviewing the group 3 areas, the Council is of the view that none of these areas have adequate capacity on a strategic level to be defined as strategic capacity areas. The Group 3 areas largely comprise of small pockets of land, spread widely across East Ayrshire incorporating a diverse

⁵⁸ CD 037

⁵⁹ CD 037 EALDP parag 6.1.8

⁶⁰ as above paragraph 6.1.12 forward,

⁶¹ CD002 SPP Table 1

range of land forms and land uses, parts of which are clearly unsuitable for wind energy development. The key concentrations of Group 3 land, free from Group 2 constraints, are shown on Map 13 and the factors that have been considered in assessing their strategic capacity are described in table 5 below. Whilst under the SPP definition, these areas have the potential to be areas of Strategic Capacity, the LDP does not identify them as such for the reasons noted below.⁶²

2.40 Table 5 gives further detail of the constraints which are considered applicable to certain areas of Group 3 classified land, which are said not to have strategic capacity for the reasons given in each case, but these areas do not include the application site. EALDP Map 13 'The Onshore Wind Framework', locates the application site as just within the western edge of the 'Area of Strategic Capacity' located to the east and south of the site, and which includes the main WLWF .

2.41 In relation to WLWF the EALDP says

"6.1.13 The Whitelee wind farm has been in operation for several years and has had a marked impact on East Ayrshire's skyline. The development has proven to be a successful scheme; it is of a large scale, located within a landscape generally suited to wind energy development.

6.1.14 In terms of future development, it is considered that there may be capacity for small scale extensions to the existing development, where these are within the core of the upland area, away from the more sensitive outer fringes. In addition, the principle of re-powering in this area will be supported, subject to the provisions of all relevant LDP policies and associated Supplementary Guidance. This area is therefore identified as an area of strategic capacity, as shown on map 13.

6.1.15 Further development to the south and south west of existing turbines would have a damaging impact on the local landscape, nearby communities and views into and within East Ayrshire. Map 13 therefore identifies an area around Whitelee which should be safeguarded from new wind energy development, to avoid any unacceptable cumulative impacts arising."

2.42 Map 13 thus shows an area to the south of the 'Area of strategic capacity', which is shaded as 'Area where cumulative impact limits further development'. The application site is located in the 'area of strategic capacity' just outwith the area shaded as constrained by cumulative development.

2.43 Central to the EALDP proposed renewable energy policy framework is Schedule 1 Renewable Energy Assessment Criteria, which provides the quality tests for the renewable energy developments. The policies state that developments must be acceptable against all criteria. The schedule 1 criteria most relevant to the objections to WLWFX 3 include

- *Landscape and visual impacts including the principles set out in the Ayrshire Landscape Wind Capacity Study...⁶³*
- *Cumulative impacts - likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of*

⁶² CD 037 EALDP parag 6.1.12

⁶³ CD040 East Ayrshire Landscape Wind Capacity Study ; see also chapter 3 below.

existing and consented energy development may limit the capacity for further development....

- Impacts on all aspects of the historic environment*
- Effects on hydrology, the water environment and flood risk*
- Impacts on forestry and woodlands, with reference to the Ayrshire and Arran Forestry and Woodland Strategy (2013)*
- Effect on greenhouse gas emissions*
- Impacts on communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker*
- Impacts on tourism and recreation*
- Public access, including impact on long distance walking and cycling routes and scenic routes identified in National Planning Framework 3*
- Net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities...*
- The ability of the proposed location to support the efficient operation of wind energy technology*
- The appropriate siting and design of turbines and ancillary works*
- The need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration*
- The need for a robust planning obligation to ensure that operators achieve site restoration*
- The scale of contribution to renewable energy generation targets...⁶⁴*

2.44 EALDP Policy RE1, Renewable Energy Developments supports renewable energy proposals

where it can be demonstrated that there will be no unacceptable significant adverse impacts on all of the relevant Renewable Energy Assessment Criteria set out in Schedule 1 of the LDP, and that the scale of the proposal and its relationship with the surrounding area are appropriate..

2.45 Policy RE3: is for Wind Energy Proposals over 50 metres in height. For such proposals the council will give.....

significant protection to Group 2 areas shown on Map 12. Such development will only be permitted within these Areas of Significant Protection in cases where it can be demonstrated that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation and where the proposal is acceptable in terms of all applicable Renewable Energy criteria set out in Schedule 1.

Within those areas shown on the Spatial Framework (Map 12) as Group 3 - Areas with Potential for Wind Energy Development, proposals for wind energy over 50m in height will be supported where it can be demonstrated that they are acceptable in terms of all applicable Renewable Energy Assessment Criteria set out in Schedule 1.

2.46 The EALDP states that the council intends to prepare statutory supplementary guidance on Wind Energy in support of the interpretation of Policy RE3 by providing more

⁶⁴ CD 037 EALDP CH 6 page 89

information on the spatial framework and the considerations that will apply to wind energy development of 50 metres or higher.

2.47 EALDP Policy RE4⁶⁵ provides for cumulative effects of wind energy proposals, and says

With specific regard to cumulative landscape impacts, the level of development that has taken place at Whitelee limits the capacity of this landscape area to accommodate further development. Whilst there may be limited scope for small additions developed in line with the advice contained within the East Ayrshire Landscape Wind Capacity Study, development over and above this, particularly to the south and south west of the existing turbines as shown in Map 14, will result in unacceptable cumulative landscape impacts...

2.48 EALDP Policy RE5: Wind Energy and the Landscape⁶⁶ refines the application of the policy framework to particular landscape areas. To assist in the detailed consideration of the landscape element of the Schedule 1 criteria the plan text refers to maps 14 and 15 which are derived from the East Ayrshire Landscape Wind Capacity Study.⁶⁷ These illustrate the landscape sensitivities to wind turbines of larger typologies. These landscape sensitivity maps and the associated detailed guidance within the landscape study would be used to assess the landscape effects of wind energy applications, alongside the other policy criteria. The application site is shown in an area of high to medium sensitivity.

2.49 Policy ENV8: Protecting and Enhancing the Landscape says

The protection and enhancement of East Ayrshire's landscape character as identified in the Ayrshire Landscape Character Assessment⁶⁸ will be a key consideration in assessing the appropriateness of development proposals in the rural area. The Council will require that:

(i) Development proposals are sited and designed to respect the nature and landscape character of the area and to minimise visual impact. Particular attention will be paid to size, scale, layout, materials, design, finish and colour.

(ii) Where visual impacts are unavoidable, development proposals include adequate mitigation measures to minimise such impacts on the landscape.

(iii) Particular features that contribute to the value, quality and character of the landscape are conserved and enhanced. Development that would result in the loss of valuable landscape features, to such an extent that character and value of the landscape, is diminished, will not be supported. Such landscape features include:

- a. Settings of settlements and buildings within the landscape;*
- b. Skylines, distinctive landform features, landmark hills and prominent views;*
- c. Woodlands, hedgerows and trees;*
- d. Field patterns and means of enclosure, including dry stone dykes; and*
- e. Rights of way and footpaths*

⁶⁵ CD 037 EALDP Ch 6 page 83

⁶⁶ CD 038 pages 84-86

⁶⁷ CD 040 with appendix SPR-L026- discussed in Chapter 3 below

⁶⁸ SPR-L008 SNH Landscape Character Assessment: Ayrshire 1998 and SPR L009 SNH Landscape Character Assessment : Glasgow and the Clyde Valley –taken into account in CD 040 and SPR-L026

Development that would create unacceptable visual intrusion or irreparable damage to landscape character will not be supported by the Council.”

The main points for the parties on policy

The main points for the applicants

2.50 The applicants submit that the application proposals would contribute towards the Scottish government’s targets for energy from renewable sources.⁶⁹

2.51 **On national planning policy** the applicant draws support from the clear continued commitment in the NPF3 to renewable energy and the identified benefits associated with it. While the NPF is protective of landscape quality, this site is not part of one of the designated landscape areas which the NPF lists for protection. As regards SPP the site should be seen as falling within a Group 3 area and is therefore likely to be suitable for a windfarm development. All of the criteria for acceptability defined in SPP paragraph 169 were fully and exhaustively considered in the ES, and this has demonstrated that the proposal is satisfactory. The site should be seen as an excellent example of the type of location where the technology can operate efficiently and where environmental and cumulative impacts have been satisfactorily addressed.

2.52 In terms of the **approved development plan** the applicants say that AJSP policy ECON 6 fundamentally supports proposals for the generation and utilisation of renewable energy. However, the policy test of ‘no significant adverse impact’, bearing in mind the age of the policy, compared with the policy framework in use today, should now be regarded as overstating the weight to be given to any adverse impacts. Any wind farm proposal will virtually always have significant impact of one kind or another, which will usually be adverse to some degree. The ‘no significant adverse impact’ test has not been reflected in the development of national policy. In any event the AJSP policy is now more than 5 years old, so predates the current SPP. All these factors should reduce the weight given to the ‘adverse impact tests in ECON 6. This being said, AJSP clearly gives policy support for proposals for large and small scale wind farm developments in the AJSP key diagram Areas of Search, subject to specific proposals satisfactorily addressing all other material considerations. The application site is within the Area of Search, and is therefore supported by Policy ECON 7 criteria A, to the other criteria being met. The evidence has demonstrated that cumulative impact is acceptable, and so criteria D is met. The ES and the applicant’s other evidence also shows that

- The impacts on the landscape and historic environment are acceptable
- There is no adverse impact on the ecology (including birds)
- The biodiversity and nature conservation of the site is protected
- The water environment, including private water supplies, has been fully considered and understood, and any risk of potential effect, which is very limited, can be adequately controlled by monitoring conditions
- The application does not impact significantly upon any local communities - the extent to which individual properties are affected which was found unacceptable in the East Kingswell appeal⁷⁰ has been addressed by the reduction in the number of turbines, and the reduction in height
- There is no impact on aviation

⁶⁹ CD 022 planning statement; see also further written submissions from applicant on update to policy

⁷⁰ SPR L018 for East Kingswell appeal decision. see also chapter 3 below.

- There is no impact on telecommunications
- The issue of noise can be mitigated by appropriate conditions or legal agreement
- There are no residential properties within the 10 rotor diameter distance indicated by Scottish Government for the potential for shadow flicker to occur.

2.53 As regards the protection of landscape quality in AJSP policy ENV1 it was accepted by the EAC Head of Planning in his report on the current application that the proposal does not adversely affect the features in criteria B, C and D. His view that some residences near to the site would result in significant adverse impact, is not consistent with the view he previously expressed in respect of the East Kingswell proposal which he supported.⁷¹ It is inevitable that there will be some localised impacts from a development of this nature. The applicant relies upon the ES, the FEI, and their landscape assessment evidence, which they consider has demonstrated that that this scheme, modified from the East Kingswell proposal in both numbers and height, does not result in unacceptable visual impact on landscape and so accords with the policy.

2.54 The EALDP appears to set up large number of policy hurdles in the way of wind farm development. However the policy tests should properly be understood as frameworks within which acceptability can be considered. The applicant's position is that the ES, the FEI and the evidence to the inquiry shows that the adverse impact which EAC principally relies on, namely, the localised impact on some properties, should properly be considered to be within acceptable levels. The applicant submits that the application should be regarded as compliant with all the relevant local plan policies, including those where conditions or legal agreements would be required.

2.55 In terms of other material considerations, the emerging local plan, the EALDP, is at a relatively early stage, and is subject to the outcome of the examination and Ministers' approval. Prior to the examination being completed relatively little weight should be given to the EALDP policies. The applicants, ScottishPower Renewables, have lodged representations in response to the proposed plan, expressing concerns about a number of issues including spatial strategy, climate change, the spatial framework for wind energy, strategic capacity for wind energy, Policy RE8 and Schedule 1.

2.56 The EALDP accepts that although East Ayrshire contributes significantly to Scotland's renewable energy output, primarily through Whitelee, further opportunities to support the renewable energy agenda must be explored and that the EALDP should continue to support wind energy proposals in suitable locations. The proposed plan says that there may be capacity for small scale extensions to existing development. The plan also states that further development to the south and south west of the existing turbines would have a damaging impact on the local landscape, and so it is significant that the application site is to the west, and north of most of the existing WLWF turbines. Policy RE 1 of the EALDP is similar to local plan policy CS12, and is supportive of proposals for renewable energy, where it can be demonstrated that there will be no unacceptable adverse impact.

2.57 Given the number and terms of the criteria which must be met in Schedule 1, there appears to be a generally restrictive approach to wind farms in the emerging plan, which is contrary to SPP. This notwithstanding, because the site falls within the 'Area of strategic capacity', the application is in the only area specified for wind energy development in the

⁷¹ CD041 EAC East Kingswell committee report

plan and would constitute a small scale extension. Thus it should still be considered favourably against the emerging LDP.

2.58 As regards the **East Kingswell appeal decision** a number of significant changes have been made to this application which fully address the reporter's reasons for refusing that proposal. The turbines are much smaller at 110 to tip rather than the largest WLWF typology of 140 to tip, as previously proposed. There are five as opposed to seven, and they have been relocated so as to substantially increase the distances between the turbines and the nearest dwellings⁷². There would now be no possibility of shadow flicker annoyance. On the concerns about cumulative impact, and wind farms being experienced as running together and dominating the landscape, the other wind farm proposals considered by the reporter to be potentially influential in that appeal had either not been approved or had been reduced in size.

The main points for East Ayrshire Council

2.59 On **national energy policy** EAC accept that the proposal would make a contribution to national renewable energy generation targets but the limited contribution from the 5 turbines should be seen in proportion to the adverse effects.

2.60 In regard to the **national planning policy**, the proposals should be regarded as inconsistent with the NPF requirement to have particular regard to landscape quality, and the ability of landscapes to absorb development, even if the landscape is not designated or expressly protected. Landscape Protection in the NPF is not restricted to national parks and national scenic areas, and wild land. In particular, landscapes closer to settlements are recognised as potentially sensitive. The wind energy spatial frameworks set out in SPP are designed to provide clearer guidance on areas where wind farm development may or may not be acceptable, and these principles are essentially reflected in both the approved development and emerging development plan policy for Ayrshire. EAC disagrees that the application site lies within a SPP Group 3 area, that is, an area assumed to have potential for wind farm development. The application site lies within a Group 2 area, that is, an area of significant protection, because this area is identified as an area of soil carbon class 6, deep peat, on Scotland's Soils website. The implications of Group 2 classification are that any significant effects on the qualities of the area require to be overcome by siting, design or other mitigation. However, in relation to the carbon capture characteristics of the site, EAC accepts that SNH has not objected to the application and that measures can be put in place through conditions to mitigate against any peat loss related impacts. Whether or not a landscape area is Group 2 or 3 the considerations laid out in SPP paragraph 169 must still be applied to establish acceptability. EAC considers that the proposed development fails the SPP paragraph 169 tests due to unacceptable impact on landscape, and on residential amenity.

2.61 EAC acknowledges that the **current development plan**⁷³ preceded the current SPP and has therefore not set out a spatial framework that exactly accords with the SPP framework. However, the development plans do provide a spatial strategy, in that they have identified areas of search, based on landscape analysis, where large and small scale wind farms will be considered suitable in principle. They have also set out the detailed

⁷² SPR-L018 East Kingswell appeal decision; and chapter 3 below, also SPR-L002 – FEI for effect on these houses.

⁷³ CD 036

criteria against which wind farm proposals will be assessed, and these do accord with the SPP framework.

2.62 The application of the development plan policies are also supported by landscape analysis⁷⁴ which gives detailed landscape guidance. The recognised principle of establishing and maintaining visual separation from other wind farms is relevant to this application. Careful consideration should be given to the effects on areas in the immediate vicinity of existing wind farm landscapes. Here it is proposed to add another wind farm onto the existing WLWF with no visual separation. If this approach is taken it would be a precedent for continual additions of more wind farms on to WLWF, and would not provide any protection to the areas, communities or residential properties in the immediate vicinity of the existing wind farm.

2.63 As regards amenity and quality of life, it is recognised that wind farms have the potential to create significant long term adverse impacts on the amenity of an area or health, well-being and quality of life of people living or working nearby. In the case of WLWF X3, the turbines would be just over 1 km from residential properties resulting in significant adverse visual impacts with potential for resultant adverse impacts on well-being and on the quality of life of the residents of the immediate area surrounding the wind farm.

2.64 On the **structure plan**, EAC says that policies ECON 6 and 7 and the AJSP proactive area of search approach has ensured that East Ayrshire has contributed significantly to national renewable energy targets. WLWF is a significant proportion of the AJSP area of search. The AJSP policies and key diagram are strategic and indicative rather than site specific. The indicative Key Diagram suggests that the proposed wind farm would be located within the broad Area of Search for large scale wind farms, but this should not be regarded as conclusive of acceptability.

2.65 EAC disagrees that the application is acceptable in terms of AJSP policy ECON7. As regards cumulative impact, when considered together with the turbines of the original Whitelee development and Extension Phases 1 and 2, the cumulative visual impact of the proposed wind farm will be considerable. EAC considers that the only opportunities for further development potentially envisaged in the AJSP are more likely to lie within the upland core where very limited numbers of larger scale turbines could potentially be located with minimal landscape impact. On a number of identified residential properties and other receptors the cumulative impacts of the proposals taken with other turbines will result in significant adverse impacts on residential amenity due to the jumble of existing turbines, the overlapping of blades and bringing turbines closer, so appearing much larger and resulting in a horizon dominated by wind turbines. The proposal would intensify and escalate the impact of what is already there on nearby residents. EAC considers that the proposed wind farm will result in significant adverse visual impacts on the landscape and buildings within the landscape.

2.66 On the other policy criteria relating to ecology, biodiversity, nature conservation, the water environment, aviation, telecommunications and noise, EAC agrees that these issues can be mitigated by appropriate planning conditions or legal obligations. In terms of shadow flicker, none of the residential properties near to the wind farm are located within the 10 rotor diameter distance indicated by the Scottish Government as being criteria for the potential for shadow flicker to occur therefore it is unlikely that this issue will arise.

⁷⁴ CD 039

2.67 As regards the protection of landscape quality in AJSP policy ENV1 EAC considers that the application will result in significant adverse visual impacts on the buildings within the landscape which are located relatively close to the site, in particular, Cauldstanes, Bestfriends Cottage, Kingswell and Drumtee. EAC considers that the residents of these buildings are already subject to a horizon dominated by wind turbines and that the proposal adds to this and brings turbines significantly closer to them. Because of relative proximity the application turbines would appear much larger to the occupiers of these buildings and their surroundings. This would be both a primary visual effect from the proposal and also a cumulative extension of the effects of wind turbines in the view, resulting in significant adverse impacts on the residential amenity of these properties.

2.68 On policy ENV1 criteria E on skylines, when considered together with the turbines of the original Whitelee development and the two extensions, the cumulative visual impact of the proposal particularly from the south west and parts of the A77 will be considerable⁷⁵ for certain residential properties. In addition, significant adverse impacts would result on the A77⁷⁶ near to South Drumbooy and for one kilometre south on the A77, with particular adverse impacts being suffered by high sensitivity receptors such as cyclists and residents due to the close proximity and position of the proposed wind farm. For these reasons, the proposal is considered not to comply with structure plan policy ENV1(A)and (E).

2.69 Turning to **the local plan**, the proposals would not comply with EALP Policy SD1. Clearly, there is a large scale operational wind farm adjacent to the application site, but the new development will extend wind turbines onto the edge of the lower fringe area of the plateau moorland, bringing wind turbines closer towards existing scattered dwellings and roads, resulting in significant adverse impacts on the character and appearance of this area. A distinction should be made between the two landscape character types. At this particular location impacts on the lower plateau fringe from the existing wind farm are already significant and the character and appearance of this particular location has reached capacity to absorb further wind turbine development. EAC also considers that the environment and amenity of local communities and residents of the area would be unacceptably affected by adverse visual impacts on the amenity of nearby residents and on cyclists.

2.70 EAC accepts that where permitted, any wind farm development would always result in a certain degree of visual intrusion to the existing landscape character. Because of WLWF, significant visual intrusion has already taken place into the landscape and the current proposal would extend these impacts. This notwithstanding the additional turbines would result in an exacerbation of the already existing significant visual impacts on the landscape character of this area to such an extent that the proposal is unacceptable.

2.71 As regards **material considerations**, the emerging development plan **East Ayrshire Local Development Plan (EALDP)**⁷⁷ has followed the spatial framework element of SPP, and the criteria laid out in this draft plan should be taken into account.

2.72 EAC considers that the application would not comply with the proposed LDP overarching policy OP1 (i), (ii), (iii), (v) and (x), nor with policy RE1, RE3, or RE5, or schedule 1 renewable energy assessment criteria, or ENV8, due to the impact of the

⁷⁵ see Chapter 3 below and SPR- L002 : FEI Viewpoint 16- Kingswell; Viewpoint 17 - Kingswells Bridge (Bestfriends Cottage) and Viewpoint 18 - Cauldstanes.

⁷⁶ As above - viewpoint 19

⁷⁷ CD 037

development on the landscape and the environmental quality of the area, its impact on established nearby residential uses, and unacceptable adverse impact on landscape and residential amenity. The proposal also has the potential to impact detrimentally on tourism because the A77 is a popular cycle route, and the development would have significant visual impact on the experience of cyclists at certain points on this route.

2.73 Regarding **East Kingswell**, EAC says that each application had to be considered on its own merits and it was not significant that officers of the council had previously been supportive of some aspects of the East Kingswell proposals. The outcome of that appeal was taken into account in the consideration of these proposals.

The main points for Objectors

CH group

2.74 The CH group made representations on national energy policy in their concluding submission, arguing that national renewable energy targets are principally intended for planning authorities when updating their development plans, and for Ministers when considering such documents. Targets do not imply that a consent or permission must follow for any particular site. In fact, permissions going through the planning system have led to the 2011 interim target for electricity consumption from renewables being met. There is also a consented capacity which has not yet been built, meaning that there is already significant progress towards the 2015 and 2020 targets. There are commentators who consider that these targets may be exceeded. If that was so, any wind power generated in future would be effectively surplus to Scotland's domestic requirements and would be exported or not used. So any adverse impacts from new wind farms are now being balanced against a target that has already been met. This means that any argument on need for more wind farms is reduced to vanishing point.

2.75 The objectors acknowledge that national policy generally favours on shore wind farm developments on appropriate sites. However, policy should not be understood as giving any special priority or advantage to renewables projects within either the EA consent system or the planning system.

Documents referred to in this chapter with hyperlink to DPEA website

Document reference	Description	Hyperlink to DPEA website
Further written submissions on policy		
	Applicant Further written submissions on policy	https://www.dpea.scotland.gov.uk/Document.aspx?id=267512
	East Ayrshire Council further information in relation to appeal - policy	https://www.dpea.scotland.gov.uk/Document.aspx?id=267483
	EAC comments in response to applicant's further written submissions on policy	https://www.dpea.scotland.gov.uk/Document.aspx?id=271447
Core documents		
CD001 -	National Planning Framework 3 (NPF3)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276474
CD002-	Scottish Planning Policy (SPP)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD 003	2020 Renewable Routemap for Scotland- Update	http://www.dpea.scotland.gov.uk/Document.aspx?id=276476
CD004 -	Electricity Generation Policy statement 2013	http://www.dpea.scotland.gov.uk/Document.aspx?id=276477
CD007	Guidance On The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000	https://www.dpea.scotland.gov.uk/Document.aspx?id=276480
CD008	Guidance On The Electricity Works (Environmental Impact Assessment) (Scotland) Amendment Regulations 2008	https://www.dpea.scotland.gov.uk/Document.aspx?id=276481
CD018	The Electricity Act 1989	https://www.dpea.scotland.gov.uk/Document.aspx?id=276497 ;
CD 017	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276496

CD022	ES planning statement	http://www.dpea.scotland.gov.uk/Document.aspx?id=230442
CD036	East Ayrshire Local Plan (EALP)	http://www.dpea.scotland.gov.uk/Document.aspx?id=276508
CD 037	East Ayrshire Local Development Plan (EALDP)	http://www.dpea.scotland.gov.uk/Document.aspx?id=276509
CD 038	Ayrshire Joint Structure Plan	https://www.dpea.scotland.gov.uk/Document.aspx?id=276490
CD 039	Addendum to the Structure plan technical report TR03/2006SPR-L018	http://www.dpea.scotland.gov.uk/Document.aspx?id=276491
CD 040	East Ayrshire Landscape Wind Capacity Study main report	http://www.dpea.scotland.gov.uk/Document.aspx?id=276492
CD 041	EAC committee report on East Kingswell application	https://www.dpea.scotland.gov.uk/Document.aspx?id=276493
Applicant's documents		
SPR L002	FEI – further environmental information on landscape and residential amenity	http://www.dpea.scotland.gov.uk/Document.aspx?id=272178
SPR-L008	SNH landscape character assessment :Ayrshire 1998	http://www.dpea.scotland.gov.uk/Document.aspx?id=272184
SPR-L009	SNH Landscape character assessment : Glasgow and the Clyde valley	http://www.dpea.scotland.gov.uk/Document.aspx?id=272185
SPR-L018	East Kingswell appeal decision notice	http://www.dpea.scotland.gov.uk/Document.aspx?id=272194
Closing submissions		
	Mr J Campbell QC: Closing submissions for the CH group	http://www.dpea.scotland.gov.uk/Document.aspx?id=287330
	Closing submissions for EAC	https://www.dpea.scotland.gov.uk/Document.aspx?id=290472
	Shepherd & Wedderburn, for the applicant - Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=291973

CHAPTER 3

Landscape and visual impact including recreational and residential amenity

Introduction

3.1 The methodology used by the applicant to assess the landscape and visual impact of WLWFX3 is explained in Appendix 7.1 of the ES.⁷⁸

3.2 In Chapter 7 of the ES and in the updated further environmental information⁷⁹ 'FEI' the applicant provided evidence on

- the likely physical effects on the landscape
- the effect on landscape character
- visual effects
- cumulative effects
- the likely visual effect on residential amenity.

3.3 EAC objected to the proposals based on non-compliance with the development plan, by reason of unacceptable visual effects and impacts on residential amenity.⁸⁰

3.4 Other objectors,⁸¹ either as an element of their objection or in a topic based submission also referred to aspects of landscape and visual impact, or residential amenity.

The main points for the applicant⁸²

3.5 The applicant says that it has adopted a conventional, tried and tested methodology for the assessment of visual impact. The work and conclusions reached in the ES reflect the essential elements of objectivity and transparency in assessment, carefully defined terminology, and entail the exercise of experienced professional judgement in reaching conclusions as to effect.

3.6 In assessing the landscape and visual effects of the resultant proposals the applicant summarises the key issues in relation to LVI as

- Whether the **capacity of the landscape** would be exceeded, with particular regard to the siting and design of the proposals, taking any cumulative effects from the existing WLWF into account
- Whether the impact of the proposals on the landscape character of the site and surrounding area are of such **magnitude and significance** in landscape and visual terms as to be unacceptable
- Whether the **cumulative impact** of the development, with other operational, consented and planned wind farms is acceptable in landscape and visual terms

⁷⁸ SPR L-003 hearing statement for the applicant SPR-L003 see also ES Chapter 7 and Appendix 7.

⁷⁹ SPR L002 FEI

⁸⁰ EAC hearing statement and SPR L001 EAC consultant's audit of ES (Ironside Farrar)

⁸¹ CH Group (formerly POW group) per Mr Tim Harrison, Cauldstanes, Mr E Davis, Kingswell, Ms Greta Roberts, Moscow and Waterside CC, and Fenwick CC

⁸² Applicant's hearing statement on LVI

- Whether the **effects on identified visual receptors**, including on users of the A77 cycle route, the B742, and the residential (visual) amenity of nearby properties at Kingswell, Kingswell Bridge, Drumtee Farm and Cauldstanes, are of such magnitude and significance in visual terms as to be unacceptable.

3.7 The ‘significance’ of landscape and visual effects should be systematically assessed taking into account the sensitivity of the landscape or of the visual receptor, and the magnitude of change that would arise from the introduction of the proposals. A ‘significant’ effect will occur where the combination of sensitivity and magnitude of change results in the development causing a degree of change on the landscape or visual receptor, such that the change becomes a defining characteristic, albeit that may be where it would be one of a number of other defining characteristics. At the other end of the evaluation spectrum, a ‘not significant’ effect would occur where the development would not become a defining characteristic, and baseline characteristics continue to provide the definitive influence. The development may still have an influence, but this influence would not be definitive.

3.8 The applicant emphasises that the application proposals incorporate embedded mitigation in their final form, in that the final design and layout was the outcome of a process of careful iteration to identify the best location for the key elements. It is widely recognised that commercial wind farms are not capable of being concealed in the landscape. The primary opportunity for mitigation of wind turbines comes from the individual approach taken to site selection and layout design. Some landscapes have greater inherent capacity than others to accommodate large scale structures, but there are very few landscapes in which a wind farm will not give rise to some significant landscape and visual effects. If potentially significant adverse effects cannot be prevented or avoided, the strategy should be to reduce those that remain as far as possible. In general the emphasis should be on modifying scheme design through successive iterations to reduce adverse effects.

3.9 Thus the approach to the design of the layout of the five turbines of WLWF X3 was an iterative process, informed by the baseline environmental surveys, feedback from the East Kingswell Windfarm application appeal decision⁸³, technical considerations, and scoping consultations. Landscape and visual considerations, in particular, were an important factor in the mitigation process which led to the final proposals.⁸⁴

3.10 Specifically

- The reduction from the seven turbines proposed in the East Kingswell project, to five in this application has increased the distance between the nearest proposed turbine and the three nearest properties to over 1 kilometre, namely
 - Kingswell (distance would now be 1.07 kilometres, instead of 605 metres)⁸⁵
 - Bestfriends Cottage⁸⁶ (aka Kingswell Bridge or Veyatie) (now 1.42 kilometres instead of 893 metres) and
 - Cauldstanes (now 1.28 kilometres, instead of 763 metres)⁸⁷
- Forestry retention and planting is proposed to mitigate specific visual effects and enhance baseline conditions

⁸³ SPR-L018 East Kingswell decision notice

⁸⁴ See CD 023: ES Chapter 3 paragraph 3.4.2 – layout changes

⁸⁵ Residence of Mr Elliot Davis and family, objector.

⁸⁶ The current residents have not objected to the application.

⁸⁷ Residence of Mr and Mrs Harrison, objectors.

- Reduction in proposed turbine height from 140 metres, to 111 metres to tip reduces the appearance of the proposed turbines in the landscape and in local views from the M77, A77, B764⁸⁸ and from Kingswell, Kingswell Bridge and Cauldstanes⁸⁹
- Reduction in turbine height brings the proposed turbines scale in line with the existing Whitelee Wind Farm (110 metres to tip) creating a more uniform appearance and a consistency of image in views locally from the north⁹⁰ and from the west.⁹¹

Landscape capacity

3.11 The applicant cites the strategic locational guidance on wind farms in Ayrshire prepared for EAC in support of the AJSP⁹², notably the Addendum to the AJSP Technical report TR03/2006 'Guidance on the Location of Windfarms within Ayrshire' (2009);(the Addendum).⁹³ While this document identified Eaglesham Moor as an area of potential constraint, it was also said that this was not necessarily a bar to development. The Addendum goes on to provide advice about the factors that should be addressed in reaching a view on the acceptability of impact.⁹⁴

3.12 The AJSP Addendum sets some distance parameters in respect of potential sensitive receptors. Development will not generally be supported within 2 kilometres of a town and village; or within either 700 metres, or a distance of 10 times the turbines rotor blade diameter (whichever is the greater) from an individual dwelling, work place or community facility unless the developer can demonstrate the impacts are acceptable.⁹⁵ There are no towns or villages within 2 kilometres of the proposed development and the advocated separation distance for dwellings (which for the turbine proposed would be 930 metres using these limits) is achieved for all nearby properties, other than for Moor Farm, which is unoccupied, owned by the applicant, and proposed for demolition.

3.13 The application has responded to the requirements of the Electricity Act to have regard to the desirability of preserving the natural beauty of the countryside, and the duty to mitigate any effect which proposals might have on this.⁹⁶ This is a central purpose of the assessment of any landscape and visual effects and is inherent in the methodology used. In this regard it is to be noted that the existing blanket monoculture visual effect of the commercial planting of Sitka Spruce on site will be alleviated by a restocking plan which will introduce 30% native deciduous woodland. This would also have beneficial biodiversity outcomes, and it is intended that the blanket mire would be restored.⁹⁷

3.14 The applicant refers to the strategic locational guidance on wind farm location in Scotland issued by Scottish Natural Heritage (SNH).⁹⁸ This offers a 'broad steer' on the sensitivities of natural heritage in Scotland to wind farm development. Scotland is analysed and categorised into three zones according to overall level of sensitivity.⁹⁹ The application

⁸⁸ SPR-L002: FEI; Viewpoints 2, 20 and 21 respectively

⁸⁹ as above Viewpoints 16, 17 and 18 respectively;

⁹⁰ as above Viewpoint 20

⁹¹ as above Viewpoints 2, 17 and 19

⁹² for AJSP policies see chapter 2

⁹³ CD 039: Addendum to the AJSP Technical report TR03/2006 'Guidance on the Location of Windfarms within Ayrshire' (2009);

⁹⁴ as above p8 parag 23

⁹⁵ as above p11 parag 23

⁹⁶ CD 019: Electricity Act Schedule 9 parag 3

⁹⁷ SPR L003, 4.14: CD 024 ES TC appendix 4.2 Forest redesign and blanket mire restoration. See also Chapter 6 of this report for impacts on natural heritage.

⁹⁸ SPR L010 SNH; Strategic Locational Guidance for Onshore Windfarms, March 2009

⁹⁹ as above parag 27

site is situated in an area classed by the guidance as “Zone 1: Lowest natural heritage sensitivity”.¹⁰⁰ Land classed as within Zone 1 typically has

*“least sensitivity to windfarms, with the greatest opportunity for development, within which overall a large number of developments could be acceptable in natural heritage terms, so long as they are undertaken sensitively and with due regard to cumulative impact”.*¹⁰¹

3.15 The applicant says that the Whitelee Forest area encompasses the more managed and man-modified habitats, such as commercially forested landscapes, which are characteristic of those in Zone 1. In this area, the value placed upon landscape quality and recreational opportunity has not been sufficient to trigger national or local designation. It is submitted, given the developed and visually man-modified nature of this landscape (including the existing operational Whitelee wind farm), that it is appropriate to accept the moderate further visual changes which would arise from the application in order to meet the need for renewable energy generation.

3.16 The applicants suggest that it is instructive to consider how the SNH guidance has been applied in decision making. While Zone 1 areas are defined as having the lowest natural heritage sensitivity, there are nonetheless many existing wind farms within Scotland located within the Zone 2 categorisation, that is landscape classified as having higher natural heritage value.¹⁰² The applicants have calculated that approximately 58% of wind turbines that are currently operating or consented within Scotland are located within Zone 2 areas. The implications of this are that the application proposals would be situated in a strategically preferable location than many other onshore wind farms.

3.17 In considering landscape capacity and the likely effects of the proposal, regard was had to the most recent locational analysis of landscape prepared for EAC, the East Ayrshire Landscape Wind Capacity Study (EALWCS) 2013.¹⁰³ This study considers the sensitivity of 12 landscape character types within East Ayrshire to a range of wind turbine developments. Four development typologies were considered in the sensitivity assessment categorised on the basis of turbine height. The assessment considers key sensitivities related to landscape character and visual amenity and potential cumulative issues associated with existing and consented wind farm developments. The application turbines would fall within the ‘Large 70m+’ typology.

3.18 The study concludes that there is some scope for windfarm development where a medium or lower sensitivity of a landscape area is identified in the study and recommends that these landscapes should be considered in the identification of Areas of Search. The applicant takes issue with the EALWCS for some ambivalence in relation to the effect on sensitivity of pre-existing development, noting that the study says both that the sensitivity of some areas is reduced by pre-existing developments, and also that existing windfarms are regarded as a constraint.¹⁰⁴

3.19 The EALWCS identifies the landscape character of the application site area as Character Type 18b: ‘East Ayrshire Plateau Moorlands with Forestry and Wind Farms’.¹⁰⁵ This type is given a range of sensitivity ratings from high-medium, where large turbines

¹⁰⁰ as above map 5

¹⁰¹ as above parag 27

¹⁰² as above parag 27

¹⁰³ see CD 040 for EALWCS main study report (June 2013) and also SPR-L040 for the appendix report , which contains the detailed landscape sensitivity assessments,

¹⁰⁴ SPR-L003 SPR hearing statement parag 6.19

¹⁰⁵ CD 040 EALWCS (July 2013) Section 12 page 55. Note distinction from LCT 18a ‘Plateau Moorlands’ See also diagram on page 54. For sensitivity assessment see SPR-040 EALWCS App page 91 forward.

would be highly visible, and medium–low to low, where there would be little sense of wildness left in the landscape, reducing sensitivity. The presence of the existing turbines of WLWF is recognised as influential on sensitivity.

3.20 In this landscape classification it is said

‘The large scale and simple landform and land cover of these uplands could relate in principle to larger turbine typologies¹⁰⁶.’

3.21 The EALWCS Appendix also considers potential cumulative issues associated with existing and consented windfarm developments and for this landscape type advises

‘The presence of operational and consented wind farms also reduces sensitivity in terms of the effect this development already has on views and character although the extent of this development also physically limits scope for additional development¹⁰⁷.’

3.22 There are two further ‘East Ayrshire Lowlands’ (7c)¹⁰⁸ and ‘Upland River Valley’ (10)¹⁰⁹ character types, which are adjacent to the location of the proposals and on which some emphasis is placed by EAC in reaching their conclusions. These types are identified as having

“either no scope, or very limited scope for development in a small part of the character type only. It is recommended that these landscapes should not form Areas of Search due to the number/degree of landscape and visual constraints identified in the siting and design of wind farm developments¹¹⁰.”

3.23 The applicant argues that the logic of this must be that the ‘East Ayrshire Plateau Moorlands’ character type, which includes the application site and its landscape context, must be the preferred landscape type in terms of the EALWCS guidance. The proposed development is in an area of the ‘East Ayrshire Plateau Moorlands with Forestry and Wind Farms’ landscape type that is of lower sensitivity and greater inherent capacity than other parts of this character type as described in the capacity study. In effect, the application proposal closely represents the opportunities described by EALWCS in terms of siting and design for ‘limited numbers of the large typology’ ‘within the upland core of this character type’. The proposed development is located within an area that has inherent capacity for development.

Visual impact on the landscape.

3.24 Contesting the EAC analysis, the applicant argues that the application site is actually more closely associated with the moorland and forested core of this landscape than the smaller scale lower hill slopes and valleys of the upland farmlands. These are generally located some distances to the north and west, beyond a clear topographic threshold formed by Ballageich Hill. Figures 7.2 and 7.3 in the ES¹¹¹ demonstrate this fact convincingly in landscape terms, where they indicate a strong similarity in topography between the application site compared with the existing wind farm site.¹¹²

3.25 EAC had objected principally because of their assessment of the significance of visual effect on residential receptors, and users of the A77 and the B724, notably cyclists. In response the applicants said that in considering likely visual effects the applicants had

¹⁰⁶ SPR-L026 page 96

¹⁰⁷ as above

¹⁰⁸ as above page 4 forward

¹⁰⁹ as above page 30 forward.

¹¹⁰ SPR L026

¹¹¹ CD 023 ES

¹¹² SPR-L002: FEI viewpoint 1 Queenseat Hill

based their assessment of environmental impact on 19 viewpoints chosen to illustrate views from a range of relatively sensitive visual receptors including people living in settlements, travelling on roads and hills¹¹³. These viewpoints are located within a 10 kilometre radius of the application site, a further 6 within a 15 kilometre radius and the farthest at 22.5 kilometres from the nearest proposed turbine. The closer viewpoints have a higher potential for significant effects to arise owing to the inevitably higher magnitudes of change which will arise because of their close proximity to the development. The locations have also been chosen because they afford a relatively open view towards the application site, which is not the case for all areas in the vicinity, where many views are screened by trees or topography.

3.26 The sensitivity of visual receptors reflects a combination of the value of the view/visual amenity they experience, in combination with their susceptibility to the proposed development. Having regard to GLVIA 3¹¹⁴ the visual receptors most susceptible to change are generally likely to include

- Residents at home
- People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focused on the landscape and on particular views
- Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience
- Communities where views contribute to the landscape setting enjoyed by residents in the area
- Travellers on road, rail or other transport routes tend to fall into an intermediate category of moderate susceptibility to change. Where travel involves recognised scenic routes awareness of views is likely to be particularly high.

3.27 In this case the higher sensitivity receptors were limited to residential receptors. In all cases it was important to have regard to the baseline visual amenity already experienced. In considering visual impact on landscape views the ES the applicant had systematically assessed the likely visual receptors of the development using accepted methodology and a conservative approach.

3.28 Fourteen residential properties were identified as requiring to be assessed. The information available had been supplemented by the FEI. Of those, only Moor Farm, which was proposed for demolition, would experience a high magnitude of change. Cauldstanes, the property of Mr & Mrs Harrison was assessed as likely to experience a medium-low magnitude of change. The 12 other properties assessed, which include the properties cited by EAC, Kingswell and Bestfriends Cottage, were found likely to experience a low magnitude of change or less.

3.29 The applicant also assessed visual impact on the settlements of Fenwick, Kilmarnock, Stewarton; the transport corridor of the M77; and the more local routes such A77, A719 (Galston Road) and B764 (Eaglesham Moor Road).

3.30 The visual effects for the A77 were assessed as not significant, largely because the effects on this receptor would be experienced over relatively short stretches of the overall route. Where there would be visibility, it would be limited by intervening coniferous woodland, reducing the amount of the proposed turbines that would be seen above the skyline. The application turbines would also be predominantly experienced in the same

¹¹³ CD 023 ES Figure 7.7. 12

¹¹⁴ SPR-L005 paragraph 6.33

visual context as the existing Whitelee schemes and would therefore be introducing elements which are characteristic in receiving views.

Cumulative visual impact

3.31 EAC had based their refusal partly on cumulative effect with other windfarms or proposals for windfarms. The ES consideration of this topic required to be updated and this was presented in the Further Environmental Information¹¹⁵. This found that that cumulative visual effects from the proposals may be increased as a result of the combined effect of the Soame and Blair wind farms in the area to the north/north west of WLWF.¹¹⁶ If these were to be constructed as planned, the application turbines would contribute to reducing the space between these developments and WLWF, as extended, from some locations, slightly increasing the visual linkage between these schemes. Together these would form an extensive wind farm landscape.

3.32 At near hand, the FEI found no significant cumulative effects at any of the landscape receptors within the study area including landscape character units and landscape designations. Of the 19 receptor locations considered, only Cauldstanes¹¹⁷ was assessed as having significant cumulative effects from the application scenario. In relation to cumulative effect with the existing turbines of WLWF, given the similarity in turbine dimensions and the careful siting of the application turbines, in the view of the applicant's landscape advisers, the application proposals would not 'tip the balance' because of the additional effects. This was in part due to the inherent capacity for large scale windfarm development in the area. On the contrary, the proposed turbines represent a relatively low change to the cumulative scenarios considered.

3.33 The applicant's position otherwise was that cumulative effect of the proposals was properly assessed as 'not significant' for all other viewpoints or principal visual receptors across each of the cumulative scenarios.

Impact on residential amenity

3.34 Residential amenity in terms of visual effects was presented in the FEI study.¹¹⁸ Fourteen residential receptors were located within the 2.5 kilometre radius study area, of these the applicant submitted that one property (Moor Farm) would experience a magnitude of change that is assessed as high; none would experience a medium to high magnitude of change; none would experience a medium magnitude of change, and one (Cauldstanes) would experience a medium to low magnitude of change; and the remainder would experience a low magnitude of change or lower. The effects on those receptors identified as experiencing low levels of magnitude of change in their views are considered to be not significant. The visual effect identified at Cauldstanes was at the lowest end of the significance scale, and Moor Farm is currently vacant and proposed for demolition.

3.35 In particular none of the properties appraised would experience a degree of change that could constitute an 'overbearing' or 'dominant' effect on the visual component of their residential amenity. This takes into account the orientation of the properties and the key views from them. It also has regard to the context in which the development would be

¹¹⁵ SPR L002

¹¹⁶ The Soame and Blair proposals were not proposed at the time of the ES. Soame is a proposal at a similar location to the Moorhouse Farmers proposal considered in the ES. The Blair windfarm proposal is at a similar location to the Harelaw Renewable Energy Park considered in the ES. These were refused on appeal. There are substantial differences between the previous and current proposals in each case, including a reduction in turbine numbers.

¹¹⁷ SPR-L002 FEI viewpoint 18

¹¹⁸ SPR-L002 Chapter 2

experienced (having regard to the appearance of the existing Whitelee Windfarm where it would be seen in baseline views) intervening separation distances, the scale and character of the existing landscape, existing development context and in some cases vegetation screening.

3.36 The term 'residential amenity' refers to the living conditions at a house, including its garden. However, in considering the potential effect of a wind farm, or a turbine, on a property, it is well accepted that even change which is significant is not of itself necessarily unacceptable. It is important to note that private views are not afforded any specific protection in planning law and the consideration of visual effects in this application takes place in that context. Altering the view from a property is not of itself a key issue, unless it can be demonstrated to have a clear deleterious effect upon the living conditions of that occupant, for example, that the turbine results in an overbearing or oppressive impact.

3.37 The applicant refers to the 'Lavender' test for acceptable impact, which requires a level of visual effect to arise which is greater than merely a significant visual effect, for the impact to be unacceptable in planning terms. The magnitude of effect must be to such an overbearing degree that it renders a property "an unattractive place in which to live". This approach is influenced by a number of factors, including the nature of views from a property and how its garden ground is used and approached; the intervening distance from the wind farm; and the specific relationship between the house and wind farm or wind turbine in question. A separation distance has a major bearing on the magnitude of an effect, as does the presence of intervening screening through landform, woodland and trees.

3.38 The applicants submitted that the evidence they had assembled about the effect on residential amenity showed that any change that would be experienced by the occupants of the properties cited by EAC and the other receptors would fall well below the 'Lavender Test' threshold.¹¹⁹

3.39 The applicant highlights that Scottish Natural Heritage, the national agency who advises on landscape, and who were closely consulted as part of the iterative process, say that the application proposal has addressed their concerns about the East Kingswell proposal¹²⁰. SNH considered that there would be significant adverse landscape and visual impacts from WLWFX3, but said that these would be localised in nature, and had no objections to the application.

The main points for East Ayrshire Council

3.40 EAC considers that there would be unacceptable visual and residential amenity impacts from the proposals. These adverse effects also mean that the proposals are contrary to approved and emerging development plan policy.

Landscape capacity

3.41 EAC considers that the proposals do not accord with the principles guiding windfarm development in this location arising from EALWCS. This included the extensive existing and consented wind farm development in the potential constraints for development in or near Landscape character type (LCT) 18B 'East Ayrshire Plateau Moorlands with Forestry and Windfarms'. This LCT is characterised by the simpler moorland and forested core of this landscape; but also includes more settled valleys and lower hill slopes within the overall character type area, where small farms and houses, woodlands and enclosed pastures

¹¹⁹ SPR-L003 SPR hearing statement parag 10.7 forward.

¹²⁰ CD 028 SNH non-statutory consultation response

provide contrasting scale references. The main development opportunities in the LCT were considered to be within the sparsely settled areas of moorland and forestry within the 'simpler' upland core of this character type. It was suggested that very limited numbers of the large turbine typology could potentially be sited in such a location, but the principle of minimising effects on adjacent settled lower hill slopes should be recognised. Very small extensions to existing wind farm developments might be able to be accommodated, if these were located within the simpler core of the upland plateau, and set well back from smaller scale settled outer fringes, to avoid the exacerbation of visual intrusion associated with the operational Whitelee wind farm and the consented Sneddon Law wind farm.¹²¹ There should be a buffer around the windfarms set on the high Whitelees Forest plateau avoiding the more sensitive farmed hill fringes. Further large turbines should continue to be located on the more extensive and simpler forested and moorland core of these uplands.

3.42 EAC considers this distinction between the simpler core of the plateau moorlands, and the lower, more settled farmland on the slopes and margins to be crucial in assessing the acceptability of the proposals.¹²² While the EALWCS identifies both constraints and opportunities for siting further turbines on Whitelee Moor EAC considers that the current proposals would exceed the capacity of the landscape to comfortably accommodate them, by extending the wind farm too far towards the more sensitive settled outer farmland fringes contrary to the EALWCS principles.

Visual effects on landscape

3.43 On landscape based visual effects, while the applicant's assessment methodology is not fundamentally challenged, EAC does not agree with the findings that there would be no significant primary visual effects. There were a number of receptors for which the proposed turbines would cause a magnitude of change sufficient to lead to significant effects. In particular, at four locations studied in the ES and the FEI viewpoints there is already an extensive array of turbines within close proximity. These are

- VP 2: Rowallan Monument
- VP 17: B764 near Bestfriends Cottage
- VP 18: Cauldstanes and
- VP19: A77, near south Drumboy.

3.44 In these visual contexts it was considered that the proposed turbines would be closer, appear sufficiently larger and taller, and/or would extend the horizontal extent of wind turbine development, and that this would lead to a degree of change in the view which would be significant to sensitive receptors, including residential properties and recreational cyclists, in particular on designated routes and local roads.

3.45 A fifth location, VP 16: B764 near Kingswell, has more limited views of the existing turbines, but it was considered that the proposed turbines, although partially screened by trees, would be sufficiently close to cause a magnitude of change that would lead to significant effects on sensitive receptors including recreational cyclists on the B764 and the other local roads nearby.

Cumulative effects

3.46 On the assessment of cumulative effects in the wider landscape context, the council's landscape advisers took a slightly different approach to that of the applicant, and found

¹²¹ located to the south of the existing WLWF.

¹²² EAC hearing statement page 10 parag 10

there to be more significant effects than the applicants' FEI identifies. This reflects not so much a difference in the basic method of assessment but a difference in interpreting the factors that contribute to cumulative effects. The applicants are effectively arguing that the addition of the proposed turbines to the baseline situation would result in a development that would appear from most viewpoints in relation to WLWF as a single integrated wind farm, and that this would not usually lead to significant cumulative effects. The applicants also argue that the presence of the existing turbines would also reduce the primary visual effects of the proposals as there is already a context of a landscape characterised by wind farms and turbines.

3.47 In contrast to this approach, EAC's view is that significant and unacceptable cumulative effects would arise as a result of the five proposed turbines being added to a baseline of existing turbines. This was because

- there would be an increase in the number of turbines in the landscape and seen in views;
- the additional turbines would add to the jumble of existing turbines in the background, creating a more uneven skyline array and increasing the overlapping of towers and blades;
- the proposed turbines seen from the closest locations would be noticeably closer than the existing turbines and therefore extend the vertical angle and prominence of the windfarm as a whole;
- from some directions the additional turbines would increase the visual experience of the extent of turbines across the horizon;
- from some viewpoints the additional turbines would contribute to the visual coalescence of WLWF, as extended, with other wind farms, in particular with the proposed Soame wind farm to the north.

3.48 Applying the advice on cumulative effects given in GLVIA 3¹²³ EAC takes the view that the proposed turbines would significantly extend and intensify the effects of the existing Whitelee developments as seen from nearby receptors to the west. The five new application turbines would continue the 'filling-up' of the Plateau Moorland/Windfarm landscape type, for views within/ towards it. They would further contribute to the substantial accumulation of turbines in the relevant views.

3.49 EAC acknowledges that in the wider landscape context, the significant cumulative visual effects from WLWFX3 would be inherently limited by the small number of turbines proposed and their appearance as part of the larger WLWF. The localised effects, however would still be significant and unacceptable. EAC's assessment has identified significant and adverse cumulative effects on nearby residential properties, effects which have gradually developed as wind farms and turbines have expanded across Whitelee Moor and its surroundings. These should be taken into account.

Residential Amenity

3.50 On visual amenity aspect of affected properties, the assessment of significant or unacceptable effects on residential amenity is a stage beyond a visual impact assessment. It requires a judgement of effects over a property as a whole and a judgement of whether or not effects are 'overbearing', 'visually dominant' or 'oppressive' such that living in the property would become unpleasant. This requires a degree of subjective judgement based on a comparison with the existing situation. Key factors of significant residential amenity

¹²³ SPR L005 GLVIA: third edition: paragraph 7.17

effects include the proximity of turbines, numbers of turbines, high vertical and wide horizontal angles of view, and the degree of openness of view/ visibility of proposals from the property. This includes horizontal effects, such as the extent of turbines which can be seen in a vista from a property. Cumulative impact with other turbines can be a factor in the impact on a particular property and that is the case here, both in regard to WLWF, and in the wider landscape experienced from the affected houses.

3.51 To a degree the situation for properties affected by WLWF is exceptional in that there are no other wind farms in the UK with the extent and number of turbines of WLWF. The relative lack of directly comparable cases is a factor that should be taken into account in this case. In the EAC view, the proposed turbines would contribute incrementally to the exceptional number and horizontal extent of turbines already featuring in views from the affected residential properties. In the view of EAC the evidence demonstrates that there would be unacceptable effects on residential amenity at Kingswell¹²⁴, Cauldstanes¹²⁵ and Bestfriends Cottage.¹²⁶ It was considered that the proposed turbines would be perceived by these residential receptors as both a primary visual effect (i.e. a change in the existing view resulting from the proposals) and also as a cumulative extension of the already considerable effects of wind turbines in the view.

3.52 In conclusion, EAC acknowledge the view that the significant effects of the proposed turbines could be said to be relatively limited by the fact that this is an extension to an existing very extensive wind farm. However if this argument was accepted, incremental development to any existing windfarm would always be regarded as having inherently limited effects, and incremental expansion could be pursued ad-infinitum. This was far too simplistic. National and strategic guidance on wind energy development indicates that there can be a limit to a landscape's ability to absorb the cumulative effects of wind energy developments, notwithstanding existing development.

Objectors' representations on landscape and visual impact and residential amenity

POW/ CH group / Mr and Mrs Harrison/ Cauldstanes Farm.

3.53 Mr and Mrs Harrison¹²⁷ live in Cauldstanes Farm. They made representations on their own behalf as well as taking a lead role on the views of the CH group. The Harrisons say that instead of the entirely rural environment in which they expected to live when they moved into Cauldstanes, they find themselves almost surrounded by wind farm turbines at all points of the compass.

3.54 The Harrisons rely on the EAC consultant's critique of the ES,¹²⁸ saying that it demonstrates that the applicant's assessments understates the impact on various viewpoints, in particular the properties at Kingswell, Best Friends Kennels and Cauldstanes. The methodology adopted for the ES LVIA and CLVIA intrinsically reduces the sensitivity of the receptors. This reduction of sensitivity status is most marked for residential receptors.¹²⁹ EAC's revised findings of significant visual impact should be recognised as correct.¹³⁰ There are a number of inconsistencies of approach, such as inconsistencies

¹²⁴ see EAC hearing statement parag 4.146

¹²⁵ as above parag 4.150

¹²⁶ as above parag 1.157

¹²⁷ CH group LVI hearing statement

¹²⁸ SPR-L001

¹²⁹ SPR-L001 Section 2.2: Conclusion, p4.

¹³⁰ As above Appendix 1

between the assessment of VP 2: Rowallan Monument compared to VP 17: Bestfriends Cottage.¹³¹ The sensitivity ratings of Bestfriends Cottage and Cauldstanes was reduced from high to medium/high for the cumulative impact assessment, for no apparent reason. Other properties within the 2km distance, including Shieldhill, which is approximately the same distance as Kingswell at 1km, are clearly not consistently appraised. These undermine the credibility of the ES and the FEI and they should not be regarded as an accurate and complete picture of the impact of the proposals.

3.55 The reality is that the additional turbines of WLWF X3 would significantly cumulatively increase the visibility of the wind farm and the dominance of turbines in the landscape, particularly at Cauldstanes.

3.56 To this should be added the physical impact on the landscape from roads and tracks, at least one quarry or borrow pit, the substation, and flood lighting. Furthermore noise and disruption from construction will be severe, significant and adverse and this will impact residential amenity.

3.57 Properly considered, the FEI visualisations for Kingswell, Bestfriends Cottage, and Cauldstanes, clearly show the pervasive effect of the proposals. This is clearly significantly adverse and unacceptable. The applicants are relying on some shielding from trees, at best, and their downplayed assessments of significance do not properly represent the reality of the situation.

Ms Greta Roberts¹³²

3.58 Ms Roberts is a resident of Waterside and a town planning consultant. She is a member of Moscow and Waterside Community Council. She has lived in the area since 1970. She says she has watched the ecology and appearance of the area being industrialised over that period with the erosion of habitats. She says she disagrees with the applicant's assessment of the area as having low sensitivity to change. The magnitude of change is already high and significant and 5 additional turbines will add to the visual distress.

3.59 Her perspective is that WLWFO was marginally acceptable in terms of landscape impact on Ayrshire as the turbines were mainly confined to the upland plateau. Subsequent extensions of the higher turbines began to intrude on the visual experience of the settled landscape of the Ayrshire Basin. Its influence now extends over the edge of the upland plateau and looms over the upland valleys and over lowland Ayrshire, including a wide range of views from the south.

3.60 She disagrees with the applicant's reliance on an adjustment of the landscape typology to a landscape 'with windfarms'. This should not be taken as a presumption that the landscape has the capacity for further exploitation. The capacity of a landscape is derived not solely from visual impact but also from other aspects such as the ecology and the cultural meaning of the place. She commends the consultant's study prepared for EAC¹³³ for objectivity, contrasting it with the applicant's evidence, which she considers to be less balanced.

3.61 In her view the application should be considered in terms of the impact on views into Ayrshire from the north and northeast, travelling from the conurbation into rural Ayrshire. She highlights the visual impact on local residents and communities, including walkers and cyclists who use the A77 related routes, and the many cyclists who make use of the B764,

¹³¹ as above

¹³² see hearing statement for LVI – Greta Roberts

¹³³ SPR-L001

and who use the WLWF internal cycle routes. These receptors move more slowly through the landscape, often in order to enjoy it, so there is more impact on them.

3.62 She considers that the cumulative impact of 'more layers' of turbines in the landscape is a crucial aspect. She says that the extension of WLWF westwards has had the effect of making the turbines appear much closer to the viewer when seen from the more transitional landscape between the plateau and the lowlands. There is a plethora of wind farms in the permission system which should be considered, even if they fall outwith the cut-off date, because there are potentially serious cumulative impact issues for the landscape. The East Kingswell decision¹³⁴ clearly demonstrated that the absorption capacity of the environment both in visual and environmental terms has clearly already been exceeded. She also cited the reporter's findings in the decision on the Moorhouse appeal¹³⁵ where the reporter considered that that more turbines in front of WLWF, albeit to the north, would make the presence of WLWF more influential on views and more perceptible where existing wind farms are seen sequentially and together. In addition, if Soame wind farm were to be approved this would result in wind farm landscape on both sides of the B764, increasing the density of turbines visible in the area with clear detriment to the landscape and the ecology.

3.63 Setting a further concentration of turbines at the north west end of WLWF would set a precedent which would support further approvals, leading to an over conglomeration of turbines.

3.64 Other more distant viewpoints which illustrated her concerns about the Ayrshire basin would include the A719 near Tarbolton, the A77 north bound near Spittalhill south of Kilmarnock, and the A77 8 miles north of Fenwick. From these viewpoints could be seen a cumulative and extensive impact on the Ayrshire landscape which dismays residents and visitors. No further wind farm development should be permitted.

3.65 She also objects, with others, to the physical impact on the landscape of the proposed loss of Moor Farm, for cultural impact reasons, because of the loss of an historic and typical hill farm. It was once a welcoming light to travellers across the high moors and has been in existence since the 18th century. It is testimony to the life lived on the moor and the many travellers, drovers and others who have passed through this very historic landscape.

3.66 In ecological terms she doubts whether the forest could be retained. She considers there would continue to be peat loss. She refers to past initiatives to restore and improve the post commercial forestry landscape and suggests that the wind farm is not a substitute for these renewal projects, which would have enhanced the landscape.

Fenwick Community Council (FCC)

3.67 The FCC view was represented by a community councillor whose husband is a serving EAC councillor. As they run a local garage they are also well placed to hear the views of tourists and non-residents. They receive a constant stream of complaints and concerns about WLWF from residents. The community council acknowledges that the wind farm is a divisive issue. However they support community concerns about noise, water purity, and small farm loss. Their view on the application is that the turbines would have a massively detrimental effect on the visual environment. They highlight the contrast between the locality as it used to be and as the wind farms have transformed it, greatly for the worse. This has led to people leaving the area, just losing confidence in it as a place to live, decisions not to invest, and falling house prices. People have been physically affected by

¹³⁴ SPR-L018

¹³⁵ Not produced : DPEA reference PPA-220-2020 South Moorhouse Farm, Muirshield Road, Eaglesham, East Renfrewshire, G77 6SD: 19 wind turbines of up to 126.5 metres to tip :appeal decision: refused 17 December 2012.

noise, water problems and general environmental deterioration. They are concerned about the continued loss of forestry and trees.

3.68 The area is not one of 'low sensitivity to change'. This is a highly visible area and a main access artery to Ayrshire. It has been peppered with huge moving edifices 300 feet tall. This is the introduction of industrial scale into the soft and settled landscape of the Ayrshire lowland basin and the small upland valleys which run out of Whitelee. This so-called change is actually an obliteration of what was previously the norm. The extension is unacceptable and unnecessary. Other sources of renewable energy have better potential and should be the priority.

Moscow and Waterside Community Council (MWCC)

3.69 MWCC says that before WLWF the area was peaceful moorland with some small farm holdings which were small green enclaves surrounded by the Whitelee forest or by peat moorland with small water courses. Most of the forest has gone, and the prospects for replanting are unclear. The forest is an established attractive landscape feature. There are plans for further tree felling and any masking of development by trees will be lessened or removed. They submit that the cumulative landscape and visual impact has reached capacity already without the extension application. The community they represent has felt the impact of WLWF in every way, leading to people leaving their homes and businesses, putting investment plans on hold, residents being physically affected by noise and water problems and environmental amenity being reduced. The present turbines are visually intrusive and further extension is unacceptable and unnecessary.

Reporters' conclusions on landscape and visual impact

Designated landscapes

3.70 Landscape planning designations that may have been affected by the application were assessed in the ES.¹³⁶ The application site itself is not subject to any statutory or nationally protected landscape-based designations, intended to protect it for its landscape character, quality or scenic value. We agree with the applicants that there would be no significant effects on any landscape designation from the application.

Landscape capacity

3.71 The two Ayrshire landscape character types which have the potential to be significantly affected by the proposals are

1. Plateau Moorland with Windfarm (Whitelee): in which the proposed site and the existing Whitelee wind farm are located, and
2. Ayrshire Lowlands (North of Kilmarnock): which forms the wider landscape context, and is an extensive area some 4-5 kilometres west of the proposed site.

3.72 The 'plateau moorland with windfarm' landscape type is a subset of the 'plateau moorland' landscape type. It forms part of the high east west ridge dividing the Clyde and Ayrshire basins. This landscape has undergone significant wind farm development mainly by reason of the extensive WLWF. The 140 metre tall turbines of WLWF are now a

¹³⁶ CD 023 ES LVIA study area shown in Figure 7.5

dominant characteristic of the plateau, and can be seen from a wide area. The underlying landscape is characterised by gently rounded topography, with extensive plateau basins rising to the south and soft contoured ridges across the plateau areas. The landscape has been used extensively for commercial forestry, notably the dark green of Sitka spruce, much of which remains, particularly around the proposal site and on the southern margins of WLWF. This shares the wider landscape with the 'moorland mosaic' of peaty wetland, grass land, bracken and turf. The plateau areas contain a number of lochans and reservoirs. Otherwise the landscape of the high plateau is not much developed, with grazed hill farmland, scattered buildings and lightly trafficked roads across the moorland. The wider landscape contains the principal transport corridor of the M77, the A77, and other local roads to the west and the south and at lower levels, at the foot of the gentle slopes to the south and west of the 'Whitelee Forest' plateau. We consider these marginal areas of the landscape type to require further consideration as discussed below. The local roads include the B764, which is the Moor Road between the A77 and Eaglesham to the north east, and which crosses the higher moorland with the main WLWF dominating the landscape to the south of the road. Both this road and the A77 are well used by cyclists.

3.73 The Ayrshire Lowlands (North of Kilmarnock) LCT is the extensive area of undulating lowland landscape to the west and south. This is a pastoral landscape, well settled and containing several large towns and villages, with scattered farmhouses and steadings.

3.74 To summarise the key terms used by the parties, in assessing effects on landscape, the **sensitivity of a landscape** is an expression of its value and quality, taking into account its importance, including its contribution to the overall pattern of landscape.

3.75 The **magnitude of change** is quantified in terms of the degree to which a landscape element will be removed or changed by the proposed development.

3.76 **Significance** is the measure of effect on landscape. A significant effect would occur where the degree of removal or alteration of the landscape element is such that that element of the landscape would effectively be redefined. If a landscape element has high sensitivity, a significant effect can occur as a result of a relatively limited degree of change. If a landscape has lower sensitivity, a higher degree of change can occur without a significant effect.

3.77 In reaching our conclusions on landscape impact, while taking close account of the landscape classification documents, we have relied on our site inspections of the locality, the wider context including longer views from the south in Ayrshire, and the information on landscape and visual effects to be drawn from the ES and the FEI.

3.78 We agree with both the applicant and the council that Plateau Moorland with Windfarm is a landscape of low sensitivity and that the effects of the development on the LCT at large would be of low magnitude. This is because in the wider context the five application turbines would be largely assimilated into the existing WLWF.

3.79 We would also agree that Ayrshire Lowlands (North of Kilmarnock) have medium sensitivity and that there would be effects of low magnitude. The five new turbines against the existing WLWF would not produce a significant effect, largely due to the distance from the development.

3.80 This is however a broad brush approach, which is a fair assessment of the five new turbines in the context of the main Whitelee Forest plateau, which is now dominated by the turbines of WLWF. As the visualisations show the plateau is now a widespread wind farm landscape, with the wide expanse of tall turbines on the high peat moor conferring a certain grandeur to the experience of the open landscape. In that context the application turbines would not bring a significant change.

3.81 The development plan framework acknowledges the suitability of the wider LCT for turbines but also emphasises the importance of maintaining clear boundaries between the wind farm landscape and more sensitive locations. We would agree with the council that there is a change of local landscape character, albeit still within the Plateau Moorlands LCT, to the west and south of the application site. This change in character is experienced where the high moorland landscape type gives way to the western and southern slopes of the plateau, dropping down to a shallow valley along the route of the B764, leading to the junction with the A77 near Bestfriends Cottage. The topography is softened and there is a sense of shelter along the valley. The plateau slopes are more settled, containing a number of farms and houses along the local roads. We consider that dominance of the existing WLWF turbines, set on the higher ground of the moorland landscape unit, lessens markedly on the slopes of the plateau, as they pass out of view, or are only glimpsed over the skyline. There is a sense of the wind farm being contained on the higher ground. We consider that the five additional turbines of the application proposals, while still actually located on the higher ground, would influence the landscape experience of the lower slopes and the more settled B764 and A77 corridor.

3.82 The ES and FEI visualisations appear to us to demonstrate that the proposed development would increase the extent of the area of the LCT where turbines would be a dominant landscape feature. Measured against the wide extent of WLWF on the high plateau, this would be a relatively restricted effect, in that it would only significantly affect a subset of the LCT, that is, the more settled lower and more sheltered margin of the main moorland type, where the A77 and the B762 corridor descends from the high plateau. This marginal area of the LCT has been separated, or buffered, from the windfarm landscape by topography and by the distance from the WLWF turbines. The additional proposed turbines would bring the wind farm landscape closer to the rim of the Whitelee plateau. This would diminish these buffer effects and extend the wind farm influence into the lower, more sheltered margins of the LCT. We agree with the council that this settled and marginal area has a higher sensitivity to change from the proposals than the higher simpler core of the LCT. As an extension to Whitelee, we consider that the resultant wind farm would be unacceptably close to the more settled areas and, had it been applied for as a whole, would have been best designed out.

3.83 We agree that the level of effect on the area immediately around the site is of medium magnitude: i.e. the turbines would be new prominent features that are not uncharacteristic of the landscape. There will be some loss of forestry. This magnitude of effect would generally extend for 1-2 kilometres from the north-east to the south-west. Where turbines are not currently located in the landscape the magnitude of change from the new turbines would be greater, but it would also be more limited in extent to the east because of the existing Whitelee turbines. So, while the wider landscape effects on the full extent of the main LCT would not be significant, we consider that there would be local effects of some significance on areas marginal to the main moorland core of the landscape character unit.

Visual impact on the landscape

3.84 The ES LVIA chapter includes 19 representative viewpoints including roads, residential properties, hilltop viewpoints and settlements. It assesses 12 of these in detail (1-8 and 16-19), because viewpoints 9-15 were considered not to have the potential for significant visual effects. The study also considered a range of receptors including settlements and road and rail corridors. This information was updated by the FEI study which refreshed the viewpoint visualisations, including a number of agreed consented and proposed wind farms which would be likely to affect these. We have assessed the degree of effect of the visual impact of the proposed five turbines on the basis of a number of site inspections and the updated FEI information, and our findings are as follows:-

VP1 B764 Queenseat Hill

3.85 This viewpoint is located outwith East Ayrshire and gives an expansive view generally north west and through WLWF showing the new turbines extending the western edge of WLWF. We agree that in this context the receptor sensitivity is medium, the degree of change, medium to low and the overall effects not significant.

VP2 Rowallan Monument

3.86 This is from a roadside monument located across the old Glasgow-Ayr trunk road now the A77 near the junction with the B764, and to the north east of the M77. The A77 is a designated cycle route. The viewpoint photomontages show the new turbines on the softer more settled slopes of the LCT mentioned above. A substantial number of the existing WLWF turbines are already visible above the crest of the hill which forms the western edge of the plateau at this location, mainly towards the south and east of the view. There would be some screening from commercial woodland on the brow of the hill. Even so, in our judgement there would be a sense of WLWF being closer to the edge of the plateau if the five new turbines were added to the view. Receptors here would include motorists and recreational cyclists on the designated cycleway. We would consider that this is a location with medium sensitivity. The degree of change would be medium because of the increased proximity of the wind farm element of the landscape, from this viewpoint.

VP3 A77/A719 junction

3.87 This is a roadside viewpoint on the A77 looking north. The receptors in this case would be motorists on the A77 and A719; recreational cyclists on the A77 cycleway and residents in nearby farm properties. The view is broad and open with the M77 in the foreground and a significant number of existing Whitelee turbines spreading across the horizon beyond. The proposed turbines would be added to a skyline which includes the existing Whitelee turbines, extending the wind farm slightly to the left and would appear slightly larger and more prominent, further highlighting the wind farm in the view. However, at a distance of nearly 4 kilometres and in this visual context, we would not consider the additional turbines to cause a significant change.

VP4 M77/A77 South of Newton Mearns

3.88 This is a roadside view on the A77 near an access to a recycling area. The view, looking generally south, is of the A 77 crossed by the M77 and its traffic, with the partially forested moorland forming the background and horizon beyond. Four of the turbines would

partially appear on a skyline that is slightly affected by the movement of existing Whitelee turbine blade tips. However, the view is busy with the clutter of the lighting columns and road signs of the roads, which obscure and distract from the skyline views. The WLWF turbines and the proposed turbines would be about 5 kilometres away. In this visual context the new turbines would not be prominent. We do not consider they would be a significant change.

VP16 B764 near Kingswell

3.89 This viewpoint is near the house known as Kingswell, on the B764 road near the access to the house.

3.90 Kingswell is a B listed building, a former Inn, on what was an important coaching route between Glasgow and Kilmarnock and so has some local historic significance. The B764 is a cycle route across the main moorland, connecting with the A77. Travelling south, the user of the road will have passed the impressive and extensive panorama of the main WLWF on the moor above. Travelling north the road user will have a sense of climbing the lower slopes towards higher land. We would agree with the council that the receptor sensitivity here should be considered high.

3.91 The assessment of the existing visual effect from the viewpoint shows that there is little visibility of the existing wind farm at the viewpoint and along the B764 due to the topography and forestry. However along the road and intermittently, the turbines are sufficiently close to the receptor for the movement of the turbine blades to be noticeable, and there is an awareness of the proximity of the wind farm.

3.92 In these views the proposed turbines would bring the WLWF turbines closer to the road and the house, and where they could be seen, albeit as partial glimpses, they would appear both large and close, an effect enhanced by moving blades. The base of the new turbines would be substantially screened by the topography and the Sitka spruce woodland on the brow of the hill, but the existing intermittent experience of the turbines would still be increased by reason of proximity and movement. There would be a contrast between the views of the moving turbine blades on the skyline as seen from the sheltered road in the valley, and a sense of incursion.

3.93 We agree with the council that the magnitude of the change would be medium, because of the sense of close proximity of the rotating turbine blades. As we consider that the receptors at this location should be allocated high sensitivity, we consider that this is a change which would be significant.

VP17 B764 near Kingswell Bridge

3.94 This viewpoint is situated on the road to the west of the property known as Best Friends Cottage, Kingswell Bridge or 'Veyatie' which we assume are former names for the property. The viewpoint is beside the B724 just beyond the junction with the A77, and so also reflects the views of travellers. There are open views to the east towards the proposed turbines from the road and the property. They look towards an extensive number of existing Whitelee turbines just over the brow of the hill in the same direction, the closest being less than 2 kilometres distant. As elsewhere, the proximity and the movement of the turbines contributes to the visual effect.

3.95 We take the view that the effect of the proposed turbines on the view from this location would be significant. The new turbines would be about 400 metres closer and would bring the WLWF markedly closer to the brow of the hill above the road. The visualisations show the closest new turbine would appear significantly larger than the current closest turbines. The effect is increased by the elevation of the feature above the property and the road. In our view there would be a sense of encroachment and looming across the brow of the hillside in these views. We consider that the magnitude of change for views from this property would be at least medium, and the same degree of effect would be experienced by travellers, particularly cyclists.

VP18 Cauldstanes

3.96 Cauldstanes was originally a traditional small hill farm steading. It is single storey house arranged around a central space, a garden to the east side, and a number of outbuildings.

3.97 The existing view to the north and east includes an extensive array of the Whitelee turbines across the horizon, the closest being 1.6 kilometres distant. Despite this distance, the turbines are highly noticeable from the viewpoint by reason of their size, number, and blade movement. The proposals would add five further turbines to these views the closest of which would be 1.26 kilometres distant. The removal of some forestry from the view would lead to further exposure of the turbines as structures. The closest proposed turbine would appear about 25% larger in blade diameter and 33% higher above the horizon than the closest existing turbine. We consider that would be a significant degree of change. These effects would be noticeable for a range of locations around the property.

VP19 A77 near South Drumboy

3.98 This is a roadside viewpoint from the A77 near the property of South Drumboy looking east up a gentle moorland hillside towards WLWF. The current views show the turbines of WLWF sitting at the top of the slope. There is some screening from conifers and topography. The proposed turbines would be experienced to a limited extent by the residents, albeit screened by outbuildings and forestry and by cyclists and other travellers on the A77. The proposed turbines would appear above plantations on the horizon. The additional turbines would add to the existing views of turbines but would appear larger and would bring the WLWF closer. The effect would be significant from this viewpoint.

Other receptors

3.99 The proposed developments would be visible to some extent from the settlements of Fenwick, Kilmarnock and Stewarton. On the basis of separation distance, limited local visibility and the existing backdrop of turbines in views from the settlements, we agree that there would be no significant effects at these places.

Summary of visual impacts

3.100 Viewpoints 2, 16, 17 and 18 represent the experience of being close by the proposed extension to WLWF in the area where the landscape type changes from moorland to a more settled and smaller scale character. The turbines would appear to spill over from the moorland into the settled lowlands. There would no longer be a clear boundary between the wind farm landscape and the more sensitive landscape to the west. The turbines would

appear out of scale in the context of the settled, pastoral landscape. The Whitelee wind farm as extended would then have unacceptable visual impacts.

Impact on residential amenity

3.101 This assessment considers the effect on the visual aspect of residential amenity, that is the effect on the experience of the place from a house or garden, or its immediate vicinity. In reaching our conclusions on the likely impact on residential properties, we bear in mind that the visual component is only one aspect of residential amenity, which is broader in scope than the effect on views, and would also include noise, air quality, the reliability of water supplies and other utilities as well as access to facilities and services.¹³⁷ However, the assessment in this chapter is restricted to the visual aspect.

3.102 For all the residences considered, the proposed turbines are over ten turbine blade diameters distant, including Cauldstanes, the property with the clearest view. This is more than the minimum separation distance mentioned in the various sources of current guidance, including the development plan, as likely to reduce concerns. We find that there would be no shadow flicker effect on any residence. However, the significance of a visual effect on the amenity of a house should not simply be based on proximity, but should also have regard to the overall and contextual impact of the proposal. Here the visual effects on residential amenity which we consider give rise to concern include

- the considerable lateral extent of the existing and proposed turbines visible in the available views;
- the position and visual composition of the proposed turbines relative to the existing turbines and
- the adverse effect on the experience of living on the properties and their curtilage.

3.103 We review below the potentially affected properties in the light of the residential amenity assessments in the FEI.¹³⁸

3.104 Moor Farm would be worst affected by the proposed turbines, but is in the ownership of the applicant and proposed for demolition. It is not a building listed for architectural and historic interest. We discuss this aspect of the proposals in chapter 4 as an element of the historic environment and have expressed reservations about the effect of its removal. However, while WLWF is in existence it is clear that Moor Farm would be unlikely to be used as a day to day residence.

3.105 Of the other properties in proximity to the proposals we agree with the outcome of the FEI studies that the magnitude of change from their existing circumstances would be low at Sheildhill, and Lochgoin farmhouse.

3.106 For Drumtee Farm the configuration of the farmhouse and the working buildings to the north east of the main house and garden provide a very substantial block to views of the wind farm from the house. There would be an extension to the west of the experience of the extensive wind farm landscape from the proposed turbines, but in this case we agree that the residential amenity of the farmhouse would not be significantly changed.

Kingswell

¹³⁷ See SPR L-006 GLVIA 3 statements of clarification

¹³⁸ SPR L002

3.107 We consider that there would be a degree of effect on the residential amenity of Kingswell. We were not able to inspect this property or its garden, but we were able to consider the house and its setting from outside its curtilage, and from the B764. This is a B listed building, a former inn, on what was an important coach route between Kilmarnock and Glasgow, which we consider increases the sensitivity of the house. In our view, based on our limited inspection, the application turbines would be unlikely to cause a direct effect on the house, nor do we consider that the setting of the house would be affected by the application.

3.108 The house sits behind a screen of trees alongside the B724, and is set back from the road behind garden ground. It sits slightly lower than the road. We formed the view that the row of garden trees would substantially shield views from the house of the application turbines looking east. There would also be some shielding from the topography on the other side of the B764, and from forestry, although the commercial forestry would eventually be removed.

3.109 However, the application turbines would be able to be seen by the occupiers during the process of entering and leaving the property, and when using the outhouse across the minor road from the property. There is at present very limited sight of the WLWF turbines restricted to glimpses on the brow of the hill. The application proposals would result in the existing intermittent experience of the turbines being increased by reason of proximity and movement. The proposed turbines would be more visible, more noticeable, and would increase the sense of domination of WLWF.

Cauldstanes

3.110 In our view an important aspect of the residential amenity of Cauldstanes is its character as a simple and typical hill farm building group. Part of its amenity, or its 'pleasantness of place' is derived from its relationship with the open moorland landscape. This relationship is experienced all around the steading, and is an important aspect of the sense of place and the setting of Cauldstanes. This environment is already significantly affected by the proximity of WLWF turbines, which are a noticeable and discordant presence in the rolling and open moorland to the north east. Despite the distance between the house and WLWF, because of the openness of the views and the dominance of the turbines, there is no real buffer effect between the house and the WLWF turbines and there is a sense of shared space. This is exacerbated by the movement of the turbines, which are very noticeable. In our view, the proposed turbines would bring this effect closer to the house, even though the nearest new turbine would be over a kilometre away. The applicant argues that this would be a restricted effect because of limited visibility from the house and the rear garden. We think this approach understates the effect of the new turbines because part of the amenity of the place is the use of the whole outside space and the experience of the landscape more generally. In our view the additional turbines would decrease the residential amenity of this house to a significant degree.

Best Friends Cottage

3.111 While noting that the occupants of Best Friends Cottage have not objected, we consider that the residential amenity of the house and curtilage would be adversely affected by the proposed turbines. The applicants have described the effects as marginal, and this property is already presented with wide views of a substantial wind farm landscape. However we consider this is a location where the increased proximity of the proposed

turbines would lead to a sense of WLWF spilling out over the rim of the plateau. This would in our view be a significant change to the residential amenity of the house and garden.

Summary of residential visual impact

3.112 We find that there would be significant erosion of residential amenity at three of the properties most affected by the proposed development, and in particular at Cauldstanes. The impacts relate to the general landscape and visual impacts we have found in this Chapter. We recognise that a small number of properties would be affected. Nevertheless, we note that the turbines proposed would be within 2 kilometres from these properties and find that they would be overdominant there.

Cumulative landscape and visual impact

3.113 As the ES was prepared in 2012 it was agreed that cumulative effects should be updated to reflect other wind farms which may require to be taken into account, and this information was brought together in the FEI. A number of further operational, consented and proposed wind farms and individual turbines were brought into consideration. In particular, we agree that were they to be consented, the Soame and Blair wind farm proposals, which would be closest to WLWF, would have the overall effect of extending the wind farm landscape to the north and north-west. They would also increase the cumulative impact on nearby residences.

3.114 We agree that if the wider LCT area is accepted as the main baseline, the degree of cumulative effect would be heavily influenced by the existing WLWF turbines to a greater or lesser extent. There are a number of other wind farms in the zone of visual influence which should be taken into consideration.

3.115 The applicants consider that because of proximity to the existing WLWF, the proposed development would generally be seen as part of an existing wind farm rather than as a separate development. We agree that this would be the overall position from a number of the more distant locations, such as viewpoint 11, Louden Hill.

3.116 However, at other locations closer to the application site, in our judgement the overall effect would be that a viewer would feel much closer to the wind farm than was previously the case, as a result of the size and proximity of the proposal turbines against the background of WLWF. At some viewpoints, this would be a subtle but significant step change in cumulative effect, making WLWF more prominent in the landscape. We regard this effect as occurring where the proposed turbines would increase the horizontal extent of turbines in the landscape or view; where they would increase the proximity of turbines to a receptor, or where the effect would be to make the turbines appear more crowded or to narrow a gap between two separate clusters of turbines, creating the appearance of a single, more extensive wind farm.

3.117 We share the council's reservations about the reliance placed by the applicants on the pre-existence of other turbines as a baseline. We preferred a more nuanced approach. If more turbines are added to an existing view of turbines that could, in some instances, produce a new sense of nearness or an increased effect which could be significant of itself. They would not necessarily be largely assimilated into the existing back ground, but could tip the balance to a significant effect. We consider it to be unduly simplistic to assume that the experience of a wind farm landscape would necessarily lead to desensitisation to further

turbines. It would still be reasonable to take account of a sense of turbines getting too close, or of additional turbines adding to the noticeability of wind turbines in the landscape. The type of landscape or the topography in which the spatial relationship is experienced may either exacerbate or moderate increased awareness of turbines because there are more of them in the view. This could occur where the landscape is open and there are wide vistas, so that turbines are visible in much of the skyline views, and new turbines would add to a sense of crowding or encirclement. This is the situation at in the viewpoints to the west of the application site in particular. It might also occur where existing turbines already seem close because of their large size. In these circumstances the cumulative effect of more turbines may well be significant. We consider the cumulative effect of the application proposals to be significant from Cauldstanes, the B764 near Best Friends Cottage, and to an extent, the B764 at Kingswell.

Overall conclusions on Landscape and visual impact.

3.118 In our view the existing WLWF is well located across the high peatlands with forestry which is the central characteristic of the simpler core of the Plateau Moorlands with Windfarms LCT. The application site itself would share this locational advantage, but the tall application turbines at the edge of the plateau would also influence the marginal more settled fringes of the LCT, where the plateau edges slope down to more sheltered areas.

3.119 In most longer views the application turbines would be successfully assimilated into the existing wind farm landscape. However, at a number of locations around the lower slopes of the plateau the application turbines would increase the visual impact of WLWF to the extent that it would bring an increased sense of the nearness of turbines, and of WLWF itself. This would be experienced in and around properties and by travellers on the B742 and the A77 corridors.

3.120 This is an area potentially subject to considerable prospective change by reason of pressure for wind farms, extensions and individual turbines. This being said the application turbines would not cause substantial issues of cumulative impact in longer views because of the limited nature of the proposal. However, there would be a number of localised cumulative impacts for those travelling around the area.

3.121 There would be significant effects on visual aspects of residential amenity at three individual properties. These would be overbearing and dominant and add to the broader visual impacts which we have found unacceptable.

Hyperlinks to documents and viewpoints referred to in this chapter

Doc ref Where available	Description	DPEA website hyperlink
Hearing statements		
	hearing statement from applicant - Landscape and Visual Impact	http://www.dpea.scotland.gov.uk/Document.aspx?id=267510
	hearing statement from Fenwick Community Council - Landscape and Visual Impact	http://www.dpea.scotland.gov.uk/Document.aspx?id=268874
	hearing statement for CH Group - Landscape and Visual Impact	http://www.dpea.scotland.gov.uk/Document.aspx?id=280622
	hearing statement from Moscow and Waterside Community Council - Landscape and Visual Impact	http://www.dpea.scotland.gov.uk/Document.aspx?id=266285
	hearing statement from Ms Greta Roberts - Landscape and Visual Impact	http://www.dpea.scotland.gov.uk/Document.aspx?id=267431
CD 033	Mr E Davis representation on LVI	https://www.dpea.scotland.gov.uk/Document.aspx?id=276505
Core documents		
CD014	EAC Committee report on the application.13 June 2014	https://www.dpea.scotland.gov.uk/Document.aspx?id=276487
CD 017	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 as amended	https://www.dpea.scotland.gov.uk/Document.aspx?id=276496
CD 018	Electricity Act 1989	http://www.dpea.scotland.gov.uk/Document.aspx?id=276497
CD 023	Environmental Statement	https://www.dpea.scotland.gov.uk/Document.aspx?id=230461
CD 023	For Environmental Statement viewpoints see below	
CD 024	Environmental Statement Technical Appendices - App 07.01 - LVA Methodology	http://www.dpea.scotland.gov.uk/Document.aspx?id=230470
	Environmental Statement Technical	http://www.dpea.scotland.gov.uk/Document.aspx?id=230471

	Appendices - App 07.02 - Landscape Assessment	
	Environmental Statement Technical Appendices - App 07.03 - Views Assessment	http://www.dpea.scotland.gov.uk/Document.aspx?id=230472
	Environmental Statement Technical Appendices - App 07.04 - Cumulative Assessment	http://www.dpea.scotland.gov.uk/Document.aspx?id=230473
CD 027	Letters of objection	https://www.dpea.scotland.gov.uk/Document.aspx?id=276499
CD 028	Statutory consultee responses	https://www.dpea.scotland.gov.uk/Document.aspx?id=276500
CD 029	Fenwick community council objection	https://www.dpea.scotland.gov.uk/Document.aspx?id=276501
CD 031	Moscow and Waterside CC objection	http://www.dpea.scotland.gov.uk/Document.aspx?id=251870
CD033 -	Davis, E 2015, a representation submitted to DPEA regarding visual impact-residential amenity - from SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=276505
CD035	Harrison, T 2015, a representation submitted to DPEA - Submission for consideration of aspects of visual impact & cumulative impact	https://www.dpea.scotland.gov.uk/Document.aspx?id=276507
CD037	East Ayrshire Local Development Plan - proposed Plan (March 2015) - volume 2 - from SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=276488
CD037 -	East Ayrshire Local Development Plan - proposed Plan (March 2015) - volume 2 - maps - from SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=276489
CD038	Ayrshire Joint Structure Plan (approved 22nd November 2007) -	https://www.dpea.scotland.gov.uk/Document.aspx?id=276490
CD 039	AJSP addendum to the structure plan technical report TR03/2006	https://www.dpea.scotland.gov.uk/Document.aspx?id=276491
CD 040	East Ayrshire landscape Wind capacity study	https://www.dpea.scotland.gov.uk/Document.aspx?id=276492
CD 041	EAC committee report on East Kingswell application	https://www.dpea.scotland.gov.uk/Document.aspx?id=276493
Applicants documents		
SPR- L001	EAC – Whitelee Wind Farm extension 3-audit	https://www.dpea.scotland.gov.uk/Document.aspx?id=272177

	of landscape & visual impact assessment Ironsides Farrar 2014 -	
SPR-L002	Applicant 's Further Environmental Information (for viewpoints see below)	https://www.dpea.scotland.gov.uk/Document.aspx?id=259795
	updated cumulative landscape & visual impact assessment -	https://www.dpea.scotland.gov.uk/Document.aspx?id=259795
	further environmental information - residential (visual) amenity assessment	https://www.dpea.scotland.gov.uk/Document.aspx?id=259814
	further environmental information - updated cumulative landscape & visual impact assessment - supporting figures	https://www.dpea.scotland.gov.uk/Document.aspx?id=259797
	further environmental information - residential (visual) amenity assessment - supporting figures - figure 9 - Residential Amenity Survey Plan	https://www.dpea.scotland.gov.uk/Document.aspx?id=259816
SPR-L004	guidelines for the assessment of landscape & visual impacts - second edition (GLVIA 2) –	https://www.dpea.scotland.gov.uk/Document.aspx?id=272179
SPR L005	Landscape institute – Guidelines for the assessment of landscape and visual impacts 3 rd edition	https://www.dpea.scotland.gov.uk/Document.aspx?id=272181
SPR L006	Landscape institute – statements of clarification of GLVIA 3	https://www.dpea.scotland.gov.uk/Document.aspx?id=272182
SPR L008	SNH landscape character assessment Ayrshire 1998	https://www.dpea.scotland.gov.uk/Document.aspx?id=272184
SPR-L009	SNH-landscape character assessment ; Glasgow and the Clyde valley	https://www.dpea.scotland.gov.uk/Document.aspx?id=272185
SPR L010	SNH; Strategic Locational Guidance for Onshore Windfarms, March 2009	https://www.dpea.scotland.gov.uk/Document.aspx?id=272186
SPR	East Kingswell decision	https://www.dpea.scotland.gov.uk/Document.aspx?id=272194

L018	notice	
SPR-L026	East Ayrshire landscape wind capacity study appendix report	http://www.dpea.scotland.gov.uk/Document.aspx?id=304220
	Viewpoints	
	VP1 B764 Queenseat Hill	ES https://www.dpea.scotland.gov.uk/Document.aspx?id=230434 FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259796
	VP 2 Rowallan Monument	ES https://www.dpea.scotland.gov.uk/Document.aspx?id=230435 FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259798
	VP 16 B764 Near Kingswell	ES https://www.dpea.scotland.gov.uk/Document.aspx?id=230456 FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259811
	VP 17 B764 near Kingswell Bridge (Best Friends Cottage)	ES https://www.dpea.scotland.gov.uk/Document.aspx?id=230457 FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259812
	VP 18 Cauldstanes	FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259813
	VP 19 A77 near South Drumboy	ES https://www.dpea.scotland.gov.uk/Document.aspx?id=230458 FEI https://www.dpea.scotland.gov.uk/Document.aspx?id=259815

CHAPTER 4

Impact from noise

Introduction

4.1 We considered the issues relating to potential noise generated by the application turbines on the basis of written submissions made by the applicants and East Ayrshire Council, and on the objections relating to this issue. The applicant and the Council reached agreement on the recommended approach prior to the end of the examination.

The assessment of noise impacts in the ES¹³⁹

4.2 The ES states that noise will be emitted by equipment and vehicles used during construction and decommissioning of the application proposals, and by the turbines during operation. The level of noise emitted by these sources and the distance from the receptor are the main factors used to determine the levels of noise projected to be experienced at receptor locations.

4.3 Operational turbines emit noise from the rotating blades as they pass through the air, sometimes described as a regular 'swish'. The amount of noise emitted tends to vary depending on the wind speed. When there is little wind the turbine rotors will turn slowly and produce lower noise levels than during high winds when the turbine reaches its maximum output and maximum rotational speed. Background noise levels at nearby properties will also change with wind speed, increasing in level as wind speeds rise due to wind in trees and around buildings, etc, and this can affect the experience of noise.

4.4 Noise levels from operation of the application turbines were predicted for the locations around the site most likely to be affected. The predictions take account of the potential combined effect of noise from the Whitelee Windfarm including the application turbines and a number of other consented wind farms.¹⁴⁰

4.5 Predicted operational noise levels were used to demonstrate that turbines of the type and size proposed can operate within the noise limits suggested by national guidance. It was concluded that operational noise levels from the application proposals would be within the acceptable levels for wind energy schemes.

4.6 Where it has been established that noise impacts are likely to be within acceptable levels the established approach to the control of noise from wind farms is that the permission will stipulate limits for the level of noise immissions received at identified properties. The limits follow guidance laid down in documents issued by the Energy Technology Support Unit (ETSU)¹⁴¹ and the Institute of Acoustics,¹⁴² and these have been accepted by Scottish Government in their advice such as Planning Advice Note 1/2011. The complexities involved in policing environmental noise are acknowledged in these guidance documents, with different levels being stipulated for the time of day or night, and the suggested measures can acknowledge the differing experiences where the noise has particular tonal qualities. The levels set in consent conditions are intended to be monitored

¹³⁹ CD 023 ES chapter 13. See also CD024 technical appendix 13 for background noise etc

¹⁴⁰ In the ES these included Sneddon Law Community Windfarm and Harelaw Renewable Energy Park. These are no longer current, but there are two substantially reduced current proposals in similar locations; Soame and Blair windfarm applications respectively .

¹⁴¹ SPR-N001: The Assessment and Rating of Noise from Windfarms: ETSU-R-97 September 1996

¹⁴² SPR-N002: Good practice guide to the application of ETSU-R-97 IoA May 2013

and acted upon by the local authority as planning and environmental health authority. Such conditions are enforceable because it is possible to control turbines so as to reduce any noise immissions to within the stipulated limits once it is detected and established to be related to the wind farm.

East Ayrshire Council

4.7 The ES information and the conclusion that ETSU-R-97 noise criterion limits can be satisfied at all properties across all wind speeds was followed by further discussions between the applicants and EAC. EAC were concerned about the cumulative noise effects of the application with the existing WLWF and how these should be controlled. EAC had received advice from its noise consultants that the application turbines should have a lower immissions limit imposed upon them than the limits imposed on WLWF, in order to ensure that the recommended limits taken together would not be exceeded.

The applicant's response

4.8 The applicant considered this approach to be misguided, and that a lower immissions limit on the application turbines only would be no easier to enforce, and may be more difficult.¹⁴³ It may also have the effect of rendering the application turbines uneconomic to run. However, the applicant pointed out that the application is not a new self-standing wind farm, but an extension of WLWF. All WLWF turbines including the application turbines would be under the single control of one operator. They advised that as far as the operator was concerned they were content that any noise condition imposed should stipulate noise immissions limits applicable to the whole of WLWF, including the application turbines. This meant that if any noise immissions were detected in excess of the condition limits the operator would be able to respond by adjusting the operation of any of the WLWF turbines until any noise issue was resolved, irrespective of which turbines were initially found to be the cause of the exceedence.

4.9 EAC has accepted this approach and a noise condition tabled by the applicant has been accepted by them as sufficient.¹⁴⁴ This is dealt with as part of the conditions suggested to Ministers in Chapter 7 and appendix 1 of this report below.

Other objections based on noise

4.10 There were a number of other objections to the application based on noise.

4.11 Mr Davis at Kingswell had included his concerns about noise levels at his property in his original objection letter,¹⁴⁵ where he complained of low frequency noise and infrasound and "wind turbine syndrome", but without being specific about whether or how it had been experienced by him or his family, or if he had taken any action about it. In his concluding submissions after the inquiry he said that he used the house as part of his business to carry out high fidelity sound engineering which was very sensitive to noise.

4.12 Dr Connor and other objectors,¹⁴⁶ suggested that various houses would suffer noise nuisance because they would be too close to the application turbines. Dr Connor referred to a neighbour who was hearing noises 'like a jet engine' but does not give further details or

¹⁴³ SPR-N008 technical report on noise

¹⁴⁴ SPR007 for agreed noise condition

¹⁴⁵ CD 027

¹⁴⁶ see objection letters from Professor Connor at East Collarie; Gilbert and Crozier, Alton Lodge, Newmilns; Connelly, Waterside

identify the house in question. The CH group say that ‘many households’ suffer intrusive wind turbine noise which is currently the subject of investigation by EAC. No further details of the households in question are given.

4.13 Fenwick Community Council said that they did not consider that all potentially affected dwellings had been considered but do not give further details of the houses said to have been omitted.

4.14 Mr Harrison¹⁴⁷ in a submission for the CH group argues that the ES does not take adequate account of planning guidance on noise. He cites previous planning guidance,¹⁴⁸ which suggested that there should be 2 kilometre separation distance between wind farms and the edges of cities towns and villages, and says that individual properties should benefit from the same degree of separation. He mentions Mr Davis’ special need for quiet at Kingswell. He says that EAC is currently engaged in statutory noise nuisance monitoring after persistent complaints about continued noise from the WLWF when turbines are unconstrained operating in easterly/south easterly winds. He does not mention any specific instances of his own experience of noise at Cauldstanes. He is concerned about cumulative noise, saying that local residents are becoming surrounded by turbines from most wind directions making turbine noise inescapable. He complains about the prospect of construction noise levels, saying they are likely to be intolerable.

4.15 Mr Harrison suggested a number of conditions were permission to be granted. Among a number of other measures he wanted permanent noise monitoring at Kingswell, subject to Mr Davis’ agreement, and a period of monitoring at Cauldstanes from the beginning of construction through to the end of the first year of production, again subject to his agreement.

4.16 The applicants and EAC each took the view that some aspects of Mr Harrison’s suggested conditions were unenforceable. Other aspects would effectively be met by the terms of the agreed proposed condition.

Reporter’s reasoned conclusions

4.17 It is clear that there is a degree of local concern that the existing WLWF is causing some noise disturbance, and apparently some existing complaints being investigated by the council, but we were not provided with any specific evidence that the existing noise protection levels set for WLWF are inadequate, nor that the measures already in place at WLWF are insufficient to address any noise problem which would arise. The council did not suggest that we should have regard to any existing complaints, and remain of the view that the application can be satisfactorily moderated through the agreed condition.

4.18 Some residents consider that the addition of the new turbines to their current experience of noise from turbines would lead to unacceptable additional disturbance. In our view for any noise arising from any part of WLWF the condition proposed would be able to provide a conventional mechanism for the control of any noise from any part of WLWF, as extended by the application turbines, to be addressed by the operator if complaints are received. We conclude that there is no issue of cumulative noise from WLWF which could not be controlled by the suggested conditions.

4.19 Another aspect of this concern would be cumulative noise from other windfarms not controlled by the applicants, but the ES has also established that there would not be

¹⁴⁷ Submission on noise from the CH group

¹⁴⁸ not produced as a document – now superseded by SPP – CD 002

cumulative noise issues arising from the application and nearby proposed and approved windfarms. We conclude that there are no issues of cumulative impact likely to arise from the application in combination with other proposals not controlled by the applicants.

4.20 EAC is alleged by the objectors to be investigating noise complaints. However, we note that the council no longer considers noise disturbance to be a basis for an objection or for refusal of the application, and that they do not mention any pattern of existing complaints which gives them cause for concern. We conclude that there is no current established problem of noise disturbance from WLWF which we should take into account.

4.21 It would appear that Mr Davis carries out noise sensitive activities at Kingswell, but we have not been told enough about what these activities are to allow us to identify whether we should take them into account. There are some legal complexities about what activities might give rise to legitimate complaints, but for our purposes we are content that the suggested condition, which is based on achieving a reasonable level of residential amenity, would provide sufficient protection for anybody living in Kingswell, were permission to be granted. In the context of this application, we consider that we have not been given any reason why we should not apply the same criterion and standards to Kingswell as to other residences.

4.22 We have considered the points made by Mr Harrison on his own behalf and on behalf of neighbours, but do not consider that his suggested approach would justify a departure from the noise control framework and best practice which has been widely accepted as sufficient protection. Some of the measures requested by Mr Harrison would run counter to established policy on conditions and present difficulties of enforcement. In our view a suitable mechanism for the monitoring of noise immissions has been developed between EAC and the applicant. We do not consider that this requires to be enhanced by any of the suggestions made by Mr Harrison for CH group. Indeed, the suggested condition would meet some of his concerns, such as the regular collection of information and the use of an independent expert. The agreed condition should result in an effective way of collecting information of a problem, testing it independently of the applicant, and the relevant authority being given the necessary information to take action if required.

4.23 We take into account that the agreed proposed condition reflects established good practice endorsed by the IoA and conclude that there would be sufficient safeguards of residential amenity in the noise limits stipulated. We have not found any evidence to indicate that noise immissions arising from the application turbines would exceed the agreed limits, or that impact from noise would otherwise unacceptably affect residential amenity.

Hyperlinks to documents referred to in this chapter

Doc reference	Description	hyperlink to dpea website
Core productions		
CD 002	SPP	https://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD 023	ES Chapter 13	https://www.dpea.scotland.gov.uk/Document.aspx?id=230461
CD024	ES technical appendices 13.03 - Background Noise & Noise Limits	https://www.dpea.scotland.gov.uk/Document.aspx?id=230496
Applicant's documents		
SPR-N001	The Assessment and Rating of Noise from Wind Farms, ETSU-R-97, September 1996 -	https://www.dpea.scotland.gov.uk/Document.aspx?id=271972
SPR-N002	A Good Practice Guide to the Application of ETSU-R-97 for the Assessment & Rating of Wind Turbine Noise, Institute of Acoustics, May 2013	https://www.dpea.scotland.gov.uk/Document.aspx?id=271973
SPR-N006	Whitelee Windfarm Extension Phase 3 EAC proposed conditions: technical clarification document - from SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=271979
SPR-N007	Agreed noise condition	https://www.dpea.scotland.gov.uk/Document.aspx?id=267432
SPR-N008	Letter from Hoare Lea Acoustics to East Ayrshire Council dated 15 Jan 2013	https://www.dpea.scotland.gov.uk/Document.aspx?id=271980
SPR-N009 -	e-mail dated 22 May 2015 to relevant Inquiry participants sending agreed noise condition - from SPR	https://www.dpea.scotland.gov.uk/Document.aspx?id=271981
	Applicant's comments on CH group submission on conditions	https://www.dpea.scotland.gov.uk/Document.aspx?id=295616

East Ayrshire Council		
	hearing statement from council - Conditions and Obligations	https://www.dpea.scotland.gov.uk/Document.aspx?id=267490
Objectors representations		
	CH Group - comments on proposed conditions	https://www.dpea.scotland.gov.uk/Document.aspx?id=295612
CD034 -	Harrison, T submission for consideration of aspects of noise related to Whitelee windfarm extension 3	https://www.dpea.scotland.gov.uk/Document.aspx?id=276506
CD 029	Fenwick Community Council - letter of objection : part of representations bundle	https://www.dpea.scotland.gov.uk/Document.aspx?id=230443
	Harrison precognition and hearing statement	https://www.dpea.scotland.gov.uk/Document.aspx?id=280623
	Mr E Davis concluding submissions	https://www.dpea.scotland.gov.uk/Document.aspx?id=287286

Chapter 5

Impact on water supplies

Introduction

5.1 Prior to the reference of the application to the DPEA none of the objections had referred to concerns about the potential effect of the application on the water environment. On 5 November 2014 Dr Rachel Connor, an existing objector to the application on amenity grounds,¹⁴⁹ contacted the ECDU to expand the grounds of her objection to include a concern that WLWF had caused pollution of public and private water supplies, and this may occur again if the application was granted.¹⁵⁰ It was decided that her new ground of objection should be investigated as part of the report process. Other objectors associated themselves with the objection and raised similar concerns.¹⁵¹ We decided that the issues should be examined in a public inquiry session.

5.2 Doctor Connor and the other objectors said that the construction of WLWFO, X1 and X2 may have led to the contamination of public and private water supplies with potentially serious public health implications. Further, in their management of the construction and operation of the previous phases of WLWF the applicants had not complied with the planning conditions designed to protect water supplies from pollution. Alternatively, these conditions had proved ineffective in discovering pollution or in alerting the proper authorities to the consequences. This meant that the present application should not be granted, because there could be no confidence that pollution would be prevented. The ES for the application was inadequate in the information about private water supplies, to the extent that it did not comply with the requirements of the the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000¹⁵², and Ministers would not be able to determine the application. Given that this was the case the application should not be granted.¹⁵³

The approach to the water environment in the application

5.3 The ES¹⁵⁴ for the application has two chapters which provide information on the potential impacts on different aspects of the water environment. Chapter 9 deals with Geology, Soils and Hydrogeology, and includes an assessment on the potential effect of the proposals on groundwater and so public and private water supplies. Chapter 10 deals with surface water and is concerned with understanding the potential effect of the development on the existing water environment including watercourses and water bodies, ground water dependant water based ecosystems (GWDTE) and peat. This includes an examination of the potential effect of tree felling. These sections of the ES also consider the mitigation of any potential effects including how compliance with the water regulation regime requirements of SEPA in respect of the Water Framework Directive regime, pollution prevention, and related issues will be achieved.¹⁵⁵

¹⁴⁹ included in CD 027

¹⁵⁰ Connor email to ECDU 5 November 2014

¹⁵¹ Mr and Mrs Harrison, Mr E Davis, Fenwick Community Council, and Moscow and Waterside Community Council

¹⁵² CD 017

¹⁵³ CH group 'Legal and Evidential Submission'

¹⁵⁴ CD 023 Chapter 9, with CD024 Appendix 9.1 for peat slide hazard and risk assessment, Appendix 9.2 for PWS, and Appendix 9.3 for borrow pits. Chapter 10 including figure 10.1 for surface water catchments

¹⁵⁵ i.e. SPR-W-006: the Water Framework Directive (WFD), 2000/60/EC; SPR-W007 the Groundwater Daughter Directive 2000/118/EC, SPR-W009: the Water Environment (Controlled Activities)(Scotland) Regulations 2011 (CAR) see CD023 ES chapter 10 parags 11 and 12.

5.4 The ES takes stock of what environmental information is available, and defines the terms to be used for the significance and magnitude of any effects on the receiving environment. It analyses the potential risks to the environment in the context of construction, operation, and decommissioning of the development. It describes what mitigation measures will be used to reduce risks or effects and how these will be implemented. In doing this both chapters explicitly rely to some extent on the experience said to be gained from the previous phases of WLWF, and in some instances rely on information already available from previous ESs.

5.5 The ES states that the development would be located in the upper reaches of the Kilmarnock Water catchment.¹⁵⁶ Much of the site has areas of peat, underlain by glacial till, and locally, by alluvial and sand and gravel deposits. The solid geology beneath the site is mainly carboniferous basalt, with some faults.

5.6 The ES considers the potential effects on the geology, soils including peat, hydrogeology, and ground water, of various aspects of construction including borrow pits, roads and tracks, and forestry felling,¹⁵⁷ and any aspects of the operation and decommissioning of the turbines which may have such impacts. This includes the potential effects on sub-surface flows, soils (including peat) and private water supplies from groundwater. It is noted that the thick peat sequences are considered to be good protection for deep ground water in terms of groundwater vulnerability, and that vertical ground water flow within such sequences is likely to be low. Ground water supplying private water supplies is likely to be constrained by the topography of the site, but given that hydrogeological catchments may extend beyond hydrological catchments, the ES defines a hydrogeological study area which extends conservatively beyond the defined hydrological catchments. This study area is used to identify any private water supplies that may be impacted.¹⁵⁸ The potential for ground instability as a result of peat slide was assessed through a combination of desk-based review, site reconnaissance and a programme of peat probing and sampling to identify the extent and depth of peat and its characteristics. These results were used to inform and refine the layout design in terms of turbine locations, access tracks, borrow pit and site compound.

5.7 As regards surface water, the potential impacts of the construction, operation and decommissioning of the application proposals on hydrology and surface water quality were considered. The site is situated on open moorland and coniferous plantation. In addition to the Kilmarnock Water catchment, the site is within the sub-catchment area of the Kingswell Burn and Drumtee Water, which flow through the site.¹⁵⁹ There are a number of minor tributaries arising from natural springs, and streams of up to approximately 2 metres in width. In addition, a network of artificial drainage ditches of approximately 0.5 metres to 1 metre in width are located within the forestry area, which is a common feature of plantations of this type. It was noted that it is not uncommon to see exposed peat and wetland vegetation on the banks of the watercourses in this area.

¹⁵⁶ CD 023 Ch 9 figure 9.3 for the hydrogeological catchment areas

¹⁵⁷ CD 024- ES Technical Appendices – Appendix 4.2 Forest Redesign & Blanket Mire Restoration and Appendix 4.3 Draft Peat Management Plan

¹⁵⁸ CD023 figure 10.1

¹⁵⁹ CD 023 ES chapter 9 figure 9.3 shows the hydrogeological catchments. chapter 10 figure 10.1 shows the hydrological catchments which the application site may affect and the other catchments not expected to be affected by this application

5.8 The Kingswell Burn was noted as a key tributary of the Kilmarnock Water which drains part of the site, and is a designated Drinking Water Protected Area under the Water Framework Directive (WFD).¹⁶⁰ The Kingswell Burn is classified under SEPA's WFD classification scheme as being of 'poor' status. The potential for hydrological and water quality effects was considered to be highest during the forestry felling and construction phases, and potentially to include changes to the natural drainage patterns; effects on runoff; erosion and sedimentation; effects on water supplies; and risk of pollution incidents.

5.9 The ES describes the mitigation measures, derived from SEPA guidance on the protection of the water environment and 'best environmental control practice', which are proposed to identify and control any effects on the receiving environment.¹⁶¹ The measures described were informed by experience gained on WLWF with regard to potential site-specific issues and the most appropriate measures to avoid or reduce these. Based on this experience it is proposed that all activities on the WLWF X3 construction site would be managed in close liaison with Scottish Water and SEPA. Site-specific mitigation measures would be further detailed within a site Pollution Prevention Plan (PPP) and Construction Environmental Management Plan (CEMP).¹⁶² The plans would be drafted by the applicants for the approval of the regulating authorities in terms of conditions to be imposed under any consent from Ministers. These would also incorporate a Pollution Incident Plan (PIP), including emergency procedures should a pollution incident occur.

The objectors' case (main points only)

Dr Rachel Connor

5.10 Dr Connor gave evidence on behalf of the CH group¹⁶³ with Mr Harrison of Cauldstanes, who also gave evidence about his own private water supply.¹⁶⁴ Mr Davis of Kingswell gave evidence on his own behalf but also relied on the evidence of Dr Connor.¹⁶⁵ Dr Connor is a semi-retired radiologist and lecturer, who lives on Hareshawmuir road to the south of the application site. Her residence is supplied by a private water supply referred to as 'Airtnoch', which also supplies a number of other homes. She has been identified as the 'relevant person' for that supply under the Private Water Supplies (Scotland) Regulations 2006 (PWSR).¹⁶⁶ She herself has no specialist knowledge of geology, hydrology, or hydrogeology. The ES shows Dr Connor's supply at Airtnoch to be drawn from hydrological catchment D, and is some 3 kilometres away from the nearest application turbine. It is accepted that this supply would be unlikely to be affected by this application.¹⁶⁷ However, since Dr Connor had come to suspect that previous phases of WLWF had affected public

¹⁶⁰ SPR-W006

¹⁶¹ CD023 chapter 10 parag 10.4.3 forward; and 10.6

¹⁶² CD024 ES technical appendices – 4.1 for Outline Construction Environmental Management Plan

¹⁶³ reminder- Dr Connor, Mr Harrison and Mr Davis were previously associated as the POW (protect our water) group, but Mr Davis withdrew from this before the inquiry. The group was renamed the CH group, consisting of Dr Connor and Mr Harrison. Mr Davis participated on his own behalf.

¹⁶⁴ precognitions of Dr Connor and Mr Harrison, and Document CH 1 'Inquiry statement' which is a longer report incorporating references to sources.

¹⁶⁵ precognition of Mr E Davis

¹⁶⁶ SPR-W009- see below for further explanation of the PWSR.

¹⁶⁷ CD 023 ES figure 10.1 Note that the Airtnoch PWS also appears in the application ES table 9.13 . It would be 4.3 to 3 km away from the nearest potential element of the application, the indicative area for borrow pits. The potential effect on the PWS is noted as negligible, and also that the PWS supply is being monitored as part of the previous extensions. If further information were to come forward as a result of that the Airtnoch PWS may be further considered. Figure 9.3 shows Airtnoch PWS would share hydrogeological catchment area I with the application. See evidence of applicant below.

and private water supplies in the area, she had carried out a lot of research into WLWF, the geology and the water environment, and how previous phases were managed. She had reached the view that WLWF had in fact contaminated public and private drinking water supplies and that the existing conditions regimes had not been successful in controlling this. She said that she had made a considerable personal and financial contribution to the objection and presenting it at the inquiry, and that she had done this because she cared about her neighbours and public health generally. She says she feels that people living locally have suffered enough from the wind farm.

5.11 Dr Connor first became interested in the question of whether WLWF had polluted water supplies after she encountered problems with her own private water supply at Airtnoch.¹⁶⁸ She then found out about problems which the users of other private water supplies around the WLWF had encountered. She made various inquiries of EAC, SEPA, and of the other water quality authorities about the policing of the WLWF construction and operation, including information which may have a bearing on water quality. She approached the applicant in order to obtain copies of the various reports and other information which they held about the construction of WLWF, some of which had been generated by the various conditions regimes, such as the information collected by the Planning Monitoring Officer. She also asked the applicant for information about the construction programmes for the various phases of WLWF. She analysed this information and all reports in detail. She carried out personal research on water contaminants and their effects, and geology, hydrogeology and peat. She was not able to engage her own hydrogeological/hydrological expert, so she obtained information by asking questions based on her findings from expert agencies such as the British Geological Survey. She raised questions herself with Scottish Water about their water supply and also approached and met with officials of SEPA and other agencies. She revisited the ES prepared by the applicants for each of the phases of WLWF, and studied critically the various environmental management plans and reports.

5.12 She concluded that the construction of the WLWFO and its two extensions had caused contamination problems, or silted or dried up a number of PWSs. She and the other objectors were critical of the information and assumptions on which the previous conditions regimes were based, and extend that criticism to the ES for this application, because the assumptions, the methodology and the proposed mitigation strategies are essentially the same. Furthermore, she argues that the conditions regimes which were intended to monitor the construction had not worked in practice, saying that they had not been properly implemented by the applicant and the council. In particular, the various consultants for the WLWF constructor and operator who had prepared the risk assessment reports on which the monitoring schemes had been based had not bothered to establish the true sources of PWS, and so had made ill informed decisions about whether or not particular PWS were at risk. Even so, such monitoring as had been carried out had disclosed numerous examples of bacteriological or toxic chemical contamination of the ground or water environment, and of PWS. Even when this had been discovered, nobody had taken steps to tell the environmental health authority or the consumers who might be affected by the contaminated water, contrary to the commitments to communication laid out in the conditions regime.

5.13 Dr Connor had formed the view that there was also a major problem of contamination of the public water supply from the Amlaird reservoir and WTW operated by Scottish Water

¹⁶⁸ precognition of Dr Connor.

because of the construction of WLWF on a designated drinking water protection area¹⁶⁹ from which these supplies are drawn. While it is acknowledged that these are public water supplies which would be unlikely to be affected by the application project, she considers the history of these to be relevant to our examination. Dr Connor believes that the public water supply was adversely affected by WLWF. Ministers should be made aware that there were serious implications for public health, in Dr Connor's view, from how public water supplies were monitored and dealt with. The behaviour of Scottish Water and the WLWF developer was instructive about the reality of the project management standards of the applicant, and the ability of the statutory authorities and the applicant to protect water supplies. She alleges that the public water supply managed by Scottish Water become so contaminated by disturbance to the water environment caused by the WLWF works that Scottish Water had had to use levels of treatment chemicals which are dangerous to human health. There could be no confidence that Scottish Water would acknowledge that this was a problem caused by WLWF because Scottish Water owned a substantial part of the land on which WLWF was constructed and would presumably be receiving rent from the operator. It was therefore not in the Scottish Water's interest to cause problems with the WLWF operator and in their public statements Scottish Water had played down their problems with the public water supplies.

5.14 Dr Connor says that the construction of WLWF had been an enormous industrial construction project over many years,¹⁷⁰ which had taken place on an environmentally sensitive area of waterlogged peat moorland which was the catchment area for a large number of public and private water consumers. The fact that WLWF had been located in a statutory drinking water catchment area, (as would be the application site) should have meant that the water supplies were carefully protected and monitored, but the opposite was the case. It was clear to her that the disturbance caused by the digging of foundations, the construction of the turbine bases, the creation of quarries or borrow pits throughout the WLWF site, exposing the bedrock to direct surface water, the cutting down of forestry and the use of brash on site, and the construction of roads and buildings had caused a number of instances of contamination of the water environment on the site. The developer's monitoring reports of samples taken on the WLWF site disclosed instances of pollution by a number of chemicals which had human health implications. She suspected that the large work force for these construction of these projects may have been responsible for sewage contamination. She considered that none of the three ESs previously prepared for each phase of WLWF had properly investigated the hydrogeology of the area and that the assumptions had been based on out of date information about the underlying geology. The assumptions did not accord with current SEPA guidance.¹⁷¹ It followed that all previous ESs were based on inadequate information about where and how water from the site might travel to reach points of consumption, and so all estimates of risk of impacts were flawed. This fundamental problem was repeated in the ES for this application.

5.15 In her view the conditions regimes which followed on from the flawed EIA for each of the three previous phases were themselves fundamentally flawed. The evaluation of risk of potential impact on PWSs on which the conditions were based was founded on inadequate understanding about the geology or hydrogeology of the area, and inadequate research or information about those PWSs. Water supplies had been dismissed as being at no or low risk on the basis of a cursory surveys based on inaccurate information. The assessment

¹⁶⁹ The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2007 made under the Water Framework Directive (2000/60/EC)

¹⁷⁰ Inquiry statement for CH group parags 12-17

¹⁷¹ SPR-W005

had assumed that the collection tank of the PWS was a suitable proxy for identifying the source. SEPA¹⁷² has made it clear that they expected the source of all PWSs to be established, and this had not been done. Until the source was known no informed decision could be made about whether or not a PWS was at risk of contamination.

5.16 Even so, such monitoring and testing as had been carried out served to disclose that serious chemical and bacteriological contamination had taken place on site. The test results that she had traced and examined had shown that:

- There had been contamination events of toxic chemicals which are banned from potable water supplies e.g. 3-4 methylphenols and, bis(2-ethylhexyl) phthalate (DEHP¹⁷³) in groundwater;
- There had been diffuse pollution of ground and surface waters from metals such as iron, manganese, aluminium, arsenic, pH changes and petroleum hydrocarbons leading to serious adverse changes in water quality.
- There had been a failure of the potable public water supply to meet regulatory standards for iron and manganese at the Amlaird Water Treatment Works (WTW) with additional concerns voiced with respect to trihalomethanes (THMs), which are the chemicals used for water treatment;
- There had been serious biological contamination of private water supplies with coliforms and *Escherichia coli* (E.coli) leading to outbreaks of illness.

She felt that these chemicals and the bacteriological contamination which had clearly taken place was highly likely to have affected the surrounding water environment and to have got in to the public and private supply systems and to have affected people.

5.17 The developer of WLWF, their technical advisers, and the statutory authorities who should have been alert to this situation, had apparently either paid no attention to the results or had persuaded themselves that there was no problem. In some cases the applicant had simply not passed the information on to the relevant authorities, or had done so long after the event. When samples apparently showing contaminants had been found nobody had taken action at the time to find out why this was so. The applicant had been happy to dismiss results as laboratory errors rather than investigate them properly. So whether she was right or wrong about the effect on the water environment, there was now no way to tell because the opportunity to investigate had been lost. There could be no confidence in a regime that was so ineffective about such serious matters.

5.18 Accordingly, Dr Connor and her supporters had completely lost confidence in the ability of the applicant and the regulatory authorities, and in particular EAC as planning or environmental health authority, to fulfil what the conditions regime expected of them. For example, she had found out that monitoring reports prepared for the applicant during construction of the extensions to WLWF which flagged up areas of concern about pollution policing, such as a post construction report by Jacobs about WLWF recommending certain protocols to improve testing¹⁷⁴ had apparently not been passed to EAC until 2013, long after the events disclosed in the reports.¹⁷⁵

5.19 Specifically, the objectors to WLWF X3 had no confidence in the conditions or mitigation regimes, past or future. These required the preparation of risk assessments to

¹⁷² as above

¹⁷³ DEHP is described by SEPA as 'a ubiquitous plasticiser'

¹⁷⁴ SPR-W022

¹⁷⁵ email from EAC to Doctor Connor 17 March 2015

identify which PWS should be monitored. In fact the history of the WLWF conditions framework had been that risk assessments for PWS had just down graded the risks from WLWF on the basis of cursory or no investigation of the PWS in question. These would not have complied with the current SEPA advice which was that all PWS must be traced to their source in order to establish the degree to which they were at risk. For instance, the applicant had used the collection tanks of PWS as proxies for the sources, which was not what was required by SEPA.

5.20 It had also become clear that EAC could not be relied on to meet their responsibilities as planning or environmental health authority. Information had not been passed to EAC by the developer when the monitoring plans said it should have been. When it had been transmitted, that had not happened until long after it was first available.¹⁷⁶ While there had been a PMO appointed for WLWFO, It would appear that for the WLWF extensions, the PMO arrangement did not work properly.¹⁷⁷

5.21 Dr Connor considered it particularly outrageous that when it became known to the developer that a PWS was contaminated with coliforms or metals, as had happened here from time to time, no steps were taken to contact the council as environmental health authority in order to warn anybody who might be affected, thus exposing the consumers of that supply to potentially serious health risks. There had in fact been gastrointestinal illness among such consumers.

5.22 She suggests an approach to the source/pathway/receptor model which she considers would be more realistic than the assumptions on which previous risk assessments have been based. This would take into account that PWS supplying potentially untreated drinking water to humans, should be regarded as highly sensitive receptors in the vicinity of the proposed works.

5.23 Her 'source' is major construction, excavation, forest felling and earthmoving, refuelling activities, oil and chemical storage, sanitation facilities and septic tanks. These should be designated as high risk for their pollution potential.

5.24 The 'pathway' to the receptor is through the geology. There is a lack of actual geological evidence so there should be a precautionary approach. On what is known about the Whitelee geology and citing SEPA guidelines, there should be assumed to be denuded and exposed volcanic bedrock with fractures and intergranular fill potentially allowing rapid GW flows. There should be assumed to be unquantified local fracture faults with potential for preferential GW flows so high risk of transmission due to permeability.

5.25 The 'receptor' is the high sensitivity drinking water supplies, where the sources are unmapped water and unknown, so a precautionary approach should be taken.

5.26 Dr Connor says she has been unable to get any of the statutory authorities, government, or most of the media to take her concerns seriously. However, her investigations had borne out her suspicions. She was clear in her own mind that there had been a number of serious incidents of surface and ground water contamination at WLWF, and that these must have been caused by the construction and/or operation of the windfarm. There had been ill health as a result. PWSs have silted up or become

¹⁷⁶ CH009

¹⁷⁷ CH031

contaminated. This had been discovered, but the information had not been passed on to the right authorities or had been ignored.

Mr Tim Harrison¹⁷⁸

5.27 Mr Tim Harrison of Cauldstanes, spoke on behalf of himself and his wife. Their PWS stopped without warning at the beginning of April 2007, while WLWF was under construction, and to his knowledge the same thing happened to the properties of Kingswell¹⁷⁹ and Bestfriends Cottage at Kingswell bridge. Having never been notified of any procedure relating to WLWF and who to contact should their PWS be affected, it did not cross the Harrisons' minds that WLWF might be the cause. They only subsequently discovered some time later through talking to other people that there were multiple instances around the same time of PWSs being affected similarly, or at least silting up and requiring filters changed. The Harrisons were unable to identify why they lost supply at the time despite carrying out exploratory excavations. They were never able to re-establish the old supply and had to install a new borehole for Cauldstanes at considerable expense. Given the timing, they now suspect that their original water supply ceased because of WLWF.

5.28 The Harrisons do not want to be placed in the situation where their water supply has been contaminated without their knowledge. Because of Dr Connor's research they are extremely concerned about the risks to their health through drinking contaminated water. It appears to them that the standards and guidelines applicable to the developers of wind farms seems to be different and less rigorous than other types of development and ultimately inadequate for the task in hand. Comparing the history of WLWF with the ES for the proposed development, it appears to them that the same practices and mitigation as were in place for the construction of the original windfarm and previous extensions are just to be used again, when they were in fact ineffective.

5.29 There seems to be a complete lack of consideration for residents who end up living in close proximity to these developments, to the extent they are treated simply as collateral damage. The attention to detail in the process of accurately assessing the environmental impact seems to focus on the legalities and technicalities of the guidelines and pays little more than lip service to the actual impact. Each of the ESs which have been produced for the applicant seem to be extremely generic and imprecise in relation to individually affected houses.

5.30 They consider that the Cauldstanes replacement borehole is sited in a more precarious position than their old PWS supply, and is directly downhill, in the same surface and groundwater catchment areas as the proposal.¹⁸⁰ They consider that Dr Connor's research has shown that their house will be extremely vulnerable to the contamination of ground water.

5.31 Their water source at Cauldstanes has never been located accurately by any of the experts commissioned by the developers of WLWF, including this application. Specifically, in the commissioned PWS risk assessments by RPS (2003)¹⁸¹ and Environ (2006)¹⁸² the

¹⁷⁸ Mr Harrison's precognition

¹⁷⁹ CD 023 ES figure 9.3 and figure 10.1

¹⁸⁰ as above – Cauldstanes bore hole not identified.

¹⁸¹ Not produced – carried out for another development proposal prior to WLWFO and referred to in subsequent risk assessments.

source of supply for Cauldstanes was never correctly identified. It is not identified in the application ES.¹⁸³ The proxy for the source has always been the collection tank, or the connection to the pipeline in the case of Cauldstanes, or the point of consumption i.e. the kitchen tap. These locations are not the right places to carry out monitoring, and until there is proper certainty about where the water comes from, any risk assessments will be seriously flawed.

5.32 Even though the source that supplied the holding tank for their PWS was never identified, and no attempt to find the source has been successful, the applicants seemed able to say "there is no direct pathway between the source and Whitelee". However, the DWPA's for both surface water and groundwater demonstrate that this area includes both WLWF and the "suggested" source of the Harrisons' supply.

5.33 The regulatory bodies and statutory consultees signed off the planning applications for WLWF and the two extensions despite the source of the Harrisons' PWS, and the PWSs of others, never having been correctly identified. Despite never having been identified, the PWS is designated as low risk.

5.34 If WLWF X3 is not to be refused the Harrisons would like the following conditions to be included in any approval

- a baseline investigation of their PWS by independent consultants, including location of the true source of the water
- transparency about the results, which should be made available to the people affected
- consideration of the range of necessary mitigation to protect the PWS and those of their neighbours
- consultation and agreement about any mitigation measures before work is started
- the ability to return to Scottish Ministers to have the development stopped if the results are not 100% safe
- continuous monitoring of PWS at the applicant's expense during construction and for a substantial period, suggested to be 10 years, after commissioning.

Mr Elliot Davis¹⁸⁴

5.35 Mr Davis' chief concern in relation to this application is the health of his family. He has a PWS to his house at Kingswell, but he does not know himself exactly what or where the source of his water is. He makes the point that the applicants do not know either. In his opinion very little effort has been made by the applicants for any phase of WLWF, or the various consultants who have worked for them on water supplies over the development of WLWF to find out where the source of his water is. What he sees in the various reports is a series of assumptions that he considers to be demonstrably flawed by inaccuracy.

5.36 He regards the applicant's theory that his supply comes from the vicinity of the 'Moor Farm' tank, or from a spring nearby, with deep scepticism. This application should not be determined until the source of his water is properly identified and any risk assessment should be based on accurate and complete information before any decision is taken.

5.37 The water from the taps at Kingswell is currently turbid, contaminated and unsafe. It can be seen to be cloudy and undrinkable at present. Mr Davis has to buy his drinking

¹⁸² SPR-W036 Environ 2006- Environmental Risk Assessment, Private Water Supplies

¹⁸³ CD 023 figure 9.3

¹⁸⁴ see production ED1' the Kingswell Farm Water Story' and Mr Davis' precognition.

water or borrow it from his neighbours with better supplies. He is clear in his mind that WLWF is directly responsible for this, whether through the construction or operation of the wind farm, his water was not in this state at any time prior to the construction of WLWF. When he moved into Kingswell in 2004 he was presented with a water report carried out by EAC.¹⁸⁵ Which gave Kingswell a clean bill of health. Sometime between 2004 and 2013 the tap water became contaminated and undrinkable. In 2007 it dried up completely. No water test results whatsoever for Kingswell are available during the construction and operation phases of Whitelee and its extensions, from 2006 to 2013.

5.38 He has now discovered that the applicants have been saying to Ministers that “periodic high ‘spikes’ of manganese, iron and turbidity concentrations...have been prevalent within the local PWS’s... long before... any windfarm construction activities” and that EAC has records going back to 1983 which suggest large variations in iron and manganese levels. This is news to him and does not accord with his experience of his PWS, which gave him no problems till 2007.

5.39 He has had personal experience of constant health problems over this period, now fortunately improved, that he has only recently realised could well have been caused by drinking unclean or contaminated water.

5.40 Mr Davis is very critical of the decisions which have been made by the developers of WLWF and their consultants in the past to down-grade the risk to his water supply so that it was not monitored. There was minimal consultation with him, no proper investigations, and the most basic inquiries could have been made with him which did not take place.

Other objectors.

5.41 The Fenwick Community Council and the Moscow and Waterside Community¹⁸⁶ Councils both made written representations expressing their concern that water supplies may have been contaminated.

The applicant’s response (main points only)

5.42 The applicant strongly rejects the allegations that WLWF has in fact been responsible for the pollution of public and private water supplies in the past. Properly evaluated, the evidence about the conduct of the construction and operation of WLWF, and the analysis of the available test results, demonstrates that either the pollution and the effects alleged were to all intents and purposes impossible, or so unlikely as to be excluded.¹⁸⁷ PWSs in the locality may have been subject to quality problems, but the reality was that PWSs taking water from the catchment areas around WLWF had always been subject to background contamination from surface water containing hydrocarbons from peat, and coliforms from animal wastes. In law, PWS needed to be properly monitored and maintained by their owners¹⁸⁸ including the exclusion of surface water. This had clearly not always been the case for many PWS, including Dr Connor’s supply at Airtnoch, and the Moor Tank from which Mr Davis’ supply was probably drawn.

¹⁸⁵ ED4 a and b

¹⁸⁶ objections from Fenwick community council and Moscow and Waterside Community Council

¹⁸⁷ precognition of Dr Alexander Lee and his report : SPR-W079

¹⁸⁸ see SPR-W011 applicant’s solicitors overview note on the legislative framework and precognition of Ms Saint-Martin

5.43 As regards the application, as opposed to the past history of phases of WLWF now completed, the applicant's position was that the ground water flows and the catchment areas which may be affected by the construction and operation of WLWFX3 had been properly identified and taken into consideration in the ES, just as their equivalents had been for previous phases. There had always been an acknowledgement of risk of contamination of the water environment from the construction and to a lesser degree from the operation of the turbines. In preparing the ES this aspect had been fully considered and discussed with the relevant authorities, including SEPA as the agency primarily responsible for the protection of the water environment, from which all water supplies would be drawn. SEPA were content that appropriate protective measures could be put in place.¹⁸⁹ This was why there were tried and tested measures proposed for the identification of water supplies at risk.

5.44 The applicant said that as developer/operator of WLWF they had complied with their obligations under all the conditions regimes for WLWFO, WLWF X1, and WLWF X2. While the monitoring process for the extensions had been carried out by the developer as had been required, there had been some gaps in the process on the regulatory side and no clear external appointment of a PMO by EAC had taken place for those phases.¹⁹⁰ If there was a breakdown in the planned monitoring arrangements that resulted in the consent conditions failing to work exactly as had been envisaged, the developer had done their part by collecting the information in accordance with the conditions, but EAC had failed to do theirs. This had led to the lack of timely communication of information as should be provided for in the conditions for the previous extensions, but the applicants had done what was required of them.

The allegation that public and private water supplies had been contaminated by WLWF, and that the same would occur with WLWF X3

5.45 The applicant regarded these allegations extremely seriously and was concerned to rebut these propositions completely, notwithstanding that the allegations were historic and were not comparable to the proposals currently being considered. They say that Dr Connor's interpretation of the results that she has examined, has assumed throughout that the finding of a contaminant on the site led to actual contamination. However, she has no expertise in placing the test results in the context of hydrology or hydrogeology or interpreting such information about possible ground or water contamination. This lack of expertise has led her into fundamental errors of interpretation. At best she has jumped to conclusions, and at worst she is guilty of alarmism and of sensationalising her results.

5.46 The applicant retained an independent expert from outside the existing and past consultancy team, and who had not previously been involved in WLWF, to review the test results and monitoring reports for WLWF which were available and to critically assess Dr Connor's interpretation of these. Dr Lee¹⁹¹ is an experienced contaminated land practitioner with particular expertise in the hydrological aspects of the transfer of contamination through land. He was not a wind farm supporter, having objected to these in the past himself. He brought to his assessment of the site and the available data the disciplines and concepts which had been developed by government, environmental health

¹⁸⁹ CD 028 statutory consultation responses – SEPA response

¹⁹⁰ see concluding submissions for the applicant

¹⁹¹ Precognition of Dr A Lee and SPR-W079.

specialists and the development industry in response to the contaminated land regime.¹⁹² This used the benchmark of significant possibility of significant harm in assessing risk from contamination in the ground or in ground water. This approach entails first establishing the presence or otherwise of a potential linkage or 'pathway' between the contaminative substance in question and any potential receptor. If these linkages are not present then action would not be necessary because there would be no significant possibility of significant harm.

5.47 Dr Lee emphasised that it was always important to objectively assess the robustness or otherwise of the test result. Any test result had to be understood in context. It was not sound science to take a single result and to assume that it was meaningful. It was also necessary to assess whether it made sense that such a result would have arisen.

5.48 For the subject area, the proper interpretation of test results also requires informed scientific understanding of the chemistry behind how substances are likely to behave in any particular ground environment. There should also be good information about the pre-existing chemical and hydrogeological environment. There should also be an understanding of the implications of the likely concentrations of potential contaminants present in the catchment area. Also relevant in assessing the risk of potential harm would be information about the likelihood, frequency and duration of potential exposure, as opposed to merely commenting on the observed presence of a potential contamination hazard, and assuming that could lead to an effect.

5.49 Dr Lee had conducted a review of the available data about WLWF including the two previous extensions and of Dr Connor's interpretation of it, and presented evidence based on a detailed report.¹⁹³ He had concluded

- The base line environment around WLWF is inherently variable. No consistent pattern can be clearly attributed to past wind farm activity in terms of the effects of diffuse chemistry (dissolved iron, aluminium, manganese etc.) on the water environment
- Where unexpected variations in water chemistry have been observed (such as DEHP and methyl phenols), these would appear to be spatially limited and/or at concentrations unlikely to be significant in terms of constituting likely harm
- There is no distinct spatial or temporal pattern, or evidence of long term irreversible change, that may be attributed to the different phases of wind farm construction.
- In addition to the above, dilution in receiving waters and along groundwater path lengths would additionally reduce the impact of any potential risk to any water supply.

5.50 Focussing on any area of risk of contamination to ground or water relating to the application itself, he noted that only a short section of the existing access route, next to the Whitelee control room compound, is within Lochgoin and Craigendunton catchments used by Scottish Water for public supply. It is unlikely that any operational impact from the

¹⁹² Environmental Protection Act 1990, Part II A inserted by the Environment Act 1995, and the statutory guidance (not produced).

¹⁹³ SPR-W079 Dr A Lee : Water Issues Report

existing access track areas to water supplies would be significant. It should also be noted that there are no public supply users in the WL3 catchment; consequently, there can be no complete pollutant linkage and future risk on this basis.

5.51 Evaluating the allegation that biological contamination by coliforms at the Airtnoch PWS in July 2010 had taken place as a direct consequence of WLWFO, WLWF X1 or WLWF X2, Dr Lee's opinion was that there was no realistic discernible pathway for the bacterial contamination on the WLWF site to have entered the Airtnoch PWS because of the distances between the two locations, and because of the catchment geography. Moreover, the only turbines ever installed within the Airtnoch catchment were H214, H213, H212 and G200 (which was on the watershed), and in fact these turbines were only installed after the July 2010 test results event relied on by Dr Connor that identified 170,000 coliforms.

5.52 In any event, bacterial contamination of private water supplies, metallic contamination and potential hydrocarbon contamination from peat, is evident throughout the general area, due to the background environment of the area, irrespective of wind farm construction. Many PWS are insufficiently protected from this type of contamination and will be affected regularly anyway. For example, the current integrity and protection of the Airtnoch supply from local surface runoff and surrounding pasture (sheep) is at least questionable, and appears to have been less protected in the past. Dr Lee notes that UV and filtration systems are reported as having been installed within various PWS supplies and these should mitigate bacterial hazards in future.

5.53 Overall Dr Lee concludes that there is no significant and consistent evidence that deleterious impacts on drinking water supplies will result from the application proposals based on his scrutiny of the site data as provided from each of the construction phases of WLWF.

5.54 The applicant makes the point that there is evidence from the PMO who was appointed to monitor the conditions on behalf of EAC and the other councils during WLWFO that the developer had an exemplary record of compliance.¹⁹⁴ However, for WLWF X1 and X2, EAC had not fulfilled the role expected of them in the conditions on the relevant consents, because they had not appointed a PMO. There had been a lack of clarity about what the role of the council should be.¹⁹⁵ This meant that the PMO system had not worked properly, and the developer had nowhere to send information until it was requested. This failure could not be laid at the applicant's door. The developer had done all that was required by the conditions, including carrying out the risk assessments and implementing the monitoring regime.¹⁹⁶

5.55 However, as regards this application, it is clear that all the necessary information about the geology, hydrogeology, and the hydrology of the site was in fact presented in the ES so as to allow the decision maker to come to a properly informed decision in terms of the EIA regulations. This information includes the preliminary assessment of the degree of risk to a number of PWS which had been identified as potentially affected.¹⁹⁷ A conservative approach had been taken to this. Further mitigation strategies were an integrated element of the application proposals, to ensure that future impacts on PWS would continue to be

¹⁹⁴ SPR W078 Ironside Farrar Final PMO report (2010) CH group reference 77

¹⁹⁵ CH031

¹⁹⁶ SPR W035 Atkins (2010) WLWF X 1 & 2 PWS risk assessment, and SPR W108

¹⁹⁷ Precognition of Ms Saint-Martin for SPR

appropriately monitored. In addition it must be understood that the construction of WLWF X3 would also take place in the context of the rigorous legal framework which protects all aspects of the water environment, and which had been taken into account throughout the development of these proposals.¹⁹⁸

5.56 In the application ES the criteria for sensitivity and magnitude of effects on groundwater and PWS have been defined based on relevant guidance, professional judgment and experience gained from a large variety of projects. The ES examines all potential generic effects on the groundwater environment and PWS as a result of activities associated with windfarm development within the context of the design proposed for WLWF X3. The potential effects cover construction, operation and decommissioning phases and are discussed prior to implementing any form of mitigation measures. Residual effects are also qualitatively assessed.¹⁹⁹ The assessment of potential impacts on PWS follows a precautionary approach based on a systematic desk-based process. The approach is catchment based. The hydrological catchments are well established and defined; see ES Figure 10.1. Given that hydrogeological catchments may extend beyond hydrological catchments, the ES defines a hydrogeological study area which extends conservatively beyond the defined hydrological catchments. Hydrogeological catchments are outlined in ES Figure 9.3. It should be noted that within these defined hydrogeological catchments, several sub-catchments are expected to be present, as for example in hydrogeological catchment I (as per catchments defined in the ES). As groundwater is expected to be recharged within local catchments, this systematic desk-based and detailed catchment analysis is considered to be a conservative approach in ES practice.

5.57 WLWF X3 construction activities will mostly take place in hydrogeological catchment I, with one turbine constructed within the southern boundary of hydrogeological catchment J. As described in the ES, the site is covered by peat deposits of variable thickness (recorded up to 4.97 metres) followed mostly by boulder clay (glacial till). Within the site boundary and the construction area, solid geology underlying the site consists of igneous rock of microporphyritic basalt type. Recent consultation with British Geological Survey indicates that the geological mapping of the area has been updated and that the igneous dyke shown to the south of the application site boundary is not in fact present. Even if the presence of this igneous dyke had been confirmed by the British Geological Survey (BGS), the dyke would not have intercepted the application site boundary. There are no practical implications from this updated information, which simply refines the information on which the ES was based. The BGS map does not indicate any major faults within the site boundary. This is not indicative of any practice flaw in the ES methodology. The ES acknowledges fracture flow behaviour as a groundwater flow transport mechanism within the bedrock, and this has been taken into account.²⁰⁰

5.58 The PWS potentially affected by the application have been identified through initial surveys and consultations.²⁰¹ These have been systematically screened against activities taking place in each individual catchment. The recharge zone associated with each PWS forms part of the hydrogeological catchment in which the PWS is located. The ES approach takes into account uncertainties in regard to the exact source location of PWS.

¹⁹⁸ see SPR-W011 – overview note by the applicant’s solicitors on the legislative framework for private and public water supplies

¹⁹⁹ ES Chapter 9 Section 9.8 taking into account the mitigation measures and survey and monitoring requirements set out in ES Chapter 9 Sections 9.6 and 9.7.

²⁰⁰ CD 023 ES Chapter 9, Table 9.10.

²⁰¹ as above Appendix 9.2

5.59 Recharge of water to PWS occurs through an infiltration process. Infiltration will take place mostly in areas where slopes are flat or very gentle. The water will percolate through peat and then glacial till deposits before reaching bedrock groundwater. Peat and glacial till have filtration ability through absorption and retardation. Water reaching the bedrock will travel down-gradient, mostly through fracture flow mechanism and this will allow various degrees of dilution to take place, depending on the degree of weathering (expected to decrease with depth) and the connectivity of fractures. As a consequence, it should be appreciated that the water quality of wells and springs travelling through the full cycle in drift and bedrock will be different from the water quality at the windfarm site in peat or glacial till deposits.

5.60 The ES clearly acknowledges that excavations such as the construction of turbine foundations and borrow pit locations have the potential to create a faster direct pathway into the groundwater system. These potential risks have been incorporated into the ES.

5.61 It is important to differentiate between surface water pathways into PWS via run-off, and groundwater pathways via infiltration through geological deposits. Surface water run-off will typically flow directly into surface water features. However, there should be no linkage between surface water run-off and groundwater fed PWSs as it is the responsibility of land owners to ensure the maintenance and integrity of PWS networks and in particular ensure the networks are well sealed to prevent any surface water inflows.²⁰²

5.62 The ES defines a number of mitigation measures such as pollution mitigation measures and emergency response plans.²⁰³ These are reported in Chapter 9 and a Schedule of Mitigation is provided in ES Chapter 17.²⁰⁴ Some of these are practices which have been applied during previous construction phases at Whitelee Windfarm, but the ES also identifies mitigation measures and requirements that are specific to the context and receptors of WLWF X3. Accordingly, a specific list of PWSs has been identified for detailed surveys, and upon the outcome of these surveys, a number of PWSs were identified as potentially requiring monitoring to be put in place.²⁰⁵ Should this monitoring indicate that a PWS has been adversely affected by windfarm construction activity, corrective action will be taken in accordance with the PWS contingency plan and in consultation with the relevant authority. This will be reflected in the proposed conditions regime for any consent.

5.63 Following the publication of the ES, additional information on the location of the source of some of the PWS has come forward, in particular the source of the EK2/EK3 network,²⁰⁶ which is the nearest PWS to WLWF X3 construction areas, and which may be the network from which Mr Davis supply is drawn.²⁰⁷ This work is supported by site visit information gathered on 19 February 2015 and initial rounds of water quality sampling from Moor Tank, which is understood to be either the source of the EK2/EK3 PWS network, or located immediately up-gradient of the EK2/EK3 source. This information will be taken into account in the proposed mitigation framework, but does not change the conclusions reached in the ES.

²⁰² SPR-W026 Scottish Executive (2006) Private Water Supplies Technical Manual

²⁰³ CD 023 ES Chapter 9 sections 9.6 and 9.7

²⁰⁴ as above Chapter 17 table 17.1 and 17.2

²⁰⁵ ES chapter 9 table 9.13

²⁰⁶ CD023 ES Chapter 9 figure 9.3

²⁰⁷ SPR-W004

5.64 It should be noted that since the ES was completed in August 2012, SEPA has published a new Land Use Planning SEPA Guidance Note 31²⁰⁸ on assessing the impact of development proposals on groundwater abstractions. This requires the application of buffer zones of 100 metre radius between PWSs and excavations less than 1 metre, and 250 metres where excavations are deeper than 1 metre. The potential effects, mitigation measures and residual effects identified on PWS in the ES still stand within the context of this updated guidance.

5.65 Provision has been made for further scrutiny of various PWSs and that would form the basis for further decisions about safeguards. There would then be a monitoring regime based on the previous conditions and informed assessment of risk. The construction and operation phases would require to comply not only with the conditions on the consent but the other legal requirements and practice guidance which protected the water environment as a whole.²⁰⁹ This has been fully taken into account in the ES and would operate as background to all activities on the site which might affect the water environment to any degree. This includes the oversight of SEPA and the CAR²¹⁰ regime, which will inform all that is done.

5.66 The objectors are failing to recognise or understand the existing comprehensive legal framework for the protection of the water environment generally and drinking water, including PWS. In particular, the objectors do not recognise that the primary responsibility for any PWS under the PWS regulations lies with the owner of the PWS.²¹¹ When the risk of effect on PWS was considered in the ES, SPR were entitled to assume that the PWSs were being maintained in good order by the 'relevant persons' under the PWS regulations,²¹² that tanks were properly maintained, and that supplies would be filtered or treated with UV filters.²¹³

Consultation with the statutory authorities

5.67 At the outset of the inquiry process it was unclear to us how influential on our consideration of this application the contention that WLWF may have adversely affected water supplies would be. We decided that we should investigate the allegations, with the question of relevance to this application remaining under consideration. As part of our examination of this aspect of the objections, we sought the views of the statutory authorities with responsibilities for drinking water quality on the objectors allegations, given that these had not previously been specifically raised with them. We accordingly asked these authorities for their comments on the objections and asked them if they wished to participate in the inquiry session on drinking water supplies.²¹⁴ The authorities consulted were SEPA; the two local authorities responsible for oversight of planning and environmental health for the location of WLWF, namely East Ayrshire Council (EAC) and East Renfrewshire Council (ERC); Scottish Water; and the Drinking Water Quality Regulator for Scotland (DWQRS).

²⁰⁸ SPR-W005

²⁰⁹ e.g. SPR-W023; SPR-W025; SPR-W040

²¹⁰ SPR-W005 SEPA guidelines; SPR-W010 the water environment (Controlled Activities)(Scotland) regulations 2011 abbreviated to CAR see below on the functions of SEPA.

²¹¹ Saint-Martin precognition;

²¹² SPR-W009

²¹³ SPR-W026 Scottish Executive (2006) Private Water Supplies Technical Manual

²¹⁴ See note of pre-examination meeting; procedure note; and consultation letters from DPEA to SEPA, EAC and ERC, Scottish Water and the DPEA. Note: regulators comments were invited on the "Legal and Evidential Submission" lodged at the beginning of the inquiry process by the CH group and other objections.

SEPA²¹⁵

5.68 SEPA is the key agency responsible for the protection of the water environment as a whole on behalf of the Scottish Ministers. This includes public water supply reservoirs and any water supplying PWSs, including reservoirs, watercourses, lochs and groundwater. SEPA is the responsible agency from which authorisation must be obtained for any activities which may affect the whole water environment such as discharges to surface and ground water and any engineering activities which affect the water environment. They are responsible for taking or requiring action to be taken both to avoid degradation, and for the overall improvement of the water environment. In terms of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)²¹⁶ certain works which may affect the water environment will require a licence from SEPA.

5.69 SEPA are also the primary enforcement authority for any water pollution incidents and can require works to be done to alleviate an incident. They are the main reporting authority for any water pollution offences, which are then progressed by the procurator fiscal to prosecution if that is in the public interest.

5.70 In support of these regulatory functions SEPA provide best practice advice and support to developers to avoid adverse impact on the water environment or pollution events. They are a statutory consultee for any environmental impact assessment under the regulations, and they were consulted in this application.²¹⁷ As a statutory consultee they may recommend conditions on planning consents where they consider that development may entail risk to the water environment. For this application they had explored the proposals and were satisfied with the proposed conditions regime.

5.71 In response to our consultation on the objections, SEPA commented that the objections suggest that significant hydrological and environmental impact from WLWF took place on surface water, groundwater and public and private water supplies. The wind farm construction and felling operations involved a large amount of activity within the catchment area. However, SEPA had no evidence of a significant environmental impact on surface water arising from the construction/felling activity at WLWF.

5.72 On the suggestion in the objection that there was increased carbon and phosphates over a 5 year period (2006-2011) within the surface waters arising from the WLWF site, SEPA had no evidence of a significant environmental impact on surface water arising either from the construction of WLWF or tree felling activity. They observed that the wind farm construction and felling operations involved a large amount of activity within the water catchment area. The forestry activities were undertaken in accordance with the relevant Forest and Water Guidelines but the large scale felling of trees can potentially result in short term increases in phosphate levels. The levels of construction activity may have an impact on the dissolved organic carbon, phosphate and iron, but these will also vary naturally depending on a number of factors such as the soil type, season, water temperature, rainfall and pH.

5.73 On colouration of water, in areas where the soils contain high levels of organic material, such as peatlands, it is usually naturally occurring humic and fulvic acids that are

²¹⁵ DPEA letter to SEPA, and SEPA water quality consultation response

²¹⁶ SPR W010

²¹⁷ CD 028 SEPA non statutory consultation response

the main sources of dissolved organic material and this gives many of Scotland's rivers and lochs their distinct natural brown colouration. There is no environmental standard in respect of dissolved organic carbon or total organic carbon as they occur and vary naturally and are not considered a pollutant in the water environment.

5.74 SEPA pointed out that while the protection of public water supplies fall within the remit of Scottish Water, and PWSs within the remit of EAC as local authority, SEPA is responsible for the protection of the general water environment and is aware of the private and public water supplies within the area. Commenting on the objectors' suggestion of the possibility of sewage effluent from the site affecting the water environment, SEPA observe that the discharge of sewage effluent to the water environment from a population equivalent of 15 or less is generally considered to be relatively low risk, but these are fully assessed in respect of the environmental sensitivities during consultation on any application. The current guidance in assessing the risk of small sewage discharges impacting on a downstream potable water abstraction states that if the available dilution is more than 50:1, then there is negligible risk to downstream abstractions. The provision of secondary biological treatment for the control buildings satisfies the level of treatment required for sewage discharges to watercourses of this size and sensitivity.

5.75 Asked in the consultation whether any pollution incidents relating to WLWF had come to their notice, SEPA reported that they had investigated ten environmental incidents in the vicinity of the WLWF construction site between 2007 and 2011 and provided details of these in their response. Five of the reports were unsubstantiated by the SEPA officer and no evidence of pollution was found. Two incidents of silty surface water run-off from construction activities were found to be causing minor pollution of watercourses in the Auldhouse area. The remaining three events were related to fly tipping incidents not related to wind farm construction activities.

5.76 In summary, SEPA has no evidence that any incidents on or in the vicinity of WLWF construction site were responsible for polluting public or private drinking water supplies. They did not consider it necessary that they should participate in the public inquiry session.

Local authorities

5.77 Local authorities, in their capacity as environmental health regulators, have a duty under the Private Water Supplies (Scotland) Regulations 2006²¹⁸(PWSR) to oversee PWSs in their area. This includes the duty to carry out risk assessments for PWSs, monitor their compliance with drinking standards, investigate any failures and advise on improvements to water treatment. It is the duty of the local authority to monitor PWS (in some cases), keep records, and investigate risks to health. Under the PWSR, PWSs are classified into Type A and Type B supplies. Type A are defined as those supplies which supply more than 50 persons or 10 cubic metres per day, or are used for a public or commercial activity. The other smaller PWS are Type B supplies and are those which typically serve individual properties, or small groups of properties. Type A supplies must have a risk assessment and annual sampling carried out by local authorities, but there is no such requirement for Type B, for which the obligations on local authorities are to provide advice and assistance, and to carry out risk assessment on a discretionary basis.²¹⁹ Regulation 4 provides that local authority shall, in relation to each private water supply to any premises within its area, determine, for their respective interests, those persons who—

²¹⁸SPR W009

²¹⁹ SPR-W009 Regulation 27

(a) provide the supply;
(b) occupy the land from, or on which, the supply is obtained or located; or
(c) exercise powers of management or control in relation to the supply,
and such a person is the “relevant person” for that supply.

5.78 We consulted both East Renfrewshire Council, the local authority in whose area most of WLWF fell, in case they were aware of any pollution incidents to PWSs from WLWF; and EAC, the relevant local authority responsible for the application, and for various PWSs for which effects from WLWF were alleged, including Dr Connor’s supply at Airtnoch. We did not consider it necessary to consult South Lanarkshire Council, as they would have been responsible for a comparatively small area of the WLWF site.

East Renfrewshire Council²²⁰

5.79 ERC said that they were unaware of any incidents whereby PWSs had been potentially impacted by WLWF within their area. They did not consider it necessary to participate in the public inquiry session.

East Ayrshire Council²²¹

5.80 EAC said that from the information they held, all of the PWSs mentioned in the objection within the areas assessed for the WLWFO, including Extension 1, Extension 2, and also the application site were all Type B supplies in terms of the PWSR. EAC’s response to the consultation was limited to its duties arising in relation to Type B Supplies and its involvement as planning authority in WLWFO, Extension 1 and Extension 2.

5.81 They referred to the conditions which had been put in place for in each of the deemed planning permissions granted for previous phase of WLWF.

5.82 WLWFO was consented in 2006²²² and construction completed in 2009. The application had been supported by environmental information. Planning conditions relative to water matters were imposed and subsequently discharged. These conditions were

- Condition 7.1(a) and (b) relating to monitoring reports on the environmental effects of construction with specific reference to ground and surface water;
- Condition 7.4.6 which relates to a ground water management plan; and
- Condition 7.4.7 for private water supplies. This required a PWS Risk Assessment Report to be prepared. EAC supplied a copy of the report by AAEnviron²²³ prepared in implementation of this condition which was referred to in the objectors’ submission.

5.83 EAC said that post commencement of the development, the three relevant authorities (EAC, REC, and SLC) appointed the environmental and planning consultants Ironside Farrar to act as Planning Monitoring Officer (PMO) under the conditions to monitor compliance with the planning conditions during the construction of the WLWFO site. Ironside Farrar prepared 17 reports on the Compliance with Consent Conditions, and these reports were sent to the three councils between 20/11/2006 and 3/6/2010.²²⁴

²²⁰ ERC consultation response

²²¹ EAC consultation response

²²² WLWF consent is SPR-W012

²²³ EAC Consultation response production EAC Production 1

²²⁴ SPR-W062 to SPR W077 inclusive

5.84 WLWF X1 and X2 were consented in 2010 and construction completed on both by March 2013.²²⁵ In support of the applications for X1 and X2 the applicants submitted individual environmental statements and technical appendices. Planning conditions relative to water matters were imposed and subsequently discharged.²²⁶ These were

- Condition 6.4 providing for a construction method statement (this construction method statement plan makes reference to protection of ground water and surface water)
- Conditions 6.8 and 6.9 providing for a monitoring report for environmental effect of construction
- Condition 6.44 private water supplies.

5.85 Again in implementation of the conditions requirements a report on risks to PWSs was prepared. (Atkins report June 2010).²²⁷

5.86 Private and surface water sampling results for the extension projects, dated 25 May 2010 to 9 April 2013, and in electronic format (comprising two excel sheets and two PDFs) were sent to the council on 12 September 2013, but not previously.²²⁸ (Note that the council does not mention any specific PMO arrangements for the WLWF extensions in this consultation response, but in other correspondence with Dr Connor the council has said that no external PMO was appointed for the extensions.)

5.87 As regards ground water monitoring for WLWFO, Ironside Farrar, the appointed PMO produced a number of progress reports which were submitted to the councils. Their final progress report²²⁹ submitted in October 2009 refers to an analytical report by Jacobs in 2009 on groundwater quality monitoring.²³⁰ The PMO concluded that the findings suggest that the ground water quality at Whitelee did not appear to have been impacted by the wind farm construction. However, with reference to the Jacobs report, the PMO report observes that, although unlikely to be related to the construction activities, questions remain in respect of some results showing cresols/phenols. A query also remains regarding the interpretation of the aluminium and iron results, in respect of a potential contribution of soil contamination during sampling or the effect of filtration of suspended solids (whether produced by construction activities or not) on the conclusions.

5.88 In relation to EAC's knowledge about the PWS which were alleged to have been influenced by WLWF, EAC refers to the Environ Report Risk Assessment: Private Water Supplies²³¹ for WLWFO prepared in 2006. This builds on an earlier report assembled by RPS in 2003. The Environ risk assessment report gives information about Catchment A, identified in that report, and mentions the Drumtee Water, Kingswell Burn, and Greenfield Burn, and a site visit assessment of supply of Cauldstanes Farm, Kingswell Farm and Veyatie (Best Friends) Cottage. This risk assessment also contains recommendations on monitoring.²³²

²²⁵ SPR-W013 consent for WLWF X1 and SPR-W014: consent for WLWF X2

²²⁶ conditions also produced with EAC consultation response as EAC production 3

²²⁷ Atkins private water supplies risk assessment June 2010 – EAC production 2 which is SPR-W035

²²⁸ EAC production 4

²²⁹ SPR-W078

²³⁰ as above pages A4/2).

²³¹ EAC consultation response production 1 – also produced as SPR-W036

²³² As above page 34

5.89 In relation to effects on PWS from WLWFO, EAC quoted the Ironside Farrar PMO Final Report²³³

“The data indicate no significant issues of concern resulting from the construction activities in respect of private water supplies. For the Ardochrig Mor water supply the data are inconclusive in respect of confirming the source of elevated suspended solids. Of note is the generally poor microbiological quality of most of the private water supplies, prior to and during the construction activities, which likely result from farming stock maintained on land in the vicinity.”

5.90 In relation to EAC knowledge about any specific effects on any PWS during the construction of WLWF X1 and X2, EAC refers again to the Atkins 2010 PWSs risk assessment prepared as part of these projects,²³⁴ to the consent Conditions 6.44, 6.8 and 6.9²³⁵ and to the private and surface water sampling results, which were received by EAC from the developers in 2013, after the end of the construction period.

5.91 An assessment of these results by the EAC Environmental Health Service concludes that they do not indicate significant contamination arising from wind farm construction activities. The reports do reveal a number of sample results during the construction phase which indicated the presence of coliforms. However, these bacteria are naturally present in soil and will vary in numbers due to a number of factors. Results also identified the presence of E coli (a gut bacteria of warm-blooded animals) at varying levels. This was considered to be due to factors other than wind farm construction activities. Had any sample results showing a high level of coliform and/or E. coli which might affect any PWS been known to EAC’s environmental health service at the time, this would have precipitated an investigation and would have included the service of Boil Water Notices advising the boiling of water from the private supply until such times as a programme of sampling conducted by the environmental health service was able to demonstrate that the water had returned to a satisfactory quality.

5.92 EAC were unaware that the water supplies at the Cauldstanes, Bestfriends Cottage and Kingswell properties simultaneously ceased in or around 2007, requiring new bore holes to be installed, and cannot comment on the cause of the water supply ceasing to run.

5.93 EAC has routinely sampled PWS in its area. However, EAC does not retain historic water test samples and is unable to comment on test references in the objectors’ submissions about any particular supply.

5.94 In terms of PWSR Regulation 27 (Type B Supplies and Risk Assessments) EAC as the monitoring local authority requires to provide such advice and assistance to a ‘relevant person’ for a Type B supply, as will enable that person to undertake a risk assessment of the potential risks to human health arising from their supply. EAC is not undertaking a risk assessment in terms of the private water supply regulation at Kingswell (Mr Davis). The position is that EAC have advised the owner of Kingswell to carry out a risk assessment and have provided advice to the owner in terms of undertaking this piece of work.

²³³ produced as SPR-W079 – see pages A4/2 to A4/4

²³⁴ EAC consultation production 2

²³⁵ EAC consultation production 3

5.95 As regards the Airtnoch PWS (Dr Connor's) EAC notes the references to this supply in the Environ report risk assessment²³⁶ and the Atkins Report Risk Assessment.²³⁷ EAC highlights that the PMO Final Report notes that

“chloroforms fluctuate with spikes and CRE confirmed high reading due to movement of sheep and increase in flock numbers after lambing time in conjunction with heavy rain.”²³⁸

5.96 In relation to this application and the applicant's approach to which PWSs should be tested, EAC would not support any view that Kingswell is the only property with a PWS that requires to be tested. EAC would expect to see a comprehensive risk assessment for any potentially affected PWSs in the same form as that undertaken for WLWFO and WLWF X1 and X2, if consent were to be granted for Whitelee Extension 3.

5.97 EAC considers that should the application be granted then appropriate conditions should be imposed dealing with water (including ground water, surface water and private water supplies) to ensure that the quality and quantity of water and water supplies is suitably protected, with sufficient assessment being provided prior to discharge of relevant planning conditions and with appropriate mitigation measures implemented as approved.

5.98 In view of EAC's limited role as a private water regulator in relation to its duties under PWSR 2006, and in the present case, which duties only extend to Type B Supplies, EAC did not wish to take part in the public inquiry session on this matter.

Scottish Water

5.99 Scottish Water is the provider of public water supplies. The Water (Scotland) Act 1980, stipulates that Scottish Water must provide a supply of wholesome water sufficient for the domestic purposes of all owners and occupiers of premises. The Public Water Supplies (Scotland) Regulations 2014 require Scottish Water to carry out risk assessments for all water supplies under their control. These duties do not extend to an absolute guarantee that public water supplies will always be harmless to public health. However, Scottish Water must, when exercising its functions, have regard to the interests of persons whose premises are connected to, or might reasonably become connected to, the public water supply. It must have particular regard to persons who are likely, because of a persistent disability, a medical condition or family circumstances, to require to have a much greater supply of water, or to make much greater use of facilities for the disposal of sewage, than might ordinarily have been expected. It must also have particular regard for persons normally resident in a rural or remote part of Scotland. Scottish Water must seek to ensure that its resources are used economically, efficiently and effectively. The Water Industry (Scotland) Act 2002, as amended by the Water Resources (Scotland) Act 2013, specifically requires Scottish Water to take reasonable steps to use its resources in support of renewable energy.

5.100 In response to our consultation on the objections Scottish Water confirmed that they were responsible for the water supplies derived from the Amlaird Water Treatment Works (WTW). The catchment that feeds the WTW is covered in blanket peat which, when wet, releases organics into the reservoir. This is not unusual and has been observed in many

²³⁶ EAC consultation response production 1

²³⁷ EAC consultation response production 2

²³⁸ SPR-W078 Page A/4/3

similar areas across the UK. The raw water quality at Amlaird WTW is generally good, however, raw water colour is consistently high. In addition to this, changing weather patterns can sometimes impact on a raw water supply (before treatment). Historically, the water treatment process has experienced difficulties meeting the very high quality standards at certain times of the year and during these challenging weather conditions. This predates the wind farm project and Scottish Water has no conclusive evidence to suggest that the Whitelee wind farm has affected raw water quality.

5.101 Scottish Water have been undertaking studies aimed at improving the water quality and establishing how best to achieve this for customers in the area. To help address the issues, Scottish Water have agreed with the DWQR that they will design a sustainable solution for customers which complies with all new standards for drinking water quality well into the future. It is important to note that this improvement work would have been required regardless of whether a wind farm was built or not.

5.102 Scottish Water made the point that for any activities within a Drinking Water Protection Area (DWPA), as is the case here, it is essential that water quality and water quantity are protected and best practice at the time should be adopted. They provided the current list of precautions and protection measures Scottish Water requests to be taken within a DWPA.

5.103 Scottish Water has no evidence to suggest that the construction of WLWF has affected the public water supply. However, they recognise that the potential impact of this type of development on water sources requires greater understanding and as a result Scottish Water has commissioned research to explore a range of potential impacts from windfarms from the short-term construction phase, but also longer-term changes, for example those associated with dissolved organic carbon quantity and quality change from altered peatland hydrology.

5.104 Scottish Water did not wish to participate in the public inquiry session.

The Drinking Water Quality Regulator for Scotland (DWQRS)

5.105 The DWQRS is responsible for the oversight of both public and private water supplies. The Regulator's general functions are derived from law implementing the Drinking Water Directives and are to ensure that the drinking water quality duties imposed on the public water supplier are complied with, and also to supervise local authorities' enforcement of their duties as regards PWSs. The Regulator has powers to obtain information relating to the quality of water supplied, and has enforcement powers where it reasonably believes that the water supplier has contravened a drinking water quality duty and the contravention is likely to recur, or that a supplier is not taking appropriate steps to rectify the contravention or (as the case may be) preventing its recurrence.

5.106 In response to our consultation on the objection, with reference first to the allegation that WLWF had affected public water supplies, the DWQRS explained that a public water supply in Scotland is one provided by Scottish Water. Scottish Water must make itself aware of the quality of the raw water it is abstracting, and assess risks to raw water quality from circumstances and activities in the catchment, however they may arise. Variation of raw water quality can occur for a number of reasons such as climatic changes, rainfall events, temperature variation and land use. The treatment processes and assets used by

Scottish Water must be appropriate for the raw water quality and be sufficiently robust to deal with variations in quality.

5.107 There are potentially many development types and activities in drinking water catchment areas which could have an adverse impact on raw water quality in the environment. DWQR expects Scottish Water to work with catchment stakeholders, and with SEPA, to minimise the risks of activity in its catchments on raw water quality. Where necessary, adjustments should be made to treatment processes in response to changing raw water quality in order to ensure that the water supplied to consumers remains wholesome, and compliance with the regulatory standards is unaffected.

5.108 The DWQRS is aware that Scottish Water has carried out a detailed risk assessment for the Amlaird water supply zone (a drinking water safety plan) and has in place arrangements for liaison with catchment stakeholders.

5.109 As required by the Public Water Supplies (Scotland) Regulations 2014 DWQR has been notified by Scottish Water of the occasions when water supplied from Amlaird Water Treatment Works (WTW), and supplied to consumers in Amlaird Water Supply Zone, has not met the regulatory standards. Failures have occurred for a number of parameters, including the iron and total trihalomethanes parameters, although these have not breached health-based guideline values set by the World Health Organisation²³⁹. All such regulatory failures are, and have been, reported to the Consultant in Public Health Medicine at NHS Ayrshire and Arran so that, following discussion with Scottish Water, measures may be taken, if necessary, to protect consumers. No such measures have been considered necessary in Amlaird Water Supply Zone.

5.110 The DWQRS notes that the representation from Fenwick Community Council expresses concern over what they term as “dangerous contamination” in the water supply. The Regulator is concerned that public anxiety and loss of confidence in the public water supply has been fuelled by a selective and, at times, inaccurate use of data and factual information. The exceedences of regulatory standards for drinking water quality have not been at a level that could be described as ‘dangerous contamination’ and have not exceeded the World Health Organisation Guidelines Values for drinking water. The Guidelines define safe drinking water as water that does not represent any significant risk to health over a lifetime of consumption.

5.111 DWQR has investigated a number of incidents where the quality of water supplied by Amlaird WTW has not met the required regulatory standard. In the period 2010 – 2012, six such water quality incidents were declared at the treatment works and one in the water supply zone. The investigations into regulatory sample failures and water quality incidents primarily concern the performance and operation of the treatment process and do not extend to attempting to identify the cause of any factors affecting raw water quality in the catchment. The investigations and information from Scottish Water indicated that sudden variation of raw water quality had occurred prior to some of the incidents, which highlighted deficiencies with existing treatment processes and equipment. The regulator concluded that the reasons for failures of the water quality standards in the Amlaird supply zone arose principally from the weaknesses with the existing treatment process, monitoring and its operation.

²³⁹ some WHO guidelines for various substances in drinking water are produced as SPR-W028 (petroleum products); SPR-W029; SPR-W031 (Iron); SPR W032 (Manganese)

5.112 Amlaird WTW has been inspected by DWQR on two occasions, first in 2009 and again in 2012. On both occasions the audit report notes the challenge presented to the treatment work by the raw water quality, and deterioration in raw water quality is referenced in the 2012 report. A number of recommendations were made regarding improvements which Scottish Water could make to the existing processes and their operation. Scottish Water has implemented these, and DWQR has noted the efforts made by Scottish Water in order to improve compliance.

5.113 Although the work undertaken by Scottish Water has had a beneficial impact on the quality of water supplied in Amlaird Water Supply Zone, the DWQR has determined that failures could recur as the treatment processes in use are not sufficiently robust. Consequently Scottish Water were advised in March 2013 that enforcement action was under consideration. In response, Scottish Water has committed to undertake the work necessary at Amlaird to ensure consistent and lasting compliance. This work must be completed by March 2017.

5.114 The DWQRS considers that some of the quotations in the objectors' submission from the regulator's report to the NHS Consultant in Public Health Medicine (CPHM) about the Amlaird supply incidents require to be placed in context and that some information has been omitted so that the complete picture is not given. For example, the full text reports that on some of the occasions when plant appeared to be struggling, the raw water colour was within design specification.

5.115 Section 6.7 of the objectors' submission references three drinking water quality incidents relating to Amlaird, but do not include all details. These incidents were assessed by DWQR, and prior to two of them, raw water quality had deteriorated suddenly for reasons which were clearly not related to WLWF and presented a significant challenge to the Amlaird WTW. DWQR highlights that the report found that changes in raw water quality resulted in increased turbidity throughout the works and the extreme operating conditions exposed process deficiencies and plant reliability issues. These hampered the optimisation of the overall processes within the works and were significant in the extended duration of the incident. A third incident referenced by the objection was in December 2010, when a significant factor was extreme cold weather, when a very high number of bursts occurred in the distribution network, causing increasing flows and requiring a very high output from Amlaird WTW.

5.116 In summary, the DWQRS has investigated all regulatory sample failures and drinking water quality incidents associated with Amlaird WTW and is satisfied that they arose principally from weaknesses with the existing treatment process, monitoring and its operation. The DWQRS notes that Scottish Water has carried out a detailed risk assessment for the Amlaird water supply zone (a drinking water safety plan) and has in place arrangements for liaison with catchment stakeholders. It is the regulator's expectation that the risk assessment will be reviewed to reflect any changing circumstances which may occur should the construction of Phase 3 of Whitelee wind farm proceed.

5.117 As regards the DWQRS' responsibilities for PWSs, these are monitored and regulated by local authorities. Drinking water quality standards are set out in the PWSR 2006. The DWQRS observes that the on-going responsibilities for maintenance, including costs for risk assessment and monitoring, lie with their owners and users. Local authority duties with regard to Type B supplies are largely discretionary duties to provide advice, risk

assess, and monitor on request from the owners and users. DWQR receives an annual data return from local authorities on the quality of private water supplies and their locations. The amount of data available is limited, as Type A supplies are generally sampled once per year for the purposes of the 2006 Regulations and Type B supplies much less frequently. The regulator is unable to provide detailed comment on the issues raised by the objectors as the regulation of these supplies is a matter for local authorities and the data set held by DWQR is limited.

5.118 The regulator comments that the quality of private water supplies in Scotland is highly variable and compliance with regulatory standards is lower than that of the public supply. This is due to many factors, including lack of, or inadequate, treatment; poor maintenance of treatment and/or storage structures; and poor source protection. It is unlikely to be possible to attribute changes in the quality of an individual supply to any particular factor without considerable investigation including extensive water quality sampling over and above the sampling undertaken in order to demonstrate compliance with the 2006 Regulations.

5.119 As regards the application, assessing the risks to any PWS from Phase 3 of the wind farm, DWQR cannot provide detailed comments, but would expect the relevant local authorities to provide information on the location of such supplies in order that they are appropriately considered.

5.120 The Regulator did not consider that he could add any further information to that supplied and consequently, did not intend to participate in the public inquiry session.

Reasoned conclusions on the impacts on the water environment.

The precautionary approach

5.121 The CH group suggested that the precautionary approach should be adopted. We take account of the precautionary principle as defined in SPP.²⁴⁰ The precautionary principle should be applied when considering whether a development consent should be granted, where the impacts of a proposed development are uncertain, but there is sound evidence indicating that significant irreversible damage could occur. The precautionary principle should not be used to impede development without justification. If there is any likelihood that significant irreversible damage could occur, modifications to the proposal to eliminate the risk of such damage should be considered. If there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.

5.122 We first consider the factors common to all previous phases of WLWF, and also to the evaluation of the application.

The water environment of the Whitelee plateau

5.123 In considering the context within which any findings in fact should be understood, we note Dr Lee's summary observations about the hydrology and hydrogeology of the Whitelee plateau. He said that environmental systems such as groundwater migration across and through a catchment area are typically complex and subject to an interplay of long term

²⁴⁰ CD002 parag 204.

processes and short term events that may vary both spatially and with time. They are subject to seasonal variation and weather events. They are rarely static, are subject to change and are often transient.

5.124 This being said the geology and hydrogeology of the Whitelee plateau is understood among the relevant experts, and they generally agree. The underlying geology generally comprises hill peat, often quite deep, and alluvium, laid over glacial till and bedrock. The alluvium and the glacial till will be present in differing depths and locations. There will probably be some ancient weathering and cracking of the bedrock. There are a number of faults present over and near the WLWF site, and near the application site.²⁴¹

5.125 Dr Carroll, Dr Connor's correspondent expert,²⁴² summarised his view of the water flows in the geology by saying that the greatest potential for impacts to water supply is to surface water in streams and reservoirs, both through direct overland runoff and through near surface groundwater flow within and at the base of areas of peat. While water flow rates in compacted peat would be expected to be low, there is potential for more rapid water flow in 'pipes' or air gaps in the peaty soil and in higher conductivity layers at the base of the peat. This means that the possibility of more rapid communication between contaminant infiltration and discharge to surface water should be recognised and addressed. As to groundwater, Dr Carroll's view was that the generally low hydraulic gradients and hydraulic conductivities expected in underlying glacial till mineral soil are such that groundwater velocities would be expected to be very low and hence that direct contamination of water extracted from wells in superficial deposits at distances greater than a few hundred metres from the wind farm boundaries is unlikely to have occurred in the period since construction began in 2006. He said that there was risk for off-site transportation of groundwater through higher hydraulic conductivity alluvial sand and gravel deposits, but this possibility is mitigated somewhat by the generally discontinuous nature of alluvium in the stream channels that traverse the wind farm area. This is all in similar vein to the applicant's picture of the hydrogeology, with only some differences of emphasis.

5.126 We also accept that authoritative expertise has been applied in all the ESs which have been prepared for each previous phase of WLWF. There has been no equally expert challenge demonstrating any fundamental misunderstandings or deficiencies to the work that was done. Dr Carroll, in particular, tends to agree with the descriptions of the geology in the ES, and the conclusions reached. This extends to the interpretation of the geological underlay and the hydrogeological and hydrological systems which may be affected by the construction and operation of the application. We include in this finding of appropriate expertise the various risk assessment reports which have been prepared for the developers of WLWF, including the risk assessments carried out by Environ UK in 2009²⁴³ and the equivalent study by Atkins in 2010²⁴⁴ and also the application for the extension. Similar expertise has been deployed by SEPA. We do not consider that any deficiencies have been shown to be present in the professional understanding of the Whitelee plateau against which judgements have been made.

5.127 A deficiency of understanding of the geology is a crucial element in Dr Connor's hypothesis that there was and would be a route or pathway between contaminants arising

²⁴¹ CD023 ES chapter 9 figure 9.2 and BGS Map 22E 20

²⁴² CH 106 Dr Carroll's report to Dr Connor.

²⁴³ SPR-W036

²⁴⁴ SPR-W035.

on the WLWF site and water supplies.²⁴⁵ She suggests that there is a lack of actual geological evidence, so a precautionary approach is required. She supplies a diagram which suggests direct and immediate hydrological connectivity across the area. She places emphasis on the borrow pits, as a potential route for water contaminated at surface into the ground water, given that they can be quite large quarries which could be exposed volcanic bedrock with fractures and intergranular fill potentially allowing rapid ground water flows. She assumes the presence of 'unquantified local fracture faults' with potential for preferential ground water flows. She places emphasis on the distinctions made between the hydrological connectivity of peat and alluvium or glacial drift, suggesting they are much more conductive of water than has been assumed. This hypothesis of greater hydrogeological connectivity appears to be Dr Connor's own, and is not accepted or supported by expert views, including SEPA.²⁴⁶ Her approach tends to ignore the influence of attenuation (discussed below) as ground water moves through strata and the influence of high water levels and an extensive saturated zone. We were not provided with any expert evidence which supported Dr Connor's contention that the basaltic bedrock should be assumed to be extensively fractured. We find Dr Connor's assumptions in this model to be improbable.

5.128 The CH group suggested that the applicant's evidence was fundamentally flawed because an outdated version of a BGS map²⁴⁷ had been used in the ES.²⁴⁸ The updated map showed the deletion of a geological dyke previously thought to have been present, but which was in any event outside the application site. The other geological information was largely the same, for example as regards the location of known faults. We do not consider that the use of a BGS map which had been superseded by a more recent version had any bearing on the conclusions drawn for the ES, nor do we consider that the use of an older map suggests any major failing on the part of the applicants or their consultants.

5.129 Overall, we are content that the underlying strata of the Whitelee plateau are understood; that the surface water catchment areas have been properly identified in the ES, the hydrogeological catchments conservatively estimated, and that the basis of projections of ground and surface water flows in the ES are sound.

Hydroconnectivity

5.130 We note that the certain principles apply to the likelihood of the transmission of pollutants through either ground water or surface water. As water moves through the ground, natural processes reduce (or attenuate) the concentration of many contaminants, including harmful micro-organisms.²⁴⁹ The degree to which attenuation occurs is dependent on the type of soil and rock, the types of contaminant and the associated activity. Attenuation will also depend on the chemistry of a pollutant in water and on the amount of pollutant in question. Attenuation is generally most effective in the unsaturated zone, i.e. above the water table, and in particular in the upper soil layers where biological activity is greatest. Thus microbiological, and to a lesser extent, chemical contaminants, are removed, retarded or transformed by biological activity. Once the saturated zone/water table is

²⁴⁵ CH group concluding submission page 74

²⁴⁶ CH 119 FOI response to Dr Connor

²⁴⁷ updated map produced by CH group -BGS Map 22E 20

²⁴⁸ see procedure notice requesting further submissions on this document and the submissions of parties – also concluding submissions by CH group and applicants.

²⁴⁹ SPR W001 SEPA groundwater protection policy for Scotland and SPR-W140 World Health Organisation Guidelines for Drinking Water Quality.

reached, attenuation usually becomes far more limited, and natural die-off and dilution then come into play.²⁵⁰ This effect means that the distance a potential pollutant would have to travel through the ground is a factor to be taken into account in any risk assessment. This principle is generally reflected in regulation policy on ground water²⁵¹ and guidance on the construction of wind farms.²⁵²

The risk of pollution

5.131 There is a risk that construction and operational activities on a windfarm site could give rise to pollution of the water environment. This has been well recognised in all previous permission processes and in the management of the phases of WLWF construction and operation by SPR. It has been recognised in the ES for the application. The question is how pollution is prevented in the first instance, and then if pollution should occur, how it is quickly detected and then addressed.

Background contamination: discolouration; metals and bacteria

5.132 We find from the evidence that all the water catchment areas in question here, including the Drinking Water Protection Area²⁵³ would include surface and ground water affected to a greater or lesser extent by the peaty ground. This would result in colouration, and some hydrocarbon substances from the peat. Equally, we accept that some minerals including metals will be present in the background water chemistry as a natural occurrence from time to time. We also accept that these phenomena would be affected by the amount of water in the system and by weather conditions.

Particulate matter

5.133 One of the recognised risks is that ground engineering would result in silt or other particulates being disturbed and entering the water environment, mainly surface water. The risk of this is mitigated by a strict and well informed approach to the management of any construction, and adherence to best practice on pollution avoidance. There are some examples of incidents where silting of water courses is known to have happened as a result of WLWF activity and these show that the WLWF constructors were able to act quickly and to the satisfaction of SEPA.²⁵⁴ This is the type of situation where SEPA would have been the primary regulator, and we place considerable weight on the views of the agency given their knowledge of the WLWF project and windfarm construction generally.

5.134 One of Dr Connor's key propositions is that particulates disturbed by WLWF construction began to block up PWS, and indeed she says that this is one of the things that first alerted her to the possibility of water contamination. The fact that the PWS at Kingswell and Cauldstanes also stopped suddenly in 2007 has also been argued to be a clear indicator of a causal link between WLWF and PWS.

5.135 However we find that the evidence of a causal link is not straightforward. We note for example that investigations for the developer at Ardochrig²⁵⁵ where a farm water supply

²⁵⁰ CH037 - British Geological Society and others - Groundwater and its susceptibility to degradation

²⁵¹ see for example SPR-W001 and SPR-W005

²⁵² SPR W005 SEPA guidance note 31 : Guidance on Assessing the Impacts of Windfarm Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems

²⁵³ see precognition of Dr Lee (as corrected) and CH 154 - Maps of Drinking Water Protected Area and Whitelee Windfarm Extension

²⁵⁴ SEPA response to water supplies consultation – appendix.

²⁵⁵ CH012 Jacobs Engineering UK Ltd (2008) Report on Borehole Ardochrig Mor 18-02-2008

became blocked, led to the conclusion that there was not a clear link between the work on the windfarm and the cessation of supply. If that supply came from deep bedrock, fissures in the otherwise impervious rock could well become blocked by mud at any time, as this is a feature of such supplies. There was also a possibility that either lack of maintenance, and very high water flow levels due to weather could be factors. It was also possible that the blockage was linked to surface water or farm activities or additional silt running off the road.

5.136 As regards the problems with the PWS supplying Kingswell, Cauldstanes and Best Friends cottage, it would appear to us on the balance of probabilities that all or some of these properties were originally served from a very old network of tanks and pipes installed by the Rowallan Estate, and that it is possible that the Moor Tank formed part of this network. The precise nature and extent of the cessation of supplies in 2007 was never diagnosed. Mr Harrison abandoned his attempts to trace the blockage and installed a borehole on his property. Mr Davis' supply has apparently resumed, but as he says himself, it does not appear to be clear water, but is affected by particulate matter. Mr Davis' current supply is clearly being affected by something, but on the evidence, if it was coming direct to Kingswell from a spring and not from a collecting tank such as the Moor Tank, it appears to us that particulates in the supply would be less likely. We are inclined to agree with the applicants that source EK2/3 and /or Moor Tank is a strong candidate for being part of the Kingswell supply. We deal with the implications of the remaining uncertainty about this below. On the balance of probabilities, we prefer the explanation that these supply failures arose from a collapse in the old water supply network, rather than the proposition that particulates from the WLWF site, more than two kilometres away, would have affected the ground water at these particular supplies.

Public water supply

5.137 In our view Scottish Water, who take water from the Whitelee plateau, and treat it for the public water supply, can also be regarded as authoritative in their knowledge of the water environment here. Suggestions have been made that Scottish Water have been partial in their responses because they benefit financially from WLWF. Not least in the face of the Scottish Water statutory responsibilities, and the extent to which Scottish Water is regulated, and the correlation between their comments and those of SEPA and the DQRS, we would dismiss this proposition. We note that Scottish Water have openly explained that they have had some issues in maintaining the standard of supply from time to time, but they are aware of the reasons for their problems from this system, which are to do with the performance of the treatment plant in a challenging location, and are taking action to address these. Public health has not been put at risk. They have been clear that they do not consider that WLWF is responsible for these problems, and neither does their regulator, the DWQRS. Scottish Water is not dismissive of the idea that windfarm construction could affect water supplies and is commissioning research. This notwithstanding, Dr Connor's suggestion that Scottish Water have supplied dangerous water to the public as a result of WLWF is robustly rejected.

5.138 We note that Dr Carroll, for Dr Connor, considered that the potential for major adverse impact on municipal water supply from poor handling of chemicals is low because of the small volumes likely to be involved and the probably very slow transit times.²⁵⁶

²⁵⁶ CH 106

5.139 In our view Dr Connor has not established on the balance of probabilities that work on WLWF has been responsible for any environmental effects on the public water supply which would not have arisen from the background hydrological or hydrological circumstances in the water catchment area. She has not established on the balance of probabilities that pollution from WLWF resulted in 'over- treatment' of the public water supply by Scottish Water with chemicals which could have endangered human health.

Private water supplies

5.140 Private water supplies can be derived from a wide variety of sources, such as boreholes, springs, or wells. In principle, they should be derived from groundwater. PWS should not be derived from surface water, because surface water can readily become contaminated. Groundwater is all water which is below the surface of the ground in a saturated zone, and which is in direct contact with the ground or subsoil. The saturated zone is where all the cracks in the rock and all the spaces between the grains of rock or within the soil are filled with water, and the upper limit of the saturated zone is usually referred to as the water table.²⁵⁷

5.141 The protection of groundwater is important because groundwater moves slowly through the ground so any impact of human activities may not be quickly recognised. Once polluted, groundwater is often very difficult and very expensive to clean up, even after the source of the pollution has been removed. Groundwater is also the base flow for surface water systems, allowing streams and rivers to flow in dry weather. However, not all groundwater is vulnerable to the risk of pollution from a given activity, because of the natural characteristics of soil and rocks. Distance between pollutant and receptor is also a factor here, as mentioned above.

5.142 The legal position for PWS which serve less than 50 people is that these are designated type B supplies under the PWSR. For each of these supplies the local authority is required to identify a person who has influence over that supply as the 'relevant person'²⁵⁸. That determination gives the authority somebody they can deal with in relation to that supply. The PWSR also require the local authority to keep very detailed records about PWS in their area²⁵⁹. Beyond the identification of the relevant person the obligations of the local authority towards the management of a type B supply are limited to discretionary risk assessment, and advice and assistance to the relevant person, although they do have powers to act if standards are breached.

5.143 The consultants to the applicants have maintained that the implications of the legal position is that any developer is entitled to assume that PWS will be maintained primarily by the people depending on them. This means that collecting tanks, for example should be regularly cleaned and maintained, and that some water supplies should be subjected to secondary treatment for bacterial contamination. In particular there should not be linkages allowing surface water to enter the PWS.

5.144 We agree that any person who takes their domestic drinking water from a PWS should act responsibly and actively take steps to ensure that the water used is clean and wholesome. They cannot assume that the water will be as clean as the public supply and that somebody else is checking it for them. There needs to be an informed and responsive

²⁵⁷ SPR-W001- SEPA Policy No. 19 Groundwater Protection Policy for Scotland (November 2009) -

²⁵⁸ SPR-W009 regulation 4

²⁵⁹ as above part X

attitude which is watchful of the integrity of the supply. People using a PWS can also consult the local authority and take advantage of the advice available to them.

5.145 We did not find that essential principle to be fully appreciated by the objectors. We were concerned that Mr Davis says he does not know where his water comes from himself. We did not feel that is a prudent position to take. In our view, anybody who takes water from a PWS and becomes concerned about its quality should promptly be taking steps themselves to establish a safe supply irrespective of their view of the cause of the problem.

5.146 We find on the evidence that many PWS in the locality have not been secure from surface water contamination. Some may have been recently improved, but this has not always been the case. It is firmly established that where surface water can get into the supply, such as where nearby land is grazed, or exposed to wild animals, there is a real risk of bacterial contamination. On the balance of probabilities we find surface water getting into the supply to be a more likely source of the high coliform readings disclosed by the water testing carried out for WLWF. In particular, given the distances and the dilution which would have occurred we exclude the possibility that this was caused by 'lack of use of welfare facilities' by anybody on the WLWF site.

Sufficiency of ES information about PWSs

5.147 Current guidance from SEPA²⁶⁰ indicates what information SEPA will require when consulted on any application or on an ES. This includes the identification of public and private groundwater abstractions within certain distances of development to allow SEPA to assess potential risk for the purposes of their consultation. These distances are a) within 100 metre radius of all excavations less than 1 metre in depth; b) within 250 metres of all excavations deeper than 1 metre. SEPA asks for the source location (including National Grid co-ordinates); the source type e.g. spring, borehole etc.; and the use e.g. domestic water supply. SEPA emphasises that it is critical that it is the source of the abstraction, and not the property that it supplies, that is identified and this should also include points of use located beyond the radius if the abstraction source lies within the zone. This particular guidance was not in force at the time of the compilation of the ES. However, we note that SEPA is content with the content of the ES and has not suggested when consulted subsequently that there are deficiencies in the information about PWSs it contains.

5.148 The objectors contend that the ES is deficient because it does not give Ministers sufficient information about the exact sources of the PWS which are identified as potentially affected by the application. and cites the SEPA guidance in support of this. The application ES contains the source of certain water supplies, and information suggesting the source of others subject to further inquiry. This information is to an extent based on earlier surveys, and has been refined as more information has come forward or as the situation has changed, such as when boreholes have been installed. It is not speculative in nature, in our view, but is based on systematic research and inquiry, even if it is not wholly complete. However, it should be noted that the application ES is predicated on the assumption that further work would be done where necessary to refine the information on which further risk assessments will be based. We consider that at the time of compilation the ES water environment chapters met industry standards. The underlying approach is that risk is acknowledged, and certain PWS are identified as being at risk. It has not been suggested that the names of any PWS which should be considered have been omitted. The ES

²⁶⁰ SPR-W 005

includes a requirement that the identified PWS will be studied and a further risk assessment will be prepared. The current SEPA guidance advises what information the key agency considers is necessary and as SEPA, with others, will be a water environment regulator for the development process, it can be expected that the risk assessments which are yet to be carried out will follow that guidance. The same SEPA guidance emphasizes the importance of using information about PWS held by the local authority, who will also have a role in the risk assessment process. We consider that as it stands the ES meets the requirements of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 in that it provides Ministers with enough environmental information about the potential impact on PWS and provides an acceptable level of mitigation strategies to both manage and respond to any impacts.

The source/pathway/ receptor model

5.149 We found the concept of source/ pathway/ receptor to be helpful in assessing the likelihood of any contamination reaching drinking water. For the reasons given above, we also place importance on the principle that physical distance between the source and the receptor is an important element of assessing both whether there is a significant risk of transmission, or whether transmission is likely to have taken place. This is principle has been consistently expressed by a number of experts in assessing hydrogeology and hydrology, including not only the witnesses for the applicants here, but also the environmental consultancies who have complied the ES data, and the PWS risk assessments for each of the previous phases of WLWF, and for this application. We note the importance of peat as a filtration medium. We also note that water moves through ground strata in a number of ways, including not only filtration but also through peat pipes, for example, or along fissures or faults. We do not however consider that there is any evidence that these transmission mechanisms have not been taken into account by SEPA or the various experts who use distance between source and receptor as a factor in assessing risk.

The analysis of environmental information and the interpretation of test results.

5.150 As a recognised expert in the field of evaluation of risk in land and water contamination, we also give considerable weight to Dr Lee's summary of the criteria which should be applied in seeking to draw a conclusion about whether any deleterious effects may in fact have occurred on water supply quality and receptors, and we have applied these principles to our consideration.

5.151 He said that to be found to be significant, any observed change must be

- significantly distinct from that which could arise due to seasonal variations
- occurring at a concentration or level that may be deemed as significant
- occurring over a duration which a given wind farm activity may be clearly identified as having likely contributed (on the balance of probabilities)
- indicative of long term irreversible environmental change or acute immediate risk.

5.152 Dr Lee also made the point that any particular test result had to be scientifically valid. It had to make sense. Industry practice accepts that in any testing regime there may be –

and in some instances there were quite likely to be some errors arising from the testing process itself. We note the views of SEPA expressed to Dr Connor along similar lines.²⁶¹

5.153 We accept Dr Lee's finding that where unexpected variations in water chemistry have been observed (such as DEHP and methyl phenols) on the WLWF site, these would appear to have been spatially limited across the site, and were therefore unlikely to be evidence of widespread pollution incidents. It was also important to note that where chemicals were found, they were generally at concentrations not considered to be significant in terms of constituting likely harm. We further understand from the evidence that it is very unlikely that relatively small instances of chemicals would have any significant effect on ground water some distance away. It cannot be assumed, as Dr Connor wishes us to do, that chemicals found on the WLWF site would be likely to be persist in the ground water, and would get into the PWS as a result. Further plausible evidence of a likely transmission mechanism would be necessary, and that has not been presented.

5.154 Overall, we find from the evidence that on the balance of probabilities the chemicals found on the WLWF sites' monitoring reports would not have migrated into the water table to any significant degree and would not have affected any water supplies drawn from ground water. It is also unlikely that they would have reached PWS tanks through a surface water pathway given the distances involved. In some instances there is real doubt about whether some chemicals found, notably DEHP, was actually present on site at all, or was in fact a false result from testing equipment. We note that SEPA shares Dr Lee's suspicion that the results showing DEHP, in particular, was a testing error. What the WLWF monitoring results all tend to show was that instances of chemical pollution were of low magnitude, and were not at harmful concentrations.

The pollution prevention principles behind previous condition regimes.

5.155 We have found that it was clearly recognised in all of the ES for each previous phase, and reflected in the conditions imposed on the section 36 consent, that there was risk of an effect on the environment, including the water environment and PWS, by reason of the works which would take place. That possibility was clearly taken into account in deciding whether consent should be given in each case. The consent conditions accordingly contain a number of measures designed to protect the environment from pollution. The general principle in each consent was that such risks could be mitigated (first) by good site management to avoid pollution, and (second) by the monitoring of any aspect of the environment which could be identified as being at significant risk of impact, in order to identify whether potential impact had in fact occurred despite measures to the contrary. As an element of the conditions strategy in each case there was to be a PWS risk assessment strategy drawn up by the developer, which was to be approved by the planning authorities, partnered with a pollution avoidance plan. The planning authorities also clearly had a role in being advised of the progress of the project, and of ensuring that all the conditions measures, of which PWS strategy was only one, were adhered to by the developer of WLWFO.

5.156 We note that Dr Carroll, advising CH group, also suggests this overall approach for the application.²⁶²

²⁶¹ CH 119

²⁶² CH 106

5.157 Thus each of the three conditions frameworks for the previous phases of WLWF contains a number of protective and monitoring conditions which could indirectly involve the protection of the water environment. Examples of these include the conditions which define the consent; the requirements for final agreement on the siting of the various elements of the development; the creation and control of borrow pits; the conditions which require various subject specific 'plans', other than those discussed below, and measures designed to avoid peat instability. The reason given for many of the conditions is the avoidance of pollution on site, which is a dominant and recurring theme throughout the framework. There is some cross over with those conditions designed principally to control effects on natural heritage aspects, which involve consultation with SNH. There are also conditions specifically designed to avoid oil spillage or other particular pollution incidents.

5.158 It is also the case that the developer in their conduct of all phases of construction required to comply with the requirements of SEPA for interventions with the water environment under the CAR regulations. Sometimes that will have required no more than compliance with practice guidance and the general binding rules, and sometimes more formal compliance will have been required. We regard this as an additional safeguard.

5.159 Given that there is a risk which requires to be assessed and then managed, we now turn to consider the functioning of the particular conditions regime for WLWFO, and then for WLWF X 1 & 2, in the light of the above conclusions. For all phases the developer was ScottishPower Renewables, (SPR) who are also the applicants in this case.

WLWFO

5.160 Permission for the original Whitelee windfarm was given on 5 May 2006.²⁶³ Construction commenced about October 2006 with the access track construction. Turbine foundation work commenced in December 2006. Construction of the wind farm continued until about May 2009 when the windfarm became operational.

5.161 Two key mechanisms of the conditions framework for environmental protection are firstly, the preparation of prevention and monitoring plans, and secondly, provision for audits after work had taken place. Thus condition 7.1, required a monitoring plan "setting out the steps that shall be taken to monitor the environmental effects of the development" during the construction phase and the operational phase. This plan was to make specific reference to ground water, surface water, noise and dust. Other conditions made provision for other 'plans' for various subject areas, including condition 7.46 described below.

5.162 In addition to this, condition 7.79 provided for an annual environmental audit to be completed and exhibited to the planning authorities throughout the existence of WLWFO. This was to show the operations carried out in the previous 12 months, and to report on a number of aspects of the environment, among the list of which is changes to ground water. The environmental audit was to include the degree of compliance with the conditions to the consent and specify any remedial measures required to safeguard the environment. The audit was to be conducted by an independent party, appointed by the planning authorities and paid for by the developer/operator.

5.163 There was no specific provision in the WLWFO consent for the appointment of a 'planning monitoring officer' as such, to act on behalf of the planning authorities, either in

²⁶³ SPR-W012- WLWFO consent.

the conditions framework or in the various planning obligations agreed between the applicant for the consent and the planning authorities. Condition 7.61 provided for the appointment of an Ecological Clerk of Works appointed by the Company and approved by the planning authorities and SNH. This person was to monitor compliance with the measures to protect ecology, advise the company on the protection of natural heritage and conservation, deal with micro-siting of plant and tracks and monitor any mitigation works.

5.164 In addition to these general safeguards the consent included specific conditions designed to protect the water environment, under the heading 'Drainage and Groundwater'

5.165 Condition 7.46 required the developer to submit a groundwater management plan for the approval of the planning authorities prior to the commencement of the development, covering water treatment and the means of drainage from all hard surfaces and structures within the site. This plan was to indicate the means of protecting groundwater and diverting surface water run-off, and to allow for the recharging of peat areas within the site.

5.166 Condition 7.47 required the developer to submit to the relevant planning authority for approval an assessment of the potential effects of the development on the quantity and quality of water supplied at all properties with private water supplies that may be affected by the development. Thereafter, any mitigation measures identified in the risk assessment were to be implemented as agreed by the relevant planning authority in order to maintain a secure and adequate quality water supply to all properties with private water supplies that may be affected by the development.

5.167 We conclude that the permission for the construction and operation of WLWFO had the protection of the environment and the management of the impact of the wind farm works as a core objective, and that the permission included measures for the monitoring of the impact on the water environment and private water supplies.

5.168 The monitoring and enforcement role of the three planning authorities was co-ordinated by the joint appointment of the environmental consultancy Ironside Farrar to act as a planning monitoring officer (PMO) on behalf of ERC, SLC, and EAC.²⁶⁴

5.169 Although it does not contain a specific reference to the WLWFO conditions, we proceed on the basis that the report entitled "Environmental Risk Assessment, Private Water Supplies, Whitelee Windfarm" by ENVIRON UK Ltd dated April 2006²⁶⁵ was intended to meet condition 7.47. This report built on previous research work on PWS carried out by the consultancy RPS in 2003 for a previous project at Whitelee. It involved a desk based review, an environmental risk assessment, an on-site review, and provision for risk mitigation measures and for monitoring. It included contingency plan recommendations in case of incidents. It identified 62 PWSs serving 82 properties as requiring to be assessed. Of these three were given a high risk rating and two a medium risk rating. Mitigation measures were identified to protect these supplies, including breaking receptor pathways and avoiding potential supply routes. It recommended monitoring of the high and medium risk supplies. The risk rating given to Dr Connor's supply at Airtnoch Farm was modified from the previous RPS assessment of 'high' to 'low', because it was considered that the hazard to source pathway was 'highly unlikely'. In relation to the other PWS properties which would be relevant to this application, site visits concluded that Cauldstanes Farm, Kingswell Farm and Veyatie (i.e. Bestfriends Cottage) were served by the same supply,

²⁶⁴ SPR-W078

²⁶⁵ SPR-W036

which was on the north side of the B764 in an area which had no direct pathway to the planned works. They were given a 'low' risk rating.

5.170 The consultancy Jacobs was commissioned by the developer to undertake a programme of groundwater monitoring and sampling, laboratory testing and subsequent assessment over the WLWFO site to provide data to assist in the assessment of whether the windfarm development was having any impact on local groundwater quality. Their final report in 2009²⁶⁶ was referenced in the final report of the PMO in October 2009.²⁶⁷ Monitoring started in July 2006, prior to any construction work, and continued on a monthly basis until September 2008.

5.171 Reflecting the requirements of condition 7.46, 7. 47, and 7. 79, which call for an environmental audit, and following the completion of the construction works, the developer commissioned Jacobs to undertake a further round of groundwater sampling and laboratory testing for comparison with the previously collected data. This reported that localised increases in the concentration of some contaminants had been observed, but these could not be correlated to identifiable site activities or other changes in conditions at the site. It was noted that peaks and troughs in the concentration of dissolved substances occurred at many locations across the site. The report concludes that these variations represent the intrinsic variability of the sampling and analytical procedures adopted, coupled with natural variations due to changes in infiltration, percolation through the soil and sub-surface water flow. The post construction samples did show continuation of increasing trends of iron and total organic carbon at some locations and a decreasing trend of pH values across all boreholes. An increasing trend for 3/4-methylphenol was also recorded. Some bore holes were near to peat, and it was considered possible that some results including iron concentrations along with the decreasing pH concentration may be indicative of local increases of peat rich water into these boreholes.

5.172 From this evidence, and from the monitoring reports produced by the applicant we conclude that as part of the planned monitoring process there were a range of contaminative substances found on the WLWF site which were recommended for further investigation and explanation as to their presence. However, for the reasons given above we do not find that identifying a substance on the WLWFO site necessarily raises any inference that such substances were likely to reach potable water through either a surface or ground water route.

5.173 Otherwise, we place some reliance on the views expressed by the PMO appointed for the three planning authorities, who said in their final report on the monitoring and policing standards under the conditions regime that the conduct of the project had been satisfactory and in compliance with the conditions regime²⁶⁸. We also place some weight on the views of SEPA that overall performance was attentive and satisfactory²⁶⁹.

WLWF X1 & 2

5.174 These were two applications for an additional 75 turbines, extending the WLWFO to the south and south west.²⁷⁰ WLWF X1 was granted on 20 May 2009 and was for 36

²⁶⁶ SPR-W022- Jacobs report

²⁶⁷ SPR-W078 Ironside Farrar; PMO final report -

²⁶⁸ CD023

²⁶⁹ SEPA water consultation response

²⁷⁰ CD 023 ES chapter 1 figure 1.1

turbines,²⁷¹ and WLWF X2 was granted on 12 December 2009 and was for 39 turbines.²⁷² Both applications were accompanied by environmental statements. Both extensions were constructed around the same time and appear to have become operational in early 2013.

5.175 The consents for both extensions are in similar terms.

5.176 The overall structure of the extension consents requires the production of a number of method statements by the developer for the approval of the planning authorities and SEPA where appropriate. These include a construction method statement specifically for track construction work (condition 6.3) and another for the period of construction dealing specifically with the protection of ground water and surface water (condition 6.4). In addition, and in similar terms to WLWFO, the conditions require the preparation and approval of a plan setting out the steps that shall be taken generally to monitor the environmental effects of the development, including any mitigation measures (condition 6.8). The monitoring plan is to be reviewed at intervals to be agreed with the planning authorities and amended if necessary (condition 6.9).

5.177 There is provision for the appointment of an Ecological Clerk of Works, and also for an engineering geologist or geotechnical engineer, who is to monitor ground conditions specifically in order to mitigate peat slide risk. (Conditions 6.24 forward). There is no reference to a PMO appointment.

5.178 For PWSs, condition 6.44 requires the early submission to the planning authority of an assessment of the effects of the development on the quantity and quality of water supplied to all properties with private water supplies that may be affected by the development. Any mitigation measures are to be implemented in order to maintain a secure and adequate quality water supply to all properties with private water supplies that may be affected by the development.

5.179 These requirements were addressed by the report by the consultancy Atkins prepared in 2010 "Whitelee wind farm extension Phase 1 & 2 Private Water Supplies Risk Assessment". This was produced and referred to by EAC in their water contamination consultation response.²⁷³

5.180 This carried out a similar exercise to the Environ report for WFWLO above. It investigated the PWS which had been identified in the ES for the two extension applications and assessed them against the proposals for risk from the extension projects. Distance from the works which might affect them, and catchment location were factors in that assessment. Dr Connor's PWS at Airnoch was assessed as being at medium risk. Among the recommendations of the report was that samples should be collected pre-construction from high and medium risk rated PWS to obtain baseline information and monitor quality during the construction phase of the development. The collection of quarterly samples during the construction phase and one year post construction would allow a water quality profile to be generated. Sampling should be supplemented with inspections of watercourses downstream of construction activity areas. Daily inspections of watercourses and associated pollution control measures (such as silt traps) are recommended when working was taking place in critical areas. Sampling should take account of high risk activities even when time limited.

²⁷¹ SPR-W013

²⁷² SPR-W014

²⁷³ SPR W035

5.181 The objectors have produced the developer's method statement monitoring plan, produced in October 2010 which was intended to meet the requirements of conditions 6.8 and 6.9.²⁷⁴ This provides (among the other measures required by the condition) for surface water ground water, and private water supplies monitoring, specifying the location and substances to be tested, and says that results will be tabulated and forwarded to the planning authorities monthly. The PWSs to be tested for the extensions includes Airtnoch, described as the Hareshawmuir properties, which includes Dr Connor and the other people who share that supply. The plan says that prior to construction commencing, potentially affected households are to be supplied with an emergency contact sheet, providing the contact names and numbers for ScottishPower Renewables (i.e. the developer); and for the local Environmental Health Officer

5.182 the plan also provides that in the event of an incident which has the potential to impact the quality or quantity of potable water supplied to a resident, the following steps were to be taken:

- The property owner will be contacted and informed of the incident at the earliest opportunity;
- If required, bowsers containing water and/or bottled water will be supplied to affected householders, and
- the relevant Environmental Health Officer shall be contacted advising them of the incident and consulting on proposed measures to deal with the incident.

5.183 Dr Connor makes the point that over this period the Airtnoch supplies were tested for SPR and were found to have elevated levels of bacteria. She criticises the extension developers for not informing the persons who take water from that supply that these results had been found. The applicants say that elevated levels of coliforms in a PWS did not qualify as an 'incident' in terms of this plan.

5.184 Dr Connor says that the developers also did not supply the persons taking water from the PWS with the contact details which the plan requires and we accept that was the case.

5.185 There was then a question about whether and when the monitoring tests for WLWF X1 and X2 were passed by the developers to EAC. The applicants have not advised us exactly when the test results were passed to EAC, but this can be identified from other evidence. EAC says that they did not receive the test results till a batch of them were sent to the council by SPR in 2013, after the construction was complete. In their concluding submissions the applicants infer that this represented the time when the results were passed to the environmental health service of the council, but do not say specifically that the results were passed regularly to another part of the council such as the planning service.²⁷⁵ However, EAC reported to a journalist in September that they had specific confirmation from SPR that the test results had not been passed to the council until 2013,²⁷⁶ and from their various comments it appears that the test results did not reach either the planning service or the environmental health service prior to that date. We find on the balance of probabilities that the test results were not passed to EAC until after the

²⁷⁴ CH 079

²⁷⁵ SPR concluding submissions

²⁷⁶ CH 009

construction of the WLWF extensions, as opposed to monthly, as the monitoring plan described above provided.

5.186 Although they did specifically not say so in their consultation response to us, EAC has said that no external PMO was appointed by EAC for WLWF X1 and X2.²⁷⁷

5.187 In a letter from SPR to Graeme Pearson MSP,²⁷⁸ part of correspondence on behalf of Dr Connor, SPR said that they fully acknowledge their responsibilities in accordance with the planning consents for both Whitelee and Whitelee Extension Windfarms, including their responsibility that the PWS shall not be affected as a result of the activities associated with the Windfarm. They went on to say

“Water sampling during the phased construction of Whitelee and the Extension has been conducted in accordance with the requirements of Planning Consent Conditions, which require that the test results from the water samples, taken on a quarterly basis, are issued to the Planning Monitoring Officer for review and action, we assume, where appropriate. Now it is acknowledged that some procedural failings were experienced during the Whitelee Extension construction activities (2010 to 2012) as a consequence of the lack of definition around the role of Planning Monitoring Officer within the Councils. While that is a failing of the system we can confirm that all water test results have since been issued to the relevant Councils. In this particular case East Ayrshire Council.”

5.188 We conclude that conditions framework for WLWF X1 and X2 was not in fact fully implemented as had been envisaged. In particular, while a method statement monitoring plan for condition 6.8 and 6.9 was prepared, it was not fully implemented in respect of the transmission of the results to the council and the communication of emergency contact numbers to people receiving PWS.

5.189 We note that the applicants suggest that elevated coliforms would not constitute an incident in terms of the monitoring plan because they consider that these results are part of background and are not caused by WLWF. We have found that bacterial contamination of surface water is prevalent, and not linked to WLWF. In our view it would have been desirable to be more explicit in the monitoring plan about what was and was not a trigger event for action on PWS supplies and to cater specifically for any action to be taken if any results of concern were revealed, irrespective of the cause.

5.190 We note that EAC has said that if they had become aware of the coliform results which the monitoring results revealed they would have considered action to secure the safety of the supplies including boil notices. The fact that the monitoring plan was not adhered to deprived them of that opportunity. Again, we have accepted that the bacterial contamination which occurred cannot be attributed to WLWF. However, the developer of WLWF agreed as an element of their monitoring obligations that they should test for coliforms as part of the risk assessment, so it can be assumed that the developer accepted that that was significant information about the water environment which should be monitored. Once such information is obtained it is important that it is responsibly handled, and in our view it should have been passed to the council in accordance with the conditions monitoring plan.

²⁷⁷ EAC Email dated 17 March 2015 to Dr Connor: copied to DPEA.

²⁷⁸ CH 031 - SPR letter to G Pearson MSP dated 12 November 2014

5.191 We are unconvinced by the applicant's suggestion that the council was in some sense responsible for the failure of the monitoring result system because of some confusion about the role of a PMO. Whether or not there was a specific appointment of an external PMO, as had happened previously, the WLWF developer should still have adhered to the clear terms of the monitoring plan and sent the information to the council. If the council did not have the information, they could not react to it. We are unaware of why the council apparently did not act proactively to obtain the information from SPR, but we have no information about why that was so which would allow us to draw any clear conclusions. From the circumstances, the council's apparent failure to chase up compliance with the planning conditions relating to PWS within their area appears to us to be another breakdown in the permission conditions.

5.192 We conclude that although the risk assessment process for PWS was properly provided for in the WLWF extension consents the arrangements were not properly implemented.

The application

5.193 The above conclusions being drawn, we now consider whether the objection has raised any substantial grounds which suggest that permission should not be granted for this application. We note that notwithstanding the location of the application site in a statutory drinking water protection area, given the spatial relationship between the application works and Scottish Water assets, we would consider the likelihood of any impact on public water supplies from the application to be negligible.

5.194 To identify the PWS which should be further considered, and with reference to the ES hydrogeological catchment areas, the application construction activities will mostly take place in hydrogeological catchment I, with one turbine constructed within the southern boundary of hydrogeological catchment J.²⁷⁹ We accept the evidence of the applicants that these catchment areas have been conservatively drawn.

5.195 The ES²⁸⁰ identified three private water supplies as being within 1 kilometre of the construction works for the application. These are shown on figure 9.3. All are located in hydrogeological catchment area J. The application site straddles hydrogeological catchment area J and I, with only proposed turbine 216 being located in catchment J. We conclude that catchment area J would not be the main locus of construction activities, and that can reasonably be taken into account in considering the potential exposure of PWSs taking water from catchment J.

5.196 Private water supplies EK2/3, are together identified in the ES table 9.3 as 'Cauldstanes, Kingswell, and Kingswell Bridge'. The ES describes this supply as a spring situated in forest on the north side of B764, which initially served all of the properties in the Kingswell Burn area but now only serves Cauldstanes, Kingswell and Kingswell Bridge (BestFriends Cottage). It is estimated that the spring would be between 630 metres and 840 metres from the nearest application turbine. The ES recommendation is that the site (of the spring) should be surveyed and monitored for quality and potential yields, depending on the outcome of the survey. It notes that Kingswell Bridge is now using a borehole, shown as EK10.

²⁷⁹ CD023 figure 9.3.

²⁸⁰ as above table 9.13 page 13

5.197 From the evidence at the inquiry it is clear that this information now requires to be updated to some extent, and the applicant has already carried out some further investigations on EK2/3. Cauldstanes is now served by a borehole near the house, installed by the Harrisons. This source may lie within hydrogeological catchment area I, and so within the same catchment as the other application turbines, but it will be more than 1 kilometre away from the nearest turbine, number 219.

5.198 It remains unclear exactly where the Kingswell water (again, hydrogeological catchment area J) is currently drawn from. We examined a collection tank in the marshy field on the north side of the B764 opposite Moor Farm, and sometimes referred to as the 'Moor Tank', which seems a likely element of the supply to Kingswell. If the Moor Tank does play a role in the supply to Kingswell, it appears to be quite old and does not appear to be isolated from the incursion of surface water. As the ES expressly intends, this supply should be further investigated, were permission to be granted for the application.

5.199 The other supplies identified by the ES as requiring further consideration are EK4 , Sheildhill, 1 kilometre away, and S15, Drumtee farm, 1.1 kilometres away. Both are to be surveyed and monitored.

5.200 Given our findings above, we conclude that the ES for this application has provided sufficient information about the PWS to allow a decision about the degree of potential risk to be made as an element of the decision about the application. While there is an acknowledged risk that work on the application site might affect the water environment, we do not consider it to be likely that pollution from the application works to PWSs would occur, were the application to be granted, given the physical relationship between the likely sources and the works. The identified risk can be mitigated by further investigation of the sources of the PWSs, and consideration of the relationship between the sources and the application site in order to inform a future risk assessment. This should be reinforced by a robust and properly implemented monitoring regime and provision for good communication of results with the relevant authorities. We consider that the PWSs which could be affected have been properly identified in the ES on a conservative and prudent basis.

5.201 The objectors emphasise, understandably, that if the conditions regime has not functioned properly before there can be no confidence that it would do so for this application. The conditions which could be imposed if the application were to be granted are discussed in chapter 7 of this report. There is potential for the previous regimes to be improved upon, for example by clarity about arrangements for the appointment of an external PMO, and this has now been suggested as an element of the conditions framework. This would mean that there was a dedicated resource available to assist the council to ensure that any conditions imposed requiring monitoring plans were fully and properly addressed, and then properly implemented. In our view that would substantially address the issues which have arisen about the implementation of the previous extension permissions.

5.202 In our investigations on this matter we have also had regard to related matters such as the potential effect on the water environment of felling of woodland. We note that the application proposals for woodland removal have been approved by SEPA. We find that the applicants have demonstrated that they are aware of the potential effect of the generation of brash on surface water, and have considered these effects in their proposals.

Hyperlinks to Documents referred to in this chapter

Doc ref where available	Description	DPEA hyperlink
Objections relating to PWS : preliminary exchanges		
	Email from Dr R Connor to ECDU intimating additional grounds of objection 5/11/14	https://www.dpea.scotland.gov.uk/Document.aspx?id=232716
CD 031	Moscow and Waterside Community Council - objection	https://www.dpea.scotland.gov.uk/Document.aspx?id=251870
CD 029	Fenwick community council September 2012	http://www.dpea.scotland.gov.uk/Document.aspx?id=276501
CD 030	Fenwick community council March 2015	http://www.dpea.scotland.gov.uk/Document.aspx?id=276502
Consultation with drinking water quality regulators		
	Reporters note note of pre-examination meeting dealing with consultation with water quality authorities	https://www.dpea.scotland.gov.uk/Document.aspx?id=244230
	DPEA consultation letters to the drinking water quality authorities requesting further information on PWS	<p>East Ayrshire Council - https://www.dpea.scotland.gov.uk/Document.aspx?id=254150</p> <p>East Renfrewshire Council https://www.dpea.scotland.gov.uk/Document.aspx?id=254151</p> <p>SEPA - https://www.dpea.scotland.gov.uk/Document.aspx?id=254152</p> <p>Scottish Water - https://www.dpea.scotland.gov.uk/Document.aspx?id=254153</p> <p>Drinking Water Quality Regulator for Scotland - https://www.dpea.scotland.gov.uk/Document.aspx?id=254154</p>
	POW group (now CH group) "Legal and Evidential Submission" 5 February 2015– expanding objection on PWS	https://www.dpea.scotland.gov.uk/Document.aspx?id=271997
	DPEA e-mail to water quality regulators - enclosing representation from Fenwick Community Council and requesting comments 24 March 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=256079
	SEPA consultation on PWS objection- response	http://www.dpea.scotland.gov.uk/Document.aspx?id=259907
	Scottish Water consultation on PWS objection- response	https://www.dpea.scotland.gov.uk/Document.aspx?id=259325
	East Ayrshire Council consultation on PWS	https://www.dpea.scotland.gov.uk/Document.aspx?id=259328

	objection –response	
	EAC response attachments - Production 1 – WLWFO ENVIRON UK Environmental Risk Assessment	https://www.dpea.scotland.gov.uk/Document.aspx?id=260508
	EAC attachments - Production 2 : Atkins report on WLWFX1 &2- Appendix 1 - Private Water Supplies Risk Assessment	https://www.dpea.scotland.gov.uk/Document.aspx?id=260228
	EAC attachments - Production 2 Atkins report - Appendix 2 - Figure 2 - PWS and Hydrogeological Catchments	https://www.dpea.scotland.gov.uk/Document.aspx?id=260229
	EAC attachments Production 2 –Atkins report Appendix 3 - Private Water Supply Risk Assessment Table	https://www.dpea.scotland.gov.uk/Document.aspx?id=260230
	EAC attachments - Production 2 –Atkins report Appendix 4 - Private Water Supply Survey	https://www.dpea.scotland.gov.uk/Document.aspx?id=260231
	Drinking Water Quality Regulator for Scotland – consultation on PWS supplies response	https://www.dpea.scotland.gov.uk/Document.aspx?id=259329
	Applicant's comments in response to information provided by water quality regulators	https://www.dpea.scotland.gov.uk/Document.aspx?id=262555
	CH group comments on consultation responses	http://www.dpea.scotland.gov.uk/Document.aspx?id=262556
	email from EAC to Dr Connor 17 March 2015 FOI response	http://www.dpea.scotland.gov.uk/Document.aspx?id=265042
Inquiry session on private water supplies		
	CH group (POW) Outline Statement of Case -	https://www.dpea.scotland.gov.uk/Document.aspx?id=271998
Precognitions		
Applicant		
	Dr Alexander Lee, WSP UK LTDSR	https://www.dpea.scotland.gov.uk/Document.aspx?id=285893
	Ms Saint-Martin	http://www.dpea.scotland.gov.uk/Document.aspx?id=270751
Objectors		
	Dr Rachel Connor	http://www.dpea.scotland.gov.uk/Document.aspx?id=270756
	Mr Tim Harrison	http://www.dpea.scotland.gov.uk/Document.aspx?id=280623
	Mr Elliot Davis	http://www.dpea.scotland.gov.uk/Document.aspx?id=270634
Inquiry session documents		
Core documents		
CD002	Scottish Planning Policy	http://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD 023	Environmental Statement including chapters 9 and 10	https://www.dpea.scotland.gov.uk/Document.aspx?id=230461

CD024	Environmental Statement Technical Appendices 04.01 - Outline CEMP	https://www.dpea.scotland.gov.uk/Document.aspx?id=230462
CD024	Environmental Statement Technical Appendices 04.02 - Forest Redesign & Blanket Mire Restoration - part 01	https://www.dpea.scotland.gov.uk/Document.aspx?id=230463
CD024	Environmental Statement Technical Appendices - 04.03 - Draft Peat Management Plan	https://www.dpea.scotland.gov.uk/Document.aspx?id=230468
CD 028	Statutory consultation responses	http://www.dpea.scotland.gov.uk/Document.aspx?id=276500
Applicants documents		
SPR W001	SEPA Policy No. 19 Groundwater Protection Policy for Scotland (November 2009)	https://www.dpea.scotland.gov.uk/Document.aspx?id=271982
SPR W002	- SEPA-EA-EHS pollution prevention guidelines (PPGs) -	https://www.dpea.scotland.gov.uk/Document.aspx?id=271983
SPR W005	SEPA - land use planning system guidance note 31 Guidance on Assessing the Impacts of Windfarm Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems	https://www.dpea.scotland.gov.uk/Document.aspx?id=271986
SPR W006	Water Framework Directive (WFD 2000-60-EC)	http://www.dpea.scotland.gov.uk/Document.aspx?id=271987
SPR W007	Directive 2000-118-EC (the Groundwater Daughter Directive or GWDD)	http://www.dpea.scotland.gov.uk/Document.aspx?id=271988
SPR W008	The Water Supply (Water Quality) (Scotland) Regulations 2001	http://www.dpea.scotland.gov.uk/Document.aspx?id=271989
SPR W009	The Private Water Supplies (Scotland) Regulations 2006	http://www.dpea.scotland.gov.uk/Document.aspx?id=271990
SPR W010	The Water Environment (Controlled Activities) (Scotland Regulations 2011 (CAR)	http://www.dpea.scotland.gov.uk/Document.aspx?id=271991
SPR-W011	overview note on the legislative framework insofar as it relates to the private & public water supplies, prepared by Shepherd & Wedderburn –	https://www.dpea.scotland.gov.uk/Document.aspx?id=271992
SPR-W012	WLWFO Consent & deemed planning permission by Scottish Ministers for the construction & operation of 322 MW Wind Powered Electricity Generating Station at Whitelee -	https://www.dpea.scotland.gov.uk/Document.aspx?id=271993
SPR W013	WLWF X1 Consent and deemed planning permission	http://www.dpea.scotland.gov.uk/Document.aspx?id=271994

	for the construction and operation of the Whitelee wind farm extension 1	
SPR W014	WLWF X2 Consent & deemed planning permission by Scottish Ministers for construction & operation of Whitelee extension Phase 2	https://www.dpea.scotland.gov.uk/Document.aspx?id=271995
SPR W022	Jacobs WLWF groundwater quality monitoring report 2009	https://www.dpea.scotland.gov.uk/Document.aspx?id=272001
SPR W023	SEPA Supporting Guidance (WAT-SG-53) environmental standards for discharges to surface waters	http://www.dpea.scotland.gov.uk/Document.aspx?id=272002
SPR W025	SEPA position statement WAT-PS-10-01 assigning groundwater assessment criteria for pollutant inputs	http://www.dpea.scotland.gov.uk/Document.aspx?id=272005
SPR-W026	Scottish Executive (2006) Private Water Supplies Technical Manual - (EXTRACT ONLY) - Section 3	http://www.dpea.scotland.gov.uk/Document.aspx?id=326406
SPR-W028	WHO(2005) Petroleum Products in Drinking-water	http://www.dpea.scotland.gov.uk/Document.aspx?id=272007
SPR-W029	WHO(2003) Di(2-ethylhexyl)phthalate in Drinking-Water	http://www.dpea.scotland.gov.uk/Document.aspx?id=272008
SPR-W031	WHO (2003) Iron in Drinking Water, Background for document Development of WHO Guidelines for Drinking-water Quality	http://www.dpea.scotland.gov.uk/Document.aspx?id=272011
SPR-W032	WHO (2011) Manganese in Drinking-water Background document for development of WHO Guidelines for Drinking-water Quality	http://www.dpea.scotland.gov.uk/Document.aspx?id=272012
SPR W034	SPR-W034 - Murray, H.S. (2012) Assessing the impact of wind farm related disturbance on stream water carbon, phosphorus and nitrogen dynamics	http://www.dpea.scotland.gov.uk/Document.aspx?id=272013
SPR W035	Atkins PWS risk assessment WLWFX1&2 2010	http://www.dpea.scotland.gov.uk/Document.aspx?id=272014
SPR W036	Environ report WLWFO 2006 environmental risk assessment PWS	http://www.dpea.scotland.gov.uk/Document.aspx?id=272015
SPR-W040	WHO (2011) Guidelines for Drinking Water Quality, Fourth Edition	http://www.dpea.scotland.gov.uk/Document.aspx?id=272020
SPR W056	PWS monitoring results 2006-2009	http://www.dpea.scotland.gov.uk/Document.aspx?id=272036
SPR W057	Surface water monitoring results 2006-2009	http://www.dpea.scotland.gov.uk/Document.aspx?id=272037
SPR W078	Ironside Farrar FINAL planning monitoring	http://www.dpea.scotland.gov.uk/Document.aspx?id=276963

	progress report	
SPR-W079	Dr Lee- WSP Parsons Brinckerhoff Report 26 May 2015 Water issues	http://www.dpea.scotland.gov.uk/Document.aspx?id=326413
Objector's documents		
CH Group / Dr R Connor and Mr T Harrison		
CH1	Statement on Drinking Water Supplies	https://www.dpea.scotland.gov.uk/Document.aspx?id=268223
	List of inquiry documents provided by Connor-Harrison Group already provided by applicant, with corresponding reference numbers	https://www.dpea.scotland.gov.uk/Document.aspx?id=277258
	Maps of Drinking Water Protected Area and Whitelee Windfarm Extension	https://www.dpea.scotland.gov.uk/Document.aspx?id=277247
CH 012	Jacobs Engineering UK Ltd (2008) Report on Borehole Ardochrig Mor 18-02-2008	https://www.dpea.scotland.gov.uk/Document.aspx?id=277313
CH 031	SPR letter to G Pearson MSP dated 12 November 2014	https://www.dpea.scotland.gov.uk/Document.aspx?id=277302
CH037	British Geological Society - Groundwater and its susceptibility to degradation	https://www.dpea.scotland.gov.uk/Document.aspx?id=277233
CH group doc ref 9, 60 & 86	Response from East Ayrshire Council to Journalist Enquiry into SPR- Whitelee	https://www.dpea.scotland.gov.uk/Document.aspx?id=277257
CH 106	S Carroll Hydrogeology of the Whitelee Wind Farm	http://www.dpea.scotland.gov.uk/Document.aspx?id=277264
CH group 119	SEPA reply regarding Jacobs report 2009 and DEHP 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=277270
CH 154	Maps of Drinking Water Protected Area and Whitelee Windfarm Extension	https://www.dpea.scotland.gov.uk/Document.aspx?id=277247
	BGS map 22E	https://www.dpea.scotland.gov.uk/Document.aspx?id=280181
Mr E Davis		
ED1	The Kingswell Farm Water story	http://www.dpea.scotland.gov.uk/Document.aspx?id=277453
ED2	Drinking Water Protected Areas - Scotland River Basin District - Surface Water Map 2	https://www.dpea.scotland.gov.uk/Document.aspx?id=267083
ED3	Drinking Water Protected Areas - Scotland River Basin District - Groundwater Map 13	https://www.dpea.scotland.gov.uk/Document.aspx?id=267084

ED4	Kingswell water samples	ED4(a) - https://www.dpea.scotland.gov.uk/Document.aspx?id=268641 ED4(b)- https://www.dpea.scotland.gov.uk/Document.aspx?id=268642
ED5.1	Correspondence with SPR November 2014	https://www.dpea.scotland.gov.uk/Document.aspx?id=268643
ED6	Letter from Fergus Ewing to Cathy Jamieson MSP 5 November 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=268644
Exchange of submissions in relation to British Geological survey Map		
	BGS map 22E	https://www.dpea.scotland.gov.uk/Document.aspx?id=280181
	Procedure notice 24 June 2015 requesting further written submissions	https://www.dpea.scotland.gov.uk/Document.aspx?id=279618
	Applicant - Information provided in response to procedure notice dated 24 June 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=285578
	e-mail from applicant - information provided in response to procedure notice dated 24 June 2015- supporting documents	https://www.dpea.scotland.gov.uk/Document.aspx?id=285579
	Connor-Harrison Group - information provided in response to procedure notice dated 24 June 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=285577
	e-mail from Mr E Davis - information provided in response to procedure notice dated 24 June 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=285586
	e-mail from Connor-Harrison Group - comments on information provided in response to procedure notice	https://www.dpea.scotland.gov.uk/Document.aspx?id=286733
Concluding submissions		
Applicant		http://www.dpea.scotland.gov.uk/Document.aspx?id=291973
CH group		http://www.dpea.scotland.gov.uk/Document.aspx?id=287330
Mr E Davis		http://www.dpea.scotland.gov.uk/Document.aspx?id=287286

CHAPTER 6:

Other relevant issues

Introduction

6.1 Schedule 9 of the Electricity Act²⁸¹ requires Ministers to have regard to 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. Regard should also be had to the extent to which the applicant has taken these issues into account so as 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, so far as can reasonably be done.

6.2 In addition to the matters covered in detail in the preceding chapters of this report, the ES²⁸² contains information relating to

- Site selection and the design evolution (Chapter 3)
- Ornithology (Chapter 8)
- Ecology and nature conservation (Chapter 11)
- Cultural heritage (Chapter 12)
- Access, traffic and transport, (Chapter 14)
- Socio economic impact including land use and recreation (Chapter 15)
- Other issues including telecommunications, television and aviation navigation equipment, shadow flicker, ice throw, safety and security, and air and climate effects. (Chapter 16)

6.3 Many of these issues have not been controversial in the context of the objections made against the application. In this chapter we comment on the matters not considered elsewhere in this report but which have a bearing on the issues mentioned in Schedule 9, whether or not they have been the subject of an objection.

Climate change

6.4 While there would be a minor adverse effect on local air quality during construction during operation, the application proposals would contribute to an overall beneficial effect by avoiding emissions due to the generation of electricity by burning fossil fuels. A carbon assessment has been undertaken to estimate the potential savings in carbon dioxide emissions by reason of the application proposal replacing other electricity sources.²⁸³ This will positively contribute to meeting Scotland's targets for reducing greenhouse gas emissions.

6.5 The application proposals would add generating capacity of 12 MW to the Whitelee wind farm, currently with a generating capacity of 593 MW, which we calculate would be an increase of about 2%.

Natural heritage impacts

6.6 The application site and its context was mapped as commercial plantation forestry and wet modified bog, with areas of improved, semi-improved and marshy grassland with a number of rides and clearings within the plantation woodland. The area contained a mosaic

²⁸¹ CD 018

²⁸² CD 023

²⁸³ consultation exchange with SEPA

of habitats, predominantly forms of wet modified bog, marshy grassland and acid flush vegetation. One area of blanket bog and one area of relatively undamaged wet modified bog were identified. A total of 13 habitat categories were identified. Surveys for birds and species were carried out.

6.7 The grass moorland and commercial closed canopy conifer plantation forest supports a range of birds typical of these habitats in Central Scotland. Species of high conservation importance (hen harrier, merlin, peregrine, short-eared owl, barn owl and golden plover) are present in the surrounding area but do not appear to use the proposed development site for breeding. Species of moderate conservation importance are present, breeding in small numbers (black grouse, curlew, skylark, grasshopper warbler, cuckoo, linnet, lesser redpoll, and song thrush). Herring gulls overfly the proposed development site in small numbers year round. Of these species of high or moderate nature conservation importance only short-eared owl and black grouse showed activity in the vicinity of the proposed development which merited further assessment of potential effects. The site does not appear to be located on a regularly used migration route, or on any corridor used for local movements by wildfowl or waders. The total land-take from the application proposal would result in the permanent loss of a very small proportion of the bird habitat on site.²⁸⁴ The magnitude of adverse effects on birds due to this relatively small loss was considered to be negligible.

6.8 Approximately 72 hectares of plantation forest is located on the site. Of this, 37 hectares will be felled, whilst the remainder will be retained for the life of the proposed development. A forest redesign and blanket mire restoration proposal was included in the proposals²⁸⁵ indicating the areas proposed for felling, restocking and restoration. The magnitude of adverse effects on birds due to these habitat modifications is considered to be negligible. The woodland replanting and restoration and the re-instatement of some bog habitat would benefit regional populations of some species of high or moderate conservation concern, including black grouse, song thrush, lesser redpoll, curlew and skylark.

6.9 The ES considered the potential for disturbance of birds and their habitats during the construction and decommissioning phases of the proposal and concluded that there would be likely to be short term adverse effects of low or negligible magnitude on birds. In operation, there would be some adverse effects of low or negligible magnitude on birds due to disturbance and the risk of collision with rotating rotor blades. The cumulative effects of the proposal with other existing and planned developments in the area were considered and judged unlikely to have a significant effect on existing bird populations. Overall, it was concluded that construction and operation of the development would not have a significant effect on birds.

6.10 As regards other species, the baseline data available for the site and surrounding area established that red squirrel and badger were unlikely to be present within the development area. The habitat was potentially suitable for otter, water vole, bats and reptiles. Protected species surveys and habitat surveys were undertaken to identify the presence or likely presence of protected species and habitats in 2009/2010 for the former East Kingswell Windfarm application. As agreed in consultation with SNH the survey data for the site was updated in 2012 through targeted surveys. Evidence of bats and otter were recorded during the 2009 and 2012 surveys respectively, but there was no evidence of water vole in either year. No reptiles were identified in 2009-2012, but an adder skin was recorded in 2012 and the site is considered to have potentially suitable habitat for reptiles.

²⁸⁴ CD 024 ES Appendix 11.05 habitat loss calculation

²⁸⁵ CD 024 ES Appendix 4.2 Forest Redesign and Blanket Mire Restoration

6.11 In terms of freshwater fish habitat, five watercourses were identified within the area as likely to support salmonids. Two of these watercourses (Collorybog Burn and Drumtee Water), would be directly affected by the proposal in that access tracks would cross these watercourses. However, due to existing barriers in the watercourses no migratory salmonids (salmon or sea trout) are likely to be present within the site and consequently significant effects on migratory salmonids were not anticipated.

6.12 Mitigation in respect of impact on species and habitats was taken into account in the preparation of the site layout design, to ensure that the number of turbines and associated access tracks proposed within ecologically sensitive habitats would be minimised. Further mitigation would be delivered through the proposed conditions. These measures would include adherence to best practice during construction and pre-construction surveys for protected species.

Natural heritage impacts – consultees.

6.13 In their consultation responses SNH²⁸⁶ confirm that the ES process had adhered to best practice in assessing natural environment impacts. Their observations on the landscape impact of the proposals have been reported in chapter 3 of this report. The proposed windfarm will have some adverse impacts on natural heritage in the local area. There would be some moderate disruption to deep peatland, as peatland habitats can be significantly damaged through disruption of the underlying hydrology during operations such as building of turbine foundations and vehicle tracks. As it is not possible to mitigate the damage to peatland, compensation for such damage by habitat management should be addressed through the proposed peat management plan proposed in the ES.²⁸⁷ Concerns about impact on peat could be addressed through the inclusion of consent conditions to reduce disturbance of deep peat. There would be some potential impacts on other aspects of natural heritage, although these could be addressed through planning conditions or agreements.²⁸⁸ Specifically, the full range of ecological mitigation and enhancement measures detailed in chapter 11, section 7 of the ES²⁸⁹ should be adopted and that, in particular, the pre-construction checks for protected species be undertaken as proposed. Conditions²⁹⁰ should also provide for a peat management plan (PMP), a blanket mire restoration plan, construction method statements, the development of an overall strategy for the decommissioning and restoration of the site, a breeding bird protection plan, and electro fishing surveys. As described in the ES a suitably qualified Ecological Clerk of Works should be appointed prior to any on-site works commencing. A detailed plan for habitat restoration should be provided for, to be developed in consultation with the Whitelee Habitat Management Group.

6.14 The observations of SEPA on the management of the water environment including surface water are discussed in chapter 5.²⁹¹ In addition to this SEPA have considered the potential impact of the application proposals on GWDTE, and have advised that the applicant's proposals for management and protection of the water environment are generally satisfactory, subject to appropriate conditions to ensure good site practice, that a water quality monitoring regime is put in place, with appropriate responses to any incidents, as discussed above.

²⁸⁶ SNH consultation response 17 October 2012, confirmed in subsequent response to FEI.

²⁸⁷ CD024 ES technical appendices 04.03 Peat Management Plan and Appendix 4.02 forest redesign and blanket mire restoration plan

²⁸⁸ SNH consultation response appendix 2

²⁸⁹ CD 023 ES Chapter 11

²⁹⁰ SNH consultation response Annex A

²⁹¹ SEPA consultation response.

6.15 The Marine Scotland Science Freshwater Laboratory²⁹² was satisfied with awareness of the risk to water quality and the protection of fish and supported the applicant's suggested measures to protect the water quality in the rivers, subject to a need to establish a robust baseline of water quality throughout the development area. Fishery consultees took a similar approach, requiring good practice to be followed where watercourses may be at risk, but not recording objections.

6.16 As regards forestry removal, Forestry Commission Scotland have advised that the application forestry redesign proposals are considered to comply with the national policy approach for woodland removal.

Objections relating to natural heritage

6.17 Some objectors²⁹³ expressed concern at the removal of trees for natural heritage or conservation reasons. Other objectors have mentioned forest clearance and the after use of chippings or brash on site a potential source of water contamination.²⁹⁴ This could occur through increased sedimentation, nutrient release as a result of felling, altered acid status as a result of felling, or peat disturbance. Some objectors object on the basis that peat would be lost.

Historic environment and the protection of sites²⁹⁵

6.18 Impacts on the historic environment are considered in Chapter 12 of the ES.

6.19 The nearest receptor to the site with cultural significance is Moor Farm, a traditional farm cottage and steading located beside the B742, which is proposed for demolition as part of the application.²⁹⁶ The building is not listed under the Planning Listed Buildings and Conservation Areas (Scotland) Act 1997. The ES assessed this as a cultural heritage asset of local importance. The property is owned by Scottish Power Renewables and is not in residential use. The effects of the demolition in terms of cultural heritage and land use have been considered in the ES Chapter 12 (Cultural Heritage) and Chapter 15 (Land Use, Socio-Economics and Recreation)

6.20 The applicant proposes demolition as part of this application for the following reasons:

- The property is currently not inhabited, and despite measures having been taken to secure and maintain the building it has been subject to vandalism, anti-social behaviour and theft of materials of value (such as copper), therefore it has to some degree fallen into disrepair.
- The property would no longer be appropriate for residential use given its location within the wind farm site and the close proximity to turbines.
- The property no longer forms part of an agricultural unit and there is little land associated with the property to facilitate its operation as a viable agricultural unit.
- Agricultural use of the property is no longer likely since the surrounding area would be used primarily for energy generation.
- Leaving the property vacant may continue to attract crime (e.g. vandalism) and further disrepair, detracting from the visual amenity of the area.
- There is no reasonable prospect of the building being occupied.

²⁹² Marine Scotland consultation response to ECDU 4 October 2013

²⁹³ CD 027 representations (bundle)

²⁹⁴ CG group inquiry statement; see also SPR-W034 H.S.Murray Ph D thesis – Assessing the impact of wind farm related disturbance on stream water carbon, phosphorus and nitrogen dynamics: a case study of the Whitelee catchments 2012. See chapter 5 for discussion of this.

²⁹⁵ CD 023 ES: Chapter 12

²⁹⁶ CD 023 ES chapter 4: 4.4.3 figure 4.1

- Scottish Power Renewables has investigated the possibility of its conversion for use as an operational building for the wind farm, but it is not capable of meeting operational requirements for such a facility.

Mitigation in the form of preservation by record is proposed, resulting in a residual effect of negligible significance.

6.21 Otherwise, no effects are predicted on 21 cultural heritage assets which were identified within the application boundary, on the basis that the sympathetic siting of turbines and infrastructure through the iterative design process would avoid known archaeological remains.

6.22 A study area with a radius of 10 kilometres around the site was considered. A total of 10 'minor' and 28 'negligible' effects are predicted on the settings of the identified Scheduled Monuments, Category A Listed Buildings, Category B Listed Buildings and Gardens and Designed Landscapes located within 10 kilometres of the proposed Development.

6.23 Potential effects on the setting of cultural heritage assets outside the 10 kilometre study area have also been assessed using the Zone of Theoretical Visibility (ZTV). No discernible effects were predicted.

Consultation response from Historic Scotland (now Historic Environment Scotland)

6.24 HS were content that the ES provided enough information to support a view on impact on the historic environment, and they generally agreed with the assessments made. They had regard to the restricted effects on a number of identified scheduled ancient monuments, 'A' listed buildings, and gardens and designed landscapes, including a small number that had not been included in the study. They took into account the scale of the proposed development, the existence of WLWF as a background to the new turbines, and the distance to nationally important sites. They had no objection to the application.

Objections relating to the historic environment

6.25 There were objections to the inclusion in the application of the demolition of Moor Farm.²⁹⁷ The objectors consider that the loss of this traditional hill farm and steading would further diminish the rich history of the area. The B764 was an historic route across the moor between Glasgow and Kilmarnock, and the roadside farm would have been a welcoming light to travellers. They point out that there are other hill farms standing across the WLWF site and the applicant has unsuccessfully sought permission to eradicate these.²⁹⁸ These are important relics of the history of land use in the area, and should not be lost. The wind farm should be considered to be transient against this background.

Transport and access

6.26 Chapter 14 of the ES²⁹⁹ considers impact on the transportation network. An assessment of traffic and transportation focused on the predicted effects of increased traffic on the public road network during construction, operation and decommissioning. The assessment considered the local road network, and the potential effects on the wider area, such as the anticipated route by which large components such as turbine blades would be transported after shipping arrival at docks in either Glasgow or Ayr.

²⁹⁷ Dr Connor, Ms Roberts and others.

²⁹⁸ Ms Greta Roberts refers to Appeal cases PPA-190-2020, 2021, and 2022 – not produced. Available on DPEA website: application by SPR for Detailed Planning Permission for Demolition of farm buildings Croilburn Farm, Hareshawmuir - <https://www.dpea.scotland.gov.uk/Document.aspx?id=124989>

²⁹⁹ CD023 ES see also CD024 technical appendices.

6.27 Construction traffic is planned to be generated over an 8.5 month period. The construction activities will result in increases of traffic flows on the trunk roads leading to the site and on the A77 and B764 local roads. When considering actual volumes of traffic, the predicted flows are within the practical operating capacity of these trunk and local/minor roads and the environmental effect is considered not to be significant.

6.28 Mitigation measures are proposed to reduce construction traffic effects including the use of appropriate approved access routes to and from the site, avoidance of heavy construction traffic travelling through Eaglesham village, and preparation of a Traffic Management Plan (TMP) prior to construction. The TMP would also include specific mitigation measures for abnormal loads such as timing of deliveries outside peak flow hours, and police escorts where necessary.

6.29 Operation and maintenance of the development will generate small volumes of additional light vehicle traffic over the lifetime of the windfarm. This traffic will gain access to the site via the entrance to the Whitelee Windfarm site at Lochgoin, and will not have a significant effect on the surrounding road network. Periodically there may be a need for major maintenance intervention including turbine or substation component replacement. These components would require a small number of abnormal loads, for example to replace rotor blades, transformers and gearboxes.

6.30 As it is likely that the turbine foundations, access tracks and underground cables would remain in situ after decommissioning, the traffic generated during decommissioning would be less than that during construction. This traffic will not have a significant effect on the surrounding road network assuming there are no major changes to the existing road network during the lifetime of the windfarm.

Consultation responses

6.31 The council's transportation services had no objections.

6.32 Transport Scotland said that while the proposed development represents an intensification of the use of this site, the percentage increase in traffic on the trunk road is such that the proposed development is likely to cause minimal environmental impact on the trunk road network. They had no comments to make.

Socio economic implications of the proposal.

6.33 The ES says that the construction of the windfarm would result in beneficial effects for on-site employment and service provision to the local and wider economy, though these would be short term and temporary. The existing operational staff at Whitelee Windfarm will be responsible for operating the proposed Development. Some additional employment or extension of existing contracts may result from the maintenance of the additional infrastructure.

6.34 The applicants highlight that the East Ayrshire Council Local Plan 2010 also sets out requirements for the provision of a Renewable Energy Fund for successful windfarm applications, used to finance sustainable community environmental projects. As the applicants are willing to make a financial contribution of some kind to community benefit the applicant submits that there is potential for economic benefits to local communities during the lifetime of the windfarm.

6.35 The impact on recreational land uses was assessed in the ES. It was considered that there would be negligible adverse effects during construction which would be temporary and not significant. During operation of the windfarm it is anticipated that there would be minor beneficial effects due to the contribution of the application to improved accessibility and recreation on WLWF.

6.36 After decommissioning of the proposed development approximately 3 kilometres of access tracks would remain, covering an area of approximately 2 hectares.

6.37 Overall, the proposed development is not predicted to result in any fundamental or material change in land use, population, structure of local community, recreation and tourism, or local services or employment.

Objections and representations relating to socio economic impact

6.38 Some objectors suggest that the windfarms are not liked by visitors to the area. There are also arguments that windfarms in the area discourage investment in small businesses and homes, because of a loss of confidence in the locality as a good place to live.³⁰⁰

6.39 Forty eight representations in favour of the application were submitted. A proportion of these were pro-forma letters giving the signatory a list of options to tick to indicate their reasons for support. These were that the application would increase the recreational benefits that exist at the windfarm; provide a boost for the local economy during construction; support additional jobs during construction; provide a further community benefit fund to support local initiatives; and contribute to government targets for renewables and greenhouse gas emission reduction. When subscribers were invited to add their own remarks, some said that the turbines were in the right place on Eaglesham Moor; that it was a great place to visit; that renewable energy should be maximised and that the windfarm should be expanded to capacity. Other persons wrote separately in support of the application giving a range of the reasons mentioned above, and adding others.

Aviation and other radar interference issues³⁰¹

6.40 The aviation consultees included Glasgow Prestwick International Airport, and Strathaven Airfield, who had no objections for their interests. Glasgow Airport identified that the proposal may conflict with their safeguarding criteria, but following discussions with the applicant withdrew their objection subject to planning conditions being attached to any consent.

6.41 The Ministry of Defence and NATS (En Route) has no objection to the development for their respective interests.

6.42 The Civil Aviation Authority does not object to the application, subject to the requirement that prior to the start of any construction, the Defence Geographic Centre is advised of the locations, heights, and lighting status of the turbines and met masts, the estimated and actual dates of construction, and the maximum height of any construction equipment to be used, to allow for the appropriate inclusion into Aviation Charts for safety purposes.

Reasoned conclusions

Conclusions on climate change

6.43 It is clear that the five application turbines would make a clear contribution to the drive to reduce greenhouse gas emissions, and would also marginally enhance the generating capacity of the 215 turbine WLWF by about 2%. However, placed in context this benefit would be relatively small, if certainly positive.

³⁰¹ see consultation responses.

Conclusions on natural heritage issues

6.44 We note the principles for planning policy on the natural environment stated in SPP. These include supporting positive change while maintaining and enhancing distinctive landscape character. Protected sites and species should be conserved and enhanced taking account of the need to maintain healthy ecosystems and work with natural processes. The water environment is to be protected and improved in a sustainable and co-ordinated way. Soils are to be protected from damage such as erosion or compaction. Woodland, with high nature conservation or landscape value should be regarded as an important and irreplaceable resource. Benefits to biodiversity should be obtained from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats.

6.45 Government policy on woodland removal³⁰² contains a strong presumption in favour of protecting Scotland's woodland resources. Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits. In appropriate cases a proposal for compensatory planting may form part of this balance. Approval for woodland removal should be conditional on the undertaking of actions to ensure full delivery of the defined additional public benefits. Planning conditions and agreements should be used to mitigate the environmental impacts arising from development.

6.46 We note that the applicant's approach to the removal of forestry is considered by FCS to comply with Government guidance. We would summarise the application proposals as involving the limited removal of commercial forestry on a keyhole basis, followed by the implementation of a habitat restoration plan which takes the wider environment into account. We consider that the removal of commercial forestry, albeit limited, would tend to contribute positively to the natural heritage interest, and that there would be a marginal benefit from the application due to habitat restoration. We conclude that the application proposals would generally accord with national policy on the natural environment.

6.47 As mentioned above we take note that the approval of the agencies consulted was given subject to requirements for a conditions framework intended to ensure pre-construction survey work and on site supervision to protect all aspects of the natural environment. We have included all these considerations in the suggested conditions in Chapter 7 and Appendix 1 below. If these are imposed we conclude that any adverse impact of the development on the natural environment would not be significant, and that there would be some marginally beneficial impacts, by reason of the prospect of restored habitat.

Conclusions on the historic environment

6.48 National planning policy on the historic environment³⁰³ says that this should promote the care and protection of the designated and non-designated historic environment (including individual assets, related settings and the wider cultural landscape) and its contribution to sense of place, cultural identity, social well-being, economic growth, civic participation and lifelong learning. Development should enable positive change in the historic environment which is informed by a clear understanding of the importance of the heritage assets affected and ensure their future use. Change should be sensitively managed to avoid or minimise adverse impacts on the fabric and setting of the asset, and ensure that its special characteristics are protected, conserved or enhanced.

³⁰² EAC 06 FCS Scottish Government Policy on Woodland Removal

³⁰³ CD 002 SPP paragraph 137

6.49 Based on the evidence from the ES surveys and the views of Historic Environment Scotland, we find that there would be no significant impact on any sites of cultural significance from the construction and operation of of the application proposals.

6.50 However, we have concerns about whether the loss of Moor Farm would be justified from a broad cultural heritage perspective, and suggest that Ministers do not include the demolition of this property in the permission were they to be minded to grant consent. We noted that the applicants have been refused planning permission on appeal for total demolition of other farms.³⁰⁴ The building is not listed for historic or architectural interest. A question arises as to whether it should be considered as a significant element of the historic environment at all. However, bearing in mind that national policy protection is also directed at non-designated assets of cultural importance, Moor Farm and steading appeared to us to be a typical small hill farm in this landscape, such as would have long predated the wind farm. It is noted in the ES as relating to remains of cultivation systems. It is clearly of some age. We would take the view that it is a local and vernacular cultural asset of some importance in that context. It would have no practical use for the anticipated life of the wind farm. We agree that it is a relatively isolated property, although it is reasonably close to the listed building at Kingswell, and forms part of a scattered pattern of houses beside the Moor Road(B764). It is readily accessible from the road, so we can appreciate that while unoccupied it could be regarded as vulnerable to vandalism.

6.51 In our view the building in its setting does have some cultural significance as an intact and characteristic vernacular building typical of this landscape, which does contribute positively to the sense of place. Unlike similar buildings deeper into the WLWF site, and so less accessible to the passer by, it can be experienced as a typical landscape feature by travellers on the B764. It lends atmosphere and a sense of the past use to the landscape experience.

6.52 We take into account that were the application to be granted, the property would be adversely affected by the application turbines, and would not be an attractive permanent residence. However, it appeared to us to be a robustly built and durable group of buildings in relatively good order. In the previous appeals where planning permission was refused for the complete demolition of other farm steadings on WLWF, partial demolition was accepted as a possible alternative approach. We hesitate to suggest any intentional destruction for management purposes, such as the retention of standing walls only, and preservation as a ruin, for a traditional building complex which is so intact and close to the public road. We suggest that further consideration should be given to a less destructive solution for the continued existence of the building than full or partial demolition.

6.53 It would be our recommendation that if Ministers are minded to approve the application the demolition of Moor Farm should be excluded from the permission. If Ministers decide that the application should be granted, but with the permission to demolish included, a condition should be imposed to include a detailed survey and recording of the buildings before demolition. This was suggested as mitigation in the ES, and is reflected in the draft conditions.³⁰⁵

6.54 However, subject to these observations we would conclude that there would be no impact with significant adverse implications on the historic environment by reason of the development.

Conclusions on socio-economic impact, including tourism

³⁰⁴ PPA-190-2020, 2021, and 2022.

³⁰⁵ CD 023 chapter 12 – see 12.8.

6.55 We agree with the findings of the ES that there will be a slight and transient local economic benefit from the process of construction, due to the possibility of availability of some employment and a slight increase in local expenditure. However, WLWF is an established operation, and we note that the applicant did not consider there would be any significant number of new operational jobs on site.

6.56 We noted the comments from objectors that some residents had decided not to invest in their homes and businesses, having lost confidence in the area, but did not find that assertion to be substantiated.

6.57 On potential effects on tourism and occasional visitors, we noted the comments that visitors to the area are reported as not liking windfarms, but did not consider this to be of much assistance in judging whether there would be any real effect on decisions to visit the area from the five additional turbines proposed. We have taken the view in relation to landscape and visual impact that the visitor experience of a traveller on the B762 or the A77 would have their experience adversely affected to some degree. We are aware that WLWF is a notable visitor attraction in its own right. There was however, no substantial evidence which would shed any real light on the potential effect of the application addition to WLWF on visitor behaviour either way. The evidence is largely anecdotal and reflects the variety of attitudes to windfarms in the general population. In the absence of direct evidence we judged that there would be unlikely to be any significant change to the visitor patterns to the locality as a result of the extension to WLWF.

6.58 The applicant has advised that they would be prepared to make a contribution to a community benefit fund. In this case the local plan contains a policy in favour of renewable energy developers being asked to make contributions to the council's community benefit fund, and the council has given information about the operation of the fund to date.³⁰⁶ We have commented further on this topic in chapter 7. We conclude that would be a prospect of a funding stream from the development towards such a fund.

6.59 Overall we would agree with the findings of the ES that the socio economic benefit which would be expected to arise from the application is relatively restricted and should be regarded as a minor element.

Conclusions on other matters

6.60 In respect of the other matters, the application proposals would cause no significant impacts on any aviation interests, subject to conditions to ensure that information about the installation of the turbines was passed to the relevant authorities. It is also clear from the ES and the consultation responses that the transport impacts from this relatively restricted proposal will be minor and transient in nature. The prior approval of a traffic management plan is provided for in conditions.

³⁰⁶ EAC written submissions on conditions.

Hyperlinks to documents referred to in this chapter

Doc ref	Description	Hyperlink to DPEA website
Statutory consultee responses		
	Forestry Commission Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230683
	Glasgow Prestwick Airport	https://www.dpea.scotland.gov.uk/Document.aspx?id=230684
	Marine Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230688
	Historic Scotland	https://www.dpea.scotland.gov.uk/Document.aspx?id=230686
	NATS Safeguarding	https://www.dpea.scotland.gov.uk/Document.aspx?id=230689
	Strathaven Airfield	https://www.dpea.scotland.gov.uk/Document.aspx?id=230690
	BAA Glasgow Airport	https://www.dpea.scotland.gov.uk/Document.aspx?id=230698
	Civil Aviation Authority	https://www.dpea.scotland.gov.uk/Document.aspx?id=230699
	Defence Infrastructure Organisation	https://www.dpea.scotland.gov.uk/Document.aspx?id=230700
	Transport Scotland TRBOD	https://www.dpea.scotland.gov.uk/Document.aspx?id=230692
	Scottish Environment Protection Agency	https://www.dpea.scotland.gov.uk/Document.aspx?id=230695
	East Ayrshire Council	https://www.dpea.scotland.gov.uk/Document.aspx?id=230693
	Scottish Natural Heritage	https://www.dpea.scotland.gov.uk/Document.aspx?id=230696
	Association of Salmon Fishery Boards	https://www.dpea.scotland.gov.uk/Document.aspx?id=230697
Core documents		
CD 002	SPP	https://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD 018	Electricity Act 1989 (extracts)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276497
CD 023	Environmental Statement August 2012 - Chapters 01-06 & Chapters 09, 10, 12-17	https://www.dpea.scotland.gov.uk/Document.aspx?id=230461
CD 024	ES Appendix 4.02 Forest Redesign & Blanket Mire Restoration	https://www.dpea.scotland.gov.uk/Document.aspx?id=230463
	Forest Redesign & Blanket Mire Restoration - part 02	https://www.dpea.scotland.gov.uk/Document.aspx?id=230464
	Forest Redesign & Blanket Mire Restoration - part 3	https://www.dpea.scotland.gov.uk/Document.aspx?id=230465
	Forest Redesign & Blanket Mire Restoration - part 4	https://www.dpea.scotland.gov.uk/Document.aspx?id=230466
	Forest Redesign & Blanket Mire Restoration - part 5	https://www.dpea.scotland.gov.uk/Document.aspx?id=230466
	04.03 - Draft Peat Management Plan	https://www.dpea.scotland.gov.uk/Document.aspx?id=230468
	Appendix 11.05 - Habitat Loss calculations	https://www.dpea.scotland.gov.uk/Document.aspx?id=230492
	Appendix 12.01 - Gazetteer of Cultural	https://www.dpea.scotland.gov.uk/Document.aspx?id=230493

	Heritage Features	
	Appendix 14.01 - Traffic Generation Tables	https://www.dpea.scotland.gov.uk/Document.aspx?id=230498
CD 027	Representations (including Fenwick Community Council, Mr T Harrison and Ms Greta Roberts and others)	https://www.dpea.scotland.gov.uk/Document.aspx?id=230443
EAC 06	Forestry Commission Scotland The Scottish Government's Policy on Control of Woodland Removal	https://www.dpea.scotland.gov.uk/Document.aspx?id=267498

CHAPTER 7:

Conditions and legal agreements

Introduction

7.1 In this chapter we discuss the conditions which could be applied to a permission, if Ministers decided to grant consent, and the differing views between the parties on the underlying issues. We also consider the respective positions of the applicant and EAC and the views of objectors on the legal obligations which have been suggested.

7.2 The applicant has tendered a list of proposed conditions on which there was ultimately substantial agreement with EAC, with some exceptions.³⁰⁷ We have used this agreed statement as the basis for our suggested conditions. These are laid out in Appendix 1 to this report. The conditions numbering used in the Appendix is different from the numbering in the agreed statement of conditions, due to the later insertion of the agreed noise condition and one other change. The numbers used in the commentary in this chapter are the numbers used in the Appendix.

7.3 In the case of each suggested condition we have had regard to the legal and policy tests for conditions on planning permissions laid out in Circular 4/1998,³⁰⁸ and the ECDU/HOPS specimen conditions for section 36 consents, which were recommended to the parties at the beginning of the inquiry and on which we understand the agreed statement to have been based.³⁰⁹ We have also had regard to Circular 3/2012 Planning Obligations and Good Neighbour Agreements³¹⁰ when considering our recommendations on a potential legal agreement.

7.4 As discussed in Chapter 6, we have also considered the requirements of the statutory consultees where a requirement for conditions has been expressed.

7.5 Note that we have not commented on any agreed condition which is essentially the same as the specimen conditions, and where there has been no challenge to the agreed wording from objectors.

7.6 We would highlight that as discussed in Chapter 4 of this report, we have concluded that the conditions frameworks for WLWF X1 & 2 were not fully implemented in some respects. We have had regard to any lessons which we consider could be learned from this in our comments.

Appendix condition 1: Commencement of development

7.7 The developers have requested an extension of the usual three year period for commencement of the development to five years, because of recent fluctuations in the financial arrangements under which the industry operates. They request time to respond to the effect of these issues, which are not under their control.

7.8 EAC says this is insufficient reason to depart from the dynamics of the reformed planning system, which operates to encourage development momentum and early implementation. Three years is the standard period and financial disruption and market conditions is not a relevant planning reason to depart from it. For example, it would not be

³⁰⁷ See agreed list of conditions in table below

³⁰⁸ CD0 10 and CD 11

³⁰⁹ see appendix 5 note of pre –examination meeting

³¹⁰ CD 013

extended to a housing developer for a housing site. Five years is an unduly long period of uncertainty about the development for the local people affected, and is not reasonable in that context. This is an extension of an existing facility with much of the supporting infrastructure in place. For a development of this scale insufficient case for an extended period has been presented by the applicant.

Recommendation

7.9 Given that there are uncertainties at present in relation to the funding of these installations we accept that an extension of the normal time period for implementation to five years is reasonable in the circumstances.

Appendix condition 3: Non-assignment of the consent; requirement to consult with EAC

7.10 EAC suggests that the condition provide that Ministers should consult with them prior to determining any application to assign the consent. The applicants do not object to this inclusion.

7.11 EAC say that as the local authority they would be best placed to apprise Ministers of any issues with a bearing on an assignment which might have arisen in relation to a consent. They also highlight in this regard that the noise condition expressly extends to the operation of all of WLWF. Any future development of the management of WLWF which might result in the future separate operation of WLWF X3 would give rise to enforcement issues which would require to be further considered with the enforcing authorities before any division was made.

Recommendation

7.12 We have reservations about the inclusion of a term in a condition which appears to bind Ministers to a particular course of action, given that Ministers' powers and duties in this regard may be circumscribed by the Electricity Act and other administrative measures not before us. In the final analysis it would be up to Ministers whether such a term is included in the proposed condition. However, the suggested amendment is not resisted by the applicant, and has a basis in common sense, in relation to an important issue. Consultation between Ministers and the local authority arises elsewhere in the specimen conditions. We have included wording to this effect in our suggested condition.

Appendix condition 4: Serious incident reporting to Scottish Ministers

7.13 The CH group say that this condition should be strengthened and extended to expressly deal with water contamination incidents. They point out that there is no definition of what might constitute a serious incident. Any contamination of a PWS might only affect a small number of people, but it could be potentially serious.

7.14 The applicant responds that the specimen condition has a very particular purpose of ensuring that Scottish Ministers are made aware of any incident of potentially national concern. They reiterate their point that pollution of PWS by coliforms and some metals can be seen to predate WLWF and should properly be regarded as a baseline of the water environment. Finding coliforms in any particular private water supply cannot be regarded as an incident of national significance. There are specific measures in the conditions designed to deal with contamination of water supplies. In any case the objectors' suggestion would lead to a duplication of controls which may cause confusion about who was supposed to deal with the issue.

7.15 EAC are content to leave this to Ministers.

Recommendation

7.16 The concern behind the objector's suggestion is their premise that the construction and operation of WLWF gave rise to water contamination in the past, and is therefore likely in the future. This is considered in Chapter 4 above where we have not found this to be established. We have also found that there is an acknowledged risk that certain PWSs may be affected by the application works, and that the conditions imposed on the application should provide for risk assessments to further understand the level of risk, and monitoring plans for those identified to require monitoring. However, we have found that the arrangements to this effect set up by the conditions imposed on WLWF X1 & 2 were not fully implemented in practice, because the applicants did not pass the information they had collected timeously to the council, and so far as is known, the council did not take steps to enforce the collection of the information. This led to a situation where the applicants had information about PWSs in a poor state, but that information was not passed to the authorities who were in a position to take steps to make consumers aware of the information. In asking for the enhancement of this condition the objectors are also trying to ensure that this does not happen were permission to be granted.

7.17 This is clearly a legitimate concern, but we do not consider that an adjustment to specimen condition 4 is the right place to address it. The reason for the specimen condition is that of keeping Scottish Ministers informed of any incidents which may be in the public interest, but underlying the condition is the implication that such an incident should be one with national implications which Ministers should be made aware of. In our deliberations on the water issue we have found that the presence of bacterial, metallic, and hydrocarbon substances in surface water and private water supplies is part of the background characteristics of this location, because of the geological, hydrogeological, and hydrological environment, and the surrounding land uses. The discovery of these substances in any particular PWS would be a matter of local, not national, concern. It would not necessarily be clear that the discovery of concerning substances would be related to a breach of obligations, which is the other trigger for notification to Ministers. Ministers' officers would not necessarily be best placed to ensure that timely and effective consequential action is taken. Such information would be best passed to the council as local environmental authority.

7.18 In our view this concern is best addressed by firstly, the express requirement in the specimen conditions that a PMO must be appointed at an early stage, and secondly, by ensuring that this aspect of the monitoring regime is made explicit. These aspects are dealt with in the context of conditions 12 and 20 below.

Appendix condition 5: Implementation in accordance with the approved plans

7.19 The CH group have concerns that the definition of the development is insufficiently transparent in that it suggests that further information may be introduced without public involvement. The applicant and EAC say no change is necessary.

Recommendation

7.20 In our view the proposed condition, modelled on the specimen condition, sufficiently defines the development which would have the benefit of the permission. The applicant would not be able to construct any different proposal without stepping outside the consent.

Appendix condition 8: Micro-siting

7.21 The CH group says that the Ecological Clerk of works (ECoW), who is employed by the developer, should not be allowed to enable a change to the location of a turbine through micro-siting of up to 50 metres without the involvement of the planning authority, if this would result in turbines being able to be moved closer to houses.

7.22 The applicant says this proposed restriction would undermine the purpose of the role of the ECoW in minimising environmental disturbance. Micro-siting is an established and a highly localised process, designed to ensure examination of the ground to ensure environmental protection, particularly of natural heritage aspects. In this case a general proscription about not moving a turbine closer to residential property would be complex to deliver, given the location of the number of residential properties around the development. This should not be extended to include borrow pits, which have their own controls in the conditions.

7.23 EAC says that the condition providing for appointment of the ECoW includes sufficient safeguard of the independence of that person in practice. They do not consider that the micro siting process in a development of this relatively restricted scale would be likely to make any significant difference to the other environmental impacts which have been assessed and on which the permission is based.

Recommendation

7.24 We do not consider that change is required to this condition. A quasi-independent and suitably qualified ECoW approved by the local planning authority and SNH is now an established mechanism to safeguard the natural environment. The appointment has been requested by SNH in their consultation as the basis for their lack of objection on natural heritage grounds.³¹¹ Micro-siting of turbines under the supervision of the ECoW is a recognised and fit for purpose strategy, which allows the development to proceed in tandem with the protection of environmentally sensitive areas. Micro-siting using established principles, within the restrictions set in the condition should not result in any significant changes to the development as it has been assessed.

Appendix conditions 9/10/11: Borrow pits

7.25 The CH group believe that borrow pits will open up pathways for water contamination. They say that the conditions should require that any borrow pit excavation must be preceded by a thorough geological survey, including test boreholes, to inform a pre-construction geological assessment and underpin a hydrogeological assessment of groundwater flow and vulnerability to pollution. If the outcome of this assessment shows that there would be a risk to a PWS the developer should be required to make arrangements for a standing alternative supply.

7.26 The Applicant says that sub-paragraph (a) of the condition as proposed requires a detailed working method statement to be prepared which has been informed by ground investigation. In fact, it is standard practice for a developer to undertake some intrusive site investigation prior to this type of development. This has happened at WLWF³¹² and would happen here. Such site investigation is part of the finalisation process of the construction contract, and is not done for environmental purposes. The investigations requested by the CH group would not be standard practice. In any event, such investigations would not

³¹¹ see SNH consultation response.

³¹² see SPR W059- Ground investigations/ water sampling results.

provide the type of information about hydrogeology which the objectors think they would. Borehole investigations would not help establish whether there was in fact any linkage between the location and a private water supply. The appropriate location for ground water monitoring is at chosen locations down gradient from the proposed works. That would be standard practice, and would inform the risk assessment process for PWS (provided for under condition 20).

7.27 EAC considers that the safeguards already included in the condition are sufficient, including the requirement for a site specific scheme for working of borrow pits, which includes details of drainage. EAC considers that it would be unreasonable to expect a developer to provide an alternative water supply as a contingency, and doubts that it would be enforceable.

Borrow pit restoration

7.28 The CH group wants a geotechnical risk analysis before a borrow pit is used for any silt slurry or peat storage.

7.29 The applicant says restoration of borrow pits will include a range of materials which arise from the construction process. The nature of the material, etc., will have been dealt with by the working method statements, up to and including reinstatement works. The comment is therefore wrongly directed and is already encompassed within the conditions.

Borrow pit blasting

7.30 The CH group wants restrictions on blasting at weekends, and want emergency phone numbers to be given to residents to allow them to report concerns.

7.31 The applicant says that the borrow pit blasting condition is in standard terms and reflects established standard practice which is to permit such activities to a limited extent on Saturday mornings. The blasting will always have to be undertaken having regard to health and safety, but the blasting association with this type of borrow pit is not particularly extensive and is controlled through the peak particle velocity levels contained within the condition.

Recommendations

7.32 The CH group's suggestions are predicated on their view that there would be a highly probable hydrogeological pathway between a borrow pit and PWS through fractures or other permeability in the geology. The expert witnesses do not consider that that is a likely scenario for this development, and we have accepted that evidence.³¹³

7.33 On the one hand, borrow pits are recognised by the ES as a possible source of impact on PWS. On the other, this is not an inevitable process, depending as it does on the relative locations of the borrow pit and the PWS, and their relationship with the hydrogeological and hydrological catchment areas. This has been considered in the ES.

7.34 Also relevant is the manner in which excavation is carried out and how the pit is managed while open, and how it is restored. These would be catered for in proposed condition 9 and 10. The process will involve both SEPA as the lead water environment authority, and the local planning authority who has oversight of the safety of PWSs.

7.35 As a final safeguard, any PWS which is realistically at risk should be monitored throughout the process, and the results handled effectively and responsibly. This is dealt with in conditions 12 and 20 which provides the detail of the framework of the management of risk to PWSs.

³¹³ See Chapter 5

7.36 As to blasting, for this size of development any blasting would be likely to be transient and fairly restricted, and we are content with the tried and tested approach which restricts vibration, and keeps any blasting to daylight hours and maintains Sundays and holidays free of blasting. Blasting is a highly regulated process, with health and safety a primary concern. We do not consider that the provision of a range of telephone numbers would provide any additional comfort or protection to residents.

Appendix condition 12: The Planning Monitoring Officer(PMO)

7.37 Reflecting the ECDU/HOPS specimen condition 12, the conditions provide that work may not start until a planning monitoring officer has been appointed. The specimen condition provides for an appointment by the developer, subject to the approval of the council. The agreed condition provided for the appointment to be made by the council.

7.38 EAC has said that in addition to any condition providing for a PMO, it is important that a section 75 agreement is also entered into which would set out in detail the specific duties of the PMO. They have provided a draft section 75 agreement illustrating their suggested approach. They say that if the section 75 is not accepted they would want the condition to spell out the remit of the PMO. They say that defining the PMO arrangements in a section 75 obligation would provide EAC with 'wider powers of enforcement' which would better assist EAC to ensure that the development is constructed in accordance with the application and the planning conditions and that the land is restored to a suitable condition.

7.39 The applicant says that the detailed terms of the PMO appointment are a matter for EAC. Some aspects of the appointment protocols could perhaps usefully be set out between the applicant and the EAC in a legal agreement, and there is further scope for discussion on the detail of this. However, EAC's changes to this condition appear to impose an obligation on EAC, whereas the conditions framework should be focussed on matters with which the developer requires to comply and should fall within their power. They say that a 'scheme' for the PMO is unnecessary.

7.40 The CH group suggests that the conditions should require that the PMO should provide reports bi-monthly on compliance performance to EAC which are to be made publicly available from the pre-construction phase to restoration. All costs are to be borne by the developer and included in a performance bond.

7.41 In response to this the applicant says that the CH group suggested changes cause similar problems to EAC's proposed adjustments. The condition has been altered from the model ECDU condition to extend to the pre-construction phase where pre-commencement conditions are being discharged, which should entail a dialogue with EAC direct. All reporting responsibilities are properly matters which will be incorporated in the formal appointment process for the PMO and should be between the PMO and EAC, and there is no need for the applicant to be involved. The management of any environmental information obtained by the PMO, including the publication of the material, is entirely a matter for EAC as the responsible statutory authority and the duties in relation to this should not be passed on to the developer.

Recommendation

7.42 In Chapter 4 we have identified that the absence of an external PMO for the WLWF extensions appeared to give rise to some confusion among the applicant and the council as to the handling of information. A formal arrangement for a PMO has not previously been incorporated in to the conditions for any previous phase of WLWF, although a PMO was appointed by the three planning authorities for WLWFO. The specimen conditions

introduce an express requirement that a PMO shall be appointed, which is clearly helpful. It is important that the role and function of the PMO are clearly delineated to ensure that the previous failures to comply with all aspects of the detail of the conditions framework do not occur with this application, were consent to be granted.

7.43 Clause 4 of the draft section 75 agreement supplied by EAC³¹⁴, suggests that prior to Commencement of Development the applicants shall submit a planning monitoring scheme for approval by the council. The Planning Monitoring Officer would

- (a) assess information submitted in relation to the discharge of the planning conditions;
- (b) monitor compliance with the terms of the deemed planning permission and conditions attached to planning consent;
- (c) submit a monthly report to the council summarising works undertaken on site, and a quarterly compliance monitoring report during the construction period, the borrow pit restoration period; decommissioning period and the restoration period;
- (d) provide a yearly report to the Council summarising aftercare works undertaken on site; and
- (e) report to the Council any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to the consent at the earliest practical opportunity.

7.44 After due consideration we have decided to suggest a condition in the same terms as the ECDU / HOPS specimen condition, which includes some of the terms suggested by the council for the legal agreement. The appointment of the PMO is to be the responsibility of the developer, which would avoid delay when the developer is ready to proceed. The condition allows for further detail of the PMO's responsibilities to be approved by the council. We have enhanced the condition framework slightly to reflect the principles behind the PMO as envisaged by the specimen condition.

7.45 We noted that there was consensus between the council and the applicant that the precise terms of the PMO appointment could usefully be included in a legal agreement, and would support such an approach if the council and the applicant wish to pursue it. However we have reservations about whether a planning obligation under Section 75 of the Town and Country Planning (Scotland) Act 1997 as amended, would be a straightforward fit with the function of the PMO envisaged in the specimen condition, and we do not consider that a planning obligation, as such, is appropriate for this purpose. There may be benefits from a self-standing legal agreement between the council and the applicant to deal with the precise arrangements under other council powers, but we are content to proceed on the basis that this is left optional, as the parties progress the implementation of the condition we have proposed.

Appendix condition 13: Ecological Clerk of Works

7.46 The CH group says that the ECoW should remain on site and conduct daily inspections until all turbines are commissioned. Baseline monitoring values for surface water ground water and PWSs should be established over 6 months prior to any construction activity. All monitoring should continue until baseline values are re-

³¹⁴ see Appendix 2 and link to draft section 75 in table

established. All failures of compliance are to be logged, and shared between the PMO and the ECoW, and should inform the bi-monthly reports. The ECoW appointment should continue until the WF is operational and not be tied to ground works. The origins of these requirements can be seen in the objectors' perception that monitoring for previous phases of WLWF was not carried out systematically and that information was not systematically logged or passed on to the relevant authorities at the time when it could have been investigated or otherwise acted upon.

7.47 EAC suggests that the condition should expressly provide that the ECoW should have an obligation to report instances of non-compliance to the PMO at the earliest practicable opportunity, in order that EAC may thereafter become aware of them and any consequential action is facilitated.

7.48 The applicant responds that the appointment of the ECoW is fundamental and comprehensive and runs right through any period of construction activity and continuing through the project until any proposed post construction restoration works are carried out as required in terms of the conditions. Requirements regarding monitoring etc., are more appropriately and clearly dealt with by the specific subject conditions. The timing of the restoration will last beyond the commencement of operation and thus the concerns expressed by Connor/Harrison regarding timing and appointment of the ECoW are not borne out.

Recommendation

7.49 It should be recalled that in contrast to the PMO, the ECoW is an independent monitor of the applicant's actions, but is employed by the applicants. The appointment is of a suitably qualified person who is to be approved by SNH and SEPA for their respective interests. The ECoW is there to 'monitor compliance with the ecological and hydrological commitments provided in the environmental statement'. This person and their responsibilities are incorporated into the applicant's operations. The idea is that they will be on site as an additional safeguard to ensure that the applicant's environmental responsibilities are actively attended to, and that no aspect of the natural environment is inadvertently damaged or neglected. We note that this condition sufficiently addresses the concerns of SNH and SEPA.

7.50 We recognise the potential advantages of an express requirement in the ECoW function that relevant information, for example about water pollution, should be drawn to the attention of the PMO. However, we suggest this is really a requirement for effective liaison between the applicant, the PMO/ Council and the ECoW, rather than a matter for express provision in the condition. For example, an overarching requirement that the ECoW liaise effectively with the PMO, and the type of information that should be shared, could be written into the PMO scheme if that were thought advisable by the applicant and the council. This would be a better and more comprehensive approach than writing miscellaneous further duties for the ECoW into various conditions which are not necessarily directly related to the ECoW function.

Appendix condition 14: The Construction and Environmental Management Plan (CEMP)

7.51 The CH group have no confidence in the way in which risk assessments and CEMP had been implemented in the previous WLWF phases. They ask for the condition to prescribe that various detailed matters are to be specifically provided for in the CEMP. These are to include the location of site toilets; site floodlighting restrictions; a specific prohibition against the use of brash; planting; groundwater monitoring, for which they wish

to introduce oversight by the British Geological Survey; surface and ground water monitoring monthly, which should include all the range of tests previously prescribed, including pH values, bacteria, turbidity, and organic content. They wish to spell out these measures because they consider that they are required to detect construction related changes. They want standardising of tests and accredited standards of methodology to be agreed with the PMO.

7.52 EAC does not consider it necessary to include these specific requirements in the condition requiring the CEMP.

7.53 The applicant says that the requirements suggested by the CH group in relation to the CEMP are over prescriptive. The topics raised are fully covered by subject conditions as to how issues are to be dealt with. The detail suggested in respect of forestry and other matters are quite properly to be contained within the plan itself. The CH group requirement suggests that the borehole monitoring should be agreed with the BGS. This would introduce a role for the BGS which is inappropriate. The BGS provide specific services and information and are not a decision maker. The CEMP process should be recognised as standard practice, for which there are detailed industry standards. It has been outlined in draft in the ES, and has been accepted in principle by the consultees. Elaborating the CEMP condition runs counter with the ECDU drive to shorten and consolidate the wording of conditions.

Recommendation

7.54 Our consideration of the evidence about the previous phases of WLWF in Chapter 5 has led us to the conclusion that problems of information handling occurred, but these were not caused by flaws in the terms of the previous CEMP process, but failures to implement properly. As discussed above we consider that express provision for the appointment of a PMO in the conditions would assist in avoiding similar problems in future. There is detailed industry and other guidance which will inform the parties about the content of the CEMP. The CEMP is a crucial management document which requires to meet the satisfaction not only of EAC but also of SNH and SEPA. The judgement of these various expert agencies about what is required in the CEMP should not be second-guessed, by the inclusion of a number of random additional requirements. We do not suggest change to this condition.

Appendix condition 15: Construction hours

7.55 The CH group wish to further define and add to what is covered by the condition limitations, and want a direct contact route for residents to complain if activity takes place outside the stipulated hours, and for residents to be advised of abnormal HGV loads outwith authorised working hours.

7.56 The applicant replies that time limits on working in relation to various potentially disruptive matters of such as blasting have already been defined by suitable conditions. The attempt by the CH Group to alter the condition to include restrictions on the erection of turbines could not operate in practice as this operation has to take into account weather, the implications of equipment required, and other technical matters. That is why it is acknowledged in the draft condition that such activities can take place outwith the specified hours.

Recommendation

7.57 We do not consider that the additional restrictions suggested by the objectors are reasonable or would be likely to be practicable. Many of these operations would take place on only a few occasions for this project and any impact would be transient. We do not

suggest any changes to the proposed condition. Modern site management practice will entail arrangements for communication with the public, and we do not consider it necessary to make detailed provision for this in a condition.

Appendix condition 19: Television reception

7.58 The CH group wants 'baseline monitoring' of all TV, radio, and mobile phone reception prior to construction activity for all properties within 2 km of the development, and a direct line for complaints.

7.59 The applicant says that there is no evidence to suggest that either radio or mobile phone reception would be in any way impacted upon by development. This is not a matter on which any evidence was led, and in the circumstances the suggested adjustments to a standard condition are unnecessary.

7.60 EAC is not aware of there being a likelihood of a problem and has not had complaints about this from existing wind farms.

Recommendation

7.61 No evidence has been provided to us as to why the specimen condition would be insufficient. We do not consider that any change is necessary.

Appendix condition 20: Private water supplies.

7.62 The CH group suggest a substantial number of suggested changes, based on their objections about the risk of contamination of water supplies. They consider the condition to be inadequate at present.

- Agreement must be reached with the planning authority as to which PWSs are to be monitored and a precautionary approach should be taken to identifying 'at risk' water supplies.
- The objector's evidence of water pollution has shown that the requirements in SEPA Land Use Planning Guidance note 31³¹⁵ would be inadequate to protect households, in particular the 250 metre buffer zone between the site of excavation and any PWS. A more cautious approach should be taken.
- PWS monitoring at the least should take place at Cauldstanes, Bestfriends Cottage, Kingswell and Drumtee, because these properties were affected during previous WLWF works.
- All PWS sources and pipelines within 2 kilometre of the site boundary should be identified.
- A holding tank should not be taken as proxy for a source of a PWS.
- Monitoring of the PWS at each household at risk, in agreement with the local authority and with the consent of the householder, should start six months prior to any works, including forestry felling, to establish an adequate baseline of water quality.
- Test parameters need to be extended beyond the basic routine monitoring test parameters to include the more extensive test parameters for a type A supply, including ground water monitoring, in order to detect any industrial contamination.
- PWS monitoring should occur monthly as a minimum increasing to weekly if the parameters increase 20% above the baseline or depart from Scottish drinking water

³¹⁵ SPR-W005

standards. Samples should be taken at the point of consumption. Additional samples should be taken of raw water at bi-monthly intervals at a point prior to any filtration or UV light treatment.

- If the householder refuses permission for monitoring or testing at the point of consumption, i.e. the kitchen tap, the developer should inform EAC so that they can facilitate testing for public health purposes.
- PWS monitoring should continue until baseline values have been established.
- All PWS monitoring results should be communicated directly from the monitoring laboratory to the developer, the PMO, and the EAC environmental health department. EAC should be responsible for notifying householders immediately should there be any failure to reach defined standards for drinking water.
- If any contamination or decrease of water supplies occurs compared to the baseline results the developer must investigate this in conjunction with EAC acting as environmental health authority, at the developer's cost.
- Residents must be informed immediately should there be any departure from drinking water standards and the developer must immediately provide alternative water supplies. Sufficient water must be stored locally at all times in case of this requirement.
- Emergency telephone numbers must be supplied to all residents within 3 km of the site including numbers of the EAC environmental health department.
- There should be a section 75 agreement to ensure that this is complied with.

7.63 The applicant responds that the proposed monitoring requirements have been set out in the Environmental Statement including all properties which would be further considered. These are matters which are properly sorted out through the approval of the mitigation scheme, and this would include several of the requirements attempted to be resolved prematurely by the CH condition. The hydrogeological catchment as defined in the Environmental Statement is conservative and the appropriate properties for potential monitoring have been identified. Other details suggested by the objectors are simply not competent for a planning condition. For instance, if a householder refused consent for monitoring their PWS, a condition cannot require a local authority to seek to persuade, or force the householder to allow EAC to monitor the PWS. Simply put, such an approach is unreasonable. It is doubtful that EAC could reasonably accept such responsibility particularly as the private water supplies in question are type B, and their legal responsibilities are limited.

7.64 The objectors attempt to prescribe where samples should be taken. That may be impossible to achieve without physically interfering with the private water supply in question, which nobody other than EAC or the householder has power to do. That is not something which would be appropriate. For example, trying to take pre-filtering results from a borehole supply may require a physical alteration to the system. This is excessive and unlikely to be acceptable to the owners of the supply, and if permission could not be obtained, the condition would be unenforceable. The suggested triggers for on-going monitoring have no evidential basis. For example, if the baseline is exceptionally low, a 20% increase will also be exceptionally low. The details of any mitigation measures should be identified within the overall scheme. The suggestion that there should be emergency telephone numbers for all residencies within 3km of the site is not reasonable or justified having regard to the information contained in the Environmental Statement or the evidence at the Inquiry.

7.65 EAC comments that the PWS protection condition as drafted requires a mitigation scheme to be approved in writing with EAC prior to the commencement of any development. EAC envisages the PMO deputising for EAC in this function. Similarly the

PMO is seen as responsible for monitoring compliance with the condition, including any mitigation, monitoring, or contingency measures. EAC considers that the PWS condition proposed is reasonable and relevant to the development permitted. The developer requires to provide a PWS risk assessment which will include all details of monitoring, mitigation measures and contingency plans. Whilst EAC does take account of SEPA guidance on this matter, EAC does not discharge planning conditions exclusively on the comments provided either from SEPA or upon SEPA guidance. It should be borne in mind that it is not EAC who has to maintain PWSs, which is the duty of the designated 'Relevant Person' under the Private Water Supplies Regulations. EAC also makes the point that if a householder refuses to allow access to the developer to carry out PWS monitoring, it would not be reasonable or enforceable to seek to compel the local authority carry out the monitoring tests. The authority has statutory provisions regulating its involvement in PWS monitoring and the costs of testing PWSs under those regulations are required to be met by the users of the supplies.

Recommendation

7.66 The CH group suggestions for the conditions are substantially based on their perception that works on WLWF have affected PWS in the past. We have not found this to be established. We reiterate that some risk to PWS from wind farm works is recognised in the ES, and that there should be measures in place to avoid this happening, together with ongoing monitoring of any PWS which have been found to be at risk.

7.67 There are a number of fundamental problems with the changes requested by the objectors. To an extent, the objectors' proposals ignore the existing legal position that the primary responsibility for the wholesomeness of a private water supply lies with the consumers of that supply. They effectively seek to transfer that responsibility to the applicants for the duration of the WLWF operations. It is inappropriate to use a planning condition to attempt to modify the background law. Other suggestions by the objectors seek to disregard national guidance, such as the SEPA guidance note. The objectors seek to pre-empt the outcome of the risk assessment process by stipulating which water supplies should be protected and to what extent.

7.68 However, in our view, the objectors have not succeeded in establishing an evidence base for their suggested measures.

7.69 Several of the additional requirements requested by the objectors cannot be realistically complied with by the applicant, given that they require the legal powers of entry which they do not have. The agreed condition has been enhanced by agreement beyond the requirements of the specimen conditions, to provide for reports to the council about whether access to sources of supply has been achieved. This would allow the council to maintain some oversight of the process.

7.70 We consider that subject to some additional specification about what the PWS mitigation scheme should cover, the proposed PWS protection condition framework provides sufficient safeguards. We acknowledge that previous conditions did not work as they had been designed to do, but we have concluded these were problems of implementation, not problems with the terms of the condition. After this inquiry, the council and the applicant would have enhanced awareness that the contamination of PWS by WLWF is a source of public anxiety, albeit not an anxiety for which we have found any justification. This was not the case for the previous phases of WLWF, and they can take this new factor into account in their arrangements. A PMO would be appointed to assist the local authority with the monitoring process, a mechanism which was not previously in place for the extensions. EAC, in considering what arrangements they should come to with the PMO they appoint, will wish to ensure that robust internal arrangements are in place to

ensure that they can react appropriately within their existing powers if any public health issue with PWS comes to their attention.

7.71 We have added an express requirement that the PWS mitigation scheme should cover arrangements for communicating with the council more quickly if the monitoring process should reveal any results which call into question the wholesomeness of any PWS, irrespective of the reason for the issue. This should remove any doubt about how information should be handled or any link to fault, but would ensure that environmental information which should be communicated to the council in their overall capacity as environmental health authority is prudently handled.

7.72 The suggestion that the developer should make arrangements to supply alternative water supplies is also predicated on the assumption that it is established that if anything goes wrong with local water supplies it will necessarily be the wind farm developers fault. We do not consider that the objectors have successfully established that to be the case. Various things can go wrong with a PWS for a number of reasons. They are inherently less secure in health terms than the public supply because they are not treated to equivalent levels. However, they have to be maintained, and they have to be kept clear from surface water contamination, and the primary responsibility for that in law lies with the owner.

7.73 In our view the proposed condition would be sufficient, if properly implemented, together with the other protective mechanisms in the proposed conditions. We do not consider that a legal agreement to reinforce monitoring of PWSs is necessary.

Appendix condition 21: Noise

7.74 The applicants and EAC have now agreed on the terms of a condition³¹⁶ which would assist in the policing of any noise emissions giving cause for concern which came from the application or potentially from another part of WLWF. EAC is satisfied that the applicant's approach reflects ETSU-R-97³¹⁷ and Appendix B of the IoA Good Practice Guide³¹⁸.

7.75 The CG group submitted a detailed alternative condition requiring permanent continual noise monitoring at Kingswell after agreement with the householder, and temporary continual noise monitoring at Cauldstanes after agreement with the householder during the preconstruction, construction phase and for one year of the operational phase with all turbines working normally.

Recommendation

7.76 In our view the agreed condition reflects the most recent guidance on good practice and provides for specified action, within reasonable timescales, as soon as complaints are received at any property, including Kingswell and Cauldstanes. The CG group approach presents problems about enforceability if a householder refused to co-operate. We do not consider that we have been provided with evidence that additional measures are required beyond the nationally recommended measures approved by the IoA. The suggested condition follows nationally endorsed guidance and policy and we do not think it is necessary to enhance it as the CH group has suggested.

³¹⁶ Submitted as SPR-N007

³¹⁷ SPR-N001

³¹⁸ SPR-N002

Appendix Condition 25. Financial guarantee

7.77 The agreed conditions provide for the costs of restoration to be underwritten by a financial guarantee. EAC argue strongly that their experience of restoration bonds means that the best approach to this is a planning obligation under section 75 of the Act. We discuss this below.

Legal obligations

7.78 A planning obligation agreement is proposed by EAC which would include the provision of the PMO, a contribution to East Ayrshire Council community benefit fund, and the provision of a guarantee for the costs of restoration of the application site. The council's proposed heads of agreement are laid out in appendix 2 below. They propose to use section 75 of the Town and Country Planning (Scotland) Act 1997 as the legal basis for the agreement, and have supplied a draft deed.

7.79 We have dealt with the proposed inclusion of the PMO in a section 75 planning obligation above.

7.80 As regards the contribution to a community benefit fund, the applicant says that they would be willing to enter into a legal contract relating to the provision of a contribution to a renewable energy fund intended for community benefit, however it should not be a section 75 agreement. They refer to the EAC's inclusion of a policy to the effect that that should be done using a TCPSA section 75 planning obligation and criticise that policy. In their view EAC's approach does not meet the tests set out in SG circular 3/2012.³¹⁹ The applicant says that to comply with these policy tests the contributions received would have to be restricted for use to offset the impacts of the proposed development only. Thus the obligation to make such a contribution would fall short of the tests in the circular for necessity, planning purpose, relationship to the proposed development, and the overall reasonableness test. They refer to the guidance in SPP³²⁰ as reinforcing this point. The applicant comments that EAC is also assuming that in a EA Section 36 application the development plan has the same primacy as in a planning application when it has been established as a matter of law that that is not the case.³²¹ The development plan in a section 36 question is a material consideration, but the direction to comply with it does not operate as it does in TCPSA S25. The applicant considers that there are better ways to achieve a community benefit contribution. A S75 obligation is designed to run with the land, when S36 consent is personal. There would be real difficulties in obtaining the agreement of the landowner to a commitment for a contribution which would run with the land. These would be very disruptive to the legal arrangements for the use of the land for the windfarm. A separate legal agreement would be designed to run with the operator, which would secure that assignation of the obligation to pay to another operator would be required.

7.81 The council explains that appropriate developer contributions towards the Renewable Energy Fund for the purpose of enabling mitigation measures and environmental improvements within East Ayrshire is consistent with East Ayrshire Local Plan Policy CS15. It is clear that it serves a planning purpose, and is reasonable, as it is part of the approved development plan. Policy CS 15³²² says that the council will require applicants for a commercial wind farm to enter a legal agreement to contribute to a dedicated Renewable Energy Fund. This will be used to finance sustainable community environmental projects,

³¹⁹ CD 013: Circular 3/2012; Planning obligations and good neighbour agreements

³²⁰ CD 002: SPP paragraph 173

³²¹ William Grant & Sons Distillers Ltd, petitioners.[2012] CSOH 98

³²² CD 036 vol 2 policies page 35

particularly those designed to help reduce carbon emissions and counteract global warming. For a period of 10 years from the commencement of construction work on the wind farm, all contributions will be directed exclusively to local projects within 10 kilometres of the boundary of the wind farm. Thereafter, 50% of the contributions received will be directed towards local projects with 50% being reserved for use in the wider East Ayrshire area. Contributions will be payable annually and be set at a standard rate of £2500 per MW of installed capacity per annum, index linked.

7.82 Some objectors express no confidence in the council's ability to distribute the monies in a way that will show any benefit to the local community.

7.83 The council argues strongly that a section 75 agreement which provides a range of safeguards is the best way to ensure that a site could be restored by the council if the developer were to fail to comply with their restoration obligations. This is rooted to an extent in their experience of shortfalls in such arrangements and their determination to avoid this in future. The applicant is in agreement with this approach, and is prepared to enter such an agreement.

Recommendations

7.84 We have discussed the use of a planning agreement to provide for the detail of the arrangements for a PMO above. As we have indicated, we see some advantages in defining the details of the PMO appointment and scheme in a legal agreement.

7.85 As regards the financial guarantee to underwrite decommissioning and restoration, this is already provided for in condition 25. However, EAC has experience of shortfalls in the funding of restoration³²³ and is particularly concerned to put in place an effective mechanism to secure adequate resources against the possibility of future failure of an operator to provide for restoration at the end of the consent. EAC has supplied a draft agreement which explains what terms they envisage as included. There appears to be anxiety in EAC about the extent of the land which the applicant is willing to restore. They cite the SPP and its requirement for "a robust planning obligation to ensure that the site operators achieve site restoration".³²⁴ The applicant is willing to provide a suitable financial guarantee for restoration. The convention is that the detail of these obligations should be reflected in a planning obligation agreement given that they include financial provision, and that seems a satisfactory way forward. We do not understand the difference between the parties about this aspect of a legal agreement to be fundamental. If Ministers are disposed to grant permission subject to a legal agreement on this point the parties could be requested to resolve any remaining difficulties between them.

7.86 The applicant has indicated that they would be prepared to set up an arrangement whereby funds would flow into a community benefit fund. The council has an existing community benefit fund set up in accordance with their EALP policy, and considers that this contribution should be the subject of a planning obligation under section 75 of the 1997 Act. We consider that there are questions about whether such a planning obligation would meet the tests in circular 3/2012. In particular, it might not be reasonable related to the development proposed. We leave further consideration of this aspect of the application to Ministers should they decide to grant consent.

7.87 On financial security for restoration obligations, Condition 23 provides for the provision of a restoration guarantee to the council's satisfaction, and a question arises as to whether a section 75 is necessary. EAC has detailed experience on the functionality of these

³²³ See EAC hearing statement on conditions and supporting documents

³²⁴ CD 002 paragraph 169

arrangements, leading to their policy approach and their views, and we note that the applicants are prepared to enter into such an agreement. Again, we would leave the final arrangements for this aspect to the further consideration of Ministers should they decide to grant consent.

Private water supplies- section 75 agreement

7.88 The CG group suggest that the proposed section 75 agreement should require the applicant to assume 'relevant person' duties for all private water supplies 'within the geohydrological unit defined in figure 9.3 of the ES' for the lifetime of the wind farm. For the reasons we give above in relation to the proposed conditions we consider that this would be inappropriate because it would be an attempt to re-write the existing law about PWSs.

Hyperlinks to DPEA website for documents referred to in this chapter

Document reference	description	hyperlink
	DPEA procedure notice hearing and inquiry sessions - 16 March 2015	https://www.dpea.scotland.gov.uk/Document.aspx?id=254156
	note of pre-examination meeting - 30 January 2015 (includes reference to ECDU recommended conditions)	https://www.dpea.scotland.gov.uk/Document.aspx?id=244230
Hearing on conditions		
Hearing statements		
applicant – hearing statement Conditions and Obligations		https://www.dpea.scotland.gov.uk/Document.aspx?id=268856
EAC hearing statement Conditions and Obligations		https://www.dpea.scotland.gov.uk/Document.aspx?id=267490
Applicant – updated statement of agreed draft conditions		https://www.dpea.scotland.gov.uk/Document.aspx?id=279504
Applicant updated agreed noise condition		https://www.dpea.scotland.gov.uk/Document.aspx?id=279505
EAC-proposed draft section 75 agreement		https://www.dpea.scotland.gov.uk/Document.aspx?id=279612
Harrison, T(CH group) statement on noise		https://www.dpea.scotland.gov.uk/Document.aspx?id=276506
Applicants Post hearing submission		https://www.dpea.scotland.gov.uk/Document.aspx?id=291523
EAC post hearing submission		https://www.dpea.scotland.gov.uk/Document.aspx?id=291128
Connor-Harrison Group - comments on proposed conditions		https://www.dpea.scotland.gov.uk/Document.aspx?id=295612
CH group post hearing submission		https://www.dpea.scotland.gov.uk/Document.aspx?id=286733
applicant - comments on submission from CH group on conditions		https://www.dpea.scotland.gov.uk/Document.aspx?id=295616
Core documents		
CD010 -	Circular 04-1998 The Use of Conditions and Planning Permission -	https://www.dpea.scotland.gov.uk/Document.aspx?id=276483
CD011 -	Circular 04-1998 Addendum to circular 04-1998 Model Planning Conditions -	https://www.dpea.scotland.gov.uk/Document.aspx?id=276484
CD013	Circular 3-2012 Planning Obligations and Good	https://www.dpea.scotland.gov.uk/Document.aspx?id=276486

	Neighbour Agreements -	
CD 036	East Ayrshire Local Plan 2010	https://www.dpea.scotland.gov.uk/Document.aspx?id=276508
Applicants documents		
SPR-N007 -	Noise Condition, as agreed between SPR and EAC	https://www.dpea.scotland.gov.uk/Document.aspx?id=281720
SPR-W005	SEPA Guidance note 31.	https://www.dpea.scotland.gov.uk/Document.aspx?id=271986
SPR-W012	WLWFO Consent & deemed planning permission by Scottish Ministers for the construction & operation of 322 MW Wind Powered Electricity Generating Station at Whitelee -	https://www.dpea.scotland.gov.uk/Document.aspx?id=271993
SPR-W013	WLWF X1 Consent and deemed planning permission for the construction and operation of the Whitelee wind farm extension 1	http://www.dpea.scotland.gov.uk/Document.aspx?id=271994
SPR-W014	WLWF X2 Consent & deemed planning permission by Scottish Ministers for construction & operation of Whitelee extension Phase 2	https://www.dpea.scotland.gov.uk/Document.aspx?id=271995
East Ayrshire Council documents		
EAC01 -	Decommissioning restoration aftercare and mitigation financial guarantees	https://www.dpea.scotland.gov.uk/Document.aspx?id=267494
EAC02	Open cast mining report	https://www.dpea.scotland.gov.uk/Document.aspx?id=267495
EAC03 -	Independent Review of the Regulation of Open Cast Coal Operations in East Ayrshire	https://www.dpea.scotland.gov.uk/Document.aspx?id=267496
EAC04 -	E-mail from DPEA to Brodies regarding PPA-190-2039 -	https://www.dpea.scotland.gov.uk/Document.aspx?id=267497
EAC05 -	Climate Change Scotland Act 2009	https://www.dpea.scotland.gov.uk/Document.aspx?id=267499
EAC06	- Scottish Government's Policy on Control of Woodland Removal	https://www.dpea.scotland.gov.uk/Document.aspx?id=267498
	EAC Draft section 75 agreement	https://www.dpea.scotland.gov.uk/Document.aspx?id=279612

Consultation responses		
Consultation Response - Non-Statutory - Forestry Commission Scotland		https://www.dpea.scotland.gov.uk/Document.aspx?id=230683
Consultation response: Glasgow Prestwick Airport		https://www.dpea.scotland.gov.uk/Document.aspx?id=230684
Halcrow, SPR, Jacobs and ECDU peat stability study for ECDU		https://www.dpea.scotland.gov.uk/Document.aspx?id=230685
Historic Scotland		https://www.dpea.scotland.gov.uk/Document.aspx?id=230686
Joint Radio Company		https://www.dpea.scotland.gov.uk/Document.aspx?id=230687
Marine Scotland		https://www.dpea.scotland.gov.uk/Document.aspx?id=230688
NATS Safeguarding		https://www.dpea.scotland.gov.uk/Document.aspx?id=230689
Strathaven Airfield		https://www.dpea.scotland.gov.uk/Document.aspx?id=230690
The Crown Estate		https://www.dpea.scotland.gov.uk/Document.aspx?id=230691
Transport Scotland TRBO		https://www.dpea.scotland.gov.uk/Document.aspx?id=230692
Consultation Response – and objection to the application - East Ayrshire Council		https://www.dpea.scotland.gov.uk/Document.aspx?id=230693
East Renfrewshire Council		https://www.dpea.scotland.gov.uk/Document.aspx?id=230694
Scottish Environment Protection Agency & subsequent correspondence - SEPA-SPR		https://www.dpea.scotland.gov.uk/Document.aspx?id=230695
Consultation Response - Statutory - Scottish Natural Heritage & subsequent correspondence - SNH-SPR		https://www.dpea.scotland.gov.uk/Document.aspx?id=230696
Consultation Response - Non-Statutory - Associated of Salmon Fishery Boards		https://www.dpea.scotland.gov.uk/Document.aspx?id=230697
Consultation Response - Non-Statutory - BAA Glasgow Airport		https://www.dpea.scotland.gov.uk/Document.aspx?id=230698
Civil Aviation Authority		https://www.dpea.scotland.gov.uk/Document.aspx?id=230699
Defense Infrastructure Organisation		https://www.dpea.scotland.gov.uk/Document.aspx?id=230700
EE Orange		https://www.dpea.scotland.gov.uk/Document.aspx?id=230701

CHAPTER 8:

Overall conclusions and recommendations

National policy

8.1 There was no dispute between the parties in relation to the importance of responding to climate change and its potential effects, through action to cut carbon dioxide emissions. The Climate Change (Scotland) Act 2009³²⁵ sets a legally binding target for greenhouse gas reduction in Scotland of 42% by 2020. The five turbines of the application proposals, as an extension to the established WLWF, would clearly make a contribution towards UK and Scottish government targets for renewable energy generation, which would in turn contribute in some degree towards meeting the targets for greenhouse gas reduction set by both governments. This accords with government expectations that onshore wind energy generation will be a significant factor in addressing the climate change targets. Thus the application proposals would clearly be supported in principle by UK and Scottish government policies in this regard.

Scottish policy on climate change and renewable energy

8.2 The 2020 Route Map for Renewable Energy in Scotland (2011) and the updates (December 2013 and September 2015)³²⁶ explain the Scottish Government target that the equivalent of 100% of Scotland's electricity demand is to be supplied by renewable sources by 2020. There has been an interim target of 50% by 2015. The 2011 update reports that the previous interim renewable electricity generation target of 31% by 2011 was met, and in 2012 renewable sources delivered 40.3% of gross electricity consumption – up from 36.2% in 2011. Renewable electricity generation in Scotland made up approximately 36% of total UK renewable generation in 2012. The 2015 update reports that, using 2013's gross consumption as a proxy for 2014, around 49.8% of Scotland's electricity consumption came from renewables in 2014, up from 44.4% in 2013. This (provisionally) means that the 50% renewable electricity target for 2015 has almost been met one year ahead of schedule.

8.3 The Electricity Generation Policy Statement – 2013³²⁷ analyses the future strategy and the role of energy generation in the economy. It notes that Scotland's renewables potential is considerable. Figures published on the UK Department of Energy and Climate Change website in May 2013 estimated that, between April 2010 and January 2013, the industry announced projects amounting to over 9,000 jobs and £13 billion investment in Scotland. Renewables potential will be capable of generating much more than enough to meet domestic demand for electricity. The remainder could be exported to the rest of the UK and continental Europe to assist other countries in meeting their binding renewable electricity and decarbonisation targets.

8.4 The objectors have argued that because of the degree of progress through the current rate of consents for renewable energy any contribution from the application should be of lesser weight. We do not consider this contention to be supported by these statements of Scottish Government policy. It is clear that the targets are ambitious and include aspirations to continue to contribute to carbon reduction across the UK, Europe, and

³²⁵ EAC 05

³²⁶ CD 003

³²⁷ CD004

globally. The targets are not intended to be regarded as limits, such that action should slacken or cease as the targets are approached.

8.5 The Scottish Government position remains fully committed to the development of renewable energy, including offshore wind to meet the “challenging but achievable” target of 14-16 GW by 2020. The application proposals to extend WLWF would be able to contribute to this.

National planning framework (NPF)³²⁸

8.6 The NPF, required in terms of the Town and Country Planning (Scotland) Act 1997 as amended, contains the Government’s vision of how Scotland ‘could and should’ develop in spatial terms. One of the interrelated themes of the NPF is Scotland as a low carbon place, with steady progress towards development which is sustainable, with Scotland as a world leader in renewable energy technology and industry. Another is the aspiration for Scotland as a natural, resilient place, where natural and cultural assets are respected, are improving in condition, and represent a sustainable economic, environmental and social resource for the nation. The NPF says that the country should continue to capitalise on the wind resource, as part of a determined strategy to develop energy generation from renewable resources.³²⁹ Onshore wind will continue to make a significant contribution to diversification of energy supplies. Wind farm development should not take place in National Parks and National Scenic Areas. Scottish Planning Policy will set out the required approach to spatial frameworks which will guide new wind energy development to appropriate locations.

8.7 We conclude that the application would be broadly in accord with NPF3.

Scottish planning policy (SPP)³³⁰

8.8 SPP introduces a policy presumption in favour of development which contributes to sustainable development. This involves supporting the delivery of electricity infrastructure, supporting climate change mitigation, and also protecting the natural heritage including landscape.

8.9 The planning system should support the transformational change to a low carbon economy, consistent with national objectives and targets. It should support the development of a diverse range of electricity generation from renewable energy technologies – including the expansion of renewable energy generation capacity. It should guide development to appropriate locations and advise on the issues that will be taken into account when specific proposals are being assessed.

8.10 Development plans should lay out a spatial framework identifying those areas that are likely to be most appropriate for onshore wind farms as a guide for developers and communities, following the approach laid out in the SPP. Development plans should also set out the criteria that will be considered in deciding all applications for wind farms of different scales – including extensions and re-powering – taking account of the considerations set out at paragraph 169.

8.11 Any application also requires to be evaluated using the criteria laid out in section 169 of the SPP. These include net economic impact; the scale of contribution to renewable energy generation targets and greenhouse gas emissions; cumulative impacts; impacts on

³²⁸ CD 001 NPF

³²⁹ CD 001 NPF parag 3.9.

³³⁰ CD 002 SPP

individual dwellings, relating to visual impact and residential amenity; and landscape and visual impacts.

8.12 We take the view that the location of the application site would be a candidate for wind farm development in terms of the SPP, so long as a satisfactory outcome can be reached in terms of the SPP paragraph 169 criteria.

8.13 Based on our consideration of the evidence in the preceding chapters, we conclude as follows in respect of the SPP criteria.

8.14 There would be some minor socio economic benefit from the scheme arising from slightly increased local expenditure during the construction period. There would be relatively few wider opportunities in this case as much of the operational implications would be absorbed into the existing WLWF operation. (Chapter 6)

8.15 The application would make a contribution to renewable energy targets to the extent of five additional turbines to WLWF, with a concomitant contribution to the reduction of greenhouse gases. (Chapter 6)

8.16 There are issues about the cumulative impact of the application turbines. We have identified that there would be limited impact in long views because the application turbines would be assimilated into views of the existing WLWF, or would not make a significant change to what is an established wind farm landscape. However there are various points where the localised impact of the five further turbines provide cumulative effects which we consider to be unacceptable. This relates to the landscape capacity of the fringes of the Whitelee plateau, to views of the new turbines with WLWF from local residences and from the A77 and the B764. (Chapter 3)

8.17 As regards impact on landscape, an essential characteristic of the existing wind farm, to which this would be a western expansion, is its successful location on a high plateau. The edges of the plateau provide an important degree of separation and containment which is relevant to both to landscape capacity and to visual impact on landscape. We have found that the application site is on the fringe of the plateau moorlands. Siting new large typology turbines so that the wind farm would have a greater visual influence on this settled margin would diminish the sense of containment and concentration of the turbines on the plateau. They would appear in many views to spill over the edge. In our view the Whitelee wind farm would then have a significantly adverse impact on the more sheltered and settled landscape of the plateau edge. (Chapter 3)

8.18 As regards the effect on individual residences, in our view there are significantly adverse impacts on the visual aspects of amenity at three properties. The topography of the plateau edges currently provides a buffer between the large expanse of tall turbines of WLWF and the dwellings to the west and south. While the application turbines would be footed on the plateau, albeit closer to the edge, they would nonetheless have the visual effect of bringing the Whitelee turbines closer to these dwellings and eroding the buffer. The turbines would be over-dominant. In our view these changes would erode residential amenity in each case. (Chapter 3) However, we are satisfied that, subject to conditions, there would be no other significant adverse effects on other aspects of residential amenity such as noise, (Chapter 4) or shadow flicker. Nevertheless, the visual impacts at these locations add weight to our view that the landscape and visual impacts overall would be unacceptable in this case. Taken with the existing WLWF to which they would be an extension, the impacts would be such that the additional turbines would not be an acceptable part of the wind farm as a whole.

8.19 We are satisfied that there would be no adverse effects on the natural environment which could not be satisfactorily mitigated by conditions, and there would be slightly

beneficial impacts from the managed removal of commercial forestry and the restoration of habitats. (Chapter 6)

8.20 There would be a satisfactory outcome of the carbon balance notwithstanding the loss of peat, using the carbon calculator.³³¹

8.21 There would be some adverse visual impact on the users of cycling routes, but otherwise no significant impact on public access. (Chapters 3 and 6)

8.22 There would be no significant impacts on scheduled monuments, listed buildings and their settings, or any designed landscapes. We have however suggested the retention of Moor Farm, an unlisted building which we considered is an undesignated asset of cultural significance which should not be demolished without further consideration. (Chapter 6)

8.23 We do not consider that there would be any significant impacts on tourism and recreation. (Chapter 6)

8.24 There would be no impacts on aviation and defence interests, but conditions would be required to ensure information about the installations is passed to the relevant authorities. (Chapter 6)

8.25 There would be no impacts on telecommunications and broadcasting installations, subject to a condition being imposed as a precautionary measure. (Chapter 6)

8.26 There would be no significant impacts on road traffic or transportation, or trunk roads, subject to the imposition of a requirement for plans to be approved in advance of the movement of large loads. (Chapter 6)

8.27 The potential effects on hydrogeology, hydrology and the water environment has been adequately assessed in the ES. There is a recognised risk to the water environment of the application site, but that risk can be managed by the conditions ensuring good site practice, and compliance with the requirements of SEPA. There is also a risk of effect to ground water arising from the construction process, and therefore a risk that private water supplies in the same catchment may be affected. The information currently available does not demonstrate that that would be a risk of any significance, but conventional conditions can be imposed to ensure that any potentially exposed PWSs are further assessed and monitored. (Chapter 5)

8.28 We are satisfied that conventional conditions and legal obligations relating to the decommissioning of the development, including ancillary infrastructure, and site restoration can be imposed to ensure a satisfactory outcome following any decommissioning. (Chapter 7 and Appendix 1 and 2.)

The development plan (Chapter 2)

8.29 The Ayrshire Joint Structure Plan³³² Policy Framework reflects the SPP principles, even though it predates the current SPP. That is to say, renewable energy developments are supported, subject to acceptability against a list of criteria. A spatial framework is put in place to identify areas in the structure plan area where wind farms may potentially be located. The quality of the landscape is to be protected and there should be no significant adverse impact.

³³¹ SEPA consultation

³³² CD 038

8.30 The East Ayrshire Local Plan³³³ follows the same approach, supporting renewable energy developments, directing them to defined areas, but approval is to be subject to a number of criteria.

8.31 In considering how the development plan should be interpreted and applied, we noted that both plan documents appear to impose a range of unrealistically high hurdles for wind farm development. We would take the view that a planning policy which appears to require no significant adverse impact from turbines cannot be intended to be interpreted literally, since any group of turbines would bring a degree of adverse impact to some extent. We have therefore approached the application of these policies on the basis that significant adverse impacts would be likely to render a proposal unacceptable. Local plan policy on where wind turbines should be located in East Ayrshire is informed by landscape analysis, and takes Whitelee Wind Farm and its effect into account in identifying the Whitelee plateau as a potential area of search for further turbines. The application site would be eligible for further consideration, but is marginal to the area of search.

8.32 For the reasons given above in relation to the equivalent tests in the SPP, we agree with East Ayrshire Council that the adverse impact on the landscape from the application and the impact on residential amenity would be unacceptable, in terms of the development plan. We do not consider the application to fail any of the other policy criteria set in the development plan, but agree with the council that the application site has been established to be unsuitable for the application proposed, and that this is a significant failure. It follows that we agree that the application would not comply with AJSP policies ECON6, ECON7, and ENV1. The application would not comply with EALP policies SD1, ENV16, ENV17, and CS12.

8.33 In regard to the emerging local development plan³³⁴ the East Ayrshire Local Development Plan (EALDP), we consider that this document is at too early a stage in the approval process for it to be given much weight. We note that in its current form it appears to follow the pattern set by the existing documents in identifying areas of search and the imposition of a number of criteria which require to be met. We would agree that the application would not be acceptable in terms of the emerging EALDP policies, for the same reasons given above.

Electricity Act 1989³³⁵

8.34 Schedule 9 of the Act requires the Scottish Ministers, in considering any proposals for which their consent is required, must have regard to the desirability of preserving natural beauty, conserving flora, fauna and geological or physiographical features of special interest and protecting sites, buildings and objects of architectural, historical or archaeological interest.

8.35 Ministers should have regard to the extent to which an applicant has complied with the duty to do what he reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

8.36 We have found a deficiency in respect of the adverse impact on the landscape. However, with the imposition of the conditions discussed in chapters 6 and 7, and outlined in Appendix 1, we are otherwise satisfied that the granting of consent would not result in

³³³ CD 036

³³⁴ CD 037

³³⁵ CD 018

significant adverse impacts as regards the other matters which should be considered. There would be a slight benefit to the natural environment in due course because of the removal of commercial forestry and habitat restoration.

Other considerations

8.37 In Chapter 7 we have considered conditions which might be attached should the Scottish Ministers determine to grant consent and deemed planning permission. The list we suggest is at Appendix 1 to this report. If Ministers take the view that the planning obligation proposed by EAC to ensure restoration of the site would be necessary, we have provided possible heads of agreement based on those suggested by the council at Appendix 2. However, we consider that the offer and expectation to contribute to a community fund cannot be said to comply with the tests set out in Circular 3/2012,³³⁶ and should not be considered as a material consideration of any weight in planning terms. Ministers may conclude that the offer carries some weight in determining the section 36 consent, if it is considered that the need for renewable energy outweighs any harm to those most affected by the proposed wind farm. We also consider that any agreement on the terms for the appointment of a Planning Monitoring Officer should be the subject of a separate legal agreement rather than a planning obligation under section 75 .

Overall conclusions

8.38 We recognise that the proposed development would contribute to the output of one of the largest wind farms in Europe and contribute towards the generation of electricity from renewable sources. That would accord with government energy policy and SPP. There would be some other benefits, including from the further investment in Whitelee, and habitat restoration. However, reflecting the terms of SPP paragraph 169, on balance we do not consider the relatively limited scale of the contribution from these five turbines justifies the adverse spatial impact, albeit localised, of this extension to Whitelee.

Recommendations

8.39 We are satisfied that Ministers have been provided with the environmental information necessary to allow them to make a determination.³³⁷

8.40 We recommend that the application be refused by reason of non-conformity with national planning policy and local development plan policy, in that the development would have an unacceptable impact on landscape character, and on the visual component of the residential amenity of a number of dwellings.

8.41 We further recommend that should Ministers determine to grant consent, that they also grant deemed planning permission and impose the conditions at Appendix 1, but only do so following the signing and registering or recording (as the case may be) of an obligation under S75 of the Planning Act or such other agreement as may be suitable.

Frances M McChlery

Dannie Onn

Reporters

³³⁶ CD 013

³³⁷ CD 017

DPEA website hyperlinks to the documents referred to in this chapter

Document reference	Description	DPEA website hyperlink
Core documents		
CD 001	National Planning Framework 3	https://www.dpea.scotland.gov.uk/Document.aspx?id=276474
CD 002	SPP	https://www.dpea.scotland.gov.uk/Document.aspx?id=276475
CD 003	2020 Renewable Routemap for Scotland - Update (December 2013) -	https://www.dpea.scotland.gov.uk/Document.aspx?id=276476
CD 004	Electricity Generation Policy Statement 2013 (July 2013)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276477
¹ CD 013	Circular 3-2012 Planning Obligations and Good Neighbour Agreements	https://www.dpea.scotland.gov.uk/Document.aspx?id=276486
CD017	The Electricity Works (EIA) (Scotland) Regs 2000 as amended	https://www.dpea.scotland.gov.uk/Document.aspx?id=276496
CD 018	The Electricity Act 1989 (extracts - section 36 and Schedules 8 and 9)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276497
CD 038	Ayrshire Joint Structure Plan (approved 22nd November 2007)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276490
¹ CD 036	East Ayrshire Local Plan 2010 (adopted 26th October 2010)	https://www.dpea.scotland.gov.uk/Document.aspx?id=276508
¹ CD 037	East Ayrshire Local Development Plan - proposed Plan (March 2015) vol 2	https://www.dpea.scotland.gov.uk/Document.aspx?id=276488
Consultation response		
	SEPA consultation	https://www.dpea.scotland.gov.uk/Document.aspx?id=230695
East Ayrshire council documents		
EAC 05	Climate Change Scotland Act 2009	https://www.dpea.scotland.gov.uk/Document.aspx?id=267499

Appendices

1. Proposed conditions
2. Proposed legal agreement
3. lists of documents for the parties
 - a. Applicants
 - b. East Ayrshire council
 - c. The CH group(formerly POW group
 - d. Mr Elliot Davis
4. Appearances
5. Note of pre-examination meeting
6. concluding submissions.

Appendix 1

Conditions recommended to Ministers See Chapter 7 for commentary on disputed conditions

Definitions of the terms used in these conditions

Company	Means Scottish Power Renewables Ltd
Commencement of the Development	Means the implementation of the consent and deemed planning permission by the carrying out of a material operation within the meaning of section 26 of the Town and Country Planning (Scotland) Act 1997
Date of 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.
Date of Final Commissioning	Means the earlier of (i) 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 (ii) the date falling eighteen months from the date of First Commissioning.
Development	Means the operational wind farm comprising an extension of Whitelees Wind Farm with the following main components: <ul style="list-style-type: none"> • five turbines (with external transformer housing); • hardstanding areas at each turbine base; • on site access tracks and associated watercourse crossings; • substation building and compound; • one communication mast; • on-site underground cabling; and • demolition of Moor Farm³³⁸ authorised by this consent and deemed

³³⁸ Note the reporters have recommended the omission of this element of the permission.

	planning permission.
Final Export	Means 25 years from the Date of Final Commissioning, or any earlier date on which generation ceases from the development.

CONDITIONS

1. Duration of the Consent

The consent is for a period of 25 years from the date of Final Commissioning. Written confirmation of the date of First Commissioning shall be provided to the Planning Authority no later than one calendar month after that date.

Reason: to define the duration of the consent.

2. Commencement of the Development (D)(A)

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. 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 accord with s58 of the Town and Country Planning (Scotland) Act 1997, and to avoid uncertainty and ensure that the consent is implemented within a reasonable period.

3. Non-assignment (D) (A)

This consent may not be assigned without the prior written authorisation of the Scottish Ministers. The Scottish Ministers shall consult with the local planning authority and seek their views on any proposed assignment before coming to a decision as to whether or not to assign the consent. The Scottish Ministers shall take into account the views of the local planning authority prior to determining if they will assign 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. The Company 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 to Scottish Ministers (D)(A)

In the event of any serious 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 Scottish Ministers, including confirmation of remedial measures taken and/or to be taken to rectify the breach, within 48 hours of the incident occurring .

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

Conditions attached to deemed planning permission

5. Implementation in accordance with approved plans and requirements of this consent³³⁹

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 Site Layout Figure 4.1). the environmental statement, including all technical appendices (as supplemented or amended by any further or additional environmental information) and other documentation lodged in support of the application.

Reason: to define the consent and ensure that the Development is carried out in accordance with the approved details.

6. Design and operation of turbines³⁴⁰

There shall be no Commencement of Development unless full details of the proposed wind turbines (including but not limited to the power rating and sound power levels, the size, type, external finish and colour) 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 and the tip height shall not exceed 111 metres above ground level. The development shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from material external rust, staining or discolouration, until such times as the wind farm is decommissioned.

All turbine blades shall rotate in the same direction.

None of the wind turbines, anemometers, or any power performance masts or similar apparatus shall display any name, logo, sign or other advertisement (other than health and safety signage) unless approved in advance in writing by the local planning authority.

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.

³³⁹ specimen condition 6 – (aviation radar solution condition not required)

³⁴⁰ specimen condition 7.

7. Design of sub-station and ancillary development³⁴¹

There shall be no Commencement of Development unless final details of the external appearance, dimensions, and surface materials of the substation building, associated compounds, external lighting and parking areas have been submitted to and approved in writing by the planning authority. The substation building, associated compound, storage, fencing, external lighting and parking areas shall be constructed in accordance with the approved details.

Reason: To ensure that the environmental impacts of the 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.

8. Micro-siting³⁴²

All wind turbines, buildings, masts, areas of hardstanding and tracks shall be constructed in the location shown on plan reference Site Layout Figure 4.1. Wind turbines, buildings, 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 is subject to the following restrictions:

- a. No wind turbine, building, mast or hardstanding shall be moved more than 50m from the position shown on the original approved plans;
- b. No access track shall be moved more than 50m from the position shown on the original approved plans;
- c. 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 Final Commissioning, an updated site plan must be submitted to the planning authority showing the final position of all wind turbines, masts, 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.

9. Borrow pit – scheme of works³⁴³

There shall be no Commencement of Development unless a site specific scheme for the working and restoration 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 based on site survey information and ground investigation;

³⁴¹ specimen condition 8

³⁴² specimen condition 9

³⁴³ specimen condition 10

- b. Details of the handling of any overburden (including peat, soil and rock);
- c. Drainage, including measures to minimise surrounding areas of peatland, water dependant sensitive habitats and Ground Water Dependant Terrestrial Ecosystems (GWDTE) from drying out; and
- d. A programme of implementation of the works described in the scheme;

Reason: To ensure that excavation of materials from the borrow pit 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, and to secure the restoration of borrow pit(s) at the end of the construction period.

10. Borrow Pit – post construction re-instatement scheme³⁴⁴

No later than 3 months prior to the end of the construction period full details of the reinstatement, restoration and aftercare scheme of the borrow pit at the end of the construction period, to include topographic surveys of pre-construction profiles, and details of topographical surveys to be undertaken of the restored borrow pit profiles, shall be submitted in writing to the relevant planning authority for approval. The approved borrow pit reinstatement, restoration and aftercare scheme shall be implemented in full within 6 months of the date of approval of the scheme.

Reason – to ensure reinstatement of the borrow pit at the end of the construction period.

11. Borrow pit – Blasting³⁴⁵

Blasting shall only take place on the site between the hours of 10.00 to 16.00 on Monday to Friday inclusive and 10.00 to 12.00 on Saturdays, with no blasting taking place on a Sunday or on national public holidays, unless otherwise approved in advance in writing by the planning authority.

Ground vibration from blasting shall not exceed a peak particle velocity of 6mm/second at agreed blasting monitoring locations. The measurement shall be the maximum of three mutually perpendicular directions taken at the ground surface.

Reason: To ensure that blasting activity is carried out within defined timescales to control impact on amenity.

12. Planning Monitoring Officer³⁴⁶

There shall be no Commencement of Development unless the Planning Authority has approved in writing the terms of appointment by the Company of an independent and

³⁴⁴ included in specimen condition 10

³⁴⁵ specimen condition 11

³⁴⁶ specimen condition 12

suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent (“PMO”). The terms of appointment shall as a minimum ;

- a. Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent;
- b. Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- c. Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout 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.

13. Ecological Clerk of Works³⁴⁷

There shall be no Commencement of Development unless the planning authority has approved in writing the terms of appointment by the Company of an independent Ecological Clerk of Works (ECoW) in consultation with SNH and SEPA. The terms of appointment shall;

- a. Impose a duty to monitor compliance with the ecological and hydrological commitments provided in the environmental statement and other information lodged in support of the application, the Construction and Environmental Management Plan, and any other plans approved in terms of condition 14 (“the ECoW works”);
- 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; and
- c. Require the ECoW to report any incidences of non-compliance with the ECoW Works to the PMO 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 14.

No later than 3 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

³⁴⁷ specimen condition 13

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.

14. Construction and environmental management plan (CEMP)

There shall be no Commencement of Development unless a Construction and Environmental Management Plan (“CEMP”) outlining site specific details of all on-site construction works, post-construction reinstatement, drainage, mitigation, monitoring and contingencies together with details of their timetabling, has been submitted to and approved in writing by the planning authority in consultation with SNH and SEPA.

The CEMP shall include

- 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 dust management plan;
- d. details of track construction methods;
- e. 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;
- f. a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;
- g. soil storage and management;
- h. a drainage management plan strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources;
- i. a surface water and groundwater management plan;
- j. sewage disposal and treatment;
- k. temporary site illumination;

- l. the construction of the access into the site and the creation and maintenance of associated visibility splays;
- m. the method of construction of the crane pads;
- n. the method of construction of the turbine foundations;
- o. the method of working cable trenches;
- p. the method of construction and erection of the wind turbines and meteorological masts;
- q. details of watercourse crossings;
- r. post-construction restoration/ reinstatement of the working areas not required during the operation of the Development, including construction access tracks, construction compound, storage areas, laydown areas, access tracks, passing places 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;
- s. a wetland ecosystems mitigation plan;
- t. a felling and tree management plan.

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 and SEPA.

Reason: To ensure that all construction operations are carried out in a manner that minimises their 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.

15. Construction hours³⁴⁸

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 national 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 or from site taking place on a Sunday or on national public holidays.

³⁴⁸ specimen condition 15

Reason: In the interests of local amenity.

16. Traffic management plan³⁴⁹

There shall be no Commencement of Development unless a traffic management 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. Measures to ensure that the specified routes are adhered to, including monitoring procedures;
- c. Details of all signage and lining arrangements to be put in place;
- d. Provisions for emergency vehicle access;
- e. Identification of a nominated person to whom any road safety issues can be referred; and
- f. Notification procedures for advising on access by vehicles carrying abnormal loads, including the number and timing of deliveries, the length, width and axle configuration of all extraordinary traffic accessing the site.

The approved traffic management 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.

17. Habitat management plan³⁵⁰

There shall be no Commencement of Development unless a habitat management plan has been submitted to and approved in writing by the planning authority in consultation with SNH and SEPA. The habitat management plan shall set out proposed long term management for the wind farm site and shall provide for the maintenance, monitoring and reporting of habitat on site.

The approved habitat management plan will be updated to reflect ground condition surveys undertaken following construction and prior to the date of Final Commissioning and submitted to the planning authority for written approval in consultation with SNH and SEPA.

Unless otherwise agreed in advance in writing with the planning authority, the approved habitat management plan shall be implemented in full.

Reason: In the interests of good land management and the protection of habitats.

³⁴⁹ specimen condition 16

³⁵⁰ specimen condition 17

18. Peat landslide management³⁵¹

Prior to Commencement of Development, the Company shall appoint and pay for an independent and suitably qualified geotechnical engineer acceptable to the planning authority, the terms of whose appointment (including specification of duties and duration of appointment) shall be approved by the planning authority.

The Developer shall undertake continuous monitoring of ground conditions during the construction phase of the Development. Continuous analysis and call out services shall be provided by the geotechnical engineer throughout the construction phase of the Development. If a risk of peat failure is identified, the Developer shall install such geotechnical instrumentation to monitor ground conditions as is recommended by the geotechnical engineer and shall monitor ground conditions. Any remediation work considered necessary by the geotechnical engineer shall be implemented by the Developer to the satisfaction of the geotechnical engineer. Monitoring results shall be fed into risk analysis reports to be submitted to the planning authority on a quarterly basis during the construction phase of the Development.

Reason: To minimise the risk of peat failure arising from the Development.

19. Television reception³⁵²

There shall be no Commencement of Development unless a Television Reception Mitigation Plan has been submitted to, and approved in writing by, the planning authority.

The approved Television Reception Mitigation Plan as approved by the planning authority in terms of the Environmental Statement 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 Company 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.

20. Private Water Supplies

There shall be no Commencement of Development unless a Private Water Supply Mitigation Scheme (which includes a risk assessment), covering the period from the

³⁵¹ specimen condition 21

³⁵² specimen condition 24

Commencement of the Development until 12 months after date of Final Commissioning, has been submitted to and approved in writing by the planning authority.

The Private Water Supply Mitigation Scheme shall as a minimum include :-

- a. all details of all mitigation, monitoring and contingency measures to be delivered to maintain the quality, quantity and continuity of water supplies to properties which are served by private water supplies at the date of this consent, and which have been identified by the PWS mitigation scheme as potentially being affected by the Development;
- b. provision for reporting on whether consent to obtain relevant access to the identified sources of supply has been achieved to permit monitoring, (where relevant) and where such consent is achieved, monitoring of those relevant properties for the period from Date of Commencement until 12 months after the Date of Final Commissioning;
- c. provision for more frequent reporting when the monitoring of any PWS within the Mitigation scheme should demonstrate results calling into question the wholesomeness of the supply, irrespective of the reason for the issue;
- d. details of the water quality sampling method; and
- c. shall specify all abstraction points.

The approved Private Water Supply mitigation scheme shall thereafter be implemented in full.

Reason: To maintain a secure and adequate quality water supply to all properties with private water supplies which may be affected by the development.

Condition 21. Noise³⁵³

The rating level of noise immissions from the combined effects of the wind turbines (including the application of any penalties) hereby permitted, and referred to herein as WLX3, together with the noise immissions of the wind turbines (including the application of any penalties) constructed and operated in terms of the Whitelees wind farm as originally constructed 'WL' (the Section 36 consent and deemed planning permission granted by the Scottish Ministers in April 2006), WLX1 (the Section 36 consent and deemed planning permission granted by the Scottish Ministers for an extension to WL in May 2009) and WLX2 (the Section 36 consent and deemed planning permission granted by the Scottish Ministers for an extension to WL in December 2009) when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed the values for the relevant integer wind speed set out in, or derived from, the tables attached to this condition at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

³⁵³ specimen condition 22

- a) The Company shall continuously log power production, wind speed and wind direction all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 24 months. The Company shall provide this information in the format set out in Guidance Note 1(e) to the relevant Planning Authority on its request, within 14 days of receipt in writing of such a request.
- b) There shall be no First Commissioning of the Development until the Company has received written approval from the planning authority of 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 planning authority.
- c) Within 21 days from receipt of a written request from the planning authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the Company shall, at its expense, employ a consultant approved by the planning authority to assess the level of noise immissions from the wind farm at the complainant's dwelling in accordance with the procedures described in the attached Guidance Notes. The written request from the planning authority shall set out at least the date, time and location that the complaint relates to and any identified meteorological conditions, including wind direction, and include a statement as to whether, in the opinion of the planning authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.
- d) The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall, prior to the commencement of any measurements, have been submitted to and approved in writing by the planning authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken and clearly define what measured data or what range of measured data shall be included in the compliance assessment.
- e) Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the Company shall submit to the planning 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 shall be those limits selected from the Tables specified for a listed dwelling which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling.
- f) The Company shall provide to the planning authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the planning authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the planning authority. The measurements 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). 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 planning authority with the independent consultant's assessment of the rating level of noise immissions.

- g) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c), the Company 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 has been extended in writing by the planning authority.

Table 1(a) Noise limits expressed in dB L_{A90,10 minute} which apply during operation of WLX3 together with WL, WLX1 and WLX2 between the hours of 23:00 to 07:00.

Location	Standardised 10 metre-height wind speed (as defined in accordance with the attached Guidance Notes to the noise condition) (m/s)											
	1	2	3	4	5	6	7	8	9	10	11	12
Lochgoin Farm	43	43	43	43	43	43	43	49	53	57	59	59
Shieldhill	43	43	43	43	43	43	43	43	43	46	48	50
Kingswell	43	43	43	43	43	43	43	43	43	46	48	50
Kingswell Bridge	43	43	43	43	43	43	43	43	43	46	48	50
Cauldstanes	43	43	43	43	43	43	43	43	43	46	48	50

Table 1(b) Noise limits expressed in dB L_{A90,10 minute} which apply during operation of WLX3 together with WL, WLX1 and WLX2 at all other times.

Location	Standardised 10 metre-height wind speed (as defined in accordance with the attached Guidance Notes to the noise condition) (m/s)											
	1	2	3	4	5	6	7	8	9	10	11	12
Lochgoin Farm	40	40	40	40	40	41	45	49	53	57	60	63
Shieldhill	40	40	40	40	40	40	41	43	45	47	48	50
Kingswell	40	40	40	40	40	40	41	43	45	47	48	50
Kingswell Bridge	40	40	40	40	40	40	41	43	45	47	48	50
Cauldstanes	40	40	40	40	40	40	41	43	45	47	48	50

Table 2 Coordinate locations of the dwellings listed in Table 1.

Dwelling	Easting	Northing
Lochgoin Farm	253000	646980
Shieldhill	251225	649253
Kingswell	250070	647766
Kingswell Bridge	249756	647301
Cauldstanes	250015	646839

Note to Table 2: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

Guidance Notes for the 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 immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. 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).

Guidance Note 1

(a) Values of the $L_{A90,10 \text{ minute}}$ noise statistic should be measured at the complainant’s property, 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 in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable any required tonal penalty to be derived in accordance with Guidance Note 3.

(b) The microphone should 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 relevant Planning Authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should 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 dwelling to undertake compliance measurements is withheld, the Company shall submit for the written approval of the planning 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 $L_{A90,10 \text{ minute}}$ measurements should be synchronised with measurements of the 10 minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the Company shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine, and at any on site meteorological mast(s), if available, together with the minimum power generated by each turbine all in successive 10 minute periods. All 10 minute arithmetic average mean wind speed data measured at 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, as determined from whichever source is agreed in writing with the planning authority as being most appropriate to the noise compliance measurements being undertaken, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10 minute periods shall commence on the hour and in 10 minute increments thereafter.

(e) Data provided to the planning authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10 minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

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

(b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (d) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the $L_{A90,10\text{minute}}$ noise measurements and corresponding values of the 10 minute standardised ten metre height wind speed, as derived from the site measured wind speed source(s) agreed in writing with the planning authority in accordance with Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. The average wind farm noise level shall be calculated for each wind speed bin, each bin being one metre per second wide and centred on integer wind speeds and plotted together with the individual data points on the XY chart. The average value in each wind speed bin defines the wind farm noise level at each integer wind speed.

Guidance Note 3

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

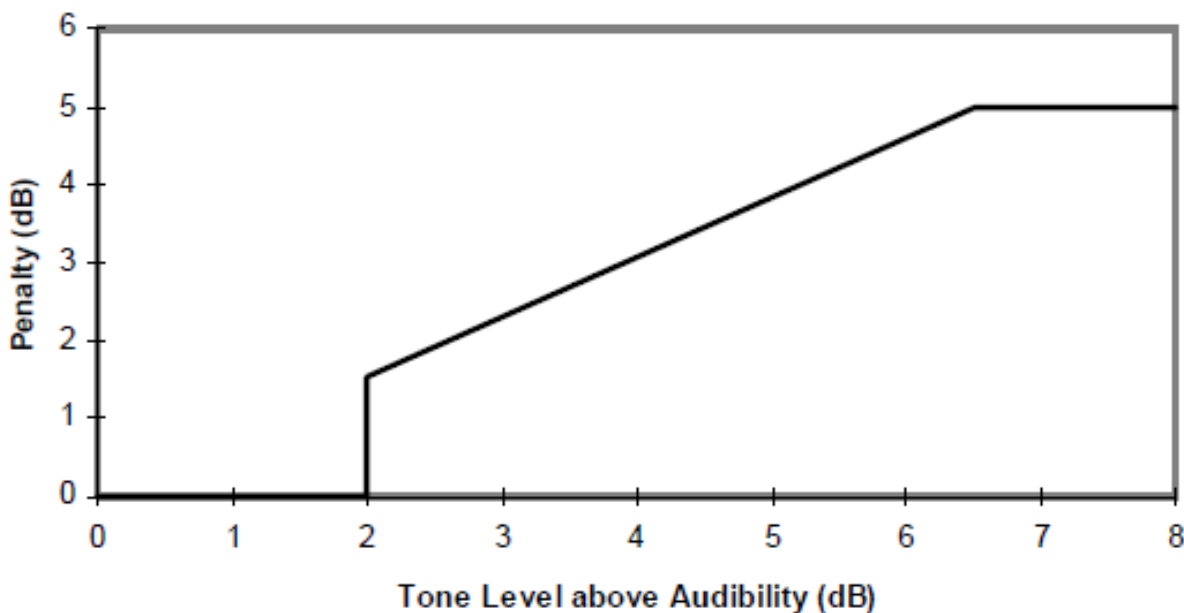
(b) For each 10 minute interval for which $L_{A90,10\text{minute}}$ data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided 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, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(c) For each of the 2 minute samples the tone level above or below 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 average tone level above audibility shall be calculated for each wind speed bin, each bin being 1 metre per second wide and centred on integer wind speeds. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

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



Guidance Note 4

(a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the wind farm noise level as determined in Guidance Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the planning authority in its written protocol under paragraph (d) 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 in Guidance Note 2.

(c) 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 (e) 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 Company shall ensure that all necessary wind turbines in the development are turned off for such period as the independent consultant requires to undertake any further noise measurements required under Guidance Note 4(c). If the number of turbines to be turned off is less than the total number of turbines on the combined site (WLX3, WL, WLX1 & WLX2) then this shall be agreed in advance with the relevant Planning Authority.

(e) Repeat the steps in Guidance Note 2, with the required number of turbines shut-down in accordance with Guidance Note 4(d) in order to determine the background noise (L3) at each integer wind speed within the range requested by the planning authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.

(f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L1 = 10 \text{ Log}_{10}[10^{(L2/10)} - 10^{(L3/10)}]$$

(g) The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.

(h) If the rating level after adjustment for background noise contribution and adjusted for tonal penalty (if required in accordance with Note 3 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 planning authority for a complainants dwelling in accordance with paragraph (e) of condition NC1 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 planning authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then the development fails to comply with the conditions.

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

22. Redundant turbines³⁵⁴

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; (i) by no later than the date of expiration of the 6 month period, submit a scheme to the planning authority setting out how the relevant turbine(s) and associated infrastructure will be removed from the site and the ground restored; and (ii) implement the approved scheme within six months of the date of its approval, all to the satisfaction of the planning authority.

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

23. Aviation safety³⁵⁵

There shall be no Commencement of Development until the Company has provided the planning authority, Ministry of Defence, Defence Geographic Centre and NATS with the following information, and has provided evidence to the planning authority of having done so.

- a. The date of the expected commencement of each stage of construction;

³⁵⁴ specimen condition 26

³⁵⁵ specimen condition 27

- 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.

24. Site Decommissioning, Restoration and Aftercare³⁵⁶.

The Development will cease to generate electricity by no later than the date falling twenty five years from the date of Final Commissioning. The total period for decommissioning and restoration of the Site in accordance with this condition shall not exceed three years from the date of Final Export without prior written approval of the Scottish Ministers in consultation with the planning authority.

There shall be no Commencement of Development unless a decommissioning, restoration and aftercare draft plan has been submitted to and approved in writing by the planning authority in consultation with SNH and SEPA. The draft plan shall outline measures for the decommissioning of the Development, restoration and aftercare of the site.

No later than 18 months prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier) a detailed decommissioning, restoration and aftercare plan, based upon the approved decommissioning, restoration and aftercare plan, shall be submitted to the planning authority for written approval in consultation with SNH and SEPA. The detailed decommissioning, restoration and aftercare plan will provide updated and detailed proposals for the removal of the above ground elements of the Development, the restoration of the site, the treatment of ground surfaces, the aftercare plan, the management and timing of the works and the environment management provisions which shall include:

- 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 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;

³⁵⁶ specimen condition 29

- 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 plan;
- 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; and
- 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 the aftercare implemented thereafter in accordance with the approved plan, 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.

25. Financial guarantee³⁵⁷

There shall be no Commencement of Development unless the Developer has delivered a bond or other form of financial guarantee in terms acceptable to the planning authority which secures the cost of performance of the borrow pit, decommissioning, restoration and aftercare obligations as contained in conditions 10 and 22 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 verified by a suitably qualified independent professional as being sufficient to secure the cost of obligations relating to the borrow pit, decommissioning, restoration and aftercare obligations contained in conditions 10 and 22. The value of the financial guarantee shall be reviewed by a suitably qualified independent professional no later than every five years and increased or decreased to take account of any variation in costs of compliance with decommissioning, 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.

³⁵⁷ specimen condition 30.

Appendix 2. Proposed legal agreements Chapter 7

Heads of terms proposed by EAC

The Heads of Agreement under Section 75 of the 1997 Act, to be concluded prior to the issue of consent under Section 36 of the 1989 Act, could comprise the following:

1. Appropriate developer contributions towards the council's Renewable Energy Fund for the purpose of enabling mitigation measures and environmental improvements within East Ayrshire consistent with East Ayrshire local plan policy CS15. (if supported by Ministers)
2. There will be a Planning Monitoring Officer for the development, who shall be appointed by the council. The cost of providing this position will be met by the developer.
3. No section of development hereby authorised shall be commenced until a decommissioning, restoration and aftercare bond is provided by the developer and agreed with the Scottish Government and the Planning Authority that will secure the decommissioning of the turbines and the restoration and aftercare of the site.

Appendix 3. lists of documents presented for the parties

a. Applicants Documents

Core Documents	
CD001	National Planning Framework 3
CD002	Scottish Planning Policy
CD003	2020 Renewable Routemap for Scotland- Update (December 2013)
CD004	Electricity Generation Policy Statement 2013 (Scottish Government, July 2013)
CD005	Letter from Government Chief Planner to Planning Authorities dated 15 January 2015
CD006	PAN 51: (Environmental Impact Assessment) (Scotland) Regulations 2000
CD007	Guidance On The Electricity Works Planning, Environmental Protection and Regulation (Revised October 2006)
CD008	Guidance On The Electricity Works (Environmental Impact Assessment) (Scotland) Amendment Regulations 2008
CD009	Web Based Guidance on Onshore Wind Turbines, The Scottish Government http://www.gov.scot/Resource/0045/00451413.pdf) (May 2014)
CD010	Circular 04/1998: The Use of Conditions and Planning Permission CD016 Code of Practice for Handling Inquiries Under section 62 and Schedule 8 to the Electricity Act 1989
CD011	Circular 04/1998: Addendum to Circular 04/1998: Model Planning Conditions
CD012	Circular 3/2011 The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011
CD013	Circular 3/2012 Planning Obligations and Good Neighbour Agreements
CD014	East Ayrshire Council Planning Committee Report for Whitelee Extension Phase 3 dated 13 June 2014
CD015	Letter from East Ayrshire Council to ECDU 9 dated June 2014
CD017	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 as amended.
CD018	Electricity Act 1989 (extracts - section 36 and Schedules 8 and 9)
CD019	The Electricity (Applications for Consent) Regulations 1990
CD020	Document not submitted
CD021	Whitelee Windfarm Extension Phase 3 Environmental Statement: Non-Technical Summary

CD022	Whitelee Windfarm Extension Phase 3 Environmental Statement: Planning Statement
CD023	Whitelee Windfarm Extension Phase 3 Environmental Statement: Volume I
CD024	Whitelee Windfarm Extension Phase 3 Environmental Statement: Volume II
CD025	Whitelee Windfarm Extension Phase 3 Environmental Statement: Volume III
CD026	Wilson, D. 2015, Email to the DPEA informing that the council supports the applicant's proposal to present updated environmental information on cumulative impact.
CD027	Letters of objection to the application (bundle)
CD028	Statutory consultee responses to Whitelee Windfarm Extension Phase 3 (bundle)
CD029	McFadzean, S. (Fenwick Community Council), 2012, Objection to East Ayrshire Council and the Energy Consents Unit. 26th September 2012.
CD030	McFadzean, S. (Fenwick Community Council), 2015, Representation to the DPEA via email expressing a wish to participate in the upcoming inquiry. 9th March 2015.
CD031	Young, S. (Moscow and Waterside Community Council), 2015, Representation to the DPEA via email expressing a wish to participate in the upcoming inquiry with attached objection. 9th March 2015.
CD032	Manson, F. (DPEA), 2015, Letter advising of the pre-examination meeting for the inquiry. 8th January 2015.
CD033	Davis, E. 2015, A representation submitted to the DPEA regarding visual impact/residential amenity, with attached letter referenced: Hurd, A. (2009) Response letter from the Scottish Government to concerns regarding the separation distance between turbines and the edge of settlements and the issue of considering wind farm capacity using megawatts . 13th February 2015.
CD034	Harrison, T. 2015, A representation submitted to the DPEA called "Submission for Consideration of Aspects of Noise Related to Whitelee Windfarm Extension 3". 13th February 2015.
CD035	Harrison, T. 2015, A representation submitted to the DPEA called "Submission for Consideration of Aspects of Visual Impact and Cumulative Impact Related to Whitelee Windfarm Extension 3". 13th February 2015.
CD036	East Ayrshire Local Plan 2010 (adopted 26 October 2010)
CD037	East Ayrshire Local Development Plan - Proposed Plan (March 2015)
CD038	Ayrshire Joint Structure Plan (approved 22 November 2007)
CD039	Addendum to the Structure Plan Technical Report TR03/2006
CD040	East Ayrshire Landscape Wind Capacity Study, Main Study Report July 2013
CD041	Report by the Head of Planning at East Ayrshire Council on the East Kingswell application (EAC Ref : 10/0485/PP)

Applicants documents	
Landscape and visual impact	
SPR-L001	Whitelee Wind Farm Extension 3-Audit of Landscape and Visual Impact Assessment Ironside Farrar 2014
SPR-L002	Updated Cumulative Assessment (FEI produced by OPEN/ SPR 13/04/15)
SPR-L003	Landscape and Visual Hearing Statement for the Applicant
SPR-L004	Guidelines for the Assessment of Landscape and Visual Impacts: Second Edition (GLVIA 2)
SPR-L005	Guidelines for the Assessment of Landscape and Visual Impacts: Third Edition (GLVIA 3)
SPR-L006	Landscape Institute: Statements of Clarification on GLVIA 3
SPR-L007	Landscape Institute: Advice Note 01/11 Photography and Photomontage in Landscape and Visual Impact Assessment
SPR-L008	SNH Landscape Character Assessment: Ayrshire 1998
SPR-L009	SNH Landscape Character Assessment: Glasgow & the Clyde Valley
SPR-L010	SNH's Strategic Locational Guidance for Onshore Windfarms in respect of the Natural Heritage (March 2009)
SPR-L011	SNH Siting and Designing windfarms Version 1: 2009
SPR-L012	SNH Siting and Designing windfarms Version 2: 2014
SPR-L013	SNH Assessing Cumulative Effects of Windfarms (2012)
SPR-L014	SNH Wild Land Areas Map (2014)
SPR-L015	SNH Visual Representation of Wind Farms (2006)
SPR-L016	SNH Visual Representation of Wind Farms (December 2014)
SPR-L017	SNH Topic Paper 9
SPR-L018	East Kingswell Windfarm Appeal Decision
SPR-L019	Black Law Extension Phase 2 Windfarm Inquiry Decision
SPR-L020	Aikengall Extension Phase 2 Windfarm Decision
SPR-L021	Harburnhead Windfarm Decision
SPR-L022	Carland Cross Repowering Decision
SPR-L023	Afton s.36 Windfarm Decision
SPR-L024	OPEN's review of EAC LVIA Audit (August 2014)
SPR-L025	Tralorg Hill Appeal Decision
SPR-L026	East Ayrshire Landscape Wind Capacity Study Appendix Report
SPR-L027	Moscow and Waterside CC LVIA Hearing Statement

Noise and noise condition	
SPR-N001	The Assessment and Rating of Noise from Wind Farms, ETSU-R-97, September 1996
SPR-N002	A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise, Institute of Acoustics, May 2013
SPR-N003	East Ayrshire Council Planning Committee 30th January 2015, Compliance Monitoring Update of Major Developments in East

	Ayrshire, Report by Acting Head of Planning and Economic Development
SPR-N004	Whitelee Wind Farm Extension Compliance report
SPR-N005	Black Law Extension Phase 2 Windfarm Consent Decision
SPR-N006	Whitelee Extension Phase 3 EAC Proposed Conditions Technical clarification document
SPR-N007	Noise Condition, as agreed between SPR and EAC
SPR-N008	Letter from Hoare Lea Acoustics to East Ayrshire Council dated 15th January 2013 (LET-SPR-1004510-MJ-20130116-2-Sheildhill)
SPR-N009	Email dated 22 May 2015 to relevant Inquiry participants sending agreed noise condition

Water supplies and water environment	
SPR-W001	SEPA (2009). SEPA Policy No. 19: Groundwater Protection Policy for Scotland (November, 2009)
SPR-W002	SEPA-EA-EHS. Pollution Prevention Guidelines (PPGs). Available on http://www.netregs.gov.uk/netregs/resources/278006
SPR-W003	ERC response providing further information on Drinking Water dated 30 April 2015
SPR-W004	ScottishPower Renewables, 2015, Response to Determination B of the Reporters' procedure note of the pre-examination meeting in response to the the Legal and Evidential Submission on behalf of the Protect Our Water Group (POW). 27th February 2015.
SPR-W005 SEPA	Land Use Planning System SEPA Guidance Note 31 : Guidance on Assessment the Impacts of Development proposals on Groundwater Abstractions and Groundwater Dependant Terrestrial Ecosystems – 2014
SPR-W006	Water Framework Directive (WFD) (2000/60/EC)
SPR-W007	Directive 2000/118/EC (the Groundwater Daughter Directive or GWDD).
SPR-W008	The Water Supply (Water Quality) (Scotland) Regulations 2001
SPR-W009	The Private Water Supplies (Scotland) Regulations 2006
SPR-W010	The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)
SPR-W011	Overview note on the legislative framework insofar as it relates to the Private and Public Water Supplies -prepared by Shepherd and Wedderburn, dated February 2016
SPR-W012	Consent and deemed planning permission by the Scottish Ministers for the construction and operation of a 322 MW Wind Powered Electricity Generating Station at Whitelee, Near Eaglesham —dated 5 May 2006, with attached conditions.
SPR-W013	Consent and deemed planning permission for the construction and operation of the Whitelee Wind Farm Extension, on Eaglesham Moor in East Ayrshire -dated 20May 2009, with attached conditions.
SPR-W014	Consent and deemed planning permission by the Scottish Ministers for the Construction and operation of the Whitelee Wind Farm Extension, Phase 2, on Eaglesham Moor in East Ayrshire dated 12 December 2009, with attached conditions

SPR-W015	Scottish Government, letter dated 16th March 2015 ref WIN-190-1.
SPR-W016	POW (Protect our Water Group), Legal and Evidential Submission, 5th February 2015 pages 36.
SPR-W017	POW (Protect our Water Group), Outline Statement of Case , 24th February 2015 pages 6;
SPR-W018	POW (Protect our Water Group), Response to regulator Comments, 27th April, 2015, pages 7.
SPR-W019	Scottish Power Renewables, (2012) Whitelee Windfarm extension Phase 3. Non-technical Summary.
SPR-W020	Inquiry Statement for Dr Rachel Connor and Mr Tim Harrison dated 19 May 2015 in relation to Matter 4, the issue of Drinking water Supplies
SPR-W021	Inquiry Statement The Kingswell Farm Water Story by Elliot Davis dated May 2015 plus two supporting documents
SPR-W022	Jacobs (2009) Whitelee Windfarm, Groundwater Quality Monitoring Report , ref B0627819.
SPR-W023	SEPA Supporting Guidance (WAT-SG-53) Environmental Standards for Discharges to Surface Waters
SPR-W024	UK Environment Agency in R&D Technical Report P2-115/TR2
SPR-W025	SEPA Position Statement WAT-PS-10-01 Assigning groundwater assessment criteria for pollutant inputs.
SPR-W026	Scottish Executive (2006). Private Water Supplies Technical Manual - (EXTRACT ONLY) Section 3
SPR-W027	Institute of Environment and Health, (2014). National assessment of the risks to water supplies posed by low taste and odour threshold compounds. Ref. WT1275.
SPR-W028	World Health Organisation (2005). Petroleum Products in Drinking-water - Background document for development of WHO Guidelines for Drinking-water Quality. Ref.WHO/SDE/WSH/05.08/123
SPR-W029	World Health Organisation (2003). Di(2-ethylhexyl)phthalate in Drinking-Water - Background document for development of WHO Guidelines for Drinking-water Quality. Ref.WHO/SDE/WSH/03.04/29.
SPR-W030	The Effects of Contaminant Concentration on the Potential for Natural Attenuation R&D Technical Report P2-228/TR
SPR-W031	World Health Organisation (2003). Iron in Drinking Water, Background for document Development of WHO Guidelines for Drinking-water Quality.
SPR-W032	World Health Organisation (2011). Manganese in Drinking-water Background document for development of WHO Guidelines for Drinking-water Quality
SPR-W033	Joint FAO/WHO Expert Committee on Food Additives. Toxicological evaluation of certain food additives and food contaminants. Cambridge, Cambridge University Press, 1983 (WHO Food Additives Series, No. 18) cited WHO 2003.
SPR-W034	Murray, H.S. (2012) Assessing the impact of wind farm related disturbance on streamwater carbon, phosphorus and nitrogen dynamics: A case study of the Whitelee Catchments. PhD thesis university of Glasgow.
SPR-W035	Atkins (2010). Whitelee Wind farm Extension phases 1 and 2. Private Water Supplies Risk Assessment. Ref. 5093089.

SPR-W036	Environ UK Limited (2006). Environmental Risk Assessment. Private Water Supplies, Whitelee Wind farm Ref. 62C10024
SPR-W037	East Ayrshire Council (2015). DEPA Ref WIN-190-1, Response in relation to reporters procedure note, dated 16 March 2015 on matter 3 "information from Water Quality regulators relating to drinking water contamination.
SPR-W038	Scottish Water (2015) Letter titled Whitelee extension Phase 3- Scottish Water Response. Ref: WIN-190-1.
SPR-W039	DWQR (2015). The Drinking Water Quality Regulators response to the request for information in relation to drinking Water matters. Application under section 36forWhlteele Wind farm Phase 3 extension. DPEAR Ref: WIN-190-1.
SPR-W040	World Health Organisation (2011). Guidelines for Drinking Water Quality. Fourth edition.
SPR-W041	SEPA (2015). Letter titled 2The electricity Act 1989, Section 36 application: Whitelee wind farm Extension Phase3" to the DPEA.
SPR-W042	AAenviro (2014). Whitelee Windfarm. Kingswell Private Water Supply. Enquiries response Report. Ref AAe054C.
SPR-W043	AAenviro (2015). Copy of 2015 Moor Farm Environmental Monitoring.
SPR-W044	Scottish Water (2015). News Statement, Tuesdays January 6, 2015.
SPR-W045	Buxton, I and Hughes, S. (2014). The Science and Commerce of Whisky - Extract only
SPR-W046	Not to be used
SPR-W047	Not to be used
SPR-W048	Met Office, (2015) Crown Copyright Rainfall data 2010 Saughall with accompanying notes
SPR-W049	Sunday Post article "Special investigation: Toxic wind turbines" dated 23 March 2014
SPR-W050	Winds of Justice "Open letters re contaminated water supplies" dated 19 August 2014
SPR-W051	Winds of Justice "More on contaminated water supplies" dated 19 August 2014
SPR-W052	Winds of Justice "Contamination of public and private water supplies by windfarms" dated 6 August 2014
SPR-W053	Winds of Justice "Doctor claims Scotland's biggest windfarm has contaminated public water supply with cancer-causing chemical" dated 30 December 2014
SPR-W054	Moor Farm Testing and Technical Note
SPR-W055	Amlaird FOI Response from Scottish Water
SPR-W056	Private Water Supplies Monitoring Results 2006-2009
SPR-W057	Surface Water Monitoring Results 2006 - 2009
SPR-W058a	WL extension Surface Water Sampling 2010 -2013
SPR W058b	WL extension Private Water Supply Sampling 2010 -2013
SPR-W059	WL extensions - Ground Investigations/ Water Sampling Results (Tetra + Raeburn information)
SPR-W060	BGS Email regarding update to Solid Geology Map
SPR -W061	Glasgow Scientific Services Analytical test reports as supplied by East Ayrshire Council re to Kingswell received on 25 May 2015
SPR-W062	Planning Monitoring Report number 1 dated November 2006
SPR-W063	Planning Monitoring Report number 2 dated December 2006.

SPR-W064	Planning Monitoring Report number 3 dated February 2007
SPR-W065	Planning Monitoring Report number 4 dated April 2007.
SPR-W066	Planning Monitoring Report number 5 dated June 2007
SPR-W067	Planning Monitoring Report number 6 dated August 2007
SPR-W068	Planning Monitoring Report number 7 dated October 2007.
SPR-W069	Planning Monitoring Report number 8 dated December 2007.
SPR-W070	Planning Monitoring Report number 9 dated February 2008.
SPR-W071	Planning Monitoring Report number 10 dated April 2008
SPR-W072	Planning Monitoring Report number 11 dated 30 June 2008
SPR-W073	Planning Monitoring Report number 12 dated 31 August 2008.
SPR-W074	Planning Monitoring Report number 13 dated 31 October 2008.
SPR-W075	Planning Monitoring Report number 14 dated 31 December 2008.
SPR-W076	Planning Monitoring Report number 15 dated February 2009.
SPR-W077	Progress Report number 16 dated 30 June 2009.
SPR-W078	Final Progress Report number 17 dated 31 October 2009.
SPR -W079	Water Issues - Planning Inquiry - DPEA ref WIN 190-1 Report no 70012087-001 dated 26 May 2015
SPR-W080	Ecological Clerk of Works Monthly Report 1 dated 28 August to 29 September 2006.
SPR-W081	Ecological Clerk of Works Monthly Report 2 dated 2 October to 31 October 2006
SPR-W082	Ecological Clerk of Works Monthly Report 3 dated 1 November to 30 November 2006
SPR-W083	Ecological Clerk of Works Monthly Report 4 dated 1 December to 31 December 2006
SPR-W084	Ecological Clerk of Works Monthly Report 5 dated 1 January to 31 January 2007
SPR-W085	Ecological Clerk of Works Monthly Report 6 dated 1 February to 28 February 2007
SPR-W086	Ecological Clerk of Works Monthly Report 7 dated 1 March to 31 March 2007
SPR-W087	Ecological Clerk of Works Monthly Report 8 dated 1 April to 30 April 2007
SPR-W088	Ecological Clerk of Works Monthly Report 9 dated 1 May to 31 May 2007
SPR-W089	Ecological Clerk of Works Monthly Report 10 dated 1 June to 29 June 2007
SPR-W090	Ecological Clerk of Works Monthly Report 11 dated 1 July to 31 July 2007
SPR-W091	Ecological Clerk of Works Monthly Report 12 dated 1 August to 31 August 2007
SPR-W092	Ecological Clerk of Works Monthly Report 13 dated 1 September to 30 September 2007
SPR-W093	Ecological Clerk of Works Monthly Report 14 dated 1 October to 31 October 2007
SPR-W094	Ecological Clerk of Works Monthly Report 15 dated 1 November to 30 November 2007.
SPR-W095	Ecological Clerk of Works Monthly Report 16 dated 1 December 2007 to 31 January 2008

SPR-W096	Ecological Clerk of Works Monthly Report 17 dated 1 February to 29 February 2008
SPR-W097	Ecological Clerk of Works Monthly Report 18 dated 1 March to 31 March 2008
SPR-W098	Ecological Clerk of Works Monthly Report 19 dated 1 April to 30 April 2008
SPR-W099	Ecological Clerk of Works Monthly Report 20 dated 1 May to 31 May 2008
SPR-W100	Ecological Clerk of Works Monthly Report 21 dated 1 June to 30 June 2008
SPR-W101	Ecological Clerk of Works Monthly Report 22 dated 1 July to 31 July 2008
SPR-W102	Ecological Clerk of Works Monthly Report 23 dated 1 August to 31 August 2008
SPR-W103	Ecological Clerk of Works Monthly Report 24 dated 1 September to 30 September 2008
SPR-W104	Ecological Clerk of Works Monthly Report 25 dated 1 October to 31 October 2008
SPR-W105	Ecological Clerk of Works Monthly Report 26 dated 1 November to 19 December 2008
SPR-W106	Ecological Clerk of Works Monthly Report 27 dated 7 January to 4 March 2009
SPR-W107	Ecological Clerk of Works Monthly Report 28 dated March & April 2009
SPR -W108	Summary of Ecological Clerk of Works Monthly Reports and product information dated June 2015
SPR-X001	DPEA Note of Pre Inquiry Meeting/Procedure Notice dated 8 January 2015
SPR-X003	Not to be used
SPR-X004	SPR response in respect of written submissions submitted by the Water Regulations to DPEA dated 27 April 2015

b. East Ayrshire Council
Documents

Conditions and legal agreements	
EAC01	- - Decommissioning restoration aftercare and mitigation financial guarantees
EAC02 -	Open cast mining report
EAC03	- Independent Review of the Regulation of Open Cast Coal Operations in East Ayrshire
EAC04	E-mail from DPEA to Brodies regarding PPA-190-2039 -
EAC05 -	Climate Change Scotland Act 2009
EAC06	- Scottish Government's Policy on Control of Woodland Removal
- draft section 75 agreement	https://www.dpea.scotland.gov.uk/Document.aspx?id=279612

c. The CH group (formerly POW group) Documents/ References

Note: The CH group produced these documents on CD. They are relied on in the form of 'references' or illustrations included in the report entitled "Inquiry Statement For Dr Rachel Connor And Mr Tim Harrison", (DPEA hyperlink given below) This statement is referred to by Dr Connor in her precognition, and contains the principle inquiry session evidence for the CH group. Hyperlinks are provided to these documents in that report. There are a number of duplications among the references. . All these documents are also available on the DPEA website.

Dr Rachel Connor and Mr Tim Harrison Inquiry document from Third Party Group (Dr R Connor and Mr T Harrison) - document 1 – Inquiry Statement on Drinking Water Supplies https://www.dpea.scotland.gov.uk/Document.aspx?id=268223	
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151	Amlaird Water treatment works zone potable water records from 2006-2009 data received from Scottish Water
152	Graphs of Minerals, Cryptosporidium and Coliforms in raw water and THMs in treated water zone.
153	Letter from Mr Bill Gilchrist EHO at EAC to Dr Rachel Connor 21 May 2015
154	Maps of Drinking Water Protected Area and Whitelee Windfarm Extension

d. Mr Elliot Davis
Documents

ED1	The Kingswell Farm Water Story
ED2	Additions to Elliot Davis Evidence WIN 190-1 Whitelee Windfarm Surface Water -)
ED3	Additions to Elliot Davis Evidence WIN 190-1 Whitelee Windfarm Groundwater -ED3
ED4	Kingswell Water Samples-ED4a and ED4b
ED5	SPR letter to dated 21st November 2014-ED5.1 and 5.2
ED6	Letter from Energy Minister Fergus Ewing to Cathy Jamieson dated 5th November
ED7	Precognition of Mr E Davis
	Drinking Water Protected Areas - Scotland River Basin District - Surface Water Maps-Map2
	Drinking Water Protected Areas - Scotland River Basin District - Groundwater Maps-Map 13

Appendix 4 Appearances

Party	Representative	Persons giving oral evidence in inquiry or hearing sessions
ScottishPower Renewables Ltd, applicant (SPR)	Mr Colin Innes, solicitor, Messrs Shepherd and Wedderburn,LLP	Dr Alexander Lee, WSPUK Ltd Ms Vanina Saint-Martin, Jacobs UK Ltd Mr James Welch, Optimised Environments Ltd.
East Ayrshire Council	Ms Melanie Barbour, solicitor, East Ayrshire council	Ms Jane Little, Planning and economic development , East Ayrshire Council Dr Guy Wimble, Ironside Farrar
CH Group (originally Protect Our Water (POW) group)	Mr John Campbell, QC	Dr Rachel Connor Mr Tim Harrison
Mr Elliot Davis	himself	Mr Elliot Davis
Ms Greta Roberts	herself	Ms Greta Roberts
Fenwick Community Council	Ms Susan McFadzean	
Moscow and Waterside Community Council	Ms Stephanie Young	

Appendix 5. Note of pre-examination meeting

ELECTRICITY ACT 1989

Application under SECTION 36: extension to Whitelee Wind Farm on land immediately to north west, and south of the B764, Eaglesham Moor. (“Whitelee Wind Farm Extension Phase 3”)

DPEA reference: WIN-190-1

Reporters’ Procedure Note

Following the pre examination meeting held at 2 pm on Friday 23rd January 2015, at Fenwick Hotel Junction 8, M77, Fenwick, KA3 6AU.

1. INTRODUCTION

1.1 An application has been made to the Scottish Ministers by Scottish Power Renewables Ltd for consent under section 36 of the 1989 Electricity Act, together with deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997, to construct and operate a wind farm of 5 Turbines of nominally 3MW each on land immediately north-west of Whitelee wind farm south of the B764, Eaglesham Moor. This is being dealt with as an extension of the existing Whitelee Wind Farm.

1.2 Dannie Onn and Frances McChlery have been jointly appointed by the Scottish Ministers to hold an inquiry into the application and report to them.

1.3 The reporters decided that a pre examination meeting should be held to discuss the manner in which they should handle the application, and this was held in public on the 23 January 2015. The applicants, and all persons who had previously indicated that they intended to participate in the inquiry were invited to attend by letter from the DPEA dated the 8 January, which gave an indication of the matters to be discussed. An agenda for the meeting was prepared and distributed on 16 January 2015.

1.4 This note summarises the matters discussed at the pre inquiry meeting, and contains the reporters’ determinations as to further procedure.

1.5 The further procedural steps as determined by the reporters, the action required, and by whom, are highlighted as Determinations and shown in bold type in the note.

1.6 An indicative programme is attached to this note as Appendix 1 to show the reporters’ current estimate of the timescales for the inquiry. Parties should note that the programme shown is subject to change pending the receipt of further information. The reporters will be working to finalise the inquiry programme as soon as possible.

2. ATTENDEES

2.1 The following persons participated in the pre examination meeting:-

- The applicant, Scottish Power Renewables, represented by Mr Colin Innes of Shepherd and Wedderburn.
- East Ayrshire Council, represented by Ms Melanie Barbour, solicitor, of the Council's Legal, Procurement and Regulatory Services Department.
- Ms Greta Roberts, objector
- Mr Elliot Davis, Dr Rachel Connor, and Mr Tim Harrison, objectors, who had formed a group called, for now at least, the 'Water Working Group Consortium', represented by Mr John Campbell, QC.
- Mr Hugh Hendry also attended but did not take part in the discussion.

3. PROCEDURE TO BE ADOPTED FOR THE INQUIRY.

3.1 The reporters explained that DPEA has published a code of practice for handling inquiries under section 62 and Schedule 8 to the Electricity Act 1989, which sets out the arrangements the reporters intend to apply in this case. Copies of the code are available on the Scottish Government website <http://www.scotland.gov.uk/Resource/0039/00394336.pdf> or from the DPEA case officer (contact details at the end of this note). The code adopts the current appeal regulations as the basis for conducting inquiries under the Electricity Act. In essence, the Inquiries Procedure rules are intended to ensure that the procedures adopted in appeal cases are proportionate and efficient, and that the process is transparent and fair. These procedures are normally used for windfarms which are being handled as planning applications, and are set out in the 2008 Town and Country Planning (Appeals)(Scotland) Regulations and in Circular 9/2009 on Planning Appeals. (here together referred to as 'the Appeal Regulations') They are adapted by reporters for use in Section 36 applications.

3.2 Following the code allows more flexible procedures to be adopted at this type of inquiry. In particular, it means that each issue identified for consideration can be dealt with by the most appropriate mode of inquiry, such as an inquiry session, a hearing session, or further written submissions. All of these procedures are more fully explained in the code at annex A and B. Such further procedures are desirable where reporters need to gather further information on an issue, or to have the evidence of parties explored and tested. On some issues, there may already be sufficient information in the papers lodged, and no further procedures would be required.

4. MATTERS LIKELY TO BE RELEVANT TO THE REPORT TO MINISTERS

4.1 The reporters explained that at this stage, based on an initial reading of the papers including the environmental statement submitted with the application, they have provisionally identified that certain matters would be relevant to their report to ministers. These were:-

- Visual and landscape impact, including cumulative impact and impact on residential amenity
- Noise emissions

- The risk of contamination to private water supplies as a result of the proposed development
- Natural heritage impacts, including ornithology and ecology
- The stability of peat
- Cultural heritage impacts, including archaeology and cultural heritage
- Transport and infrastructure, including telecommunications, TV, radio and aviation navigational equipment
- Socio-economic impacts including employment
- Consistency with national planning, development planning and national energy policies, and the council's strategy for wind farm location
- Possible conditions and any legal obligations if consent is granted.

4.2 The reporters invited persons present to indicate if there were any other topics not included in that list which should be included. No new topics were suggested, although the question was raised as to whether residential amenity should be separately considered.

4.3 Determination A. The reporters have decided that residential amenity will be examined as an aspect of a number of issues, notably noise emissions, and visual and landscape impact, and during site visits, rather than being considered as a self standing topic.

4.4 From the list of relevant matters above, the reporters have identified that some topics do not require further examination in the inquiry process. This is because on those topics enough information had been submitted to ministers already, and had not been criticised, or found to be controversial.

4.5 However, there are five topic areas, which the reporters consider require further examination in the inquiry. These are:-

1. Noise emissions, including any cumulative effects
2. Visual and landscape impact, including cumulative impact and impact on residential amenity
3. The risk of contamination to private water supplies as a result of the proposed development
4. The development plan, the emerging development plan, and any other planning policy update
5. The regime of planning obligations or other legal agreements, and conditions, which should be considered by Ministers if they are minded to grant permission.

These are referred to as the 'Inquiry topics'.

4.6 The reporters asked if any persons disagreed with their selection of topics for the inquiry, and there were no objections. However, Mr Campbell indicated on behalf of the Water Working Group Consortium that they would be submitting that the potential impact on water supplies was wider than private water supplies and included the public supply.

4.7 Mr Campbell also indicated that there was a concern about the public safety of windfarms, if machinery should fail, on passers by and on road safety. The reporters will keep this topic under review for the meantime and may seek further information on these matters if they need it.

5. THE ENVIRONMENTAL IMPACT ASSESSMENT

5.1 The reporters explained that under schedule 9 of the Electricity Act 1989 and The Electricity Works (EIA) Scotland Regulations 2000, as amended, the Scottish Ministers are unable to grant consent unless they are satisfied that the applicant has provided an Environmental Statement (ES) that meets the requirements of the legislation and they (the Ministers) have taken it into account.

5.2 The reporters accordingly need to ensure that the ES complies with the legislation and is up to date. The ES submitted with the application is dated August 2012. The reporters invited comment on any aspects which the meeting felt should be updated.

5.3 The applicants advised that they accepted that ES should to be updated to include recent wind energy proposals in the cumulative assessments. This is to include the wind farm application at Soame. However they requested that the reporters identify a cut-off date for the consideration of further applications. In this regard the council suggested that consideration should also be given to two further wind farm proposals expected to be submitted to the council in February. This was supported by some objectors.

5.4 Mr Campbell for the Water Working Group Consortium indicated that an element of his client group's objections was a fundamental challenge to the adequacy of the environmental statement, and that he would argue that it was incomplete and insufficient in an important aspect fundamental to his clients concerns.

5.5 Determination B. In respect of the adequacy of the environmental statement the reporters require the following action. If they so wish, all parties to the inquiry are invited to specify any respect in which they consider the application's environmental statement must be updated by the inclusion of information relating to cumulative impact to meet the legal requirements for the consideration of environmental information, giving reasons, and indicating clearly what further information they consider should be supplied or taken into account. These submissions should be submitted to the DPEA and copied to the other parties no later than Friday 13 February 2015. Each party may then comment on these representations, their responses to be submitted to the DPEA and copied to the other parties no later than Friday 27 February 2015.

5.6 Following the consideration of these representations, the reporters may make a request for further environmental information, if they consider it necessary, and may make further determinations about the need for advertisement, if this is required.

6. PARTICIPATION OF INTERESTED PARTIES

6.1 The reporters advised that reflecting the code of practice, the DPEA had previously invited all persons who had made any representations relating to the application whether

they wished to be involved in the inquiry. The invitation to attend the pre examination meeting had been extended only to those persons who wished to participate. However, anybody who had indicated their wish to be involved in further procedures would be advised of these whether or not they had been in attendance at the pre examination meeting.

6.2 The reporters emphasised that they would be taking account of all representations which had been made during the processing of the application in their report, whether or not their authors were involved in the inquiry.

7. PROCEDURE FOR CONSIDERING THE INQUIRY TOPICS.

7.1 The reporters consulted those present for their views on which procedures, i.e. public inquiry sessions, hearings or further written submissions, would be the most appropriate for the inquiry topics.

7.2 In respect of the Inquiry topics, the following opinions were expressed:-

7.3 Inquiry topic 1: Noise emissions.

It was agreed that there may not be a great deal of difference between the applicants and the council on noise. It may be that after further deliberation agreement may be possible. The applicants and the council agreed to explore this. However if agreement could not be reached, it was the applicants' strongly held view that the different technical views could best be explored in a public inquiry format. How noise from wind farms could and should be controlled had been the subject of developing practice. Hearing formats had proved to be unsatisfactory at presenting any differences in a highly technical field in a systematic way.

7.4 Noise disturbance is mentioned in some objector's submissions, but Mr Campbell required to take instructions on the degree to which his clients intended to be involved in any inquiry sessions on noise.

7.5 Determination C. The reporters request that the applicants and the council investigate whether agreement can be reached between them on the content of any noise emissions condition, and advise the reporters by Friday 13 February 2015 whether they consider that agreement will be possible between them or otherwise. Thereafter the reporters will consider which form of procedure would be appropriate for this inquiry topic. For the purposes of making arrangements for the inquiry, they will proceed meantime on the preliminary basis that the topic may be considered at a public inquiry session.

7.6 Inquiry topic 2- Landscape and visual impact

Notwithstanding the requirement for further clarification in relation to the further work required to assess cumulative impact, there was consensus that this could be effectively examined in a hearing session.

7.7 Determination D. The reporters determine that Inquiry Topic 2 – landscape and visual impact will be considered at a hearing. The date of the hearing session and the requirements for the submission of hearing statements and documents will be announced following consideration of any need to update the environmental

statement, following the exchange of representations concluding on the 27 February 2015.

7.8 Inquiry topic 3 -The risk to water supplies

Mr Campbell of the WWGC accepted that further information was required in relation to the content of his client's objections and volunteered to submit an outline statement of case.

7.9 Determination F . The objectors constituted as the Water Working Group Consortium are to lodge with the DPEA an outline statement of case giving full particulars of all aspects of the case they intend to make on all inquiry topics no later than Friday 13 February 2015. This should be sent to the applicants and the other parties to the inquiry at the same time.

7.10 Determination G. No conclusion could be reached by the reporters about which procedure would be appropriate for this topic until further information is available about the arguments and evidence to be submitted by the objectors.

7.11 Inquiry topic 4 – the development plan, emerging development plan and any other policy update.

There was consensus that this could be considered through further written submissions.

7.12 Determination F. Inquiry topic 4, planning policy, will be considered through written submissions. The deadlines for submissions will be announced by further procedure notice at a later date.

7.13 Inquiry topic 5 - conditions and any legal agreements

The reporters advised that a set of specimen conditions for cases under section 36 of the Electricity Act had recently been issued for consultation by ECDU and they would expect to take these into consideration in their recommendations to Ministers, should Ministers be minded to grant. A copy of these is attached to this note as Appendix 2.

7.14 The usual practice on conditions and legal obligations is first, that agreement should be reached so far as possible between the applicant and the planning authority who would be responsible for enforcement on conditions and the terms of any proposed legal agreements. These should then be laid out, in usually in hearing statements, for consideration in the inquiry, indicating where agreement has been reached. Submissions could be made on these by other parties.

7.15 There was broad consensus that a hearing session would be appropriate.

7.16 Determination G. On inquiry topic 5 on conditions and legal obligations, the reporters consider that a hearing session would be appropriate. The reporters encourage the applicants and the council to continue to seek agreement about what conditions should be recommended, and the terms of any legal obligations proposed. The timescales for hearing statements and documents will be announced by a procedure notice at a later date.

7.18 More generally as regards the inquiry topics, the reporters drew attention to the normal practice in relation to the consideration of government policy. At any policy session, in accordance with normal practice, parties would be allowed to express their views on how Government policy should be applied, but they would not be allowed to question the merits of such policy.

7.19 Lastly, if there are any other matters which emerge on which the reporters require further information, those are likely to be dealt with in writing.

8. DATES, LOCATION, AND LIKELY DURATION OF INQUIRY OR HEARING SESSIONS.

8.1 It was generally agreed that the Fenwick Hotel would be a suitable venue, if available.

8.2 Based on the information currently available, and on the assumption that agreement could not be reached about some matters, estimates were attempted on the length of each inquiry or hearing session.

Topic 1 - noise – inquiry lasting 1 or 2 days

Topic 2 - visual and landscape impact – hearing lasting 1 day.

Topic 3 - water supplies – public inquiry lasting 1 or 2 days

Topic 5 - conditions- hearing of half day.

8.3 Accordingly, albeit on a worse case scenario, it would be necessary to plan for the inquiry to take place over two weeks, although not all days would be required and could be used for site visits.

8.4 Given that the scope of the applicant's and the objectors' cases could not be clarified until after the exchange of further information, it would not yet be possible to set the precise dates for the inquiry and so the dates for the exchange of statements, and other documents. Given the availability of witnesses and counsel, and the reporters' availability, it was agreed to aim to hold the inquiry during the weeks beginning 15 and 22 June 2015. Parties were asked to arrange their diary commitments accordingly. An indicative timetable is attached to this note as Appendix 1. **Parties are asked to note that this is likely to be changed, and ensure that they use the most current information about the programme throughout the inquiry.**

9. PREPARATION FOR THE INQUIRY, INCLUDING INQUIRY DOCUMENTATION.

9.1 The reporters intend to give full directions in relation to the lodging of inquiry statements of case or hearing statements, and supporting documents and precognitions where appropriate, in a further procedure notice in early March.

9.2 Reflecting current practice, parties may expect that for public inquiry sessions, statements of case will be requested within two weeks of the direction being made, with documents to be lodged 4 weeks prior to the date of any inquiry session, and precognitions and summary precognitions to be lodged two weeks prior to the inquiry.

9.3 Hearing statements and any hearing supporting documents will be required to be lodged 4 weeks prior to the date of any hearing.

9.4 Written submissions will require to be lodged within a suitable date, to be announced.

9.5 The applicants agreed to take responsibility for the compilation and deposit of a set of core documents, hopefully avoiding unnecessary duplication of documents which all parties may refer to in their evidence.

9.6 All inquiry documentation will be published on the DPEA website. Confidential or personal information should not be included.

9.7 All inquiry documentation will be placed on public deposit in the offices of the council's planning department at East Ayrshire Council, The Johnnie Walker Bond, 15 Strand Street, Kilmarnock KA1 1HU. The council agreed to take responsibility for moving these documents to the venue when the inquiry starts. The parties must ensure that they send an extra copy of all their documentation to the council for public deposit.

10. SITE INSPECTIONS

10.1 The reporters confirmed that there would be a programme of accompanied site inspections to some elements of the site, such as the site itself, and if convenient, to the properties anticipated to be significantly affected. The reporters would make some preliminary visits to the site and the surroundings prior to the inquiry, on an unaccompanied basis.

10.2 To assist with planning this the reporters would ask the parties to the visual impact inquiry session, in particular, to liaise and provide the DPEA with a list of those viewpoints from which they wish the reporters to see the site. These are likely to be the ones which will be explored in greater detail at the inquiry sessions, and may not be exhaustive. Where the viewpoint chosen for a site visit is not on or close to a road, parties should provide details of where it is possible to park and a map of the most appropriate route from there to the viewpoint. The reporters request that this should be provided to the DPEA no later than 30 March 2015. At the inquiry sessions, there will be a discussion about whether there is a need for further site inspections.

11. ANY OTHER RELEVANT MATTERS

Other than the matters raised and dealt with in this note, no party at the pre-examination meeting had any other procedural matters to raise.

12. COMMUNICATIONS IN PREPARATION FOR THE INQUIRY

Any queries parties may have for the Directorate about the inquiry should be directed in the first instance to the case officer – Fiona Manson. Her telephone number is 01324-696480, the fax number is 01324-696444, and her e-mail address is Fiona.Manson@scotland.gsi.gov.uk. The address of the office is 4 The Courtyard, Callendar Business Park, Callendar Road, Falkirk, FK1 1XR

The case officer will be asked to circulate a contact list of all parties to the inquiry to facilitate the exchange of inquiry documents and any other communications.

Appendix 1

Indicative programme

Appendix 2

ECDU /HOPS Suggested conditions for wind farms – consultation draft

Appendix 6

Links to concluding Submissions

submission	hyperlink
The applicants (SPR)	
Shepherd & Wedderburn, for the applicant - Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=291973
applicant - requesting guidance on whether e-mails from Mr Campbell on discrepancies in the applicant's closing submission is to be accepted	https://www.dpea.scotland.gov.uk/Document.aspx?id=295618
applicant - response to e-mail from Mr E Davis regarding the content of the applicant's closing submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=295615
East Ayrshire Council	
East Ayrshire Council - Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=290472
CH group	
Mr J Campbell, for Connor-Harrison Group - Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=287330
e-mail from Mr Campbell, for Connor-Harrison Group - advising of possible factual discrepancies in the applicant's closing submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=295617
Mr E Davis	
Mr E Davis - Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=287286
e-mail from Mr E Davis - advising of possible discrepancies in the applicant's Closing Submission	https://www.dpea.scotland.gov.uk/Document.aspx?id=295614